



Conference Proceedings

OSAKA, JAPAN

August 14-16, 2017

ACMASS

Annual Conference on
Management and Social Science

ISLLE

International Symposium on
Language, Linguistics, Literature and Education

Conference Proceedings

August 14-16, 2017

Osaka, Japan

ACMASS

Annual Conference on Management and Social
Sciences

ISLLE

International Symposium on Language,
Linguistics, Literature and Education

ACMASS

Annual Conference on Management and Social Sciences

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Content

Welcome Message.....	4
General Information for Participants.....	5
International Committees	7
International Committee of Social Sciences	7
Special Thanks to Session Chairs	11
Conference Venue Information.....	12
Osaka International Convention Center	14
Conference Schedule	15
Social Sciences Keynote Speech.....	17
Oral Sessions	19
Management (1)	19
ACMASS-0017	20
ACMASS-0023	22
ACMASS-0087	45
ACMASS-0120	60
ACMASS-0129	77
Education (1).....	87
ISLLE-0007	88
ISLLE-0011	89
ISLLE-0013	96
ISLLE-0036	98
ACMASS-0018	99
ACMASS-0019	105
Management (2)	113
ACMASS-0062	114
ACMASS-0084	127
ACMASS-0091	139
ACMASS-0094	148
ACMASS-0048	163
Strength, Art and Creative Approach to Counseling and Social Work	177
ACMASS-0027	178
ACMASS-0038	186
ACMASS-0040	188
ACMASS-0046	190
ACMASS-0049	191

Finance & Law	193
ACMASS-0006	195
ACMASS-0009	208
2. L	210
ACMASS-0041	221
ACMASS-0116	222
ACMASS-0103	234
Society & Culture & Communication	246
ACMASS-0039	248
ACMASS-0061	257
ACMASS-0114	259
ACMASS-0044	261
ACMASS-0058	273
ACMASS-0082.....	276
ACMASS-0099	280
ACMASS-0032	289
Economics.....	297
ACMASS-0036	298
ACMASS-0054	314
ACMASS-0088	328
ACMASS-0089	347
ACMASS-0093	371
Education (2) & Psychology.....	388
ACMASS-0001	389
ACMASS-0028	398
ACMASS-0104	404
ACMASS-0110	414
Language, Linguistics & Literature	416
ISLLE-0032	417
ISLLE-0039	419
ISLLE-0027	421
ISLLE-0010	431
ISLLE-0024	433
Education (3).....	445
ACMASS-0037	446
ACMASS-0085	448
ACMASS-0105	450
ACMASS-0118	452
Poster Sessions (2).....	454

Society / Psychology / Economics / Communication	454
ACMASS-0045.....	456
ACMASS-0053.....	463
ACMASS-0067.....	465
ACMASS-0102.....	468
ACMASS-0122.....	470
ACMASS-0024.....	472
ACMASS-0123.....	474
Poster Sessions (3).....	475
Education / Management.....	475
ACMASS-0033.....	479
ACMASS-0052.....	481
ACMASS-0059.....	483
ACMASS-0065.....	490
ACMASS-0074.....	492
ACMASS-0076.....	494
ACMASS-0077.....	496
ACMASS-0083.....	505
ACMASS-0113.....	507
ACMASS-0117.....	510
ACMASS-0025.....	512
ACMASS-0005.....	514
ACMASS-0015.....	521
ACMASS-0050.....	523
ACMASS-0064.....	525
ACMASS-0066.....	527
ACMASS-0072.....	530
ACMASS-0133.....	534

Welcome Message



Local Host

Adriana E. Edwards Wurzinger

Associate Professor, Saitama University, Japan

Valued colleagues and guests,

Welcome to Osaka, Japan!

We are delighted to have you among us for the Annual Conference on Management and Social Sciences, 2017, organized by the Higher Education Forum. That many of you have decided to travel long distances to attend serves to remind us all just how important our work as scholars, researchers, and human resources specialists really is. We are honoured to share this event with you.

Osaka is a bustling, modern city that offers many attractive sights, as well as easy access to the old charm and historical attractions of beautiful Kyoto, and to dynamic Kobe. From stunning Osaka Castle to the never-ending nightlife of Namba and culinary delights of Umeda, Osaka will surely make your visit to Japan an unforgettable experience. Go out there and explore! Osaka and its outgoing, beautiful people are waiting for you.

We sincerely hope that you will enjoy your stay, and that this chance to network, learn, and grow as professionals will be truly unique and productive. We have no doubt that this opportunity will bring together local and international talented professionals, eager to discuss new developments, challenges, and projects that will open new possibilities in our fields of work and research. Together, we have the power to make of this a positive and constructive event, upon which we can continue to build better and more productive environments.

Looking forward to working and learning together in Osaka, Japan!

General Information for Participants

■ **Registration**

The registration desk will be situated on the **10th floor** at **Osaka International Convention Center** during the following time:

08:30-16:00, Tuesday, August 15, 2017

09:30-14:00, Wednesday, August 16, 2017

■ **Organizer**



Higher Education Forum (HEF)

Tel: + 886 2 2740 1498 | www.prohef.org



■ **A Polite Request to All Participants**

Participants are requested to arrive in a timely fashion for all addresses. Presenters are reminded that the time slots should be divided fairly and equally by the number of presentations, and that they should not overrun. The session chair is asked to assume this timekeeping role and to summarize key issues in each topic.



Sandals or Slippers



Tank Top



Shorts

■ **Certificate**

Certificate of Presentation or Certificate of Attendance

A certificate of attendance includes participant's name and affiliation, certifying the participation in the conference. A certificate of presentation indicates a presenter's name, affiliation and the paper title that is presented in the scheduled session.

Certificate Distribution

Oral presenters will receive a certificate of presentation from the session chair after their presentations or at the end of the session. Poster presenters will receive a certificate of presentation from the conference staff at the end of their poster session.

The certificate of presentation will not be issued, either at or after the conference, to authors whose papers are registered but not presented. Instead, the certificate of attendance will be provided after the conference.

■ **Preparation for Oral Presentations**

All presentation rooms are equipped with a screen, an LCD projector, and a laptop computer installed with Microsoft PowerPoint. You will be able to insert your USB flash drive into the computer and double check your file in PowerPoint. We recommend you to bring two copies of the file in case that one fails. You may also connect your own laptop to the provided projector; however please ensure you have the requisite connector.

Preparation for Poster Presentation

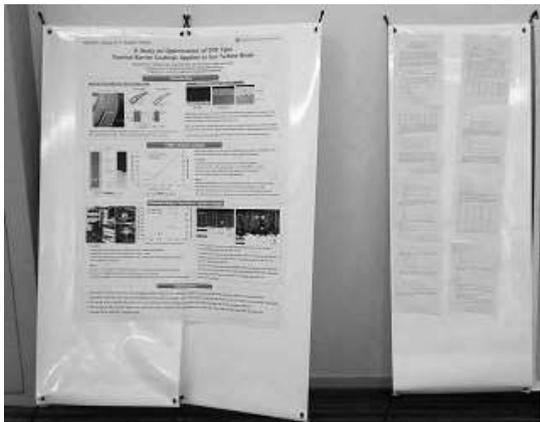
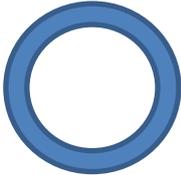
Materials Provided by the Conference Organizer:

1. X-frame display & base fabric canvases (60cm×160cm)
2. Adhesive tapes or binder clips

Materials Prepared by the Presenters:

3. Home-made poster(s)
4. Material: not limited, can be posted on the canvases
5. Recommended poster size: 60cm*120cm



	
<p>A 60cm*160cm poster illustrates the research findings.</p>	<ol style="list-style-type: none"> 1. Wider than 60cm (left) 2. Copy of PowerPoint slides in A4 papers (right)
	

International Committees

International Committee of Social Sciences

Adeeb Jarrah	United Arab Emirates University	UAE
Ahrar Husain	Jamia Millia Islamia - A Central University	Indian
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Zabihollah Rezaee	The University of Memphis	USA
Zhou Xiao	Fudan University	China

Special Thanks to Session Chairs

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Tania Hossain	Waseda University

Conference Venue Information

Osaka International Convention Center

5-3-51 Nakanoshima, Kita-ku, Osaka City, 530-0005 Japan

TEL : (06)4803-5555 (Main) / FAX : (06)4803-5620

Osaka International Convention Center is located in Nakanoshima in the center of Osaka. This facility can be used for various activities such as different types of conferences, concerts, exhibitions, providing a high-quality service emphasizing bringing people of different nationalities together through various exchanges.

The Osaka International Convention Center Corporation was founded as a joint venture between Osaka Prefecture and the Osaka business community. Inheriting the foundation from the time of the former Osaka International Trade Center, the company was entrusted by Osaka Prefecture with the management of the Osaka International Convention Center.

Transportation

• Car

From Kansai International Airport

-Approx.55 minutes to Osaka Station on the JR Line

-Approx 60 minutes to the Osaka Station by airport limousine bus

15 minutes by Osaka city bus from JR Osaka station.Take No.53-bound for Funatsubashi,or No.55-bound for Tsurumachi 4-chome.Get off at Dojima Ohashi bus stop.

From Osaka International Airport(Itami Airport)

-Approx 30 minutes to Osaka Station by airport bus

15 minutes by Osaka city bus from JR Osaka station.Take No.53-bound for Funatsubashi,or No.55-bound for Tsurumachi 4-chome.Get off at Dojima Ohashi bus stop.

From Shin-Osaka Shinkansen(Bullet Train) Station

-Transfer to the JR local line at Shin-Osaka Station,and disembark at Osaka Station(approx.5 minutes)

15 minutes by Osaka city bus from JR Osaka station.Take No.53-bound for Funatsubashi,or No.55-bound for Tsurumachi 4-chome.Get off at Dojima Ohashi bus stop.

Access to Osaka International Convention Center



- **Train**

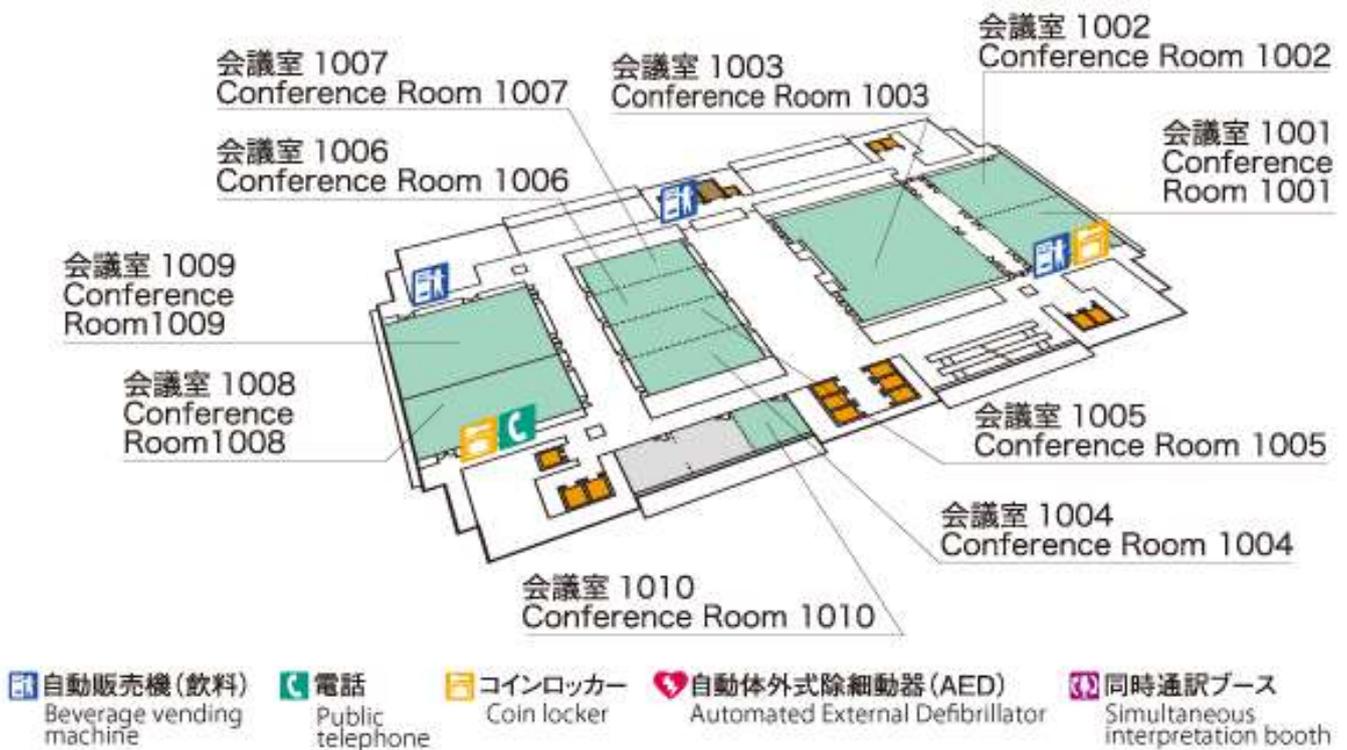
- 1 minute by walk from Nakanoshima station (Exit No.2) on the Keihan line.
- 15 minutes by walk from Fukushima station on the JR loop line
- 10 minutes by walk from Shin-Fukushima station on the JR Tozai line(Exit No.3)
- 10 minutes by walk from Fukushima station on the Hanshin line(Exit No.3)
- 15 minutes by walk from Awaza Station on the Subway Chuo line (Exit.No.1), or Sennichimae line (exit No.9).

- **Bus**

- 15 minutes by Osaka city bus from JR Osaka station.Take No.53-bound for Funatsubashi,or No.55-bound for Tsurumachi 4-chome.Get off at Dojima Ohashi bus stop.
- A shuttle bus runs between the Rihga Royal Hotel and JR Osaka station.
- 15 minutes by Nakanoshima loop bus from Yodoyabashi station on the Subway Midosuji line,or the Keihan line (Exit No.4). The bus stop in front of Sumitomo building.Get off at Osaka International Convention Center.

Osaka International Convention Center

The 10th Floor Plan



Oral Session: Conference Room 1005~1007

Poster Session: Conference Room 1004

Tea Break & Networking: Conference Room 1004

Conference Schedule

Monday, August 14, 2017

Internal Meeting

Tuesday, August 15, 2017

Oral Presentation (10 F)

Time	Schedule	Venue
08:30-16:00	Registration	Foyer Area
09:00-10:30	Management (1)	Room 1006
	Education(1)	Room 1007
10:30-11:00	Tea Break & Networking	Room 1004
11:00-12:00	<p><u>Social Sciences Keynote Speech</u> Associate Prof. Adriana E. Edwards Wurzinger Saitama University <i>Topic: Riding the Burnout Wave: A Sociological Approach to Understanding and Tackling Burnout.</i></p>	Room 1007
12:00-13:00	Lunch Time	Room 1003
13:00-14:30	Management (2)	Room 1006
	Strength, Art and Creative Approach to Counseling and Social Work	Room 1007
14:30-14:45	Tea Break & Networking	Room 1004
14:45-16:45	Finance & Law	Room 1006
	Society & Culture & Communication	Room 1007

Tuesday, August 15, 2017

Poster Presentation (Room 1004, 10 F)

Time	Schedule
14:00-15:00	Poster Sessions (2) Society / Psychology / Economics / Communication
15:30-16:30	Poster Sessions (3) Education / Management

Wednesday, August 16, 2017

Oral Presentation (10 F)

Time	Schedule	Venue
09:30-14:00	Registration	Foyer Area
10:15-10:30	Tea Break & Networking	Room 1004
10:30-12:00	Economics	Room 1006
	Education (2) & Psychology	Room 1007
12:00-13:00	Lunch Time	Room 1003
13:00-14:30	Language, Linguistics & Literature	Room 1006
	Education (3)	Room 1007

Social Sciences Keynote Speech

Room 1007, 10th Floor

11:00–12:00, Tuesday, August 15, 2017

Topic: Riding the Burnout Wave: A Sociological Approach to Understanding and Tackling Burnout.

Associate Professor Adriana E. Edwards Wurzinger
Saitama University,
Center for English Education & Development (CEED)
Japan, Saitama Prefecture



Summary of Keynote Speech

Nobody is completely free from the effects of stress. No news there.

There is nothing wrong with the exhilarating feeling of being challenged, with the adrenaline that a limited amount of stress (the kind you can keep under control) can bring to our professional lives, but how much is enough? Where is the thin line between positive, creativity-fostering stress, and simple, straightforward burnout?

During this presentation, we will uncover and discuss the elements of burnout using sociological principles, aiming at creating a scaffolding of strategies that would allow the participants to put together their very own "survival kit".

Be prepared to participate! This will be the kind of talk where you'll have to walk the walk!

Brief Introduction of Associate Prof. Adriana E. Edwards Wurzinger

A historian, sociologist & social anthropologist, Adriana has been working at Saitama University's CEED since 2006.

As an associate professor, Adriana teaches academic lectures and speaking classes on the History of Secret Societies; Pirates in History & Literature; European History of the Middle Ages; Religion, Popular Culture and the Witch-craze in Medieval and Modern Europe; Sociology of Identity and Human Emotions; Global Culture; and Presentation Skills (Public Speaking), and general Academic English skills classes.

Since 2006, Adriana has coordinated and directed 13 Drama Workshops for Saitama University. Students and teachers alike have shown increasing interest in our theatrical adventures, and the annual workshops have become a popular activity and a trademark of our department. As a coordinator, she wears that badge proudly.

Areas of specialization: Sociology of Identity and Human Emotions, Micro-expressions and Deception Studies, Sociology of Migrations, Social Anthropology of Identity, History of the Witch-Craze in the Late Middle Ages and the Renaissance, Slavery History, Global Migrations History, Conflict Resolution, Public Speaking Training & Drama.

More details on: www.aedwsaidai.kazmatrix.com

Management (1)

Tuesday, August 15, 2017

9:00-10:30

Room 1006

Session Chair: *Prof. Min-Hsin Huang*

ACMASS-0017

The Impact of Salesperson's Ethical Behavior on Consumers' Identification with a Retailer

Min-Hsin Huang | *National Sun Yat-Sen University*

ACMASS-0023

The Influences of Belief Disconfirmation and Country-of-Origin Effect on Repurchasing Intention for Online Apparel Brands: Empirical Evidence from Taiwan

Shu-Yun Cheng | *Southern University of Science and Technology*

Nai-Chang Cheng | *Da-Yeh University*

ACMASS-0087

A Study of the Impact of Business Strategy on Customers' Tourism Behaviors, Travel Motivation, and Satisfaction —A Case Study of Hotels at Kenting, Taiwan

Jen-Shou Kao | *Chang Jung Christian University*

ACMASS-0120

Coaching Team effectiveness Effect Social Support, Self-Efficacy and Job Involvement-Logistics Industry Company as an Example

Yuh-Shy Chuang | *Chien Hsin University*

PingChuan Lee | *Chung Yuan Christian University*

ACMASS-0129

The Sharing Economy: A Case Study of Airbnb in Thailand

Parisa Rungruang | *Mahidol University*

Anchalee Buathongchan | *Mahidol University*

ACMASS-0017

The Impact of Salesperson's Ethical Behavior on Consumers' Identification with a Retailer

Min-Hsin Huang

Department of Business Management, National Sun Yat-Sen University, Taiwan

E-mail address: minhsin@faculty.nsysu.edu.tw

1. Background/ Objectives and Goals

The construct of consumer-company identification (CCI) is defined as a consumer's psychological state of perceiving or feeling a sense of belonging with a company. CCI has received much attention in recent relationship marketing literature and has been discussed as a new way to build deeper and more meaningful long-term relationships with customers. This study examines how CCI is influenced by consumers' perceptions regarding the ethical behavior of retail salespeople.

2. Methods

A conceptual model is developed and empirically tested based on personal interviews with 386 retail shoppers in Taiwan. Second year graduate business students were trained in survey administration and used as interviewers. Respondents were interviewed one at a time, and all surveys were personally administered by the interviewers. This data collection approach has been successfully utilized in previous retail studies.

This study measured all constructs using multi-item scales adapted from the literature. To measure moral equity, contractualism, and relativism, this study used seven-point semantic differential scales with bipolar anchors. All other items employed seven-point, Likert-type scales, with anchors ranging from strongly disagree (1) to strongly agree (7). Structural equation modeling (SEM) was employed to analyze the data using Lisrel 8.72. Following the suggestion of Anderson and Gerbing (1988), we evaluated the measurement model first and then examined the research hypotheses. The fit indices suggest that the model fits the data well ($\chi^2(137)=489.32$, $p<.001$; comparative fit index [CFI] = .98; non-normed fit index [NNFI] = .98; and root mean square error of approximation [RMSEA] = .08; standardized RMR[SRMR] = .05) (Hu and Bentler 1995). The reliability of the measurement model is supported because all coefficient alpha values and composite reliability estimates exceed .7 (Nunnally 1978). The convergent validity and discriminant validity of the current study are all confirmed. The hypotheses of this study were further tested. The estimated results of structural model are obtained and the various goodness-of-fit indices indicate that the hypothesized model fits the data well ($\chi^2(215)=589.59$, CFI = .95, NNFI = .94, RMSEA = .07, SRMR = .05).

3. Conclusion

Consumer-company identification (CCI) has been discussed as a new way for marketers to build deeper and more meaningful long-term relationships with their customers. Which strategies effectively enhance CCI? This question has received much attention among marketing managers and researchers. This study contributes to the literature in three ways. First, this study offers empirical evidence to show that consumers' perceptions of the ethical behavior of retail salespeople can enhance consumers' identification with the company. Furthermore, the ethical behavior of salespeople is demonstrated to not only directly affect CCI, but also to indirectly influence consumers' repurchase intention and word-of-mouth. Second, this study verifies that, among the three moral/philosophical dimensions (i.e., moral equity, contractualism, and relativism), consumers' perceptions of the moral equity of retail salespeople has the greatest influence on CCI. Third, this study reveals the moderating role of product type and shows that consumers' perceptions of the ethical behavior of retail salespeople has a greater effect on CCI for experience products than for search products.

In this era of e-commerce and increased competition, retail salespeople provide the key advantage for retailers hoping to build deeper, long-term relationships with their customers. The results of this study provide new insights for retail practitioners and suggest that retailers can enhance consumers' identification with their company by increasing consumers' perceptions of the ethical behavior of their salespeople. To this end, we have specific recommendations regarding the selection, training, evaluation and compensation of retail salespeople as follows. When recruiting and selecting retail salespeople, managers must take candidates' ethical attitude into account. This study also recommends that marketing practitioners propose sales training programs to educate their sales staff regarding appropriate ethical responses to various scenarios. Such a training program should place particular emphasis on the dimension of moral equity because empirical evidence from this research shows that, among the three moral/philosophical dimensions, consumers' perceptions of the moral equity of the retail salespeople has the greatest impact on CCI. Finally, as for evaluating and compensating retail salespeople, managers who are designing the compensation plan for their retail sales staff should consider not only sales performance but also customers' evaluations of ethical behavior. Customers' evaluations of the ethical behavior of retail salespeople can be obtained via the company's regular customer survey and customer complaint system.

Keywords: Ethical behaviors, Salespeople, Consumer-company identification, Retailing.

ACMASS-0023

The Influences of Belief Disconfirmation and Country-of-Origin Effect on Repurchasing Intention for Online Apparel Brands: Empirical Evidence from Taiwan

Shu-Yun Cheng

Southern University of Science and Technology

Email: sophie1108@stust.edu.tw

Nai-Chang Cheng

Da-Yeh University

Abstract

This study examined the antecedents influencing customer satisfaction and repurchase intention for online apparel shopping from the viewpoint of expectation disconfirmation theory. We developed an extended model to explain repurchase intention, taking into consideration disconfirmation of beliefs as well as the concept of country-of-origin effect. Our empirical results show that all the disconfirmation of belief constructs tested have a significant effect on satisfaction. Satisfaction exerts a significant effect on repurchase intention while country-of-origin effect has only limited effects. These results have implications for researchers as well as entrepreneurs.

Purpose –The purpose of this paper is to show how belief disconfirmation and country-of-origin effect enhances repurchase intention for online apparel shopping.

Design/methodology/approach – This study adapts the viewpoint of expectation disconfirmation theory (EDT) to explain repurchase intention. Based on a survey of 297 website users in Taiwan, the structural equation model has been applied to examine the influence process from a user satisfactory context to personal cognitive beliefs, and thus repurchase intention.

Findings – Our empirical results show that all the disconfirmation of belief constructs tested have a significant effect on satisfaction. Satisfaction exerts a significant effect on repurchase intention while country-of-origin effect has only limited effects.

Practical implications –To sustain a successful shopping website, attention must be paid to enhancing user’s delivery and product value disconfirmation, enlarging country-of-manufacture image. Practitioners can apply the findings of this study to focus on the determinants of success for their ecommerce.

Originality/value – The originality of this research is its explanation of system adoption behavior, which combines the core of IS success with SCT, links user satisfaction to intention to use, and concerns behavior within a specific context.

Keywords: Expectation disconfirmation theory, Country-of-origin effects, repurchase intention, Country image

Influences of the country-of-origin effect on purchasing intention for online brands

1. Introduction

The country-of-origin has become important information for consumers in product selection. Identical products but with different country-of-origin are perceived differently by consumers (Usunier, 2006). From a marketing perspective, country-of-origin is one way to distinguish a firm's products from their competitors. Moreover, it is now one of the most widely researched concepts in marketing and consumer behavior (Papadopoulos & Heslop, 2002).

China's textile and garment industry built its current dominance on the lowest production costs in the world. "Made in China" is one of the most recognizable labels in the world today, and due to China's rapidly developing large manufacturing industry, China is now the largest exporter in the world. Accordingly, the label "Made in China" can be seen on a wide assortment of goods, ranging from clothing to electronics.

Nevertheless, country-of-origin could be seen as a competitive advantage since consumers tend to have a relative preference for products produced in their own country (Agrawal & Kamakura, 1999; Baker & Ballington, 2002). It also represents an important aspect of a product's image that is used to differentiate goods and services by brand management (Kotler & Gertner, 2002).

Nowadays, the apparel industry generally focuses on optimizing the supply chain so that products can be designed and manufactured quickly and inexpensively to allow consumers to purchase new fashion at lower prices (Thomassey, 2010). To this end, many manufacturers are still taking their production overseas to optimize their supply chains, and have set China as the next key market in which to expand their businesses (Qu & Brocklehurst, 2003).

For example, resembling an "online Uniqlo", Lativ is one of Taiwanese shoppers' favorite e-commerce brands. It uniquely leverages Taiwan's textile infrastructure and applies new textile technologies. Lativ has survived in this fiercely competition industry via its online shop, low prices, and "Made-in-Taiwan" marketing strategy. Its fashions are sold online with slogans such as "Purely Made in Taiwan" and "A Renaissance of the Taiwan Garment Industry". In response, Taiwanese consumers have supported Lativ not only due to the quality of its products, but also

because of the “Made in Taiwan” label. Accordingly, Lativ has been very successful in the Taiwanese market, with annual sales reaching US\$135 million in 2011. As a result, its success has encouraged many local Taiwanese entrepreneurs to enter the market of popular clothing.

However since 2010, Lativ has moved some of its manufacturing to China, Vietnam, and Indonesia because of the higher costs and limited production capacity in Taiwan’s textile industry. As a consequence, the marketing strategy of “Made in Taiwan” is being used less frequently. Overall, Lativ’s decision has angered customers, with many vowing to boycott the brand.

Some customers now believe that by purchasing Lativ products, they will help progressively worsen the clothing industry in Taiwan. In particular, ethnocentric consumers believe that purchasing foreign goods is unpatriotic, as it diverts local capital to foreign economies, which ultimately leads to the rejection of foreign products.

This phenomenon prompts the following research questions: (1) what motivates people to repurchase apparel online with the viewpoint of expectation disconfirmation theory in this process? (2) How do the country-of-origin effects affect consumers’ purchase decisions?

2. Theoretical Review

This work develops a theoretical model to characterize the role of country-of-origin effect (COE) in understanding repurchase intention. The model is grounded by expectation disconfirmation theory (EDT) and COE literature pertaining to motivations of repurchase intention.

2.1 Expectation Disconfirmation Theory

Expectation disconfirmation theory (EDT) assumes that expectations can be coupled with perceived performance to affect post-purchase satisfaction. This effect is mediated through disconfirmation between the expectations and performance of products or services. If a product or service meets expectations, the positive disconfirmation will result in post-purchase satisfaction; conversely, if a product or service falls short of expectations, the consumer is likely to be dissatisfied (Oliver, 1980; Spreng, MacKenzie, & Olshavsky, 1996). Figure 1 depicts the model of expectation disconfirmation theory.

Table 1. Operational definitions

Constructs	Operational definition	Items	Source
1. Website quality disconfirmation	The degree website quality exceeds expectations for complete and well-formatted information system and website speed.	6	(Cheng et al., 2012; Delone & McLean, 2003; Lin, 2007b; Yang, Cai, Zhou, & Zhou, 2005)
2. Delivery service disconfirmation	The degree the delivery service exceeds expectations for reliable delivery, package safety, timely delivery and ease of returns.	5	(Ahn et al., 2005)
3. Product value disconfirmation	The degree the product value exceeds the customer's expectation.	3	(Ahn et al., 2005; Yang & Peterson, 2004)
4. Customer satisfaction	The degree of one's feelings of pleasure or displeasure regarding clothing brands.	5	(Lin, 2007b; Yang et al., 2005)
5. Country-of-manufacture image	The degree to which an individual believes the attitude toward country of manufacture.	6	(Shirin & Kambiz, 2011)
6. Country-of-brand image	The degree to which an individual believes the attitude toward country of brand.	6	(Shirin & Kambiz, 2011)
7. Brand image	The degree to which an individual believes the attitude toward the brand.	4	(Chen, 2010; Low & Lamb Jr, 2000)
8. Repurchase intention	The degree to which an individual believes they will repurchase this online brand in the future.	4	(Liao et al., 2011; Tsai, Chang, & Tsai, 2015)

The EDT has been widely applied in recent years to understand continuance usage of information systems (IS). Furthermore, a user's satisfaction is affected by the discrepancy between the expectation of website quality and the disconfirmation. Studies have verified that the EDT is successful in explaining satisfaction and continuance-usage behavior in a variety of contexts, including online shopping (Bhattacharjee, 2001; Hsu, Yen, Chiu, & Chang, 2006; McKinney, Yoon, & Zahedi, 2002).

Under the online-shopping context, customers make purchases through a website as an interface, with their behaviors subject to influence by internet marketing strategies. Nevertheless, deciding whether to repurchase online remains a personal behavior; accordingly, the EDT can be appropriately applied to investigate customer purchasing behavior.

However, because the EDT is generic and applicable to many categories of information systems, certain theoretical extensions may be required to explain customer purchasing behavior. One extension is the integration of four features into the EDT to capture the characteristics of this specific context; another is incorporating COE into the EDT to explain online customer

purchasing intention. The concept of COE is reported to have a significant effect in online shopping (Kassim & Asiah Abdullah, 2010; Kwok, Uncles, & Huang, 2006), with the effect believed to be lasting and contributing to purchasing decisions.

2.2 Country-of-origin effect

The country-of-origin (COO) represents information according to which consumers make inferences about product attributes, triggering a global evaluation of quality, expectation, and performance. Consumers assign attributes to the product based on country stereotype and user experiences with products from that country. The country-of-origin effect on consumer behaviors have been extensively studied (Godey et al., 2012; Koschate-Fischer, Diamantopoulos, & Oldenkotte, 2012; Parkvithee & Miranda, 2012). Research into country of origin effects has focused on various issues linking consumer perceptions with other marketing variables, including consumer nationalism, product quality, price consciousness, technology sophistication, brand images, and country images, to measure consumer attitude and purchasing behavior (Ahmed et al., 2004; Badri, Davis, & Davis, 1995; Hamzaoui & Merunka, 2006).

In other words, research has shown that consumers' broad general perceptions of a country, including its national characteristics, economic and political backgrounds, and representative products, combine to create an overall image or stereotype that is then attached to the products of that country (Nagashima, 1970). This image has a significant influence on consumer perceptions and behaviors, and in situations in which additional information is unavailable or difficult to obtain, can be the determinant of whether or not someone buys a product.

In the past decade, China's reputation has suffered worldwide due to product-safety institutions in many parts of the world recalling Chinese-made products. Consumers generally perceive Chinese products as low-quality, and connect "made in China" labeling with value pricing and unskilled labor. In contrast, "Made in Taiwan" can be a COO practice that plays a role in realizing customer loyalty based on distinct ethical values. In this manner, business organizations can benefit from building an ethical reputation. Meanwhile, consumers are becoming more aware of the social implications of their consumer decisions, and are therefore beginning to make buying decisions related to their country-of-origin concerns.

3. Research model and hypotheses

This study has discussed consumers' behavioral intentions regarding the continuance of online shopping using the expectation disconfirmation theory (EDT), which has been extended to include new variables extracted from the country-of-origin effect literature. The conceptualized model suggests that satisfaction and purchasing intention of online shopping can be characterized using variables derived from EDT (positive disconfirmation of belief) and variables stemming from the physical market, including website quality, delivery service, and

product quality. **Figure 2** graphically depicts the research model and the hypothesized causal relationships among the constructs under study.

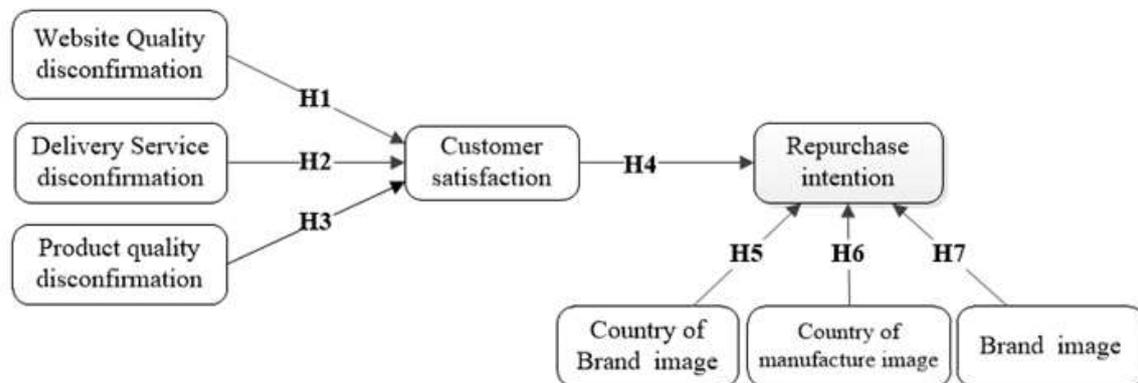


Figure 2. Research model.

Disconfirmation of beliefs and perceived country image were included in this study to investigate the determinants of online consumer purchasing intention. Previous studies have indicated that information quality, system quality, and service quality have a direct effect on satisfaction (Delone & McLean, 2003; Liao, Liu, Liu, To, & Lin, 2011). More specifically, if consumers confirm the high quality of a website and service, they would likely experience a high level of satisfaction. Moreover, product value is considered one significant factor of international competitiveness. Moreover, product value is considered one significant factor of international competitiveness, and can represent the likelihood that the consumer will become a repeat customer, thereby providing ongoing business for the firm.

EDT posits that satisfaction with a service or product is a consumer's primary motivation for usage continuance for its continuance (Oliver, 1980). In other words, satisfied customers will continue supporting a clothing brand, while dissatisfied buyers will discontinue their purchasing or switch to other brands. Simultaneously, country-of-origin has been found as one factor that can affect customer purchasing intention (Back, 2005; Oly Ndubisi, Har Lee, Cyril Eze, & Oly Ndubisi, 2011). The online customer-behavior model summarized by the hypotheses regarding disconfirmation indicates that disconfirmation might affect satisfaction. In turn, repurchase intention will be influenced by both COE and satisfaction.

3.1 Disconfirmation of beliefs and satisfaction

Disconfirmation of beliefs refers to the evaluations that a customer makes with respect to a product or service. These evaluations are made in comparison to the customer's original expectations. In EDT, expectations are formed via disconfirmation judgments and serve as the comparison standard that consumers exercise to evaluate. In turn, customer satisfaction or dissatisfaction is based on their disconfirmation. Accordingly, disconfirmation is reported to

affect satisfaction, with positive and negative disconfirmation respectively leading to satisfaction and dissatisfaction (Oliver & Burke, 1999).

Website quality is the key factor for predicting users' intention to use a website (Cheng, Tsai, Cheng, & Chen, 2012). More specifically, website features are the quality measures for web-based information systems provided by a website. In the context of e-commerce, website quality factors have the potential to directly affect satisfaction (Wang, Wang, & Liu, 2016; Yoo, Kim, & Sanders, 2015). Accordingly, the updated IS-used model identifies information quality, system quality, and service quality as antecedents of user satisfaction (Delone & McLean, 2003). In this study, information quality and system quality are considered important website qualities of IS success. If consumers perceive that a website is of high quality, they will likely derive high satisfaction from the website and develop a willingness to purchase (Liao, Palvia, & Lin, 2006). We can, therefore, speculate that website quality disconfirmation will positively influence satisfaction. Accordingly, hypothesis 1 is proposed as follows:

H1: Positive website quality disconfirmation has a positive effect on satisfaction.

Delivery service is a comparison of expectations between the actual delivery service and performance (Lewis & Booms, 1983). A business with high delivery-service quality will meet customer needs and maintain a competitive advantage. Delivery service quality measures the overall support achieved by reliable delivery, package safety and timely delivery (Ahn, Ryu, & Han, 2005). Consequently, if consumers perceive that delivery service is better than expected, then it will directly influence their customer satisfaction, leading to the following hypothesis

H2: Positive delivery service disconfirmation has a positive effect on satisfaction.

Product value is a marketing concept employed to analyze the satisfaction received by a customer from a purchase. Perceived value is the customer's overall perception of the quality of a product and determined by the customer's judgement of the relationship between perceived product quality and price. Perceived value may also be expressed as a straightforward relationship between perceived benefits and perceived costs. When consumers perceive value as being positive, they will be satisfied with the products, leading to more sales. In this study, perceived product value is defined as the degree to which the product attributes (e.g. price, quality) fit the customer's expectations. Consequently, if consumers perceive that product quality and price exceed their expectations, then it will directly influence their customer satisfaction. There is a positive and direct relationship between product value and customer satisfaction. Thus, the following hypothesis is formed.

H3: Product value disconfirmation has a positive effect on customer satisfaction.

3.2 Customer satisfaction and purchasing intention

Since the value derived from e-commerce depends on customers' continuance intention, it is

important to investigate what motivates people to repurchase online. Satisfaction is an important element of EDT because it significantly affects e-commerce in terms of customers' future actions. Every study that extends EDT has included this variable because of its high explanatory power. Moreover, satisfaction is the connection between the belief variables and behavior intention (Wu, 2013).

Customer satisfaction becomes especially important when the market is saturated. The marketing literature shows that there is a positive relationship between satisfaction and repurchase intention. It has been reported that satisfaction reflects an individual's psychological state resulting from a cognitive appraisal of disconfirmation (Bhattacharjee, 2001). As such, a high level of satisfaction will result in an increase of customers' continuance usage or purchase intention. Accordingly, customer satisfaction is positively associated with the purchasing intention (Fang, Chiu, & Wang, 2011). Hence, this study proposed that customer satisfaction is likely to directly influence purchasing intention.

H4: Customer satisfaction has a positive effect on purchasing intention.

3.3 Country-of-origin and purchasing intention

The use of country-of-origin initiatives to influence consumers purchasing intention has become quite common (Andersen & Chao, 2003). Several studies have also shown that COE impacts both corporate reputation and perception of product quality, which in turn impacts consumer repurchase intention (Bilkey & Nes, 1982; Roth & Romeo, 1992). Moreover, COE, also known as country image, is a psychological effect describing consumers' attitudes toward products.

A product's country image is likely to influence consumers' evaluative judgments of quality and value. This effect differs by product category and quality level of the country of manufacture. This paper considers a country-of-origin on consumers' perceptions of online apparel brands. Country-of-origin is divided and represented by country of brand (COB) and the country of manufacture (COM). It aims to assess the perceived similarities and differences between apparel with respect to the country of brand (COB) and the country of manufacture (COM) of that same brand (Fetscherin & Toncar, 2010).

Finally, brand image has also become a factor in consumer choice of online apparel brands. It has been noted that brand image is very important, as it is an accumulation of beliefs and views about a particular brand. In other words, positive brand image represents the consumers' perception about the product and increases repurchase intentions. Consequently, it has a positive and direct impact on purchase intention. (Aghekyan-Simonian, Forsythe, Kwon, & Chattaraman, 2012).

Based on these arguments, the following hypotheses are postulated.

H5: Positive country-of-manufacture image has a positive effect on consumer purchasing intention.

H6: Positive country-of-brand image has a positive effect on consumer purchasing intention.

H7: Brand image has a positive effect on consumer purchasing intention.

4. Research methodology

This study has two main goals: (1) to examine the hypothesized associations among selected variables; and, (2) to further examine the measurement model fit. Structural equation modeling (SEM) was used as the statistical technique for data analysis. The analysis unit of this research is current individual online shopping consumers.

4.1 Instrument development

The first part of the questionnaire included background questions, such as age, gender, education, income and occupation. The second part measured the eight constructs employed in this study. Table 1 lists the operational definitions of the constructs with references to their sources.

The research model includes eight constructs, each of which was measured via multiple items adapted from the extant literature to improve content validity, as described below (Straub, Boudreau, & Gefen, 2004). After the survey instrument was first developed, a pilot study was conducted during which the initial survey was tested among twenty users with online shopping experience. Then, according to their comments, some items were revised to improve the clarity and understandability. The final items are listed in Appendix 1. All items were measured with 5-point Likert scales, where 1 means “strongly disagree” and 5 represents “strongly agree”.

Table 1. Operational definitions

Constructs	Operational definition	Items	Source
1. Website quality disconfirmation	The degree website quality exceeds expectations for complete and well-formatted information system and website speed.	6	(Cheng et al., 2012; Delone & McLean, 2003; Lin, 2007b; Yang, Cai, Zhou, & Zhou, 2005)
2. Delivery service disconfirmation	The degree the delivery service exceeds expectations for reliable delivery, package safety, timely delivery and ease of returns.	5	(Ahn et al., 2005)
3. Product value disconfirmation	The degree the product value exceeds the customer's expectation.	3	(Ahn et al., 2005; Yang & Peterson, 2004)
4. Customer satisfaction	The degree of one's feelings of pleasure or displeasure regarding clothing brands.	5	(Lin, 2007b; Yang et al., 2005)
5. Country-of-manufacture image	The degree to which an individual believes the attitude toward country of manufacture.	6	(Shirin & Kambiz, 2011)
6. Country-of-brand image	The degree to which an individual believes the attitude toward country of brand.	6	(Shirin & Kambiz, 2011)
7. Brand image	The degree to which an individual believes the attitude toward the brand.	4	(Chen, 2010; Low & Lamb Jr, 2000)
8. Repurchase intention	The degree to which an individual believes they will repurchase this online brand in the future.	4	(Liao et al., 2011; Tsai, Chang, & Tsai, 2015)

The six items for measuring information quality, system quality, and service quality were adapted from Cheng et al. (2012), Delone and McLean (2003), Lin (2007b), and Yang et al. (2005) to reflect the influence of significant others' opinions on users. Items measuring product value were adapted from Ahn et al. (2005) and Yang and Peterson (2004), while items measuring satisfaction were adapted from Lin (2007b). Items measuring the two dimensions COE, namely COM and COB, were adapted from Shirin and Kambiz (2011). And lastly, items of consumer purchasing intention were adapted from Liao et al. (2011).

4.2 Sampling and data collection

A survey method was employed to collect data. Samples were selected from among individuals who have experience in purchasing online apparel brands. Initially, a pilot study involving university students was conducted to determine any ambiguous items that needed to be revised. Finally, online surveys were used because they have several advantages over traditional paper-based mail surveys (Tan & Teo, 2000). Specifically, they are cheaper to conduct, elicit faster responses, and are geographically unrestricted. Moreover, such surveys have been widely used in recent years, the validity of which is broadly accepted (Wright, 2005). The survey was

conducted during January to May 2016. The hyperlink to the online Chinese questionnaire was posted on the survey website. In addition, the link to the website was also posted on several online discussion forums. In order to encourage participation, supermarket coupons were offered as lottery prizes for those who participated in the survey. The online survey yielded 297 valid questionnaires out of 500 in total, giving a response rate of 59.4 percent.

Approximately 59.3% (n = 176) of the effective respondents were female, with 85.9% (n = 255) of all respondents being aged between 20 to 30 years. The distribution of the respondents' gender and age reflected the characteristics of the online apparel shopping experience population in Taiwan. In addition, nearly 86.9 % of the respondents (n = 258) had the experience of online apparel shopping more than twice. The respondents were distributed among the following education levels: high school (4.4 %), college (54.9 %), and master (40.7 %).

Table 2. Demographic characteristics of respondents (n = 297)

Demographic characteristics	Frequency	Percentage
<i>Gender</i>		
Female	176	59.3%
Male	121	40.7%
<i>Age</i>		
Under 20	16	5.4%
21-25	174	58.6%
26-30	81	27.3%
31-40	18	6%
Over 41	8	2.7%
<i>Education</i>		
High school	13	4.4%
College	163	54.9%
Master	121	40.7%
<i>Online apparel shopping experience per year</i>		
1 time	39	13.1%
2-3 times	141	47.5%
4-5 times	74	24.9%
Over 6 times	43	14.5%

4.3 Data analysis and results

The descriptive statistics of each construct are presented in Table 3. The mean scores for each construct exceeded three on the five-point scale, signifying a positive perception of the constructs in question. Examinations of skewness and kurtosis coefficients were performed for the constructs to identify the distributional characteristics of the data collected. As shown in Table 3, the coefficients of the skewness and kurtosis are all well within the acceptable threshold of ± 2 (Bhattacharjee, 2002). In addition, the standardized residual of the mean value for each construct and the standard deviations are closer to zero and one, respectively, indicating normal data distribution (Hair, 2009).

Most researchers have recognized that common method variance (CMV) is a major validity threat to research findings in behavioral research, when data are obtained from a single-informant (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We conducted Harman's single-factor test for measurement validation. The largest variance explained by an individual factor was 36.29 %; thus, none of the factors account for the majority of the variance. Accordingly, we feel that CMV is not a significant problem in this research (Pavlou & Gefen, 2004). In terms of reliability, the Cronbach's alpha of each construct was found to be above the threshold value of 0.60, ranging from 0.764 to 0.926, thereby displaying high internal consistency (Hair, 2009).

Table 3. Descriptive statistics

Constructs	Mean	Std. residual	SD	Skewness	Kurtosis
1. WQD	3.831	0.062	0.377	-1.102	0.504
2. DSD	3.564	0.049	0.861	-0.849	0.388
3. PVD	3.394	0.021	0.415	-0.529	0.558
4. CS	3.047	0.036	0.332	-0.337	0.261
5. COM	3.262	0.041	0.215	-0.641	0.827
6. COB	3.220	0.020	0.114	-0.103	0.362
7. BI	3.266	0.016	0.284	-0.118	0.319
8. RI	2.281	0.029	0.349	-0.214	1.028

WQD= website quality disconfirmation, DSD= delivery service disconfirmation, PVD=product value disconfirmation, CS= Customer Satisfaction, COM= Country-of-manufacture image, COB=Country-of-brand image, BI= Brand image, RI= Repurchase intention.

4.4 Measurement model assessment

Confirmatory factor analysis (CFA) using AMOS 18.0 was used to test the measurement model. Although the sample size (N = 297) of the present study was acceptable, it was slightly below the recommendations proposed by Westland (2014) and Bollen (2014) to provide statistical significance when the anticipated effect size was 0.10, the statistical power was 0.80, and the confidence level was 95 %. A minimum sample size of 200 is suggested for covariance-based SEM techniques (Bliemel, Eggert, Fassott, & Henseler, 2005). Given the size of the sample in this investigation (N = 297), the use of the covariance-based AMOS was deemed reasonable. As reported in Table 4, none of the fit indices of the CFA model violate their corresponding threshold values, demonstrating that the measurement model has excellent fit with the data. The ratio of $\chi^2/d.f.$ for the structural model was 1.958, which again is within the recommended level of 3. Comparisons of other fit indices with their corresponding recommended values provided evidence of a good model fit (GFI = 0.922, AGFI = 0.828, NFI = 0.938, NNFI = 0.912, CFI = 0.902, RMSEA = 0.062). Accordingly, we can conclude confidently that the present data can be explained adequately using the proposed model.

Table 4. Overall Fit Indices of the CFA model

Model-fit index	Recommended Results		References
	cut-off value		
χ^2	N/A	121.694	
<i>d.f.</i>	N/A	62.152	
$\chi^2/d.f.$	≤ 3.00	1.958	(Bentler & Bonett, 1980)
Goodness-of-fit index (GFI)	≥ 0.90	0.922	(Hu & Bentler, 1999)
Adjusted goodness-of-fit index (AGFI)	≥ 0.80	0.828	(Ullman & Bentler)
Normalized fit index (NFI)	≥ 0.90	0.938	(Bentler & Bonett, 1980)
Non-normalized fit index (NNFI)	≥ 0.90	0.912	
Comparative fit index (CFI)	≥ 0.90	0.902	
Root mean square error of approximation (RMSEA)	≤ 0.08	0.062	(Hair, 2009)

Tables 5 and 6 list the number of items, factor loadings, composite reliabilities, average variance extracted (AVE), and the square root of the AVE, as well as the correlations between constructs. As indicated in Table 5, the complete factor loadings of all CFAs exceeded the benchmark value of 0.70 (Vinzi, Trinchera, & Amato, 2010) and reached an appropriate level of significance ($p < 0.001$), suggesting that all indicators are significantly correlated with their respective constructs, thereby assuring construct validity (Fornell & Larcker, 1981).

Table 5. Results of CFA for measurement model

Latent variable	Item	Item-total correlation	Factor loading	Composite Reliability ^a	AVE	Cronbach's alpha
1. WQD	WQD1	0.752	0.761	0.857	0.502	0.764
	WQD2	0.723	0.735			
	WQD3	0.662	0.704			
	WQD4	0.634	0.607			
	WQD5	0.637	0.612			
	WQD6	0.771	0.809			
2. DSD	DSD1	0.745	0.821	0.888	0.614	0.917
	DSD2	0.733	0.820			
	DSD3	0.764	0.837			
	DSD4	0.693	0.724			
	DSD5	0.681	0.705			
3. PVD	PVD1	0.831	0.854	0.903	0.756	0.926
	PVD2	0.837	0.857			
	PVD3	0.840	0.896			
4. CS	CS1	0.735	0.773	0.890	0.618	0.810
	CS2	0.707	0.786			
	CS3	0.798	0.857			
	CS4	0.640	0.691			
	CS5	0.759	0.815			
5. COM	COM1	0.788	0.858	0.900	0.600	0.869
	COM2	0.833	0.862			
	COM3	0.688	0.736			
	COM4	0.623	0.732			
	COM5	0.620	0.726			
	COM6	0.609	0.719			

6. COB	COB1	0.565	0.711	0.858	0.503	0.874
	COB2	0.551	0.694			
	COB3	0.513	0.628			
	COB4	0.610	0.725			
	COB5	0.636	0.741			
	COB6	0.644	0.749			
7. BI	BI1	0.680	0.784	0.898	0.688	0.866
	BI2	0.644	0.760			
	BI3	0.790	0.904			
	BI4	0.697	0.861			
8. RI	RI1	0.708	0.827	0.855	0.598	0.890
	RI2	0.714	0.848			
	RI3	0.702	0.709			
	RI4	0.664	0.698			

Note: All t-values are significant at $p < 0.001$. *Composite reliability: (square of the summation of the factor loadings) / (square of the summation of the factor loadings) + (summation of error variances) }.

All composite reliability measures exceeded 0.850, which is above the recommended 0.7 (Byrne, 2013), indicating adequate internal consistency. AVE values of all constructs are above the suggested threshold value of 0.50 (Fornell & Larcker, 1981), thereby demonstrating convergent validity. In addition, the square root of each construct's AVE was larger than its correlations with other constructs, indicating discriminant validity (see Table 6). Despite the high correlation coefficients among certain constructs, they display no signs of multi-collinearity, with all variance inflation factor (VIF) values less than 2.

Table 6. Discriminant validity

Construct	1	2	3	4	5	6	7	8
1. WQD	0.709							
2. DSD	0.261	0.784						
3. PVD	0.355	0.197	0.869					
4. CS	0.314	0.394	0.173	0.786				
5. COM	0.250	0.218	0.481	0.353	0.775			
6. COB	0.226	0.346	0.284	0.168	0.439	0.709		
7. BI	0.433	0.222	0.019	0.004	0.017	0.009	0.829	
8. RI	0.207	0.415	0.216	0.284	0.359	0.157	0.444	0.773

Notes: Diagonals represent the average variance extracted. Other entries represent the shared variance;

WQD=website quality disconfirmation, DSD=delivery service disconfirmation, PVD=product value disconfirmation, CS=Customer Satisfaction, COM=Country-of-manufacture image, COB=Country-of-brand image, BI= Brand image, RI=Repurchase intention.

4.5 Hypothesis testing

To test the internal structural fit, the model path diagram was used to investigate the correlations between independent variables and dependent variables. Table 7 shows that the findings support all hypotheses. In terms of antecedents of online customer satisfaction, the research model predicted that DSD and PVD were significantly correlated with satisfaction. These results support WQD, DSD and PVD would have positive correlations with satisfaction. Our results support this prediction, with path coefficients of 0.213 ($p < 0.05$), 0.337 ($p < 0.01$) and 0.596 ($p < 0.001$), respectively. In terms of consequences, satisfaction presented a significant and positive effect on repurchase intention, with a path coefficient of 0.617 ($p < 0.001$). As such, these

results support H1–H4.

In addition, COM image and COB image both had significant and positive relationships with repurchase intention, with path coefficients of 0.201 ($p < 0.05$) and 0.515 ($p < 0.001$). Consequently, these results support H5 and H6. Finally, BI also has a positive effect on repurchase intention, with a path coefficient of 0.379 ($p < 0.01$), which supports H7. The results of hypotheses testing are presented in Figure 3.

Table 7. Hypotheses Tests

Hypothesis	Path coefficient	t-value	Supported?
(H1) Website quality disconfirmation → Customer Satisfaction	0.213*	2.440	Yes
(H2) Delivery service disconfirmation → Customer Satisfaction	0.337**	3.580	Yes
(H3) Product value disconfirmation → Customer Satisfaction	0.596***	7.958	Yes
(H4) Customer Satisfaction → Repurchase intention	0.617***	9.076	Yes
(H5) Country-of-manufacture → Repurchase intention	0.201*	2.227	Yes
(H6) Country-of-brand → Repurchase intention	0.515***	6.465	Yes
(H7) Brand image → Repurchase intention	0.379**	3.901	Yes

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

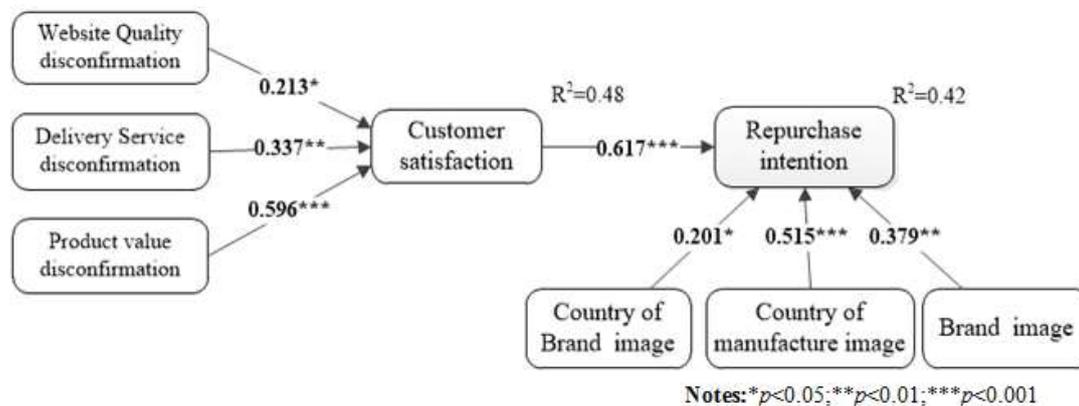


Figure 3. Results of structural modeling analysis

5. Discussion and implications

5.1 Discussion of the results

The findings of this study indicate that the positive disconfirmation of a website exert a significantly positive influence on satisfaction. This means that even if the website quality provided by online stores exceeds the expectations of consumers, the consumers will not necessarily derive a higher level of satisfaction.

Our results show that positive disconfirmation of the website has an only slightly significantly positive influence on satisfaction, which means that even if the website quality exceeds

consumer expectations, it does not produce greater satisfaction. This may be due to the composition of the respondents in this study, the majority of whom were young individuals between the ages of 21 and 40. Thus, it is assumed that members of this group possess better than average computer skills and more experience using the internet, such that the operating system is unlikely to present obstacles and website quality is not a main significant indicator of satisfaction.

Our results show that the positive disconfirmation of delivery service has a significant and positive influence on satisfaction, which means that DSD surpassing consumer expectations increases satisfaction. This supports the findings in Lin (2007a), in which DSD was reported to exert a significant and positive influence on satisfaction.

Our results in support of H5 and H6 confirm the findings which indicates that that a favorable assessment of country image has a positive impact on consumer evaluations of COE, which in turn has a positive effect on purchasing behavior, future purchase intentions which in turn has a positive effect on purchasing behavior and future purchase intentions, and also, as Bilkey and Nes (1982) and Roth and Romeo (1992) found, a willingness to pay more for the country image. Our results in support of H7 agree with the findings of Park and Kim (2003), which indicate that fulfillment of brand image has a positive impact on consumer evaluations, which in turn has a positive effect on purchasing behavior, future purchase intentions, and a willingness to pay more for the brand image.

5.2 Theoretical implications

This study contributes to our understanding of how repurchase intention affects online shopping behavior. Using the well-established EDT as a theoretical framework, we proposed three critical online shopping factors (Website quality disconfirmation, Delivery service disconfirmation and Product value disconfirmation) contributing to customer satisfaction. PVD is a new construct in IS research. Previous studies confined to an exploration of satisfaction in IS have used Website quality and Delivery service as important antecedents to satisfaction. This study developed an integrated model based on the concepts of EDT and COE in an effort to predict and explain repurchase intentions in online shopping. This study's innovation was that it integrated website features, delivery service and product value within the EDT model. We also made an initial attempt to conceptualize and test a theoretical model of COE. The current research model revealed some interesting findings that have not been discussed in previous research. For example, the disconfirmation of expectations regarding product quality value was found to be a stronger predictor of satisfaction. In addition, we found that satisfaction derived from country image and brand image both have a significant effect on repurchase intention.

The results from this study confirm the findings regarding brand image and country-of origin

that are related to manufacture and brand (Fetscherin & Toncar, 2010). Moreover, satisfaction and country-of origin both play an important role in influencing consumer repurchase intention.

5.3 Practical implications

This examination of website quality disconfirmation, delivery service disconfirmation and products value disconfirmation and their impact on the satisfaction of customers engaged in online shopping has yielded several interesting findings. Clearly, customer satisfaction is composed of several partial variables. Our findings also show a direct link between satisfaction and delivery service. To sustain a successful online apparel website, attention must be paid to enhancing user's delivery and product value disconfirmation. Country-of-manufacture image plays an important role in country-of-brand image. Practitioners can apply the findings of this study to focus on the determinants of success for their ecommerce.

6. Conclusion

Theoretically, while drawing upon the extended EDT, we aimed to provide a model capable of understanding the online apparel consumer repurchase intention. This study examines the impact of website quality, delivery service, and product value on the satisfaction of consumer through statistical analysis and applies EDT as a theoretical base. Our findings indicate that both satisfaction and COE are determinants of repurchase intention.

Successful e-commerce not only needs to provide a high quality website but high value and good service to entice customers to return to their online store. More pertinently, exceeding customer expectations is essential to customer satisfaction; therefore, online companies must offer products and services superior to those previously experienced by consumers when shopping at other online companies.

Moreover, with industrial development, social progress and the impact of international business, competitive pressures faced by global brands are growing. With COE, consumers are gradually paying more attention to whether the enterprise has a positive brand and country image. Accordingly, COE was also taken into consideration in order to understand the determinants of consumer purchasing intention.

In order to reduce the negative impact of COE on products or brands, two urgent issues need to be researched. First, in the Taiwanese market, the product areas that have a clear negative COE must be identified, as well as the areas that are conducive to the source of Taiwan's brand effect brand effect. Second, in different product categories, the cause of COE should be determined, as well as strategies to reduce the negative impact COE.

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Appendix A: Constructs and Measurement Items

Website quality disconfirmation (WQD)

1. The information provided by website is accurate.
2. Website provides me with a complete set of information.
3. The information from website is always up to date.
4. Website operates reliably.
5. Website allows information to be readily accessible to me.
6. If I wanted to, I could easily contact a customer service representative by telephone. This exceeded my expectations

Delivery service disconfirmation (DSD)

1. The website delivers the right product which was ordered than I had expected.
2. The website delivers products with safely packaged than I had expected.
3. The website delivers products at the promised time than I had expected.
4. It is easier to return the product delivered than I had expected.
5. All of the terms and conditions (e.g., payment, and return policies) were easy to read/understand; this was better than I had expected.

Product value Disconfirmation (PVD)

1. Website sells higher quality products than I had expected.
2. Website sells greater variety of products than I had expected.
3. Website supports higher product availability than I had expected.

Customer Satisfaction (CS)

1. I feel satisfied about my overall experience.
2. I feel pleased about my overall experience.
3. I feel contented about my overall experience.
4. I feel delighted about my overall experience.
5. I would be very satisfied with this apparel brand.

Country-of-manufacture image (COM)

1. The level of economic development of country is high.
2. The level of democratic politics of country is high.
3. The level of industrialization of country is high.
4. The standards of living of country are high.
5. The level of technical knowhow, technology implementation of country is high.
6. The product quality of country is high.

Country-of-brand image (COB)

1. The level of economic development of country is high.
2. The level of democratic politics of country is high.
3. The level of industrialization of country is high.
4. The standards of living of country are high.
5. The level of technically advanced of country is high.
6. The product quality of country is high.

Brand image (BI)

1. The apparel brand is known for its high quality.
2. The apparel brand is a reliable product.
3. The apparel brand is useful.
4. The apparel brand has good features.

Repurchase intention (RI)

1. I recommend the apparel brand to others.
2. I am keen on the apparel brand in the near future.
3. I think that my friends and relatives love the apparel brand.
4. I am strongly considering purchasing this apparel brand again in the near future.

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A Study of the Impact of Business Strategy on Customers' Tourism Behaviors, Travel Motivation, and Satisfaction –A Case Study of Hotels at Kenting, Taiwan

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Abstract

The objects of the study are mainly tourists travelling to and lodging at the tourist recreation and resort hotels at Kenting, Taiwan. Data was first collected through questionnaires and then analyzed statistically to draw conclusion. It is found that the research has the following purposes: First, to understand the impact of business management strategy of hotels at Kenting on customers' tourism motivations, satisfaction and behavior intention; secondly, to explore the relationship among customers' tourism motivations, satisfaction and behavior intention; thirdly, to explore the relationship between consumers' personal background and business management strategy of hotels at Kenting; finally, to analyze the variation in consumers' personal background among tourism motivations, satisfaction and behavior intention.

Keywords: Business Management Strategy of Hotel, Tourism Behaviors, Travel Motivation, Satisfaction

I. Introduction

Tourism Industry is the most profitable and booming industry in the Twentieth Century. According to the previous reports of World Tourism Organization (WTO) and World Travel & Tourism Council (WTTC), the number of tourists reached 840 million tourists in 2006. Among them, the production value of tourism industry accounts for 10.4% the global GDP and 12.2% of total value of the global export (Analysis Report of Department of Investment Services, Ministry of Economic Affairs, 2008). The tourism industry has been included in "Six Emerging Industries Action Programme" which announced in 2009 by the Taiwanese government. Currently the Taiwanese society have begun emphasizing tourism leisure and recreation, and the local tourism has grown rapidly accordingly. The number of the domestic tourists in Taiwan has increased from 97,900,000 in 2009 to 142,600,000 in 2013, the income from tourism has also dramatically increased from 182.8 billion dollars in 2009 to 272.1 billion dollars in 2013 (Tourism Bureau, Ministry of Transportation and Communications, 2014). In recent years, Taiwan actively promote the development of tourism industry, followed by the successful 2008~2009 "Year of travels in Taiwan", the Tourism Bureau continues the next motive power of

grow up to promote “Travels in Taiwan, 100% touched your heart” by “inviting more foreign visitors to travel Taiwan and to experience the beauty of Taiwan” to create new milestone of total revenue of tourism amounting to 5,100 billion dollars, and aims to serve millions tourists within 5 years (Tourism Bureau, Ministry of Transportation and Communications, 2015). The outcomes would reveal that the great importance of tourism and recreation on Taiwan (Jeou-Shyan Horng, Chih-Ching Teng, Ming-Huei Lee, Yuan-An Liu, 2006)

In recent years, the demands on relax hotels have become more and more rigorous since our quality of life have enhanced and the awareness of customers have risen. hoteliers of tourism and leisure hotels must explore the relationship among business management strategy of hotel and customers, satisfaction and behavioral intention to think of the business model of hotels from the prospective of customers to serve as the reference of future development and management of hotels to achieve the win-win situation between hotels and customers (Huan-Shen Liao, 2009). According to the statistic data of the Tourism Bureau, to meet the requirement of accommodation of the domestic and foreign tourists hotels in Taiwan, the number of legal general hotel, statistical table, and numbers of employee of the statistics data by September 2016 is as follows. A total of 3225 hotels are operated in Taiwan (including 106 and 3,165 general hotels), a total of 146,201 rooms, and 54405 employees (Tourism Bureau, Ministry of Transportation and Communications, 2016). With the policy deregulation of Taiwan Strait Tourism, the prospect of tourism is getting better, all of the Taiwanese hoteliers hold the positive attitude toward establishment of tourism hotels one after. Currently among hotels applying to the Tourism Bureau for the construction, there are a total of 57 hotels to be built between 2009 and 2012, with a total of 15,183 rooms of hotel rooms and the total investment amount amounting to 1031 億元 (Tourism Bureau, Ministry of Transportation and Communications, 2009). According to the above data, the blooming development of tourism industry have given rise to the hotel industry.

The service sector has gradually become mainstream and is receiving attention in many developed countries, frontline service employees play the important critical roles in customer service since they are the first people to contact customers when constructing and developing for the customer relationship (Liao & Chuang, 2007; Hulsheger & Schewe, 2011). Chia-Jung Hung (2004) pointed out that there are two main types of services: tangible and intangible; the so-called tangible service refers to the physical facility, equipment, products; the so-called intangible service refers to the service attitude of service personnel. The outcome of the service offered by the enterprise is a significant determinant of customers making transaction to other enterprises, in case the enterprise can offer good service so as to improve customer satisfaction and confidence level to establish relationship with customer to enhance the willingness of continuous business of customers. According to Zeithaml and Bitner (2000), the scope of customer satisfaction is more extensive than the service quality, including: to measure of quality

only focus on the Dimension of service quality, thus, service quality is supposed to affect customer satisfaction (Chien-Wen Chen, Mei-Wen Chen, 2006). In addition, Keaveney (1995), Fornell&Wernerfelt (1987) found that services offered by the enterprise is a significant determinant of customers making transaction to other enterprises, in case the enterprise can offer good services so as to improve customer satisfaction to establish relationship between the industry and customer to enhance the willingness of continuous business of customers. From the above, we have learned that the effect of satisfaction to behavioral intention of customers.

In this study, we apply the questionnaires to conduct the study, and hope to achieve the following research purposes: 1. To understand the effect of business management strategy of hotels at Kenting to visiting motivations of customers, customer satisfaction, and behavioral intention. 2. To explore the relationship among visiting motivations of customers, satisfaction and behavioral intention. 3. To investigate the relationship between personal backgrounds of customers and business management strategy of hotels at Kenting. 4. To analyze the difference of personal backgrounds of customers among visiting motivations, satisfaction, and behavioral intention.

II. Literature Review

(1) Management Strategy of Hotel

The definition of “hotel” is as follows: 1. Statute for the Development of Business Hotel: to run the Business Hotel to welcome business visitor and offer them services; 2. Regulations for Administration of Taiwan Hotels: refers to the profit-seeking business offer recreation and lodging services to the uncertain personnel except for hospitality industry; 3. Regulations for the Administration of Hotel in Taipei City: the location equipped with rooms, bedding to offer recreation and lodging services of the uncertain personnel for the purpose of business running; 4. Regulations for the Administration of Hotel in Kaohsiung City: refers to profit-seeking business to offer recreation and lodging services to the uncertain personnel except for international hospitality industry and hospitality industry. (Chien-Feng Huang, 2004). Li-Chung Chang (2005) argued that hotel is a public device to offer meals, lodging and services to gain the reasonable profits. **Chiung-Yu Lu, Meng-Li Huang, Chin-Ming Lee (2015)** argued that the establishment of hotels are in following conditions: 1. To offer the meals, lodging, and recreational device; 2. A place to offer various conference, social, cultural, and information exchange; 3. a profit-seeking business aims to earn the reasonable profits; 4. Shall be liable to legal rights and obligations to the public; 5. A building is well equipped with and approved by the government.

Secondly, lodging Industry is one important part of the Taiwan tourism development. Currently tourists not only pay attention to safety of lodging but also gradually emphasize the atmosphere, style, and ranking of hotels, therefore, the related hoteliers gradually develop diversified business

model to meet the requirement of consumers¹. In addition, the hotel industry in Taiwan can be divided as tourism hotel and general hotel according to its scale, management, administration method, and characteristics, among them, the tourism hotel industry can be classified as the international tourism hotels and general tourism hotels in accordance with the standard of construction and equipment for “Regulations for the Administration of Tourism Hotel Industry” (Po-Wen Chang, 2007). Moreover, Ming-Cheng Xie, Chien-Hsiang Wu (1992) classified hotels as the following 4 types according to its characteristics, duration of lodging of tenants, and size: 1. commercial hotel: are usually located at cities, the main customers are business customers with luxury equipments such as swimming pool, sauna, fitness club, and commercial center; 2. resort hotel: are usually located near coast, mountain, hot spring area, and scenic spot to be far away from the city. It is limited by low and peak season for the purpose of health and leisure; 3. residential hotel: popular in Europe and America, most of the subjects are single elderly. Such kinds of hotels are usually apartment with room services; 4. Special Hotel: such as motels, airport hotel, apartment, and so on.

Wen-Ting Lin (2003) pointed out that the degree of characteristic and the exterior environment of competition of core resource of restaurant affect the adopted business management strategy, characteristics of core resource of restaurant, and the interior alternative environment affect the adopted business management strategy. Chuan Lee, Wen-Ruey Lee, Hsiao-Wen Hsu (2000) argued that hospitality industry which adopt different strategies has significant difference on operating performance, the market segment and pricing strategy are important factors affecting the operating performance of international tourism hotel. Jui-Chao Teng, Ching-Yu Lee (2010) emphasized that the hoteliers shall utilize the strategic alliance to adopt the advertisement to promote the tourism and tour image of Taiwan to increase the number of foreign tourist to Taiwan to enhance the revenue of hotels.

(2) Travel Behavior and Motivation

The word motive or motivation stems from the Latin word "movere" which means to move. Your motivation level is what moves you to participate in an activity and it affects your desire to continue the activity. (Han J, 1998). Maslow (1943) suggested that the source of motivation is a drive derived from the need not being satisfied from the physical need. Fishbein & Ajzen (1975) argued that motivation refers to utilize the expectation value theory to take part in a given activity, in other words, the attraction of the activity itself and the expected outcome of

¹Article 2 of the current “Act for the Development of Tourism” classified the lodging industry into three categories including tourist hotel industry, hotel industry, and homestay. Among them, Item 7 defines Tourist hotel enterprise as “a profit-taking enterprise that operates international tourist hotels or regular tourist hotels to provide tourists with lodging and related services.” Whereas, Item 8 of Article 2 clearly defines hotel enterprise as “profit-taking enterprise other than the tourist hotel enterprise that provides tourists with lodging, rest for a brief period, and other services approved by the central administrative authority”(Shang-Ju Yu, 2007).

participants. Kolter (1999) pointed out that motivation, also known as the driven power, is a strong pressure to indicate the individual to search for satisfaction to meet to reduce the anxiety and tension. Yu-Cheng Liang (2010) pointed out that motivation is a driven force, willingness, expectation, and temptation to lead the individual toward the certain goal to meet the personal requirement or reduce the pressure. Yi-Heng Chou, Hsi-Jui Wu (2003) divided the travel motivation of tourist into interpersonal relationship and capability cultivation, physical and mental relaxation and leisure, willing to know how and learn, seek for one's own space and inspiration, kinship and friendship cultivation. Among them, the travel motivation of tourist is mainly for physical and mental relaxation and leisure to the physical relaxation, relax, slowing down the living tempo, the mental relaxation, emotion exchange with his or her family members, getting rid of the daily busy life, pressure and tension relaxation. Chin-Hsiung Hou, Chang-Jen Kuo (2003) classify the leisure motivation of tourist into 4 categories, i.e., "in pursue of social knowledge benefit," "in pursue of self and risk," "in pursue of natural experiences," and "living in harmony", the research indicated that there are significant differences among "in pursue of social knowledge benefit," "in pursue of natural experiences," and "living in harmony" of tourists of different wet places to imply that the leisure motivation of tourists differ by different place of leisure. Chai-Chin Liu, Chia-Ming Chang, I-Hui Liu, Ching-Shu Huang(2005) suggested that there were 5 factors of travel motivation of tourism participants including "curiosity and self-satisfaction," "Leisure and recreation," "visiting and learning," "seeking for excitement," and "fitness keeping and challenge."

(3) Customer Satisfaction

Brand decisions then essentially involve alternative brands and the buyer's own choice criteria (Howard & Sheth, 1969); Fujiwara, Wiedemann, Timpl, Lustig & Engel (1984) pointed out that customers would estimate the product performance and expectation before purchase after use product. The customer will live happily and feel satisfied when the above reach the certain conformity, vice versa; according to Zeithaml, Parasuraman, & Berry (1990), satisfaction which is an attitude is the estimation of purchasing behavior and interaction with products. Oliver & Westbrook (1993) pointed out that customer satisfaction is the comprehensive of cognitive and emotional factors. Concluding each viewpoints of scholars, Lazar & Kolter (1996) pointed out that satisfaction is the difference function between perception and expectation, customer satisfaction mainly comes from the perception on the function and outcome of product as well as the expectation toward products to compare the above to feel happy or disappointed sense.

Voss, Parasuraman & Grewal (1998) pointed out that performance, expectation, and price jointly decide the customer satisfaction; Yi-Ching Lin, Chen-Hsiang Chen, Lun-Chung Tzeng(2006) pointed out that customer satisfaction is the difference between "expected level" and "actual level" of product or service offered to customers. Co & Hart & Singh (1988) discovered that the intention of complaints on products or services of customers, including voice complaints (i.e.

claims on compensation of merchants), private complaints (i.e. negative electronic word-of-mouth), and third-party complaints (i.e. reflect to the legal organization); Churchill & Surprenant (1982) concluded viewpoints of many scholars to propose the customer satisfaction theory and concluded the factors affecting the customers into the following 4 categories: 1. Customer Expectation: “Customer Expectation” refers to the expected profit offered by the product before purchasing of customers, “Customer Expectation” reflects the expected performance of product of customer. 2. Product Performance: “Product Performance” refers to the real perception of customers after purchasing to compare with the expectation before purchasing. 3. Disconfirmation: “Disconfirmation” refers to the degree of difference between the expectation and product of customer. Oliver (1980) thought the strength and direction of disconfirmation affect the assessment of customer on customer satisfaction. 4. Customer Satisfaction: “Customer Satisfaction” refers to the degree of expectation is in conformity with product.

Regarding the customer satisfaction Behavior Scale, moreover, Parasuraman, Zeithaml & Berry (1996) developed an assessment of behavioral intention to be classified into four categories including word-of-mouth communication, purchasing intention, price satisfaction, and complaints, behavioral intention refers to the “the certain expression whether to take such action or not” (Chia-Chun Hsu, 1999). [Zeithmal, Berry, and Parasuraman’s (1996) theoretical framework of behavioral intentions on the web-based services using the e-Servqual instrument.] Kuan-Chu Chen, Yui-Dung Lin (2006) thought that generally speaking behavioral intention is the possibility and tendency of individual to take a certain action or certain method toward the attitude. Kozak (2001) argued that repeat visit refers to the willingness of tourists willing to travel the certain destination or other scenery on the traveling industry; Selnes (1993) thought that repurchase intention refers to the tendency of willingness of re-consumption of customers for the previous purchased product or service. Dodds and Monroe (1985) proposed that the relationship model of price, quality and perceived value and mentioned that perceived value is an important factor in consumers’ purchasing decision process, and consumers will buy a product with high perceived value. Abramson, Giddy & Kotler (2000) thought that the certain degree of satisfaction or non-satisfaction of customers to determine to purchase such product again after purchase products or service.

III. Research Methods

This study is based on questionnaires way. The target respondents of questionnaire survey are tourists check-in to lodge at tourism and leisure hotels at Kenting, Taiwan. Interviewing is performed to select the hoteliers who are willing to comply with our survey and inviting tourism recreation hoteliers at Kenting, Taiwan to release questionnaires to accommodation tenants. Data are statistically analyzed after the selection of valid questionnaires.

(1) Research Hypothesis

Based on the result of literature review, we propose the following hypotheses:

H1. Different backgrounds of customers have a significant positive impact on business management strategy.

H2. Different backgrounds of customers have a significant positive impact on visiting motivations of customers.

H3. Different backgrounds of customers have a significant positive impact on customer satisfaction.

H4. Business management strategy has a significant positive impact on visiting motivations of customers.

H5. Business management strategy has a significant positive impact on customer satisfaction.

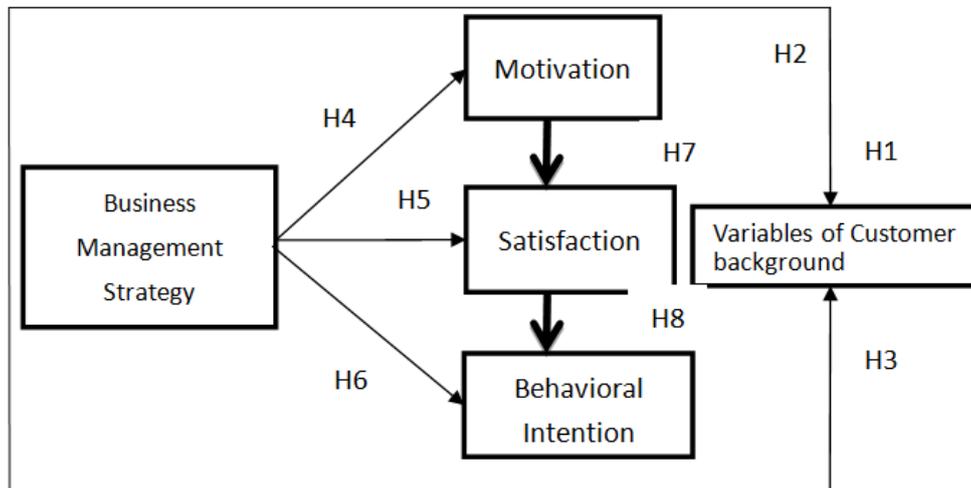
H6. Business management strategy has a significant positive impact on behavioral intention .

H7.visiting motivations of customers has a significant positive impact on satisfaction.

H8. The customer satisfaction has a significant positive impact on behavioral intention .

(2) Conceptual Framework

The study was to investigate the visiting motivations , satisfaction and behavioral intention of different backgrounds of customers under the business management strategy of hotels. Based upon the purpose of this research and result of literature review, the research structure of this study is confirmed as follows.



(3) Subjects of Research

The sampling focuses on the consumers travel to hotels in Kenting for consumption, among them, those who are travel to homestay and hotels are not subjects for this research. Deleting such customers from the samples, in addition to the capability of filing questionnaires of respondents, this study chooses the customers aged above 18 as the target subjects.

(4) Sampling Methods

With regard to the selection and collection of the sampling the research applies the method of purposive sampling. Interviewing is performed to select the hoteliers who are willing to comply with our survey and inviting tourism recreation hoteliers in Kenting Area of Taiwan to releasing questionnaires to accommodation tenants.

(5) Questionnaire Design

The design structure of the questionnaire depends mainly upon the literature reviews exploring business management, management strategy, customer motivation, satisfaction, and revisit intention. The Nine Indicators of Excellent Model of European Foundation for Quality Management (EFQM , 2012) is applied as the fundamental structure of management indicator of hotel of this study, and the findings of research of Erh-Chung Kung (2013) is also applied; secondly, Customers’Lodging Motivation mainly refers to the scales of the findings of the research of Yu-Ting Huang (2012) and Jen-Shou Kao (2012), the structure of scale of customer satisfaction and behavioral intention refers to the scale structure of Morgan & Hunt (1994), and the scale of satisfaction and behavioral intention scale of researches of Huan-Shen Liao (2009), Yu-Ting Huang (2012), and Yi-Lan, Kuo (2012).

Questionnaire Investigation method was used in this study to collect data. The questionnaire was consisted of four parts, the first part Particulars of Customers, the second part hotel management indicator, the third part Customers’Lodging Motivation, and the fourth part customer satisfaction and revisit intention. We use Likert's five-point scale to analyze, the scale of business management is classified into five scales “Very unimportant”, “unimportant,” “Neutral”, “Important”, and “Very important”. The scale of questionnaire of motivations is classified into “strongly disagree”, “disagree”, “general”, “agree”, and “strongly agree”. The scale of questionnaire of satisfaction degree is classified into “the least satisfied,” “not satisfied,” “Neutral,” “satisfied,” and “very satisfied.” The score of the above is from 1 to 5 points in order.

First Part: Particulars of Customers

We aim to understand the backgrounds of customers of hotels in Kenting Area. The following is the 8 items of questionnaire.

Table 1 Items of Background of Customers

Items of Background		
(1) Gender	(4) Educational Level	(7) Nos. of Visiting Hotel
(2) Age	(5) Personal Monthly Income	(8) Customer Type
(3) Occupation	(6) Place of Residence	

Second Part: Hotel Business Management Indicator

We aim to understand the importance of hotel business management indicator since it is one of the main explorations of the study. This study identified 48 items, which are further divided into nine dimensions.

Hotel Business Management Indicator		
leadership	(1) innovation and sustainable development	(4) corporate culture
	(2)the introduction of evaluation system	(5) staff centripetal force
	(3) brand image	(6) cross-field general training
Strategic Directions /activities	(1)learning experience activities	(4) attractions introduction
	(2) package trip	(5) Guide to explain
	(3) recommended itinerary	(6) safety design
Manpower	(1)hotel professional training	(4)activities planning manpower
	(2)health services professional manpower	(5) activities lead and guide explain manpower
	(3) the license of professional manpower	(6) Cooperative manpower
Partnership	(1)alliances	(3) Subcontractors
	(2)foreign trade alliance	(4) production and cooperation
Process	(1)staff work flow	(3) Activity planning and implementation process
	(2) customer service process	(4)risk management process
Customer results	(1)housing rate	(4) customer satisfaction
	(ii) Number of participants	(5) return rate
	(3) customer response feedback system	(6) customer recommendation rate
Employee results	(1)leave, absent, rate assessment	(5) satisfaction with communication and leadership style
	(2)positive motivation and work motivation	(6) the identity of the organization
	(3) job adjustment and job satisfaction	(7) learning growth opportunities and satisfaction
	(4) Satisfaction with the salary of the employment environment	(8) healthy image and literacy
Social results	(1)to promote community leisure	(3) to create a healthy community
	(2)the development of cultural	(4) to cultivate local identity

	industries	
Key performance results	(1)the average price	(iii) Extensible service and product value
	(2)the total service / learning activities revenue	(4)the establishment of characteristics and brand

Third Part: Customers' Lodging Motivation

We aim to understand the importance of Customers' Lodging Motivation since it is one of the main explorations of the study. This study identified 18 items.

Table 3 Customers' Lodging Motivation

Customers' Lodging Motivation	
(1) the environment of hotel is beautiful	(10) the hotel can gather between family and friends feelings
(2) Hotel accommodation is convenient	(11) hotels often hold accommodation promotions
(3) the hotel has a beautiful and affordable package trip	(12) The atmosphere created by the hotel made me feel like at home
(4)restaurant gourmet special meal	(Thirteen) to this hotel allows me to adjust the physical and mental, to restore vitality
(5) to experience the local customs and culture Kenting	(14) can experience the local natural ecology
(6) to be able to buy Kenting characteristics of goods and products	(15) service personnel can provide satisfactory service quality
(7) can release the usual cumulative pressure and anxiety	(16) Service personnel have received good service training
(8) can change the pace of ordinary life	(17) service personnel can provide professional service attitude
(9) Hotel offers preferential parent-child activities	(18) This hotel brand image and well-known

The Fourth Part: Customer Satisfaction

This study identified 18 items, which are further divided into three dimensions to measure the customer satisfaction. 6 items are included to explore the entire satisfaction and revisit intention.

Table 4 Scale of Customer Satisfaction

Customer Satisfaction		
Hotel facilities	(1)the quality of activities facilities	(4) Hotel parking parking
	(2)the activities of the facility space	(5)clearly describes indicators of hotel facilities /guidelines
	(3) Facilities maintenance and maintenance	(6) facilities to create an atmosphere of the atmosphere
Hotel environment	(1)the restaurant environment clean and tidy	(4) room environment planning and design
	(2) The hotel rooms are clean and tidy	(5) the hotel as a whole beautiful landscape
	(3) the hotel space planning and moving line design	
Hotel services	(1)hotel staff service enthusiastic	(5) the attitude of the hotel staff kind and polite
	(2) service personnel can provide timely services	(6) hotel staff have enough expertise to deal with the problem
	(3) service personnel for customer problems can be completed within a predetermined time	(7) hotel staff can take the initiative to help customers solve the problem
	(4) the hotel staff will take the initiative to inform the hotel of the information	
Overall satisfaction and Revisit Intention		
(1)satisfied with the overall service of this hotel	(4)I will recommend friends and relatives to come to stay	
(2)very happy to choose this hotel accommodation	(5) next time I would like to take my family to this hotel accommodation	
(3) The overall service of this hotel is honest and honest	(6) the next time you come to this hotel to stay	

(6) Data Analysis

The questionnaire survey is designed from research objectives, conceptual framework, and research hypothesis. A questionnaire was employed to collect the data needed, and was analyzed the reliability, validity of scale, correlation analysis, ANOVA, and regression analysis with statistical software.

4. Expected Research Outcome

1. To understand the effect of business management strategy of hotels at Kenting to visiting motivations of customers, customer satisfaction, and behavioral intention.
2. To explore the relationship among visiting motivations of customers, satisfaction and behavioral intention.
3. To investigate the relationship between personal backgrounds of customers and business management strategy of hotels at Kenting.
4. To analyze the difference of personal backgrounds of customers among visiting motivations, satisfaction, and behavioral intention.

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Coaching Team effectiveness Effect Social Support, Self-Efficacy and Job Involvement-Logistics Industry Company as an Example

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Abstract

Logistics industry recently have worker s age problem, since the logistics industry is a hard working environment, also young age workers lack of interest in labour-intensive industries. Logistics industry requires a lot of stillness workers. Based on the basic labour and logistics management, it is a critical issue of possibilities to improve employees ' job burnout, reduce work stress and increase job involvement,

Team effectiveness effect self-efficacy, job involvement and social support affect work performance is the major factor as in this research. This study empirical test team effectiveness effect social support, self-efficacy and job involvement.

This study distribute questionnaire for total of 270 samples, and 234 returned, the return ration is 86.6%. the analysis technology used structural equation modeling (SEM) analysis as well.

Keywords: Coaching, self-efficacy Team effectiveness, social support, Job Involvement

Introduction

Besides organizing teams at the company structure are to cope with the fast-changing environment and increasing capability by use of the Internet. Distribution enterprises have realized only having good quality teams could improve the ability to solve problems, increase productivity and make utilization of resources more efficiently. Quick (1992) believes teamwork has the advantages of cooperation between individuals and reduction of competition, making circulation of information faster and more extensive, communication channels smoother, utilization of resources more efficient, decision making more consensual and the time it takes to solve problems shorter, and related personnel more committed to execution of decisions.

Cohen & Ledford (1994) studies point out that improvement of participation of team members can bring many benefits to the organization, including quality upgrades, production increases and

higher employee involvement. Today, management teams in enterprises stress the importance of giving employees certain authority, encouraging participation, innovation and provision of information, and also emphasize that members need to take responsibility (Deci, & Ryan, (1985) When employees become self-motivated to take part in tasks, the progress of operations can be left to the charge of the team members (Hackman, 1986). Once the management becomes less demanding, the organization will have more flexibility and managers will have more energy to complete other tasks, find out other issues that need to be addressed, engage in other long-term planning work, and handle external relations (Manz & Sims, 1980).

However, Barry, etc. (1999) point out that the structure with only teamwork as the foundation cannot assure direct control of the conduct of employees on assembly lines. In practice, more teams have failed. Therefore, besides team systems, other measures also have to be taken to assure teamwork can be carried out in better ways and one of such measures is to allow employees to exercise their self-efficacy (Bandura, 1986), which means the ability of an individual to make assessment and execute a series of actions. In other words, the stress is not set on the technical capacity an individual has but on the ability of an individual to apply his or her skills to accomplish work.

Meanwhile, in response to the gaps in the distribution processing industry, Saleh, & Hosek (1976) suggests job involvement can be influenced by the work environment and individual input. The situational factors at work can be easily affected by the environment in the organization and influence employees' job involvement. Such factors in the distribution processing industry include bad weather and messy surroundings. For this reason, hardworking and perseverant people are needed. However, facing aging population and young people's lack of interest in labor-intensive work, the logistics industry is badly in need of low-level employees. Meanwhile, in the distribution processing industry where labor is the foundation, occupational burnout is more likely to occur. As a result, enthusiasm and involvement drop. Under such circumstances, support from others and whether the coaching of team leaders are good enough to encourage involvement and boost work performance become important.

Distribution processing businesses are aware that if teaching, guidance and encouragement can be provided through a coaching system to help staff members continue to improve work performance, upgrade skills and develop careers (Krazmien & Berger, 1997), work situations can become better. Enterprises have realized the talents they need are not individual fighters but leaders who can organize teams and lead them to grow and move toward excellence. When job involvement is low, social support is all the more significant. Colvin, Cullen & Thomas (2002) indicate that social support is multifarious. It includes individuals' feeling that they have support and friends and relatives or other people that mean something to them identify with their sense of value and provide symbolic or substantive assistance. In other words, the key issue is whether

the individuals in a team can get help through their personal relations or social backup and whether social support has an effect on their job involvement. For this reason, this study will be focused on the influence of coaching and team effectiveness on self-efficacy, social support and job involvement.

Literature review

1. Coaching

Managerial personnel have to be able to provide coaching ability (Evered & Selman, 1989). Through a coaching system, they teach, guide, encourage and give feedback to employees, as well as help their staff members improve work performance, upgrade skills and develop careers (Krazmien & Berger, 1997). In the aforesaid theories, learning and development are stressed. In general, as defined by most scholars, skill coaching is a strategy for organizational development. It can help employees promote their self-efficacy, performance and job involvement. Through good interactions, managers can stimulate employees to bring out their maximum potential. Conventional management aims at solving technical problems by giving employees professional support, whereas coaching is an approach of management to train executives. While coaching, managers can stimulate creativity, see employees release their potential and identify talented ones who can be promoted to be team leaders in the future. Based on the abovementioned, this study concludes that coaching can be adopted in management for supervisors to, with the interests of employees taken into consideration, confer proper authority to stimulate staff members to develop their potential, encourage employees and help them solve their problems to increase productivity. However, it hasn't been indicated in too many studies whether coaching will have any negative effect on the development of self-efficacy in the distribution processing industry. This is a question that requires further exploration.

2. Team effectiveness

As defined in the study by Guzzo, & Salas (1995). a team is an organization of two or more people to independently accomplish their mutual targets. That is to say, a team has to include at least two people and they must have mutual targets. Meanwhile, Shonk (1982) define that a team includes two or more people put together to complete a mutual mission through coordination. According to Maddux (1993) study that the composition of a team involves many other important factors. Team members have to develop a sense of belonging for their work and to their unit, unconditionally contribute their professional skills and knowledge to the organization in order to achieve team targets, work under mutual trust for one another as well as openly express their ideas and opinions and communicate with sincerity, and understand that occurrence of conflicting ideas is a normal phenomenon during interactions and take constructive measures to solve conflicts. Therefore, the biggest difference between a team and an individual is that consensus is required in a team. Without consensus, team performance will be accredited to individuals and team effectiveness will decline. On the contrary, when consensus is achieved, the

team will become an effective unit to consolidate group performance (Katzenback et al., 1993). Team members need to trust and rely on one another in their pursuit of mutual targets. They must also cooperate and take active part in teamwork.

Based on the above mentioned definitions from different scholars, a team is defined in this study as a working group composed of people who can complement, rely on and cooperate with one another to accomplish their mutual target through coordination and communication. They also have to take responsibility whether the work is successful or not. As for team effectiveness, many studies have indicated that the approaches of work can help improve job involvement. Nonetheless, there is no consistent conclusion with regard to whether such approaches can increase productivity or performance of lower-level employees (Banker, Field, Schroeder & Sinha, 1996; Cohen & Ledford, 1994). Apparently, different indices adopted in measurement of team effectiveness can lead to dissimilar study results. Since this study is conducted on the distribution processing industry, the productivity of lower-level employees is the main concern; hence, the connotation of team effectiveness requires further discussion.

3. Social support

Social support refers to emotional, moral and material support that an individual is able to get, officially or unofficially, from another member, the group or environment to help the individual overcome frustrations or pressure (Caplan, 1974). Meanwhile, Norbeck, Lindsey and Carrieri (1981) suggest that social support is multifarious. It is when an individual feels through personal relations the love and care that relatives, friends and others have for him or her as well as the affirmation and recognition of his or her sense of value. At the same time, these people might also offer symbolic or substantive assistance. In other words, it means such an individual can get help through personal networks and social support (Colvin, Cullen & Thomas, 2002). According to Caplan, (1974) definition, social support is like a message that makes an individual have the sense of belonging to a group and feel loved and cared for. In the meantime, from the perspective of providers, social support is given to increase resources for the recipient. Such resources include actual assistance, feedback, information, counseling and encouragement. Social support can not only reduce stress but also lead to tangible results (Shumaker & Brownell, 1984).

4. Job involvement

Kanungo (1982) point out that work commitment can be divided into work focus and job involvement. The former refers to the level of importance of work in the personal life of an individual. Being the outcome of socialization, it does not change easily with the external environment. The latter means the promise of an individual to concentrate on work and pay attention to the work condition all the time. In the meantime, Robbins (2001) point out that job involvement includes two aspects. The first is the level of enthusiasm about the work and the second is stronger identification with the work than others. From the aforesaid studies, it can be

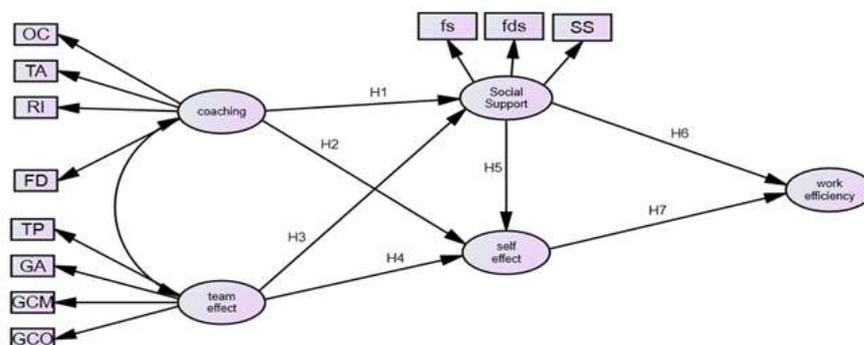
reckoned that scholars define job involvement differently. Kanungo (1982) also point out that job involvement is a result of socialization and a part of a person’s sense of value. An individual may be highly involved in his or her work but may not necessarily consider work a very important part of his or her life. Lodahl & Kejner (1965) define that the term “job involvement” as “an individual’s identification with his or her work or the significance of work in his or her self image.” Also pointed out that “job involvement means work performance and has an effect on self-esteem.” However, as the hypothetic premise of this definition being “job involvement is the sense of value that takes form at an early stage of socialization,” if an individual’s sense of value towards work does not change, his or her job involvement will not become different in consequence of job changes.

5. Self-efficacy

Bandura (1977) was the first to propose the idea of self-efficacy in a systematic approach. According to Bandura (1986) study that self-efficacy is the ability of an individual to assess a series of actions that he or she is to execute. It is not the technical capacity of an individual that is emphasized, but his or her ability to evaluate his or her capacity to apply skills to accomplish a mission. As pointed out by Bandura (1971) based on social learning theories, the strength of people’s self-belief determines whether they will try hard to cope with difficult situations. According to Luszczynska, Scholz, & Schwarzer (2005) study point out that self-efficacy is usually situation-specific, but individuals can also have a generalized sense of self- efficacy that reflects itself overall estimate of personal competence in dealing with a variety of stressful situations.

In the empirical self-efficacy study that similar to the general workplace finding out that coaching training self-efficacy beliefs have been shown to positively relate to training performance (Bell & Kozlowski, 2008; Colquitt et al ., 2000; Hughes et al ., 2013).

Fig. 1 Study Framework



Hypotheses

From the aspect of the provider, coaching is to increase resources for the recipient. Such resources include actual assistance, feedback, information, counseling and encouragement. The support can not only reduce stress but also lead to tangible results (Shumaker & Brownell, 1984). Based on this, the hypothesis that the recipient is willing to accept when the provider conducts coaching to the recipient is proposed.

H1: Coaching will have positive significant influence on social support.

Coaching is conducted to help staff members continue to improve work performance, upgrade skills and develop careers (Krazmien & Berger, 1997). The emphasis is placed on the coach being a good teacher and a friend at the same time and able to give support and encouragement especially when people encounter problems to persuade them they have the ability to break through and make them try harder. Such persuasion can lead to success and help the encouraged develop self-efficacy (Bandura, 1997). Based on this, the hypothesis that timely encouragement from the supervisor or a superior will have an effect on self-efficacy is proposed.

H2: Coaching will have positive significant influence on self-efficacy.

The stronger the social support an individual receives in a team, the less likely this individual will feel alienated when given assignments. In other words, this individual will have a stronger feeling of interdependence about the team and increase the level of interdependence to enhance team performance. Results of related studies show that the stronger the social support from the team an individual feels, the stronger the confidence of the individual will have in his or her ability to improve work efficiency. Deeter-Schmelz & Ramsey (1997) also suggest that in a teamwork environment, social support can have strong influence on work results. As pointed out by Campion (1993), when team members help one another and have active socializing interactions, the efficiency of the team will improve. Based on this, the hypothesis that the more encouraging the other members in a team are, the stronger the identification with the team will be is proposed.

H3: Social support will have positive significant influence on team effectiveness.

Parker (1990) indicates that a team leader has key influence on team effectiveness. An effective team leader is also a good manager and a team member. A leader must be able to set clear and precise targets and prospects for the team and push individual members to make efforts accordingly while feeling happy to be working with the others. At the same time, when there are members with experience, they can have effective influence on development of self-efficacy. As pointed out by Bandura (1997), individuals develop their self-efficacy in accordance with their successes or failures in the past and also perform initial interpretations of results of their actions accordingly. Successful experiences can increase their expectations for their abilities whereas repeated failures will lead to self-doubt and decline of self-efficacy. Therefore, perfection of team effectiveness will have an effect on development of self-efficacy. Based on this, the

following hypothesis is proposed:

H4: Team effectiveness will have positive significant influence on self-efficacy.

According to Caplan (1974), Social support refers to emotional, moral and material support that an individual is able to get, officially or unofficially, from another member, the group or environment to help the individual overcome frustrations or pressure. Meanwhile, as indicated by Bandura (1977), in social persuasion aiming to help develop self-efficacy, the emphasis is placed on the coach being a good teacher and a friend at the same time and able to give support and encouragement especially when people encounter problems to persuade them they have the ability to break through and make them try harder. Such persuasion can lead to success and help the encouraged develop self-efficacy. Based on this, the hypothesis that providing appropriate encouragement to support others can enhance their ability to cope with difficult situations is proposed.

H5: Social support has positive significant influence on self-efficacy.

Kanungo (1982) suggests the level of an employee's job involvement can be affected by the mentality and behavior of the other members of the organization. In the meantime, according to the buffer theory put forth by Antonovsky (1974), social support provides buffers to protect people from pressure in daily life. The buffering effects are mainly to provide cognitive guidance and information and resources needed to cope with pressure. Individuals with more social support will be subject to fewer factors that have influence on their physical being and mentality. Therefore, social support is considered to have buffering effects. Cohen and Wills (1985) think positive social relationships can help individuals deal with negative psychological conditions (such as anxiety, depression, etc.) Through networks of social relations, individuals can get emotional support and affirmation of their self-worth to enhance their capacity to face changes in life. Based on this, the hypothesis that the buffering effects of social support can have an effect on job involvement is proposed.

H6: Social support has positive significant influence on job involvement.

Vicarious experience in self-efficacy means that when seeing the success of people with abilities similar to their own and the praise received, individuals can convince themselves that they can also do the same and succeed (Bandura, 1986) and, as a result, develop the feeling that they are needed. Kanungo (1982) believes job involvement is the consequence of whether the needs of employees are satisfied. The stronger the feeling that their needs are satisfied, the more intense the job involvement of the employees will be. Based on this, the hypothesis that vicarious experience can increase one's confidence at work and job involvement is proposed.

H7: Self-efficacy has positive significant influence on job involvement.

Methods

1. Data analysis

IBM SPSS Statistics 20 and AMOS20.0 are adopted for statistical power and data analysis. The statistical methods applied in this study include reliability and validity analysis, and mean and standard deviation analysis. Structural equation modeling is used to analyze the hypothetical relations between the variables in the study mode to test whether the study mode and the hypotheses are valid and also analyze the overall model.

2. Sample data

This study is intended on understand the influence of coaching and team performance on job involvement through provision of social support and development of self-efficacy. A questionnaire survey was conducted on people working in the distribution processing industry through convenient sampling. 280 copies of questionnaire were issued and 250 were retrieved. After subtraction of 16 samples with misplaced answers, unanswered questions and intentionally given wrong answers, 234 copies were valid. The response rate was 83.5%.

3. Definition of variables

Coaching is defined as the guidance and feedback given to distribution and processing workers by their supervisors. The study tool is designed in reference to the one adopted in Hagen, M. S., & Peterson, S. L. (2014) for measurement. The scale includes 16 questions covering four dimensions, namely open communication, team-orientation, respect for individuals and pursuit of development.

Team effectiveness is defined as the effect of communication between distribution processing workers on team operation. The study tool is a revised version of the scale applied in the *Influence of Team Leaders on Collective Effectiveness and Team Performance* (Tjosvold(1988). It includes 29 questions covering the four aspects of team performance, team attitude, team commitment and team cooperation.

Social support is defined as the reactions of logistics workers to emotional and moral support. The study tool (MSPSS; Zimet, Dahlem, Zimet & Farley, 1988) includes 12 questions covering the three dimensions of family, friends and specific people.

Job involvement is defined as the unswerving commitment of logistics workers and their concerns about their work as a result of personal experiences and the current environment. The study tool (Measurement of Job and Job Involvement by Kanungo, R. N., 1982) includes 10 questions.

Self-efficacy is defined as the cognitive perception of distribution processing workers toward cause-and-effect relations in different situations. The study tool Caikang, W. (2000) includes 10

questions covering the dimensions of anxiety about tests, self-efficacy and ways of coping.

Results

1. Reliability and validity analysis

The questionnaire covers five dimensions: coaching, self-efficacy, team effectiveness, social support and job involvement. The numbers of questions regarding the different dimensions are 20 about five aspects of coaching, 10 about self-efficacy, 29 about four aspects of team effectiveness, 12 about three aspects of social support and 10 about job involvement. After the questionnaire was designed, it was presented to be inspected by five specialists for wording modification. Subsequently, 50 copies were issued for a pretest. Afterwards, reliability and validity analysis was performed and items with inadequate reliability and factor loads larger than 0.5 were deleted. Finally, the questionnaire containing 81 questions about all the aspects was administered, retrieved and statistically processed. The Cronbach's α and confirmatory factor analysis were applied to evaluate reliability and validity. According to Nunnally (1978), reliability coefficients larger than 0.7 are considered decent for basic research. The Cronbach's α values of the scales for different dimensions all exceeded 0.7: 0.963 for the total aspects of social support, 0.897 for job involvement, 0.963 for self-efficacy, 0.977 for coaching and 0.985 for team effectiveness. Apparently, the reliability of the questions regarding each dimension is rather high.

2. Validity analysis

(1) Convergent validity analysis

In the confirmatory factor analysis, composite reliability (CR) is adopted as the standard in measurement of the reliability of potential aspects. The composite reliability value of the potential aspects concerns the consistency of the aspects measured. The higher the reliability, the higher the internal consistence will be. Initially, the reliability of the variables inspected has to be larger than 0.50 (Jöreskog & Sörbom, 1989). Then, the composite reliability must be examined. As suggested by Fornell & Larcker (1981), the CR value had better be over 0.6. After the questions regarding each dimension were tested, each standard load turned out to be larger than 0.7. First, it was necessary to check whether the reliability of each variable was larger than 0.50 (Hair et al., 2009). The tests performed revealed the CR value for each dimension was larger than 0.7, indicating the four scales had rather decent reliability.

The AVE values of the aspects in the coaching scale were respectively 0.784, 0.885, 0.845 and 0.697. The AVE values of the aspects in the team effectiveness scale were 0.785, 0.828, 0.712 and 0.897. The AVE values of the aspects in the social support scale were 0.823, 0.780 and 0.867. The AVE value of the aspect in the self-efficacy scale was 0.572. The AVE value of the aspect in the job involvement scale was 0.572. All the aspects complied with the suggestion from Hair et al. (2009) that the AVE values should be larger than 0.5.

(2) Discriminant validity analysis

Bootstrapping is adopted in this study to establish the coefficient confidence intervals between dimensions. If an interval does not include 1, correlation exists and discriminant validity exists between intervals (Torzadeh, Koufteros and Pflughoeft, 2003). Bootstrapping is adopted under 95% confidence level to estimate the coefficient confidence intervals established with SEM. If an interval does not include 1, the hypothesis is invalid. Bootstrap re-sampling is performed 8000 times on the confidence intervals under 95% confidence level. AMOS provides two ways for estimation of confidence intervals. The first one is based on point estimate standard deviations and the second is the bias-corrected percentile method. The related data shown in Table 2 indicate the lower-bound and upper-bound values of the confidence intervals between dimensions do not include 1, meaning that discriminant validity exists between dimensions.

Parameter	Bias-corrected		Percentile method	
	Lower	Upper	Lower	Upper
Respect for individuals <-> team orientation	.975	.999	.975	.999
Respect for individuals <-> open communication	.930	.974	.932	.976
Respect for individuals <-> pursuit of development	.546	.770	.553	.774
Team orientation <-> open communication	.944	.979	.945	.980
Team orientation <-> pursuit of development	.557	.779	.564	.784
Family <-> friends	.609	.838	.600	.831
Family <-> specific people	.563	.804	.558	.801
Friends <-> specific people	.881	.951	.880	.950
Team performance <-> team attitude	.958	.996	.958	.995
Team performance <-> team commitment	.925	.978	.930	.979
Team performance <-> team cooperation	.921	.970	.916	.968
Team attitude <-> team commitment	.907	.983	.915	.984
Team attitude <-> team cooperation	.930	.980	.925	.978
Team commitment <-> team cooperation	.941	.980	.942	.980

3. Common method variance

Common method variance (CMV) refers to a kind of systemic bias as a result of the ways of

measurement adopted in research. Causes are many, such as features and contexts of questions. To prevent occurrence of CMV when people fill in answers, slack single-factor CFA CMV tests were applied, including single factor confirmatory analysis, with the χ^2 being 3763.601 (df = 464), χ^2/df (Chi square value/degree of freedom) being 8.111, and other goodness-of-fit indicators: GFI = 0.408, AGFI = 0.0326, CFI = 0.658, TLI = 0.634, SRMR = 0.902 and RMSEA=0.175.

In the multi-factor confirmatory factor analysis, the χ^2 value was 2136.717 (df = 454), the χ^2/df (Chi square value/degree of freedom) 4706, and other goodness-of-fit indicators: GFI = 0.597, AGFI = 0.532, CFI = 0.826, TLI = 0.809, SRMR = 0.902 and RMSEA = 0.126.

The two models $\Delta df = 65-59 = 6$, $\Delta X^2 = 3736.601-2136.717 = 1599.884$. The Δ value was larger than 1.96. The difference achieved significance $p < 0.000$, meaning the null hypothesis was rejected. Therefore, the models were different and no bias would occur in coefficient estimation. In other words, there would be no confusion in presentation of conclusions.

4. Overall mode goodness of fit

In this study, dimensional measurement is conducted in stages on team effectiveness, coaching, social support, self-efficacy and job involvement in the distribution processing industry. The results from the measurement in stage 1 are adopted as the indicators in measurement of the multiple variables in stage 2. The results of the confirmatory factor analysis in stage 1 are as shown in Table 3 and Table 4. All the goodness-of-fit indicators are not close to the ideal values and none of them is higher than 0.9. Therefore, the initial results of confirmatory factor analysis are not as expected.

Table: Coaching

	Evaluation Standard	Range	Evaluation Standard	Initial Model Test Result	Study Result
Absolute goodness of fit index	χ^2/df	The smaller the better	< 5	4.769	4.562
	GFI	0-1	> 0.9	0.595	0.607
	AGFI	0-1	> 0.9	0.531	0.542
	RMR	-	< The smaller the better	0.251	0.253
	SRMR	0-1	< 0.05	0.970	0.0969
	RMSEA	0-1	< 0.08	0.127	0.124
Parsimonious goodness of fit index	PGFI	0-1	> 0.5	0.514	0.521
	PCFI	0-1	> 0.5	0.756	0.764
	PNFI	0-1	> 0.5	0.722	0.731
Incremental goodness of fit index	NFI	0-1	> 0.9	0.786	0.798
	NNFI/TLI	0-1	> 0.9	0.806	0.819
	CFI	0-1	> 0.9	0.822	0.834

VI. Hypothesis Testing

In the relation between coaching and social support, the unstandardized estimate is 0.240, standard deviation = 0.152, CR value 1.584, p-value > 0.36, and standardized path coefficient = 0.141, indicating significance. The study data show reverse significant influence; therefore, H1 is valid.

In the relation between coaching and self-efficacy, the unstandardized estimate is -0.201, standard deviation = 0.119, CR value 1.696, p-value > 0.36, and standardized path coefficient = -0.124, indicating significance. The study data show reverse significant influence; therefore, H2 is valid.

In the relation between team effectiveness and social support, the unstandardized estimate is 0.622, standard deviation = 0.083, CR value 7.513, p-value > 0.36, and standardized path coefficient = 0.710, indicating significance. The study data show positive significant influence; therefore, H3 is valid.

In the relation between team effectiveness and self-efficacy, the unstandardized estimate is 0.559, and standard deviation = 0.077, CR value 7.304, p-value < 0.36, standardized path coefficient = 0.669, indicating significance. The study data show positive significant influence; therefore, H4 is valid.

In the relation between social support and self-efficacy, the unstandardized estimate is 0.356, standard deviation = 0.067, CR value 5.295, p-value < 0.36, and standardized path coefficient = 0.373, indicating significance. The study data show positive significant influence; therefore, H5 is valid.

In the relation between social support and job involvement, the unstandardized estimate is 0.351, standard deviation = 0.090, CR value 3.860, p-value < 0.36, standardized path coefficient = 0.433, indicating significance. The study data show positive significant influence; therefore, H6 is valid.

In the relation between self-efficacy and job involvement, the unstandardized estimate is 0.301, standard deviation = 0.090, CR value 3.335, p-value < 0.36, standardized path coefficient = 0.3534, indicating significance. The study data show positive significant influence; therefore, H7 is valid.

Conclusions

The results of this study indicate that team effectiveness, social support and self-efficacy have positive significant influence on job involvement, but the influence of coaching on self-efficacy and social support appears to be reverse and insignificant. In a work environment of the conventional logistics industry, the needs of professional knowledge teaching and skill coaching are not so strong. Employees cannot feel the effect of coaching and, as a result, the effect of coaching on self-efficacy is not obvious. Employees are unable to improve their self-efficacy after receiving skill coaching from their supervisors. McClelland & Boyatzis. (1982) thinks giving authority and responsibility to employees can increase their ability. This means the motivation to perform better at work can be achieved through improvement of self-efficacy. In this study, coaching has no significant influence on social support probably because coaching of professional knowledge in the logistics industry is carried out through established modes and requires no communication. Employees have no deep perceptions of corporate concepts meant to be conveyed through coaching. They have no intention to make career planning and cannot do anything about the ways promotions are given; hence, they are unable to feel the benefits of support from families, friends, peers and coaching. When pressure from work occurs, the intensity of self-belief determines whether they will make efforts to cope with difficult situations. Heller, K., & Swindle, R. W. (1983) point out that individuals with more social support will be less likely to be subject to factors that have effects on their mentality and physical being; therefore, social support is considered to have buffering effects. Logistics workers set accomplishment of team targets as the top priority. Team members have their own expertise and are able to support and cooperate with one another. Under such circumstances, they will be able to clearly and openly communicate to complete work and job involvement and enthusiasm to participate will be upgraded.

Study Limitations

Convenience sampling was adopted to conduct a questionnaire survey on logistics workers in northern Taiwan only. Plus, the samples were retrieved a month later. Therefore, the influence of the frame of mind of the people at the time of filling out the questionnaire and other factors that might have affected the authenticity of the answers on the results of the study cannot be ruled out. Moreover, the questionnaire was filled out by just a portion of logistics workers. Whether the results can speak for the management condition of the entire industry remains an issue to be looked into.

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The Sharing Economy: A Case Study of Airbnb in Thailand

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Abstract

The current study focused on the sharing economy in Thailand using Airbnb as a case study. The study investigated the meaning of sharing, the reasons behind why someone shared (or not) their homes with travelers, and whether the economic impacts affected their willingness to list their homes on Airbnb. The data were collected from in-depth interviews of 15 respondents who were users and non-users of the home-sharing platform. The results indicated that the meaning of sharing varied from person to person but to all, sharing means to give something away. Sharing became easier with less intimate and personal items. Most respondents felt uncomfortable sharing their home with complete strangers, as it was a personal space. A major barrier to rent out their properties was trust, either in travelers or in Airbnb system. Those who had their properties listed on Airbnb website would use their apartments that they were not currently living in. Most respondents considered that listing properties on Airbnb was a good way of making extra income. All of the respondents who had their listings on Airbnb pointed out that they would still rent out their apartments regardless of the economic circumstances.

Keywords: Sharing economy, Airbnb, Thailand

1. Background

The Sharing Economy

The word 'sharing economy' refers to the sharing of information, services and products and this is largely possible because of information technology, but may or may not depend on it for sharing transaction to occur (O'Sullivan, Davis, & Hetzel, 2014). It is also known as the collaborative consumption, collaborative economy and peer-to-peer sharing. While these transactions may or may not incur fees, they possess tangible economic values. The sharing economy goes beyond the monetary realm as it touches the experiential side of consumption by means of creating personal relationships (Ardis, Fernandez-Lozada, Schmidt & Tize, 2013). This means creating more value to the community and at the same time the networks created and through the peer feedback system brings about trust between strangers to deliver the products or services as expected.

PricewaterhouseCoopers Megatrends Report 2014 notes the global sharing economy is worth \$15 billion and will grow to \$335 billion by 2025. This is an emerging economy and has so far made a significant impact to the traditional models. It is without a doubt a revolutionizing global trend and therefore an interesting research area.

This study investigated the reasons behind the popularity and expansion of the collaborative economy starting from the fundamentals of sharing, the shift in consumer behavior towards sharing, and sharing as a correlation to the economy. Using Airbnb as a case study, this research looked into how the shared economy is being practiced in Thailand and the motives behind why Thais choose to participate in the home-sharing platform.

The findings of this study would not only help to understand the consumer behavior in Thailand towards the sharing economy but would also be beneficial for companies that incorporate this business model and how to market this growing trend to Thai consumers.

Models of the Sharing Economy

Initiated in the U.S., this new type of collaborative consumption is making its presence globally. Airbnb is thought to be amongst one of the most prominent players in this new type of economy as noted by Forbes analyst Tomio Geron (2013). Founded in 2008 by 3 young guys struggling to pay their bills, the idea to rent out space in their own apartment came about as a means to make some extra cash. This later became the company's fundamental business model. To date, Airbnb has received over 40 million guests in its 2 million listings worldwide in 190 countries according to Airbnb's website (2015). The company is now valued over \$10 billion. The company is well known to be revolutionizing the sharing economy. What Airbnb does is simply matching homeowners with lodgers who are looking for a place to stay at an affordable price (Kurtz, 2014).

The collaborative economy has become popular and as Joe Kraus, a general partner at Google, believes that people are changing the way consume in ways that impact their lifestyle, environment and the economy. Collaborative consumption creates ease of access and this can be seen as having considerable impacts on companies today (Geron, 2013).

Fundamentals of Sharing

Sharing has been part of the human practice since the beginning of civilization and as Price (1975) mentions, is the basic and ubiquitous form of economic behavior. Sharing is strongest within families but becomes less as one looks outside this closed circle (Belk, 2007). According to Hellwig's research (2015), propensity to share varies with gender, age, occupation and as reaction to the popular culture of social media. Women are generally more willing to share than men and the younger are more likely to share than older. Willingness to share also has to do with the item

itself. The more distant the object, the higher the willingness to share. More intimate objects people are less likely to share (Hellwig et al., 2015).

The notion of the shared economy combines the economic exchange of goods and the dimension of social engagement, making the shared economy a form of hybrid economy which operates between the market and nonmarket economies by way of complex interactions (Scaraboto, 2015).

Shift in Culture and Social Norm

The act of sharing can also be viewed as a culture and social norm or a shift thereof. Societal rules and religious doctrines do have a degree of influence on individual's disposition to sharing. This type of introjected form of motivation for sharing takes roots from obligations to the society in terms of responsibility and conforming to social norms (Deci et al., 1999). Some people may feel guilty owning too many material possessions, thus sharing helps them feel good about themselves (Hellwig, 2015).

It can also be seen that there has been a change in ownership patterns, particularly in the choice of lifestyle of young adults. Environmental concerns, creative consumption to have "better" choices instead of having "more", consumers prefer to find alternative services instead of wanting products (O'Sullivan et al., 2014). In a survey conducted by Latitude and Shareable Magazine (Gaskins, 2010) on the topic of sharing activities through the use of technology, 78% of the respondents are more welcoming to share with strangers due to online interactions with others. Thus growth of information technology creates and reinforces collaborative consumption, making it the rising trend of the 21st century.

Economics Reason

In an article *Airbnb and the Unstoppable Rise of the Share Economy*, Tomio Geron (2013) spoke of Frederic Larson, a man who has been negatively affected by the grim economy in the U.S. found the opportunity to make some extra income by renting out his home on Airbnb and benefiting from \$97 net profit a night and participated in the ride-share service, where he makes \$100 a night from fee paying passengers. It is no surprise to see a big rise in the numbers participating in the "gig economy" where numerous people become small entrepreneurs offering various services on the online to cope with the economy.

As consumers, the sharing economy provides convenience and is a way to save money and time. To some, it is a matter of financial utility that motivates them to share with others (Hellwig, 2015). In a survey conducted by Gaskin (2010), the participants with lower income have a higher tendency to sharing behavior and feel about it as opposed to those with higher level of income. This shows a direct connection with the economic situation affects each individual. On the other

hand, looking at a more general picture, two-thirds of the respondents to the survey found it interesting to share if their personal possessions can generate monetary value.

Businesses can also increase profits from collaborative consumption by implementing sharing services to their business model (Melanson, 2011). This is the reason why Avis Budget Group invested into Zipcar, a car sharing service (Savitz, 2013).

Based on the literature review, the shared economy takes shape from the combination of the traditional economies of exchange and the intrinsic human behavior of sharing giving rise to a hybrid economy (Scaraboto, 2015). To some scholars, the collaborative model of consumer behavior is a result of technology which makes the sharing of information fast and efficient (O'Sullivan et al., 2014) and thus creating relationships and value to the society (Ardis et al., 2013) as this became a new platform for a new market space. This has resulted in the shift in the ethics of consumption to becoming the new norm (Deci et al., 1999; Gaskin, 2010; O'Sullivan et al., 2014). Others believe the peer-to-peer sharing happens as a result of financial utility (Hellwig, 2015) where personal items and space can be shared or in other words, rented out for money. The hardship in the economy in the last few years has led people to find ways to gain extra income (Geron, 2013). The majority of research took a general global view of the consumer behavior, concentrating mostly in the Western side of the world. The notion of sharing has thus been generalized to the Western context and this left an area of research for other specific cultures (Hellwig, 2015). Therefore, the current study would delve into the sharing economy of Asia Pacific, in particular Thailand and the consumer behavior related to this new shift.

2. Method

Research Design

The current study adopted a qualitative research design as the consumer behavior and attitude toward the notion of shared economy need to be explored. This method will generate words as opposed to numerical data, which is designed to measure something (Bricki & Green, 2015). Qualitative research involves observation and also the interviews allows both the interviewer and the participants to share their stories, create a more relaxed atmosphere, and this will encourage both to draw out more in depth information (Creswell, 2013).

Population and Sampling

The target population of this study was people who live in Bangkok. This group is most likely to be the first movers in the sharing economy as they are mostly exposed to the international media and will be open to try new things compared to the other provinces.

Using a purposive sampling method, the sample included various age groups of 15 Thai adults over 20 years of age who were already the users of home sharing platform Airbnb either have used it as a traveler, a host or both, or potential users who may or may not have heard of it.

Data Collection

In this particular research, the data collection method came in the form of in-depth interviews. With semi-structured interviews, questions are predetermined and follow-up questions were asked to elaborate of the key issues.

A set of open-ended questions was designed to investigate the respondents' knowledge about the shared economy in the context of popular business using this model, their belief about sharing in general and more specifically their thoughts about sharing their personal possessions with strangers for monetary gain and for social contribution (see Appendix A).

Data Analysis

After the interviews were conducted and data were recorded, all of verbal, textual, and visual information gathered were transcribed in detail. Content analysis was adopted in this study to find common themes that reoccur. The assignment of codes to the data helped sift through the various themes and sub codes were used as more detailed analysis was made. After the assignment of codes, all of the information from the codes was extracted to find relationships and patterns and how each theme interrelated (Bricki & Green, 2015).

3. Results

Demographic Data

Of 15 respondents, 13 (86.7%) were female and 2 (13.3%) were male with 80% (12) between ages 25 and 34 years old. Of this group of 15 respondents, 60% had a master's level degree of education and 33.3% held a bachelor's level. Eighty percent were either single or in a relationship. Around 67% of the group were company employees and 40% made a monthly earning of over THB 60,000.

Factors that influence consumer behavior of Airbnb in Thailand

Concept of Sharing

The concept of sharing, charity giving or merit offering is common practice in Thai culture. With the Buddhist religion as the country's fundamental belief system, Thais give away food, money and material possessions as an act of merit making. Some may do it more regimentally, while others more occasionally on their birthdays or Buddhist holidays. According to Hofstede (2015), Thailand is considered a country where collectivism is relatively high. Everyday activities are done usually in groups or communities. From the communal activities is where one can observe

where most of the sharing happens. Thus it is common to see people eat together, share food at the office, and big family going places together.

From the interviews of the respondents, the meaning of sharing varied from person to person but to all, sharing means to give something away. To some, sharing is giving something that is no longer used or needed by the person, which indicates an excess of personal possession or resources.

“Sharing is giving something to other people when we have something more than we need or we have something left.” (Male, 28, company employee)

A respondent mentioned human interdependence when it comes to sharing.

“Costs can be too high if certain things are not shared.” (Male, 30, Master degree student)

One person did not mind sharing anything that could be cleaned or washed for hygienic purposes (Female 39, self-employed). Some would share with those who are in need or to those who will need the materials more than they do and perceive them as valuable.

“[Sharing] is letting other people use or enjoy stuff I own, only when it is not being used or I have more than enough.” (Female, 39, self-employed)

To many of the respondents, sharing is *“spreading out of good things”*, which could be something tangible or even intangibles such as happiness and experiences.

The interviewees were asked which items they own that they were willing to share. Some said they do not mind sharing things that to them are not very personal items such as books, stationery items such as pens, and household appliances such as a washing machine and kitchen utensils. Others were willing to share personal care products such as shampoo, soap, toothpaste and even cosmetics but would typically share these items with people they knew such as friends or family members, but would be less inclined to do so with a complete stranger.

“I can hardly imagine sharing my personal belongings with an absolute stranger.” (Female, 32, company employee)

Aside from letting other people use their personal items, some respondents saw sharing as an act of using the same resources such as carpooling.

“I don’t mind letting people sit in my car if we’re going the same direction.” (Female, 40, Master degree student)

Based on the interviews, it can be seen that even if Thailand is a collective society where things are done as a community, the idea of sharing still varies from person to person and varies by different degrees. Sharing becomes easier with less intimate and personal items. This is in line with the findings of Hellwig (2015) that the closer the personal possession, the less inclined a person is willing to share with others, especially strangers.

Home Sharing

When it came to sharing of their home, 11 out of 15 respondents felt uncomfortable sharing their homes because the home was a personal space.

“I don’t feel comfortable having strangers in the house. I have too many personal things there.” (Male, 31, Master degree student)

Many viewed they would be losing their privacy when allowing other people to stay at their home. Some were afraid of unforeseeable circumstances or the possibility of their personal belongings would get dirty or damaged through the usage of another person.

“If I let other people use my home they can make it dirty or make things out of order.” (Female, 28, Master degrees student)

Some felt it was a matter of personal safety and trust in a complete stranger and chose not to share their homes.

“I do not trust strangers. We don’t know who they are, how can we trust them? They can destroy my place or steal my things.” (Male, 30, Master degree student)

Of this group who would not be willing to share their homes with complete strangers, almost half would be happy to share their living space with close friends and 41% with close relatives. The other four respondents were open to home sharing with paying travelers and two respondents liked the idea of getting to meet new people as a motive.

Of 15 interviewees, eight were users of Airbnb, five have heard of the platform either from friends, family or have read about it, and two did not know what Airbnb was.

With regards to the eight users of Airbnb, most respondents used this platform to find good priced accommodations for their travels. Three respondents used it for the unique travel

experience it offers. Of the eight users of Airbnb, five had their properties listed on Airbnb. However, only one of these five users rent out a room in the same house she is living in on the home sharing platform. The rest would list the apartments that they are not currently using.

When asked why the other three users did not list their homes on Airbnb, their responses were as follows:

“I am a very neat person. I cannot stand the fact that people come and mess up my things.”
(Female, 29, Master degree student)

“I think it’s too much of a hassle. I prefer to take long-term tenants.” (Female, 27, Master degree student)

For the non-users of Airbnb who have heard of the platform, when asked why they have not used it yet, most were reluctant to use the Airbnb because they felt more secure booking their accommodations at hotels especially going to a place they were not familiar with. Two respondents showed strong distrust in the Airbnb system and the idea of strangers staying in private homes or the idea of staying in a stranger’s home.

“It is difficult for me to trust strangers especially when it comes to safety and security for their own sake. People especially at my age and above will have trust issues because we do not trust or believe anything so easily.” (Female, 40, company employee)

Airbnb provides insurance for both the host and the guests; this interviewee was asked whether this would alleviate the trust issue. Her response is as follows:

“I don’t think people care so much about insurance at the beginning. I still will not trust it and Airbnb can also face legal issues here in Thailand.” (Female, 40, company employee)

Another male respondent gave his take on Airbnb.

“I do not trust strangers. The host can become a case like the Uber taxi drivers, even the company cannot fully guarantee their safety. Trust issue is a problem here. A stranger can destroy my house or steal my belongings. Besides, we may have low quality budget travelers, so I will not trust to have my property in their hands.” (Male, 30, master’s student)

The other respondents, who were non-users of Airbnb, were asked whether or not they would list their space on Airbnb. Their responses were as follows:

“I live with my parents now. It’s my parent’s call whether to rent out our place or not. If I had my own place I would consider it.” (Female, 32, company employee)

“It really depends on the person’s background or upbringing. If you are familiar with foreigners and backpackers, then you would trust to rent the place out to them.” (Male 27, company employee)

“I personally would give it a try but that’s because I speak English well. I have relatives who have properties they can rent out, but I don’t think they will rent it out on Airbnb because I think language is a barrier. The use of language translation apps (Google Translate) do not work for Thai and communicating with guests will be quite difficult.” (Female, 29 Master degree student)

Based on the interviews, when it comes to sharing one’s home, most respondents view sharing one’s home as something too personal and therefore, not voluntarily practiced. Those who had their properties listed on Airbnb website would use their apartments that they were not currently living in or only do so occasionally. The major barrier of sharing their properties lies in trust, either with the travelers or the Airbnb system. Respondents who were comfortable with communicating in English tend to be users and service providers of Airbnb in Thailand. In line with the findings of Hellwig (2015), the person’s background play a major role when it comes to sharing and thus impacts the degree of growth of the sharing economy business model in Thailand, when compared to countries in Europe where higher percentage of people can speak multiple languages.

Economic Factor

The respondents were asked whether the current economic situation of Thailand encouraged them to list their properties on Airbnb. Most respondents considered that listing properties on Airbnb is a good way of making extra income.

“It does not cost anything much and I have rooms available and this should be a good idea of making extra money.” (Female, 29, master’s student)

Another interviewee mentioned that it would be a *“win-win situation for the economy. The host gets paid for sharing their rooms to guests and the guests are getting a reasonable priced accommodation.”* (Female, 31, company employee)

All of the respondents who had their listings on Airbnb said that they would still rent out their apartments regardless of the economic circumstances. Hence, the economic situation of a country had an effect on consumption behavior but was not a strong factor of influence to a person’s decision to home-share on Airbnb.

For those who were non-users of the home-sharing platform, or who were users but did not have a listing, their answers were quite similar in that the economy had no effect on their likelihood to list their space. However, if Airbnb generated a higher earning than their current job, they would consider a job change and devote more time to this business.

It was notable that the group with higher income (more than 60,000 THB a month) tended to have more of a passive approach to the home-sharing platform. This is in line with Hellwig's (2015) findings that propensity to share varies with income; and the higher the income, the less likely a person is willing to share (Gaskin, 2010). Therefore, it is more of the social economic situations of each individual rather than the economic impacts per se that influence a person's behavior towards involvement in the sharing community.

Appendix A

Interview Questions

1. What do you think is the meaning of sharing? Under what circumstances would you share?
2. Which personal belongings would you share with a stranger?
3. How do you feel about letting people stay at your home if you had extra space available? Explain why or why not?
4. If your answer in question 3 was negative, would you be fine with allowing someone stay at your home if you can receive monetary compensation for their stay? Justify your answer.
5. On a scale of 1 to 4 (1 being the most and 4 being the least) rate how much influence does your family have on your decision-making to let people stay at your house?
6. On a scale of 1 to 4 (1 being the most and 4 being the least) rate how much influence do your friends have on your decision-making to join Airbnb.
7. On a scale of 1 to 4 (1 being the most and 4 being the least) rate how much influence does social media have on your decision-making (social media include Facebook, Instagram, blogs, forums such as Pantip, etc.) to join Airbnb.
8. Are you a user of Airbnb platform?
9. If you are a user, how long have you been a user of Airbnb? If you are not a user but have heard about it, how long have you known Airbnb for?
10. How did you get to know about Airbnb? If you are a member of Airbnb, explain the reason(s) why you have decided to join?
11. If the economic situation was not so good in Thailand will that influence your likelihood to rent your space out on Airbnb? Explain why or why not.
12. What do you think about the notion of limited resources? Do you think Airbnb helps the economy?

Education (1)

Tuesday, August 15, 2017

9:00-10:30

Room 1007

Session Chair: *Prof. Vichy Wai Chi HO*

ISLLE-0007

CDA on an Education Brochure for Ethnic Minority Students and Parents in Hong Kong

Emil Li | *Technological and Higher Education Institute of Hong Kong*

ISLLE-0011

How Tailor-Made Teaching Redefine “IT”? University Practical Language Course in Hong Kong

Vichy Wai Chi HO | *The University of Hong Kong*

ISLLE-0013

Teacher Read aloud in EFL Elementary School Classrooms

Yu-Chih Huang | *Huafan University*

ISLLE-0036

Learning How to Teach Readers – The Experiential Learning of Student Teachers

Jackie Fung King Lee | *The Education University of Hong Kong*

ACMASS-0018

Effects of Parental Involvement on Educational Achievement among Taiwanese Junior High School Students from the Perspective of Cultural Capital

Chih-Lung Hsieh | *National Taitung University*

ACMASS-0019

Effects of Study Books for Note-Taking in Enhancing Student Learning

Patchara Vanichvasin | *Kasetsart University*

ISLLE-0007

CDA on an Education Brochure for Ethnic Minority Students and Parents in Hong Kong

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1. Background

Education is the key to the future. Not only does it enable individuals to fully unleash their potentials and capabilities, it is also instrumental in realising attainment in other areas such as employment and indeed, life in general. Although Hong Kong has been enjoying international praise for its sound education system, one of the most disgraceful and pressing issues in the local public education arena today is the persistent underachievement and negligence of ethnic minority (EM) students residing there. This is repeatedly evidenced by research studies, reports by non-governmental organisations and press articles complaining about inequity and deprivation of social rights regarding educational provision for EM students in the territory.

Language reflects ideologies, so does imagery. This paper attempts to uncover the underlying ideologies behind the visual and verbal signs of the brochure titled “Non-Chinese Speaking Parent Information Package: Your Guide to Education in Hong Kong” produced by the local education authority in 2013. The brochure was carefully read and interpreted through the lens of Critical Discourse Analysis (CDA).

2. Methods

Fairclough’s Critical Discourse Analysis (1995) is a three-dimensional analytic model that requires a systematic description (semiotic analysis), an accurate interpretation (analysis of encoding and decoding processes) and a comprehensive explanation (social and cultural analysis). It aims to draw out the form and function of the text (1st dimension), to understand how the text relates to the way it is produced and consumed (2nd dimension), and to discover the relation of this to the society in which it takes place (3rd dimension). Policies are made to secure particular economic, political, or power interests of the policymakers, who intend to influence actors (not) to take action in accordance with one particular viewpoint among many competing and conflicting perspectives. CDA is seen as a visual semiotic tool to analyse the relationship between language/image and ideology/power in a text. CDA requires a critical and analytical eye to read, interpret and explain a text that is socially regulated and constrained. It is like a sharp knife slicing through multiple layers of a policy onion in an attempt to understand the hidden interests and disinterests of the policymaker and of the actors. By drawing on the analytic framework of Fairclough’s CDA, this paper has given a critical visual and textual analysis of an

informative guide designed by the Education Bureau of the Hong Kong Government.

3. Results

Through examination of the inter-relationship between the visual and textual signs that shape and construct meanings in the reader's mind, the author has uncovered the hidden ideologies of the Chinese Language education policy being advanced to persuade the ethnic minority parents and students in Hong Kong. The analytical results show how the underpinning ideologies and proposed support measures have deceptively paint a beautiful and promising education picture for the target readership of the information brochure.

Keywords: CDA, ethnic minority education, Chinese language

4. References

Fairclough, N. (1995). *Critical Discourse Analysis*. London: Longman.

ISLLE-0011
How Tailor-Made Teaching Redefine “IT”? University Practical Language Course in Hong Kong

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Abstract

The “Chinese Language Enhancement Programme” (CLEP) provides compulsory practical Chinese courses to all the undergraduate students in the University of Hong Kong (HKU). How does a single language programme suit thousands of students from ten faculties? What pedagogies are adopted to make sure effective learning?

Keywords: Tailor-made teaching, Flipped Classroom, Language Curriculum Development, E-learning

Background

The Chinese Language Enhancement Programme (CLEP), which belonged to the School of Chinese, was established in 1993 and provided undergraduate practical Chinese courses to all faculties of the University of Hong Kong (HKU). Since then, CLEP has become the compulsory subject for all the undergraduate students. Only if they achieve passing grade, can they graduate from HKU.

Four-year curriculum system has been implemented in all the universities of Hong Kong since 2012. Undergraduate students in HKU have to achieve 54 credits of compulsory subjects within four years, including the common core courses with 36 credits, the Chinese (6 credits) and English (12 credits) courses with 18 credits.

All the universities in Hong Kong offer compulsory course on Chinese or Chinese culture to undergraduate students. For example, two “University Chinese” courses are provided in the Chinese University of Hong Kong (CUHK).¹ In contrast, the CLEP provides 29 compulsory practical Chinese courses with the same credits and learning objectives with different content to all the faculties of HKU in the 2016-2017 academic year.²

¹ For the details of “University Chinese” courses of the Chinese University of Hong Kong, please refer to <http://www.chi.cuhk.edu.hk/index.php/en/clan-4year-en/uchinese-home>.

² For the course structure and introduction of the “Chinese Language Enhancement Programme” (CLEP) in the School of Chinese, the University of Hong Kong, please refer to <http://www.chinese.hku.hk/main/chinese-language-enhancement-program/>

On the other hand, CLEP has been taking “tailor-made teaching” as the most important teaching objective. The curriculum design mainly considers the need of working environment of students after graduation. It aims to improve the Chinese language skills which is related to their profession.

How does CLEP provide the compulsory practical Chinese courses with the same credits and learning objectives to different faculties on the one hand and balance the curriculum standardization and achieve “tailor-made teaching” on the other? This paper will discuss the question from the aspects of “Professional Chinese”, “Chinese Proficiency”, “Delivery Mode” and “Pedagogy”.

Professional Chinese

All the CLEP courses share the three important elements, that are “Chinese Grammar”, “Chinese Character” and “Practical Chinese”. “Chinese Grammar” includes grammar, vocabulary and the correction of grammatically wrong sentences. “Chinese Character” includes difference between Traditional Chinese and Simplified Chinese characters, typo correction. “Practical Chinese” includes skills on oral presentation, group discussion, public speaking, debating skills and practical Chinese writing (such as notice, letter, meeting minute, proposal and other practical writing skills).

These three elements keep all the CLEP courses within the same teaching objectives and provided the practical Chinese course with 6 credits for the different faculties in the university.

Although the main content of the Chinese practical courses in HKU focuses on Chinese knowledge, communication skills and writing training, the teaching contents of the Chinese practical courses are variant, according to the students' professional conditions and job requirements based on the teaching idea of Professional Chinese. To achieve the goal of “tailor-made teaching”, for example, the Chinese courses for the Faculty of Engineering focus on the Chinese applications in project planning, official negotiation, information technology. On the other hand, the Chinese courses for the Faculty of Law focus on the Chinese applications in the legal provisions, legal arbitration.

CLEP not only tailored it's Chinese courses for the faculties, but also for different disciplines in the same faculty. For example, there are five CLEP Chinese enhancement courses for different disciplines in the Faculty of Business and Economics, namely CBBA9001 for accounting major, CBBA9002 for business and information technology major (double degree course) , CBBA9003 for finance and banking major, CBBA9004 for international business and global management major and CBBL9001 for “Business and Law” major (double degree course). Although the five courses share major teaching contents such as Chinese characters, communication skills and

writing skills, the teaching emphases, learning items and performance evaluation are different according to the student's major in the faculty. For example, the class size, lecture format of CBBA9003 differs from the other four courses. Besides, CLEP provides six Chinese courses to the Li Ka Shing Faculty of Medicine, namely, CEMD9002 for nursing major, CEMD9003 for Chinese medicine major, CEMD9005 for pharmacy major, and CEMD9006 for medicine major (local student), CEMD9007 for medicine major (non-local) and CEMD9008 for biomedical science major.

Chinese Proficiency

Nearly 30% students in HKU are non-local students in HKU. They come from Mainland China, foreign countries, or even international schools in Hong Kong. They are admitted by HKU through the National Joint College Entrance Examination of Mainland or international baccalaureate tests, such as IB, IGCSE, GCE or SAT. In general, they are called as "Non-JUPAS" as the local students are admitted to university through the "Join University Programme Admissions System (JUPAS)". The Non-JUPAS students join the university through different channels with different Chinese levels. For example, Mainland students may be slightly better than local students in Chinese writing while the local students may be slightly better than the Non-JUPAS, Non-Mainland students in this field. Besides, Mainland students have no need in simplified Chinese learning but the Non-JUPAS, Non-Mainland students have a low cognized standing point on simplified Chinese. Therefore, if they were arranged in the same class, teaching will inevitably be influenced because of the learning difference.

So, besides the practical Chinese course which is provide to local students admitted by HKU through JUPAS, CLEP also provides suitable and distinctive Chinese courses to the students who have different learning background. For example, the Mainland students have to choose one of the two courses in CUND9002 and CUND9003. The former serves the students who speak Cantonese (mainly from Guangdong province, Mainland China), and the teaching content mainly focuses on Hong Kong culture, traditional Chinese characters and advanced practical language skills, while the latter is offered to the students who are not familiar with Cantonese (mainly comes from provinces other than Guangdong).

To achieve the goal of "tailor-made teaching", CLEP designs distinctive Chinese courses for Non-JUPAS, Non-Mainland students. For example, there are two Chinese courses (i.e. CEMD9006 and CEMD9007) offer to the Li Ka Shing Faculty of Medicine. Differ from CEMD9006 which is provided to local students admitted by HKU through JUPAS, CEMD9007 is a tailor-made Chinese course for the Non-JUPAS, Non-Mainland students in the faculty. The course focuses on improving their oral communication due to the requirements of the medical profession, including the pronunciation training on Cantonese, mock medical diagnosis, medical video interpretation, mock open talk in medical profession, difference on medical terminology in

Mainland China and Hong Kong.

Delivery Mode

Different with other university compulsory language course in Hong Kong, CLEP offers Chinese enhancement courses from year 1 to year 4. In order to meet the need and timetable of students in different disciplines or faculties, practical Chinese language courses are offered for all the academic years. For example, most Chinese courses in Faculty of Business and Economics are offered as year 3 programme. The four CLEP courses for Faculty of Education are respectively year 2 (CEDU9004), year 3 (CEDU9006), year 4 (CEDU9001) programmes. The adjustments are made for meeting the learning progress of the students in that faculty and the timetable of the academic year in order to achieve the best learning outcome.

The teaching model of CLEP practical Chinese course is the combination of lecture and tutorial. The lecture is the class with dozens or hundreds of students and has around fourteen hours per semester. Theories and principles are discussed in lecture. The tutorial is the class with ten to twelve students. It takes ten to twelve hours per semester. It allows students to practice, actualize the theories and principles learned in lecture. Besides, group discussions and presentations are usually conducted in the tutorial.

However, the classroom pattern, "Lecture + Tutorial", may not be suitable for all students.³ In addition to the such classroom pattern, some CLEP practical Chinese courses are carried with the form as workshop which last for two to three hour per lesson. Based on the learning and professional needs of students, teaching, discussion, presentation are made in the same lesson. CBBA9003 for the Faculty of Business and Economics, which is provided to finance and banking major, is an example.

Pedagogy

Like other university courses, CLEP has been using problem-based learning (PBL) didactics.⁴ Under the PBL teaching environment, students need to apply the knowledge learned in the course.⁵ As the mainstream didactics, PBL is questioned by scholars to some extent.⁶ CLEP also uses other didactics, especially those related to information technology, for cooperating with PBL. For example, "e-Teaching Portfolio" and "Flipped Learning".

³ Phillips, R. (2005), Challenging The Primacy Of Lectures: The Dissonance Between Theory And Practice In University Teaching, *Journal of University Teaching & Learning Practice*, 2 (1).

⁴ Maggi Savin-Baden (2004), *Foundations of problem-based learning*, Maidenhead : Open University.

⁵ C. E. Hmelo-Silver (2004), Problem-based Learning: What and how to do students learn?, *Educational Psychology Review*, Vol. 16-3, pp. 235-266; H.S. Barrows (1996), Problem-based Learning in medicine and beyond: A brief overview, *New Directions for Teaching and Learning*, Vol. 68, pp.3-12.

⁶ Don Margetson (1997), Why is problem-based learning a challenge? *The challenge of problem-based learning*, Psychology Press, pp.36-44; Colin Coles (1997), Is problem-based learning the only way? *The challenge of problem-based learning*, pp.313-324.

Under the teaching environment of e-Teaching Portfolio, every student has their own personal and independent learning account in Moodle. Task performances, including grades and the teacher's comments, are collected and listed in order in a single online account. Students carry out continual improvement according to the instruction of teachers and improve continuously. On the other hand, teacher's suggestion can be made in reference to student's performance on past assignments.⁷ Teachers help students understand the benefits of portfolios and how to use portfolios to enhance professional growth and success. E-Teaching Portfolio is important for continuous assessment of the Chinese learning, writing and oral presentation.

There are different views on the popular Flipped Learning in recent years,⁸ and we tend to adopt the following definitions:

As far as we are concerned, the successful flipped learning depends on the four pillars of "F-L-I-P", while "F" for "Flexible Environment", "L" for "Learning Culture", "I" for "Intentional Content" and "P" for "Professional Educator".⁹ Video clips on lecture content are uploaded to Moodle for the students to preview and prepare for the coming lesson. Therefore, class time can be used for group discussion, assessment and practice, which can make the learning more efficient.¹⁰

However, some of researches show that the learning progress of flipped learning depends on the self-discipline of students and the handling of the teaching contents of teachers.¹¹ Besides, it may not greatly improve the teaching effectiveness and it also does not coincide with the goal of CLEP: tailor-made teaching. Therefore, in addition to the videos, discussions, presentation and evaluations, I uses the "Flipped Back" concept. Firstly, student's oral presentation is recorded (video A) and uploaded. Secondly, teacher record his oral comments on video A, that is while he is watching the students' presentation (video B). In other words, video B is the combination of the visual image of students' oral presentation (video A but just mute) and teacher's oral comment. Student can evaluate his own presentation and receive teacher's comment in the same video. With the help of video function, such as "volume adjustment", "fixed mirror" and "fast forward",

⁷ Nedra Reynolds, Elizabeth Davis (2014), *Portfolio Teaching: A Guide for Instructors*, Boston: Bedford / St. Martin's

⁸ Mike Acedo (2013), 10 Pros And Cons Of A Flipped Classroom, *TeachThought*, retrieved from <http://www.teachthought.com/learning/blended-flipped-learning/10-pros-cons-flipped-classroom/>

⁹ Jacob Lowell Bishop, Matthew A Verleger, The Flipped Classroom: A Survey of the Research, *Flipped Learning*, Retrieved from <http://flippedlearning.org/definition-of-flipped-learning/>

¹⁰ Bishop, Jacob Lowell and Matthew A. Verleger (2013), The flipped classroom: A survey of the research, *ASEE National Conference Proceedings*, Atlanta, GA. Vol. 30. No. 9., pp.2.

¹¹ Sandi Findlay-Thompson, Peter Mombourquette (2014), Evaluation of a Flipped Classroom in an Undergraduate Business Course, *Business Education & Accreditation*, Vol. 6, No.1, pp. 63-71; Nielsen, L. (2011), Five Reasons I'm not flipping over the flipped classroom, *The Innovative Educator*, retrieved from <http://theinnovativeeducator.blogspot.ca/2011/10/five-reasons-im-not-flipping-over.html>

students can identify their problems or merits and follow the advice of teachers. Progress is obvious in oral presentation and pronunciation.

Conclusion

Facing the new challenges of the new century, the teaching method of Chinese in universities must also be changed. CLEP offers nearly thirty Chinese courses all ten faculties of the University of Hong Kong. Although the information technology is massively used, much attention should be paid to the relationship between learning and teaching. The “I” and the “T” in the “IT Teaching” should be redefined as "I" am a "T"eacher by following out the idea of “Tailor-made teaching” from the perspectives of professional Chinese, Chinese proficiency, delivery mode and pedagogy.

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63-71.

ISLLE-0013
Teacher Read aloud in EFL Elementary School Classrooms

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1. Background

Reading aloud to students is an excellent way to present new vocabulary, set up small-group conversations, model story structure, teach content knowledge and motivate students to learn to read (Helman 2009). In addition to native speakers, reading aloud also facilitates language acquisition for students new to English. In fact, the use of interactive and analytic talk with students during read aloud help students develop competence in organizing their explanations, learn to modify their speech and improve their analytical ability. These discussions during read aloud are especially valuable for students with minimal English proficiency (Dickson & Smith, 1994; Kalia, 2007; Boyd & Galda, 2011). However, most of the research uses experimental research design and statistical analysis of students' academic achievement. There is less research focusing on how teachers select reading materials and how teachers present the texts in an English as a foreign language (EFL) context. Therefore, I conduct case studies to see how teachers read aloud picturebooks to help EFL students' learning in the elementary schools in Taiwan.

2. Methods

In this research, I conduct qualitative multiple case studies to see how exceptional teachers in Taiwan use picturebooks in their classrooms. Qualitative research methods are selected for this study because I want to generate data rich in detail and embedded in context. I recruited 6 exceptional elementary school English teachers from north, central and south Taiwan respectively. Some teachers teach more than one class, so for each teacher I observed one to three different classes for at least two months. My primary data sources include observation, videotapes, teacher interviews, students' work samples and secondary data sources, such as teachers' blog and lesson plans. These data collection activities are carried out in 9 local elementary classrooms in total in Taiwan. I transcribe all my recorded video and audio files. Then I analyze the data by working on the coding using the computer program Nvivo, a qualitative data-analysis software.

3. Results

My observational evidence showed that teachers used picturebooks to extend and expand their current learning objectives. The major factor teachers took into consideration when selecting books was their current learning target. Sometimes the books chosen were related to the current

main themes they were learning, but occasionally teachers would choose books merely for enjoyment. All these books and reading materials provided an opportunity for discussion. Teachers typically read aloud picturebooks as a vehicle for introducing holidays as well as interesting themes, and nurturing students' motivation to read. L1 was the major language teachers use during their discussion and interaction with students, but code-switching occurred constantly between English and Mandarin. Furthermore, teachers demonstrated that there was a lot of teaching before, during and after read aloud beyond simply reading to students. For example, before reading, teachers guided students to focus on their learning objective and set a purpose for reading. Some teachers even showed pictures on projector screen to pre-teach vocabulary to get students ready for the reading. Reviewing words and themes was also the strategy that teachers would use to activate students' background knowledge and make connection for the new reading. During reading, teachers used a great variety of instructional strategies to help students' literacy development, including vocabulary instruction, comprehension check, scaffolding language development and cooperative learning, etc. For example, in addition to comprehensible input, teachers encouraged collaborative dialogue by inviting students to work together to discuss in order to maximize opportunities for producing the language. Moreover, while reading books portraying different cultures, teachers guide students to acknowledge and accept the cultural differences. Teachers also intentionally planned to create opportunities for student output after read aloud. I identified several activities teachers used, such as reader's theater, role playing, games and activities, talent shows, independent reading and assessment, etc. In short, teachers read aloud picturebooks to help students move progressively toward higher levels of comprehension and skill acquisition that they would not be able to achieve without assistance.

Keywords: Read-aloud, picturebooks, English as a foreign language, literacy development

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ISLLLE-0036

Learning How to Teach Readers – The Experiential Learning of Student Teachers

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1. Background

Reading is a rewarding process and is enjoyed by young learners and the teacher alike, if it is done in a proper way. Many student teachers in Hong Kong, however, share the view that they do not have enough pedagogical knowledge and skills to teach readers effectively. Recent efforts to improve teacher education have focused on improving prospective teachers' learning process through experiential learning.

2. Method

The knowledge transfer project conducted is an attempt to address our dearth of knowledge as to the impact of service learning on preservice teachers in terms of their acquisition of pedagogical content knowledge to teach readers to young learners. The aim of the project was to enhance prospective teachers' professional growth through the development of teaching resources for school teachers. The process involved: (1) collecting participants' views on reader teaching and learning, (2) selection of readers, (3) lesson planning and materials development on selected readers, (4) peer comment, self-reflection and lesson revisions, (5) school tryouts, (6) further lesson revisions, (7) project evaluation, and (8) dissemination of project outputs through online publication. Student teachers' learning in the process was gauged through meeting discussions, lesson revisions and project evaluation.

3. Results

The professional strategies developed include lesson planning, materials development, critical evaluating, teamwork skills, and ability to select the key language features and teach grammar, phonics and vocabulary through readers. The student teachers also learnt how to extend activities to relate to children's daily lives to make English learning more fun and meaningful. The findings suggest that service learning is a valuable component of preservice teacher education.

Keywords: experiential learning, preservice teacher education, readers

ACMASS-0018

Effects of Parental Involvement on Educational Achievement among Taiwanese Junior High School Students from the Perspective of Cultural Capital

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Abstract

By adopting the concept of cultural capital proposed by Lareau and Bourdieu as the main theoretical framework, this study examined three types of parental involvement in their children's schooling: (1) parent knowledge and selection of schools for children; (2) parent contact of children's schools; and (3) parent participation in parent's associations or service as school volunteers. These types of parental involvement were applied to discuss the association between social class and parental involvement and thus analyze the effects of parental involvement on their children's academic performance and outcome in educational tracking. By conducting an empirical analysis on data collected from the Taiwan Education Panel Survey, this study evidenced social reproduction in education regarding the educational achievement of Taiwanese junior high school students. In addition, this study found that fathers with higher education levels and mothers with higher job statuses had a greater understanding of their children's education or school affairs, and thus applied their knowledge in selecting schools, enabling their children to enter high-quality educational institutions and achieve high academic performance, consequently leading to a higher chance of their children entering an academic track. Therefore, the study results indicated that socially privileged families in Taiwan, compared with those less privileged, were more able to assist their children in obtaining higher educational achievement through specific types of parental involvement.

Keywords: cultural capital, parental involvement in schooling, educational achievement, educational stratification

I. Introduction

This study investigated parental involvement in schooling to investigate the process through which academic achievement is attained in an ethnic Chinese society. The following topics were discussed: 1. Exploring the factors of parental involvement in Taiwanese society to clarify the effect of family background on parental involvement. 2. Examining the effects and causal mechanisms of parental involvement on children's academic achievement. 3. Considering the theoretical implications of parental involvement in schooling in the context of cultural capital,

and exploring the process of educational stratification.

The first research contribution is the introduction of cultural capital theory. Multiple foreign studies have considered parental involvement in schooling from the perspectives of both social and cultural capital. This study focused on cultural capital. The advantages of social capital are only effective within a social system. If the habitus of individuals is already in line with the culture of the external social field, this is conducive to various types of social dominance. Because each family varies in social position, the lifestyle and habitus developed in each family in the long term must be different, which underlie the knowledge based of whether and how parents are engaged in their children's schooling.

The second research contribution is using of the Taiwan Educational Panel Survey. The Taiwan Educational Panel Survey (TEPS), developed by the Academia Sinica, the National Science Council, and the Ministry of Education, is a large-scale database on the educational process of Taiwanese adolescents. The sampling design of TEPS employed a long-term tracking approach based on a panel survey. Seventh-grade students were interviewed in 2001, followed by subsequent interviews with the same students in 2003, 2005, and 2007. The parents and teachers of these junior high school students were also interviewed.

This study combined the TEPS surveys of students, parents, and teachers. The primary data were the first wave of interviews conducted in 2001 and the third wave of interviews (with the students as eleventh graders) conducted in 2005.

II. Definition of Parental Involvement

1. Specific viewpoint

This study focused on various parental involvements and interventions in their children's schools. General definition: All education-related activities the parents are involved in are within the scope of parental involvement. Specific definition: Parents' individual and collective rights of participation, communication, and decision-making related to schools' educational affairs as a means of exercising parental rights and their role as students' guardians. In this context, the specific definition of parental involvement refers to the parental involvement in schooling.

2. Parental involvement in schooling as cultural capital

Lareau was particularly concerned about parental involvement and focused her study on parental attention paid to children's activities outside of formal curricula; hence, she proposed the context of informal cultural knowledge to interpret this type of cultural capital. Lareau found that in addition to formal learning programs and educational training, various informal educational activities are incorporated latently in school education. Regardless of social status, each parent is encouraged to engage in various school affairs, including volunteering, assistance with service

learning courses, and participating in parent–teacher conferences. Lareau’s study revealed that the parents familiar with this implicit cultural knowledge were capable of responding to the teachers’ expectations, thus helping their children to gain advantages in school.

3. Three types of parental involvements defined from the perspective of cultural capital

Lareau pointed out that parents may engage in numerous actions that improve their schoolchildren’s education to generate social benefits. In particular, as a large-scale bureaucratic organization, a school exhibits specific logic and mechanisms of operation. Parents’ familiarity with the informal cultural knowledge of how a school operates enables them to play the parental role expected by teachers during their children’s educational process, thereby enhancing their children’s learning and conferring adaptive advantages in school.

This study identified three types of actions of parental involvement in schooling: learning about or selecting schools, actively contacting the school, and serving as a parent volunteer or member of the parents’ association.

(1) Learning about or selecting the school: Refers to parents’ attention to, understanding of, and selection of the school in which their children are enrolled. Learning about or selecting the school implies the parents’ knowledge of the education system and understanding of school rules.

(2) Actively contacting the school: Refers to parents’ formal communication with teachers or school staff to understand their children’s behavior and performance in school. Actively contacting the school implies that parents have a sense of entitlement to request assistance from teachers.

(3) Serving as a parent volunteer or member of the parents’ association: Refers to parents’ involvement by assuming the role as a member of the parents’ association or volunteer. Members of the parents’ association are responsible for sponsoring specific activities at a school and participating in school affairs, whereas parent volunteers frequently engage in tasks such as traffic control, supervising morning study hours, and counseling students in professional skills. This type of parental involvement implies satisfying parents’ own expectations of the operation of the school system using their previous knowledge and experience.

III. Research Design

1. Hypotheses

H1: Parents with higher socioeconomic statuses are more deeply involved in parental activities from the perspective of cultural capital.

H2A: The extent to which parents are involved in parental activities from the perspective of cultural capital is positively correlated with their children’s performance in standardized tests.

H2B: The extent to which parents are involved in parental activities from the perspective of cultural capital is positively correlated with teachers' evaluations of their children.

H3A: Children with the support of higher Parental involvement in cultural capital-based activities attain higher scores in standardized tests, thereby gaining increased likelihood to select the academic track.

H3B: Children with the support of higher Parental involvement in cultural capital-based activities attain more positive evaluations from the teacher, thereby gaining increased likelihood to select the academic track.

2. Source of data

Because this study explored the effect of parental involvement in schooling on students' in-school performance and their subsequent educational track selection, the respondents were interviewed in the seventh and eleventh grades to observe the change in their academic achievement.

A total of 3022 respondents participated in both interviews. After invalid questionnaires with incomplete responses were eliminated, a total of 2320 valid samples were subjected to statistical analysis.

3. Dependent variables

(1)Educational tracks: The tracking system consists of academic tracks (i.e., opting for higher education) and vocational tracks (i.e., opting to acquire trade skills).

(2)Standardized tests (item response theory): A comprehensive standardized test on various skills (i.e., analytical, mathematical, reading and writing, and science) was administered to the student respondents to evaluate their learning, thinking, and problem-solving skills.

(3)Teacher's evaluation: The respondents' homeroom teachers were asked to evaluate their students' abilities in oral communication, report writing, teamwork, data collection and organization, and logical thinking.

(4)Parental involvement defined from the perspective of cultural capital. First, learning about or selecting the school: this study identified the parents' understanding of their children's school, including educational tracks, discipline, differentiated learning, and developmental characteristics. Second, actively contacting the school: this study considered whether the parents had actively contacted the school over problems such as their children's academics, adaptation, mental health, and behavior. Third, serving as a parent volunteer or member of the parents' association: this study investigated whether the parents had engaged in school activities as a volunteer or member of the parents' association.

IV. Analysis

1. Social class-based differences in parental involvement in schooling

The results revealed that differences existed among parents of different social classes regarding

cultural capital-based parental involvement. The parents with higher levels of social statuses were more involved than those with lower levels, but this only applied to “learning about or selecting the school” and “serving as a parent volunteer or member of the parents’ association.” Social class determined by fathers’ education level and mothers’ occupation significantly affected parents’ “learning about or selecting the school.” Social class determined by mother’s education level and monthly household income significantly affected parents’ “serving as a parent volunteer or member of the parents’ association.”

H1 was partially supported. (1) Fathers’ education level and mothers’ occupation positively affected parents’ “learning about or selecting the school.” (2) Socioeconomic status was not correlated with parents’ “actively contacting the school.” (3) The mother’s education level and monthly household income positively affected parents’ “serving as a parent volunteer or member of the parents’ association.”

2. Effect of parental involvement in schooling on standardized test and teacher’s evaluation scores

Results revealed that the inferences of H2A and H2B required revision. (1) “Learning about or selecting the school” supported H2A but rejected H2B. The data indicated that parents’ level of understanding of their children’s school was positively correlated with their children’s standardized test scores but not with the teacher’s evaluation scores. (2) “Actively contacting the school” rejected both H2A and H2B. Parents’ frequency of communication with the school was negatively correlated with both standardized test and teacher’s evaluation scores. (3) “Serving as a parent volunteer or member of the parents’ association” rejected H2A but supported H2B. The frequency of parental involvement in this aspect was not correlated with their children’s standardized test scores, but correlated positively with teacher’s evaluation scores.

3. Effect of parental involvement on educational tracking results

H3A was partially supported, but H3B was rejected. The results confirmed that cultural capital-based parental involvement affected student respondents’ educational tracking results via the following path: parents’ “learning about or selecting the school” positively affected their children’s standardized test scores, which increased the likelihood of the children in entering the academic track.

V. Conclusion

Social class-based differences existed in parental involvement in schooling, particularly when mothers’ education level and occupation were used to determine the family’s socioeconomic statuses. Mother’s occupation was the primary factor influencing parents’ “learning about or selecting the school,” followed by father’s education level. Mother’s education level was the primary factor influencing parents’ “serving as a parent volunteer or member of the parents’

association,” followed by monthly household income. However, socioeconomic status was not correlated with parents’ “actively contacting the school.”

Effect of cultural capital-based parental involvement on students’ standardized test and teacher’s evaluation scores varied by the type of involvement. “Learning about or selecting the school” was positively correlated with standardized test score. “Serving as a parent volunteer or member of parents’ association” was positively correlated with teacher’s evaluation score. However, “actively contacting the school” was negatively correlated with both the standardized test and teacher’s evaluation scores.

The effects of parental involvement on students’ educational track selection varied by the type of actions. Parents’ “learning about or selecting the school” positively affected their children’s likelihood of entering the academic track, with the standardized test score serving as a mediator. Neither parents’ “actively contacting the school” nor “serving as a parent volunteer or member of the parents’ association” affected their children’s selection of educational track.

ACMASS-0019

Effects of Study Books for Note-Taking in Enhancing Student Learning

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Abstract

The purpose of this research was to examine the effects of study books for note-taking to enhance student learning in terms of student achievement and satisfaction. The purposive sample group was 49 undergraduate students who have been studied Bachelor Degree of Business and Computer Education at Vocational Education, Faculty of Education, Kasetsart University and enrolled in Knowledge management subject in one class. The research instruments were 1) study books for note-taking 2) pre-test and post-test 3) a questionnaire collecting student's opinions towards satisfaction and recommendation. Data were analyzed by using content analysis, t-test, mean and standard deviation.

The research results of the effects of study books for note-taking revealed as following:

1) For student achievement, the mean and standard deviation of student content knowledge was at a high level ($\bar{X} = 4.44$, S.D. = 0.56). Scores before and after using study books for note-taking were 54.50 and 87.80 of 100, respectively. The posttest scores were higher significantly than the pretest scores at 0.05 level of significance.

2) For student satisfaction, the means and standard deviation of student satisfaction was at a high level ($\bar{X} = 4.41$, S.D. = 0.57). Results from open ended answers were that study books for note-taking were very useful for recording, reviewing, retaining, summarizing and managing the content knowledge. They were considered as a good and interesting way to learn and create notes in student's own preferred styles. In addition, it helped stimulate creativity but still put content knowledge into a system that was easy to understand and apply it in the future.

In conclusion, study books for note-taking can be used as an effective learning strategy to enhance student learning in terms of student achievement and satisfaction with positive results.

Keywords: Effects, Study Books, Note-Taking, Student Learning

1. Background/ Objectives and Goals

It is well aware that the primary role of teachers is to pass knowledge and information onto their students (Wikipedia, n.d.) as content knowledge, which refers to the body of knowledge and information that teachers teach and that students are expected to learn in a given subject (Great

School Partnership, 2016).

However, knowledge must be translated into skills to be successful (Van De Ven & Johnson, 2006). If students possess appropriate content knowledge, they have great potentials to turn that content knowledge into skills and be successful in their learning.

Notes obviously serve as a place to keep knowledge and information for later review (Kiewra 1985; Kiewra et al 1991). The body of research on note-taking reveals that in general, taking notes in class and reviewing those notes later positively impacts student learning (for instance, Bligh 2000; DeZure, Kaplan, & Deerman 2001; Kiewra et al 1991)

The literature (Foos, Mora & Tkacz 1994; Katayama 2005) also shows that people better retain materials that they have generated themselves (i.e., personal notes) than materials generated by others (i.e., someone else's notes). Ultimately, the combination of both functions makes note-taking a crucial part of successful learning (Boye, 2012).

According to the mentioned above, the researcher is interested in examining the effects of study books for students to take notes in class in order to keep content knowledge that a teacher passes onto students and to enhance student learning in terms of student achievement and satisfaction through the use of study books for note-taking throughout a given subject.

2. Methods

In this study, the researcher set numbers of population, sample group, data collection tools and data analysis processing as shown below:

a. Population and Samples

Population in this research was 104 undergraduate students who have been studied Bachelor Degree of Business and Computer Education at Vocational Education, Faculty of Education, Kasetsart University.

Samples were 49 undergraduate students who have been studied Bachelor Degree of Business and Computer Education at Vocational Education, Faculty of Education, Kasetsart University and enrolled in the knowledge management subject in one class, which was selected by purposive sampling.

b. Research Instruments

Instruments used in this research were 1) study books for note-taking 2) pre-test and post-test 3) a questionnaire collecting student's opinions towards satisfaction and recommendation.

The first instrument was study books for note-taking of content knowledge of the selected

subject. They were used with samples of 49 undergraduate students to examine the effects in enhancing student learning in terms of student achievement and to support quantitative data from pre-test and post-test. Study books for note-taking were tried out with nine non-targeted group of students with a very high satisfactory level at 4.78. Students were given study books to take notes throughout the course and had to submit them at the end of the course. Their study books were then rated in its content knowledge on a scale of 5 to 1 as follows: 5 indicates very high, 4 indicates high, 3 indicates average, 2 indicates low and 1 indicates very low in content knowledge.

The second instrument was a writing test used as pre-test and post-test. It consisted of three short and long answers focusing on key content of knowledge management subject. Three experts were consulted to confirm the content validity of items in a writing test. Appropriate adjustments were made to a writing test according to experts' comments.

The third instrument was a satisfaction questionnaire collecting student's opinions towards their satisfaction and recommendation. There were two parts. Part one was five point Likert Scale used for students to rate their satisfaction with 11 items. Part two was an open ended answer for students to give recommendations with 1 open-ended answer. The five point Likert Scale items were rated on a scale of 5 to 1 as follows: 5 indicates very high, 4 indicates high, 3 indicates average, 2 indicates low and 1 indicates very low. It was verified by three experts and tried out with a different group of students after using study books for note-taking. Appropriate adjustments were made to the questionnaire.

c. Data Collection

Once students who have been studied Bachelor Degree of Business and Computer Education at Vocational Education, Faculty of Education, Kasetsart University enrolled in the knowledge management subject, students were tested on the pre-test prior to the use of study books for note-taking for comparison with post-test scores, which was tested after their use of study books for note-taking.

At the beginning of the class, students were given study books for note-taking. The teacher encouraged students to take notes from lecturer's presentations and students' own notes from each classroom sessions across 15 weeks of the course in their preferred styles and examples of taken notes in study books from nine non-targeted group of students were shown to students to give some ideas of how to take notes with study books given. The teacher assessed these individual notes after students submitted their study books at the end of class to examine their content knowledge of the subject.

At the end of the class, students were tested again on the post-test after the use of study books for

note-taking to compare scores with pre-test scores. The teacher administered a satisfaction questionnaire to examine student satisfaction and recommendations. Then, data were collected from study books, pre-test, post-test and questionnaires.

d. Data Analysis and used statistics

The researcher analyzed the data gained from samples of students through study books, pre-test, post-test and a satisfaction questionnaire. The content knowledge from study books was analyzed in terms of student content knowledge of the selected subject by using content analysis, mean and standard deviation. T-test was used to compare student achievement in the pre-test and post-test. Information of satisfaction was taken to find out mean and standard deviation in order to interpret the given scores in the questionnaire based on each student’s opinions toward their satisfaction. Recommendation was analyzed by using content analysis.

3. Results

The research results of this study were presented as following

3.1 Effects of Study Books for Note-Taking in terms of Student Achievement in Content Knowledge

Results of Student Achievement in content knowledge were presented in Table 1 and Figure 1.

Table 1 Means and Standard Deviation of Student Achievement in Content Knowledge

Content Knowledge	n = 49		Interpretation
	\bar{x}	S.D.	
Content Knowledge	4.44	0.56	High
Total	4.44	0.56	High

The data analysis in Table 1 showed that the mean and standard deviation of the student achievement in content knowledge from study books for note-taking was 4.44 and standard deviation (S.D.) was 0.56. This meant that student can demonstrate their content knowledge through study books for note-taking at a high level.

Examples of content knowledge that students demonstrated in their study books were presented in Figure 1

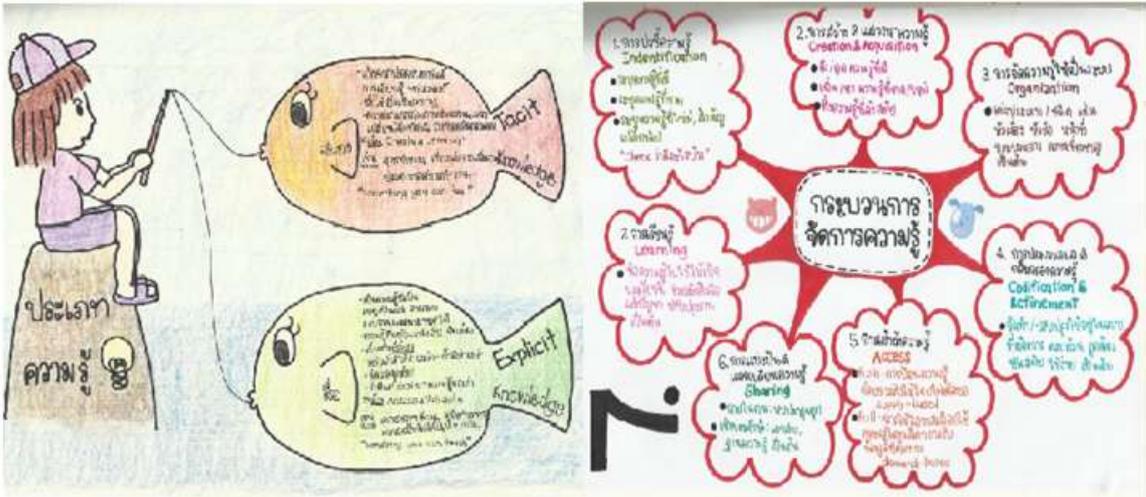
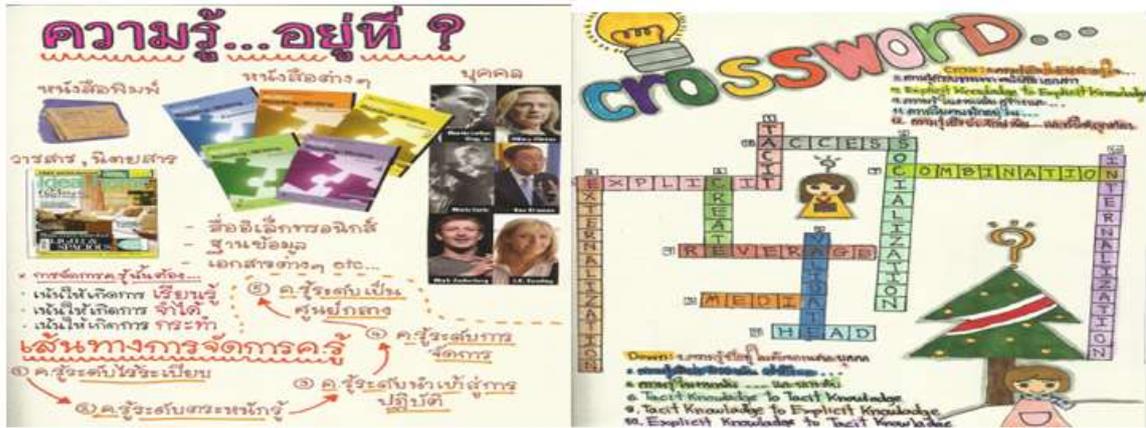


Fig. 1: Examples of Content Knowledge from Study Books for Note-Taking

3.2 Effects of Study Books for Note-Taking in terms of Student Achievement

Results of Student Achievement before and after using study books for note-taking were presented in Table 2.

Table 2 Student Achievement before and after Using Study Books for Note-Taking

Test	Total Scores	\bar{x}	S.D.	t-test	Sig.
Pre-test	100	9.16	7.33	14.79*	0.0000
Post-test	100	66.13	21.02		

*the mean difference is significant at the level 0.05 level

The data analysis in Table 2 showed that after using study books for note-taking, the post-test scores were higher than pre-test scores. There were significant differences between pre-test and post-test scores. It meant that student achievement after the use of study books for note-taking was higher than before, significantly different at 0.05.

3.3 Effects of Study Books for Note-Taking towards Student Satisfaction

Results of Student Satisfaction towards the use of study books for note-taking were presented in Table 3

Table 3 Means and Standard Deviation of Student Satisfaction towards Study Books for Note-Taking

Student Satisfaction	n = 49		Interpretation
	\bar{x}	S.D.	
1. It helps record, summarize, review and emphasize the content knowledge	4.55	0.62	Very High
2. It manages content knowledge systematically	4.44	0.60	High
3. It keeps content knowledge suiting to note-takers' needs.	4.43	0.64	High
4. It manages content knowledge with easiness to understand and with convenience to use	4.58	0.53	Very High
5. It involves note-takers to participate in learning activities throughout study books	4.19	0.63	High
6. It is in own note takers' responsibilities.	4.56	0.63	Very High
7. It stimulates creativity in taking notes in ways note takers prefer most	4.56	0.63	Very High
8. It increases the effectiveness of keeping and managing content knowledge	4.36	0.59	High
9. It creates good attitude in managing note takers' own content knowledge	4.30	0.69	High

Student Satisfaction	n = 49		Interpretation
	\bar{x}	S.D.	
10.It motivates note takers to manage content knowledge by themselves	4.13	0.69	High
11.It promotes knowledge management skills of note takers	4.42	0.60	High
Total	4.41	0.57	High

The data analysis in Table 3 showed that mean was 4.41 and standard deviation (S.D.) was 0.57. This meant that the student were satisfied with study books for note-taking at a high level.

Results from open ended answers were that study books for note-taking were very useful for recording, reviewing, retaining, summarizing and managing the content knowledge. They were considered as a good and interesting way to learn and create notes in student's own preferred styles. In addition, it helped stimulate creativity but still put content knowledge into a system that was easy to understand and apply it in the future.

4. Conclusion

Study books for note-taking can be used as an effective learning strategy to enhance student learning in terms of student achievement and satisfaction with positive results.

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Management (2)

Tuesday, August 15, 2017

13:00-14:30

Room 1006

Session Chair: *Prof. Anna Fatchiya*

ACMASS-0062

Frontline Workers' Passion and Emotional Exhaustion: The Mediating Role of Emotional Labor Strategies

Kuan-Yu Chen | *National Pingtung University of Science and Technology*

Cheng-Hua Wang | *Chang Jung Christian University*

Ching-Wen Chang | *Chang Jung Christian University*

ACMASS-0084

Amoeba Management outside Japan: The Case of a Japanese Corporation Operating in Malaysia

Zubir Azhar | *Universiti Sains Malaysia*

Anwar Allah Pitchay | *Universiti Sains Malaysia*

Nurhafiza Abdul Kader Malim | *Universiti Sains Malaysia*

ACMASS-0091

The Application of TELES in the Enhancement of Disaster Response and Rescue Policy in Tainan Area: A Study Following 0206 Earthquake in Tainan

Yuan-Ming Chiu | *Chang Jung Christian University*

Yu Chieh Lin | *National Taiwan University*

ACMASS-0094

Forces that Propel SMEs to Become Born Globals in South Korea

Anura Amarasena | *Woosong University*

ACMASS-0048

How Negative Behaviors of Leaders are Conceptualized and Measured

Jai-Hyoung Lee | *Nonghyup University*

ACMASS-0062

Frontline Workers' Passion and Emotional Exhaustion: The Mediating Role of Emotional Labor Strategies

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Abstract

The main purpose of this study is to apply a dualistic model of passion and conservation of resources theory to explore how frontline workers with different categories of passion for work use emotional labor strategies, and how this affects emotional exhaustion. We carried out a survey of 260 frontline workers in the restaurant industry, using a structural equation model to establish the relationship between different variables. The results show that the use of different emotional labor strategies by frontline workers produces different levels of emotional exhaustion. Frontline workers with harmonious passion used a deep acting strategy to reduce the occurrence of emotional exhaustion. However, frontline workers with obsessive passion frequently used a surface acting strategy which was more likely to trigger emotional exhaustion. In addition, the present study also proposes several management implications as a reference for managers with regards to human resources management, as well as suggestions for future research directions.

Keywords: harmonious passion, obsessive passion, deep acting strategy, surface acting strategy, emotional exhaustion

1. Introduction

In the service industry, frontline workers in the service industry are also believed to be in high emotional labor jobs (Ashforth & Humphrey, 1993). The process of providing services directly facing the customer means a greater possibility of work stress than other occupations. From the perspective of conservation of resources theory, dealing with different sources of stress over a long period inevitably leads to greater emotional exhaustion, producing burnout (Maslach & Jackson, 1981). Therefore, in the customer-oriented service sector, understanding potential factors causing burnout in frontline workers is an important issue for managers.

In previous academic studies, most research on emotional labor has continued to focus on the negative influence of emotional labor on service workers (e.g., Brotheridge & Grandey, 2002; Totterdell & Homan, 2003). Empirical studies also show that there is a clear relationship between surface acting strategies and emotional exhaustion (Brotheridge & Grandey, 2002). In contrast, there is a positive link between deep acting strategies and service performance (Grandey, 2003; Totterdell & Holman, 2003). Clearly, under the existing stress of emotional labor, service workers' choice of coping strategies (emotional labor strategies) affect their psychological outcomes and organizational performance. Although past studies have shown that individual differences will affect assessments of preferences, and even the different cognitive outcomes of the same emotional labor (Diefendorff and Richard, 2003; Schaubroeck and Jones, 2000), leading to the adoption of different strategies, in the study of emotional labor, there has been little empirical testing of individual factors.

According to current knowledge, there have been few empirical studies looking at which strategies service workers with work passion should adopt in response to emotional labor, and how their emotional exhaustion situation changes following this response. We argue that the concept of passion will provide us with a better understanding of how emotional exhaustion is produced. Therefore, the present study argues that individual differences (such as passion) play an important role in emotional labor. We examine whether work passion is a potential antecedent to the emotional labor strategies chosen by workers. In addition, we also examine the effects of different forms of work passion and emotional labor strategies on emotional exhaustion in workers.

2. Literature review

2.1. Frontline workers

In academic research. Bitner, Booms, and Mohr (1994) define frontline workers as workers in the service sector who interact with and provide services to customers. Since frontline workers come into direct contact with customers either face-to-face or voice-to-voice, they often have to adjust their emotional expressions to satisfy the emotional norms of the organization and the needs of customers. This is a major characteristic of emotional labor. As a result, frontline workers are frequently classified as having high levels of emotional labor (Hochschild, 1983).

2.2 Work passion

The dualistic model of passion explains participation in work through healthy and unhealthy motives, identifying two types of passion: harmonious passion and obsessive passion. The important difference between these two types of passion lies in whether the job has been internalized as a part of the individual's identity. Harmonious passion is produced by self-determined internalization, producing free and autonomous engagement in work. Therefore, harmonious passion should be consistent with the core values and self-concept of the individual.

However, obsessive passion conflicts with the self-concept of the individual.

2.3 Emotional labor

Good service performance is a necessary condition to attract customers, and an important method of maintaining customer loyalty (Rafaeli & Sutton, 1987). To enhance the standard of service and retain customers, organizations will establish certain norms for emotional expression, which serve as the basis of the emotions displayed to customers by service workers (Ashforth & Humphrey, 1993; Hochschild, 1983). Therefore, the effort applied to regulate one's emotional expression is called “emotional labor” (Grandey, 2000). Service workers frequently use two strategies to regulate their emotions, in order to satisfy the rules for emotional expression demanded by the organization: surface acting strategy and deep acting strategy (Hochschild, 1983; Zapf, 2002).

If the strategy chosen by service workers leads to emotional imbalance, it will result in a negative impact. Conversely, a “sincere” deep acting strategy may produce a sense of accomplishment in workers; therefore, a high or low sense of accomplishment is determined by how much workers identify with the organization (Ashforth & Humphrey, 1993).

2.4 Emotional exhaustion

According to Maslach 's theory, burnout can be divided into three dimensions. First, the “emotional exhaustion” dimension refers to the organization's excessive emotional demands on the individual during interpersonal interaction, which the individual is unable to cope with, leading to exhaustion of emotional resources. Next is the “depersonalization” dimension — individuals lose feelings toward the people they are servicing; they either pay no heed to them or view them as objects, producing indifference or emotional distance. Finally, the “reduced personal accomplishment” dimension — individuals lose their motivation for their job, producing a significant decline in feelings of competence or a sense of professional accomplishment (Maslach & Jackson, 1981; Schaufeli & Buunk, 2003; Wu & Cheng, 2003). Although research on work stress is not the same as that on emotions, it has enabled people to start to understand the importance of emotions in organizations (Rafaeli & Worline, 2001). Based on the above, the present study focuses only on emotional exhaustion.

3.1 Derivation of Relationships and Model Construction

3.1.1 Relationship between work passion and emotional exhaustion

Vallerand et al. (2003) believes that different methods of internalization produce two different forms of passion. Autonomous internalizing of activities produces harmonious passion, while controlled internalizing produces obsessive passion (Vallerand, 2008). Harmonious passion may produce positive outcomes, such as enthusiasm, flow experience, and feelings of fulfillment following participation (Hodgins & Knee, 2002). However, obsessive passion is believed to

generate negative emotions, heightened self-awareness, and rigid task engagement (Vallerand, 2008). The differences between these two forms of passion has previously been applied to research on burnout. In contrast, workers with harmonious passion are less likely to face burnout. In a subsequent study, Vallerand, Paquet, Philippe, and Charest (2010) found that obsessive passion is positively associated with conflict at work, producing increased emotional exhaustion. Conversely, harmonious passion has a positive association with job satisfaction and a negative association with conflict at work, therefore producing a relative decrease in emotional exhaustion.

The results of these studies show that if we can distinguish between an individual's form of passion for work, this can help us understand the level and direction of influence of work passion on the emotional exhaustion of workers. Hence, we propose our first and second hypotheses:

Hypothesis 1. Frontline workers' harmonious passion for their job is negatively associated with emotional exhaustion.

Hypothesis 2. Frontline workers' obsessive passion for their job is positively associated with emotional exhaustion.

3.1.2 Relationship Between Work Passion and Emotional Labor Strategies

Zapf and Holz (2006) argue that when explaining the effects of different types of emotional labor, emotional labor research should take into account individual differences. Some studies have looked at the relationship between passion and personal qualities. Due to the different method of internalization, individuals with harmonious passion can actively control their passion for activities, so that their passion for activities become a part of their lives (Vallerand et al., 2003). To summarize the above, harmonious and obsessive passion have "want to" and "need to" qualities, respectively. Personality traits that produce a "want" or "need" to manage emotional expression affect service workers' choice of emotional labor strategies. Therefore, we propose the following hypotheses:

Hypothesis 3. Frontline workers' harmonious passion for their job is negatively associated with the use of a surface acting strategy.

Hypothesis 4. Frontline workers' harmonious passion for their job is positively associated with the use of a deep acting strategy.

Hypothesis 5. Frontline workers' obsessive passion for their job is negatively associated with the use of a deep acting strategy.

Hypothesis 6. Frontline workers' obsessive passion for their job is positively associated with the use of a surface acting strategy.

3.1.3 Relationship between emotional labor and emotional exhaustion

In existing literature, many studies have explored the relationship between the use of emotional

labor strategies and emotional exhaustion (e.g., Brotheridge & Lee, 2003; Morris & Feldman, 1997; Seery & Corrigan, 2009; Totterdell & Holman, 2003; Zapf, Seifert, Schmutte, Mertini, & Holz, 2001). Johnson and Spector (2007) also argue that when service workers adopt a deep acting strategy, they attempt to change their inner emotional feelings, meaning that their inner emotional feelings and the external emotional performance required by the organization are consistent, reducing the consumption of individual emotional resources from following emotional expression norms. However, if service workers choose a surface acting strategy, and cannot eliminate the imbalance between the individual's inner emotional feelings and emotional expression norms, emotional expression norms will continue to use up individual emotional resources, producing emotional exhaustion. Based on the above, the present study argues:

Hypothesis 7. The use of a deep acting strategy by frontline workers is negatively associated with emotional exhaustion.

Hypothesis 8. The use of a surface acting strategy by frontline workers is positively associated with emotional exhaustion.

3.1.4 The mediating role of emotional labor strategies

In existing literature, aside from testing the direct relationship between work passion and emotional exhaustion, Vallerand et al. (2010) argue that other mediating variables may also influence the relationship between passion and emotional exhaustion. Forest, and Crevier-Braud (2012) also find that harmonious passion mitigates emotional exhaustion through the mediating effect of flow experience. Donahue, Forest, and Vallerand (2012) find that rumination and resilience play mediating roles in the relationship between work passion and emotional exhaustion. In particular, these studies focus on the mediating role of psychological factors “after normal work” in the relationship between passion and emotional exhaustion. However, they do not examine the mediating role of psychological factors “during normal work.”

The conservation of resources theory argues that individuals have a basic motivation to preserve, protect, and create resources that are important to them (Hobfoll, 1989; Hobfoll, & Shirom, 2001). Hobfoll (1989) argues, when personality traits can help people deal with stress, their levels of resilience are higher, which mitigates the depletion of emotional resources. In other words, the interactive effect of work stress and personality traits is one of the most significant factors determining emotional exhaustion (Wu & Cheng, 2006).

On this basis, in the present study, emotional labor is equivalent to sources of work stress, while work passion belongs to personality traits. When workers have a high degree of harmonious passion, or have the ability to regulate the emotions of others, this will produce a relief effect, so that when engaged in emotional labor, workers can reduce their depletion of emotional resources, thereby reducing the severity of emotional exhaustion. Conversely, when workers have a high

degree of obsessive passion, or take an insincere attitude towards customers, they may continue to deplete their emotional resources, even producing serious physical and mental symptoms. Therefore, the emotional labor strategies adopted by workers may be another potential mediating variable. However, according to current knowledge, there are currently no studies testing the mediating effect of emotional labor strategies adopted by workers during normal work in the relationship between the form of passion and emotional exhaustion. Therefore, we try to answer these questions, proposing the following hypotheses.

Hypothesis 9. Frontline workers with harmonious passion use deep acting strategies to mitigate the symptoms of emotional exhaustion (i.e., deep acting strategies play a mediating role in the relationship between harmonious passion and emotional exhaustion).

Hypothesis 10. Frontline workers with obsessive passion frequently use surface acting strategies, producing increased symptoms of emotional exhaustion (i.e., surface acting strategies play a mediating role in the relationship between obsessive passion and emotional exhaustion).

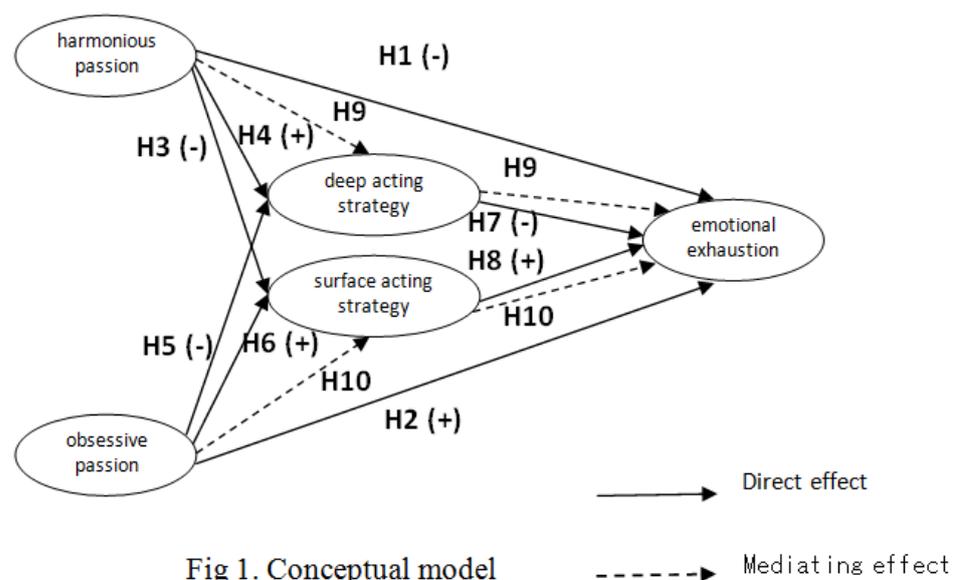


Fig 1. Conceptual model

4. Conceptual model, Sampling design and analysis

Through the collation and analysis of the literature from Taiwan and other countries, we make inferences and establish the relationship between hypotheses. The present study proposes a conceptual model (Figure 1) to investigate whether frontline workers with different forms of passion, and the emotional labor strategies adopted when providing services are associated with emotional exhaustion. In the study, we use the convenience sampling method. In addition, considering the consistency, number, and convenience of the collection of samples, we carry out questionnaire surveys of frontline workers in restaurants in the Kaohsiung and Pingtung area of Taiwan. Based on the suggestions of the past literature, the number of samples for factor analysis correlation should be at least 5 to 10 times greater than the number of questionnaire items

(Kerlinger & Lee; 2000). Based on this, the present study will aim to collect between 170 and 340 valid samples (5 to 10 times greater than the 34 question items).

5. Discussion, conclusions and limitations

5.1 Sample demographic data

We carried out questionnaire surveys of frontline workers in restaurants. Questionnaires were distributed between March and May 2015. A total of 360 questionnaires were distributed, and 320 questionnaires were returned. There were 260 valid questionnaires, giving a valid response rate of 81.25%. In terms of the distribution of the sample population, the gender breakdown was as follows: 68.5% female respondents and 31.5% male respondents; 90.4 % unmarried respondents and 9.6% married respondents; for age distribution, the 21-30 age group (46.2%) made up the largest number of respondents; in terms of level of education, the majority of respondents had a college education (60.8%); for years in the job, the majority (53.1%) had been employed for less than a year; while for average monthly income, the income range TWD15,001-30,000 accounted for the majority of respondents (58.5%).

5.2 Scale reliability and validity analysis

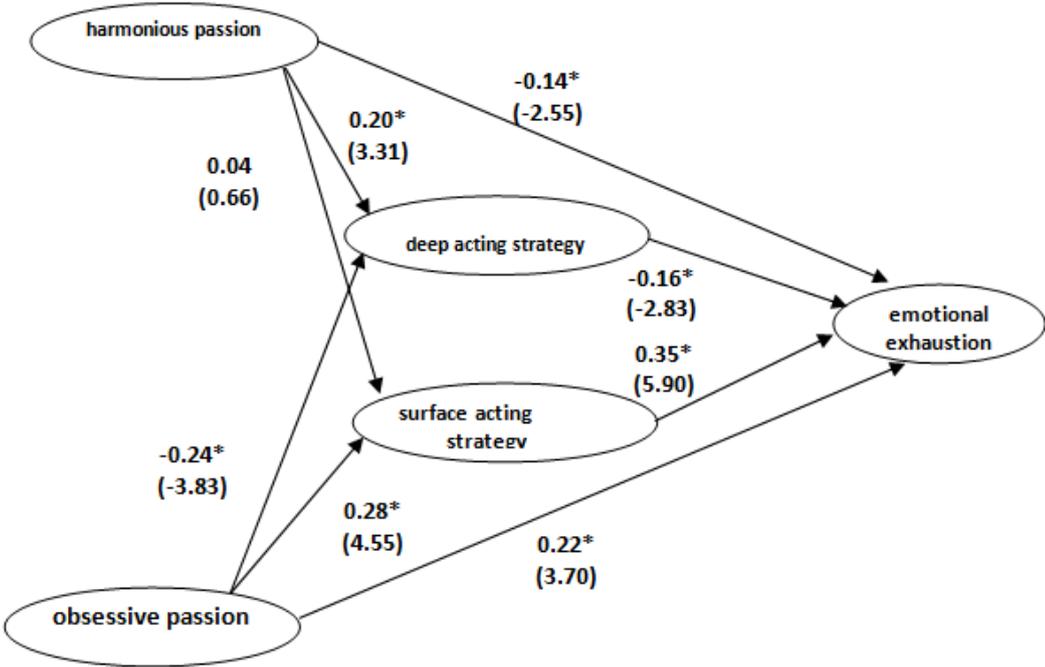
The present study uses confirmatory factor analysis to test the scale reliability, convergent validity, and discriminant validity. The standard for the convergent validity is that the observed variables (questionnaire items) used to measure the same dimension should have a high degree of correlation. Confirmatory factor analysis showed that (see Table 1) . This indicates that the internal consistency of the research model can be broadly accepted. Therefore, the scale items show reliability and convergent validity.

Discriminant validity involves the measurement of two different constructs. Here we use the method proposed by Anderson and Gerbing (1988), that the correlation coefficients between different dimensions should be lower than the square root of the AVE for that dimension. In the present study, each of the dimensions meet the required criteria, so the scale therefore has discriminant validity.

5.3 Correlation analysis for the overall model and testing mediating effects

In the present study, we use a structural equation model to test the conceptual model, showing the measurement effects of the latent variables and observed variables, and the causal relationships between the latent variables. We use Amos 6.0 software for testing. The values for each of the goodness-of-fit indicators are $\chi^2/df = 1.053$, NFI=0.957, NNFI=0.998, CFI=0.998, RFI=0.953, IFI=0.998, and RMSEA=0.014, which are all within the ideal range. In addition, both the PNFI and PGFI indicators were greater than 0.5 at 0.883 and 0.777, respectively. For the goodness of fit indicators, nearly all of the indicators are within the acceptable range, showing that the overall model has reached a good standard. The path parameters are shown in Figure 2.

We can see that of the hypotheses proposed by the present study, only H3 is not established, showing that there is no direct relationship between harmonious passion and surface acting strategy. Aside from this, the standardized path coefficients for the other variables are all significant. Therefore, H9 - H10 is supported. This result shows that if frontline workers with harmonious passion use a deep acting strategy (mediator), they can effectively reduce emotional exhaustion, if frontline workers with obsessive passion use a surface acting strategy, this will increase the occurrence of emotional exhaustion.



Note:
 1. The figure within the parentheses () is t-value.
 2. * p < 0.05

Fig 2. Path diagram of the conceptual model

Table 1 Confirmatory analysis of the measurement model

Construct	Number of items	M	SD	SK	KU	SFL(C.R.)	SE	SMC	EV	α	CR	AVE	
Work passion	Harmonious passion	4.65								0.971	0.971	0.826	
	PA1_1	4.61	1.62	-0.47	-0.47	0.90*(18.66)	0.35	0.81	0.50				
	PA1_2	4.65	1.64	-0.41	-0.57	0.90*(18.72)	0.35	0.81	0.50				
	PA1_3	4.67	1.67	-0.49	-0.54	0.91*(18.96)	0.36	0.83	0.49				
	PA1_4	4.58	1.63	-0.31	-0.67	0.92*(19.35)	0.35	0.84	0.41				
	PA1_5	4.72	1.60	-0.44	-0.55	0.91*(19.06)	0.34	0.83	0.43				
	PA1_6	4.65	1.66	-0.34	-0.77	0.92*(19.28)	0.35	0.84	0.43				
	PA1_7	4.71	1.57	-0.44	-0.51	0.90*(18.80)	0.34	0.82	0.45				
	Obsessive passion	4.39									0.977	0.977	0.857
	PA2_1	4.41	1.77	-0.21	-1.12	0.93*(19.72)	0.37	0.86	0.43				
	PA2_2	4.35	1.79	-0.15	-1.09	0.93*(19.89)	0.38	0.87	0.42				
	PA2_3	4.36	1.82	-0.25	-1.05	0.93*(19.87)	0.38	0.87	0.43				
	PA2_4	4.44	1.73	-0.17	-1.13	0.93*(19.69)	0.36	0.86	0.42				
	PA2_5	4.42	1.81	-0.18	-1.06	0.92*(19.51)	0.38	0.85	0.49				
	PA2_6	4.38	1.79	-0.11	-1.08	0.92*(19.46)	0.38	0.85	0.48				
PA2_7	4.39	1.77	-0.13	-1.03	0.92*(19.40)	0.37	0.85	0.48					
<u>Mardia coefficient</u>								-10.04					
<u>Deep acting strategy,</u>								it(it+2) = 224					
Emotional Labor	EL1_1	4.60	1.79	-0.37	-0.92	0.93*(19.63)	0.38	0.86	0.45	0.974	0.975	0.865	
	EL1_2	4.52	1.70	-0.44	-0.66	0.92*(19.44)	0.36	0.85	0.44				
	EL1_3	4.56	1.75	-0.41	-0.89	0.93*(19.59)	0.37	0.86	0.44				
	EL1_4	4.54	1.80	-0.43	-0.80	0.94*(20.14)	0.37	0.88	0.38				
	EL1_5	4.53	1.82	-0.44	-0.85	0.93*(19.62)	0.38	0.86	0.47				
	EL1_6	4.50	1.80	-0.36	-0.93	0.93*(19.81)	0.38	0.87	0.43				
	<u>surface acting strategy</u>	4.28									0.932	0.938	0.752
	EL2_1	4.35	1.71	-0.11	-1.02	0.93*(19.58)	0.36	0.86	0.41				
	EL2_2	4.19	1.75	-0.09	-0.92	0.82*(15.92)	0.40	0.67	1.01				
	EL2_3	4.31	1.76	-0.10	-1.15	0.94*(19.86)	0.37	0.87	0.39				
	EL2_4	4.33	1.78	-0.16	-1.05	0.93*(19.61)	0.38	0.86	0.44				
EL2_5	4.22	1.82	-0.05	-1.10	0.69*(12.39)	0.45	0.47	1.76					
<u>Mardia coefficient</u>								-1.49					
								it(it+2) = 143					
Emotional Exhaustion	EH1	4.08	1.93	-0.06	-1.23	0.94*(20.09)	0.40	0.88	0.46	0.985	0.988	0.901	
	EH2	4.10	1.88	-0.03	-1.22	0.93*(19.95)	0.39	0.87	0.46				
	EH3	4.07	1.89	-0.07	-1.16	0.94*(20.01)	0.39	0.87	0.45				
	EH4	4.04	1.84	-0.06	-1.15	0.92*(19.45)	0.39	0.85	0.52				
	EH5	4.05	1.93	0.00	-1.20	0.94*(20.05)	0.40	0.88	0.46				
	EH6	4.11	1.87	-0.08	-1.17	0.94*(20.36)	0.39	0.89	0.38				
	EH7	4.10	1.92	0.00	-1.19	0.94*(20.27)	0.40	0.89	0.42				
	EH8	4.11	1.90	-0.04	-1.24	0.94*(20.19)	0.40	0.88	0.42				
	EH9	4.03	1.96	-0.06	-1.25	0.94*(20.17)	0.41	0.88	0.45				
	<u>Mardia coefficient</u>								-7.38				
								it(it+2) = 99					

Note: M=Mean; SD=Standard Deviation; KU= Kurtosis; SFL= Standardized factor loading; SE= Standard Error; SMC= Squared Multiple Correlation; EV= Error Variance; α =Cronbach's α coefficient; CR= Composite reliability;; AVE= average variance extracted; it =The number of observe variables.

*p<0.05

6. Conclusion and Recommendations

6.1 Conclusion and Discussion

(1) Relationship between work passion and emotional labor

The results show that from the perspective of the personal qualities (meaning work passion) of frontline workers, frontline workers with harmonious passion can carry out their job autonomously and according to their own needs, and they more frequently adopt a deep acting strategy. However, since the work of frontline workers with obsessive passion is only to achieve a particular purpose rather than to express autonomous feelings, these workers tend to use a surface acting strategy rather than a deep acting strategy. This perspective is supported in the research of Vallerand et al. (2003) and Grandey (2000).

In addition, it is worth noting that the empirical results show that harmonious passion and surface acting strategy are not significantly correlated, showing that no relationship exists between the two. From this perspective, the non-significant relationship between harmonious passion and surface acting strategy, and the significant negative relationship between obsessive passion and deep acting strategy are reasonable.

(2) Relationship between emotional labor strategies and emotional exhaustion

The empirical results show that deep acting strategies involving positive emotions are unlikely to produce emotional exhaustion, while surface acting strategies involving negative emotions are likely to produce emotional exhaustion. This result can be explained by reference to the conservation of resources theory. Emotional labor can be viewed as a type of effort by workers to regulate their emotions. In addition, emotional labor involves psychological effort and depletion of emotional resources (Wu & Cheng, 2006). However, when workers use a surface acting strategy, they only alter their external expression, without adjusting their inner feelings, often leading to emotional imbalance in workers due to the dissonance between external emotional expression and inner feelings (Grandey, 2003), producing emotional exhaustion.

(3) Relationship between work passion and emotional exhaustion

The present study has shown that frontline workers with harmonious passion are less likely to show signs of emotional exhaustion, while workers with obsessive passion are more likely to show signs of emotional exhaustion. These results are consistent with our expectations, and are also consistent with the view of Vallerand et al. (2003) that harmonious passion can increase the level of satisfaction and can avoid the occurrence of emotional exhaustion, while workers with higher levels of obsessive passion are more likely to face emotional exhaustion. These results are also in accordance with the view of Geneviève et al. (2012) that workers with harmonious passion carry out their work by their own free will, reducing the occurrence of emotional exhaustion, while workers with obsessive passion are more likely to trigger emotional exhaustion.

(4) The mediating role of emotional labor strategies

Finally, the present study establishes the mediating role of emotional labor strategies. In other words, when frontline workers with harmonious passion are faced with the emotional norms of the organization, they can use a deep acting strategy with positive thinking to regulate their emotions, reducing their depletion of emotional resources, and therefore reducing emotional exhaustion. However, frontline workers with obsessive passion use a surface acting strategy with negative thinking, resulting in continued emotional and psychological exhaustion. This is equivalent to the concept of emotional exhaustion. According to Hochschild's (1983) view, long-term emotional labor by workers will lead to self-alienation, meaning a loss of the connection between the true self and the self at work, ultimately producing emotional exhaustion. From the perspective of the conservation of resources theory, workers engage in emotional labor according to their job requirements, meaning that workers must continuously expend mental energy in order to perform the job. Therefore, for workers with emotional labor, as with sources of work stress, if frontline workers have high levels of harmonious passion this indicates that they can overcome the self-alienation caused by emotional labor, internalizing sources of stress as personal identity; in this way, they genuinely feel the emotions that they are required to express, using deep acting strategy in response to stress, therefore reducing resource depletion, and emotional exhaustion. Conversely, for frontline workers with obsessive passion, their job does not produce autonomous internalization, but is carried out only to achieve a particular purpose. This purpose will generate stress, leading to self-alienation and leading the worker to adopt a surface performance strategy for the service job in order to satisfy particular purposes. If this process continues, the internal resources of workers will be drained, creating the predicament of emotional exhaustion (Grandey, 2000).

6.2 Research Limitations and Suggestions for Future Research

This study was limited by manpower, financial, and time factors, making it impossible to carry out comprehensive and detailed research. We therefore suggest the following research directions for future researchers.

(1) More in-depth discussion on the results of the present study can be carried out, for example, by addressing the following questions: What is the most effective and sustainable way to increase work passion? Does the dualistic model of passion produce changes over time? Therefore, it is suggested that follow-up research can address these issues, carrying longitudinal research providing assistance to industry executives and managers.

(2) The present study did not explore whether the workplace or organizational atmosphere affects the relationship between emotional labor and emotional exhaustion. For example, when frontline workers are engaging in emotional labor and receive positive feedback, or when organizations provide institutionalized support to workers to help them deal with emotional issues. Based on

the conservation of resources theory, feedback or emotional support is a type of resource acquisition. Can it reduce the seriousness of emotional exhaustion? This question should be explored in future research.

(3) In the present study, we only include work passion and emotional labor strategies as potential variables affecting emotional exhaustion. Subsequent researchers can examine different antecedent variables, mediating variables, or moderating variables, discussing different influence factors to verify the influence of different variables. This may increase the reference value of the research and the applicability of research findings.

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We only included part of reference were included in the manuscript due to page limits, additional information on reference is available upon request(email:).

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**Amoeba Management outside Japan: The Case of a Japanese Corporation
Operating in Malaysia**

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Abstract

Japanese management accounting systems, such as just-in-time, kaizen, target costing, kanban system, lean, and amoeba management, have been extensively used by large Japanese multinational corporations like Toyota, Panasonic, Sony and Kyocera in managing their day-to-day business operations. Such management accounting systems are claimed to have been used by these corporations in making informed decisions, which corresponds to their aim of achieving desired business objectives. However, there appears to be little evidence written on the areas of business operations in which these systems are applied in, and the short-term and long-term implications of such application on, Japanese corporations operating outside Japan. As a result, the promotion of Japanese management accounting systems at the international level appears to be less visible and thus remains insignificant. Using a case study approach, this paper examines the above concerns by analysing a Japanese corporation (disguised as Shōri Corporation) that operates its ICT business in Malaysia. A particular management accounting system that has become the focal point of this study is amoeba management. Interestingly, this management accounting system was recently introduced in Shōri Corporation by its parent company that is based in Japan. Data is analysed based on respondents' responses conducted through a series of semi-structured interviews and documentary reviews. To enhance the quality of this qualitative analysis, observations of the day-to-day business operations were also performed. These data collection methods have enabled this study to draw some useful insights and to reveal some interesting findings about Shōri Corporation. In Shōri Corporation, the term "amoeba" seems to have started to be used at every level of the organisation, such as a departmental amoeba and a divisional amoeba to control various organisational activities. Its management control cycle proceeds with monthly plans, which are drafted by managers in the respective divisions, with annual budgetary plans envisioned in every activity and/or project. Given that this involves setting monthly targets as well as annual targets which are assigned to

respective managers, Shōri Corporation has been able to plan its business activities and improve its financial performance. These findings suggest that amoeba management is useful in controlling business activities and in achieving desired business targets. Nevertheless, given that amoeba management has been applied in an organisational context that gives little emphasis on integration, there appears to be a problem with regard to finding a common language between managers and operational staff in some amoebas (that represent departments, divisions, product groups, sections, units, and teams). As a result, Shōri Corporation's master plans, despite being reviewed numerous times, are often perceived by operational staff to have been designed with unrealistic targets and measures. To this end, this study has been able to not only demonstrate the usefulness and practicality of amoeba management in coordinating complex business structure and in managing complex business activities, but also the issues that entail from the application of this Japanese management accounting system in Shōri Corporation.

Keywords: Amoeba management, Japanese corporation, Malaysia

1.0 Background and Objectives of the Study

There are numerous Japanese management accounting systems which were invented by practitioners and/or academics to manage business operations. These systems have been applied largely by major Japanese multinational corporations to make informed decisions so as to improve their business results. However, the details of the application of the systems are scarcely discussed in the literature. Driven by a desire to understand in more detail about a particular management accounting system applied by a Japanese organisation operating outside Japan, this study has adopted a case study approach. Specifically, it analyses a Japanese corporation (disguised as Shōri Corporation) that operates its ICT business in Malaysia and has adopted amoeba management to manage complex business activities. Such analysis is crucial to provide empirical evidence on the use of amoeba management in managing day-to-day activities, and its influence on business performance.

In view of the above, this study attempt to answer the following research questions:

- a) What has driven the case organisation to apply amoeba management?
- b) Why and how has the case organisation applied amoeba management?
- c) How has amoeba management been mobilised to provide useful information and to influence business performance of the case organisation?
- d) What issues have emerged following the application of amoeba management in the case organisation?

2.0 Literature Review

Management accounting systems are regarded as an important management accounting element of any business undertakings especially in supporting organisations to make informed business

decisions. As claimed by many scholars, accounting has always been regarded as the language of business (Hopwood, 1987; Ahrens & Chapman, 2007). It provides a basis for managing scarce resources within organisations by providing alternatives to solve certain business issues and to influence business performance. Thus, in order to achieve desired business objectives, organisations must manage accounting information effectively through the use of appropriate management accounting systems. Accounting information needs to be relevant and is able to produce highly functional information such that it can help managers to make informed decisions so as to enhance the profitability and capability to manage costs. Additionally, accounting information should be used to influence rather than just to inform organisational members at different levels.

The literature has advocated that there are various management accounting systems that organisations use to provide accounting information. For example, Kaplan & Norton (1992) promotes the use of *balanced scorecard* to evaluate performance that concerns not only financial aspects, but also non-financial aspects. Similarly, Cooper & Kaplan (1998) assert that *activity-based management* is a useful tool as it focuses on activities in the costing process and transforms data into meaningful, strategic operational and tactical information that managers can use for better decision-making. Another management accounting system is *economic value added* which is hailed as a governance mechanism that reshapes corporate control (see Bouwens & Spekle, 2007; Chiwamit et al., 2014; McLaren et al., 2016). While these are amongst the most popular Western-based management accounting systems, there appear to be some useful ones developed by the Japanese counterparts.

The extant literature has reported the use of some Japanese management accounting systems which include just-in-time, total quality management, target costing, kaizen, supply chain analysis, kanban system, and lean and amoeba management (Monden, 2012; Takeda & Boyns, 2014; Okano, 2016). These Japanese management accounting systems are claimed to have been able to generate useful accounting information (and to some extent better quality of information than their Western counterparts). Japanese culture is often associated with a commitment to sustain long-term performance of business organisations. It also has a credible historical reputation of introducing innovative management accounting systems to improve business performance and to respond to changes in business environment.

Generally, Japanese management accounting systems concern the integration between the strategy and value creation. They have given much emphasis on feed-forward control (Nishimura, 2003). The emergence of the modern management accounting systems within the Japanese organisations started in the 1970s. These systems were based on the traditional management accounting tools developed in the West, particularly in the US during the 1950s and 1960s. For example, the cost design and cost improvement methods, which were prevalent in the US, were

systematised into a Japanese version of just-in-time by integrating the feed-forward control and market strategy as an innovation in the inventory management. Indeed, the just-in-time has been applied by organisations throughout the world as one of the important Japanese management accounting systems.

However, despite the importance of Japanese management accounting systems throughout the world, we know little about their application in the Malaysian context. As such, this project aims at identifying the nature and characteristics of a particular Japanese management accounting system in a Japanese-based organisation operating in Malaysia. This should enable an analysis to be made in terms of the extent to which the Japanese organisation uses, and the manner in which it implements, a particular Japanese management accounting system in its own settings. By so doing, the application of such system can be further promoted and extended to other organisations for possible emulation. This should enable other organisations to appreciate the usefulness and practicality of this Japanese management accounting system and the ensuing issues they may experience from such application.

3.0 Amoeba Management

In this study, the central focus of our analysis is on the application of amoeba management. The following provides an overview of this management accounting system in further detail.

Amoeba management is a management accounting system for a decentralised organisation, which incorporates several types of controls, such as the budgetary control system, performance measurement, and decision-making on capital investment (Adler & Hiromoto, 2012; Inamori, 2013; Urban, 2017). Inamori (2013) defines amoeba management as a management approach which divides an organisation into small groups (usually subunits), operates them on a stand-alone basis by connecting them directly to the market, cultivates leaders with a sense of management, and encourages all employees to participate in the management process. Amoeba management involves setting responsibility centres (i.e., profit or investment and cost centres) in an organisation and providing managers with management tools and market-based information which are necessary to operate each subunit. Such tools and information are mobilised through the creation of subunits called “amoebas”. These amoebas refer to responsibility centres that are responsible for yearly and monthly budgetary control and for measuring business performance.

Amoeba is usually structured in a formal way. It concerns dividing an entire organisation into amoebas which are the fundamental organisational subunits of operations considered mainly as profit (or cost) centres. Each amoeba has a manager responsible for organising and coordinating business (or managerial) activities. Amoebas are created on a functional basis. Typical examples of amoebas are manufacturing and sales units which have clear commercial objectives, and thus regarded as profit centres. Meanwhile, other organisational units such as purchasing, research

and development, corporate headquarter, legal, and accounting units are called non-profit amoebas, and thus cost centres. Whereas manufacturing amoebas are organised on a product or process basis, sales amoebas are organised on a product or regional basis.

4.0 Methods

In choosing between the available research approaches (e.g., quantitative and qualitative methods), there is a need to analyse their appropriateness to issues or research questions that are of interest. In this study, we chose to answer the research questions outlined earlier using a qualitative case study research approach. This approach should enable the study to provide a detailed explanation about the application of amoeba management in the case organisation. Specifically, we adopted semi-structured interviews, observations and documentary analysis as our data collection methods.

The interviews were performed in two phases involving 21 respondents of different positions at different levels in different amoebas. While the first phase (conducted in 2015 and 2016) concerned exploring the application of amoeba management in the case organisation, the second phase (conducted in 2017) concerned getting data on emerging issues derived from the data analysis of the first phase interviews. The observations included observing the operations of the case organisation that applied amoeba management, visiting plants and the corporate head office, and observing meetings on amoeba management. Meanwhile, the documentary analysis was performed by reviewing the publicly available information found in the website and internal archival records, such as minutes of meeting and management reports. These methods are important to enable this project to achieve its research objectives and to “provide a rich description of the social world” (Covaleski & Dirsmith, 1990: 544).

Following the adoption of the above methods, we managed to not only observe the application of amoeba management in the case organisation, but to also gain an understanding of issues accompanying such application. These should enable us to unearth the ways in which amoeba was structured and implemented in the case organisation and investigate issues arising from such implementation. The following section provides an overview of the case organisation.

5.0 Shōri Corporation

Shōri Corporation was established in Malaysia in the early 1990s. It is one of the subsidiaries of a leading manufacturer of ICT products in Japan. In its pursuit to excel in business operations, Shōri Corporation has equipped itself with advanced production and decision technologies to maintain innovative strength, which appear to be in compliance with its parent company’s desire. It has immersed itself in two key ICT sectors namely multifunctional technologies and life enhancements. Leveraging on this business portfolio, Shōri Corporation has offered a range of innovative products and services such as telecommunications, document management, and

multipurpose products.

For the year ended 2016, Shōri Corporation's revenue was recorded at USD45.6 million and a total workforce of more than 900 staff at various managerial and operational levels. Over the years, it has developed its business in Malaysia by focusing on sales and marketing of laser printers and office document solutions, as well as microelectronic components. It has consistently enhanced its staff's potentials through various training programmes and life-long learning activities conducted by the parent company (based in Japan), as well as in-house and external providers. It has also demonstrated outstanding achievements in advanced technology, sustainable business solutions and best management practices. These achievements appear to relate to its commitment to continuously serve customers with greater value and excellent product offerings and services.

Shōri Corporation has six organisational levels, namely: product groups, divisions, departments, sections, units, and teams. While the first three levels (i.e., departments, divisions, product groups) can be regarded as upper level amoebas which aggregate financial performance of the subordinate organisational units, the last three levels (i.e., sections, units, and teams) which are located at the middle and lower positions of the organisational hierarchy play the core role in amoeba management. Nevertheless, each level is accountable for the profit (and/or cost) indicators calculated by aggregating financial performance of individual amoebas. The six organisational levels as described above are subject to a decentralised decision-making structure. Such a structure is aimed at coordinating the diverse amoebas with increasingly complex business and operational activities. The decentralisation of decision-making functions to individual amoebas corresponds to the parent company's structure, which encourages efficiency in their business and operational dealings. Management control systems are used to manage day-to-day commercial transactions and other business activities. Routine accounting practices, such as budgetary control and performance measurement systems, appear to dominate in this Japanese subsidiary. Since Shōri Corporation adopts a decentralised functional decision-making structure, it is not uncommon for different business units to have different ways of doing things, which hampers its parent company's effort for greater integration. Additionally, there appears to be an overlapping nature in its hierarchical structure.

6.0 Results

6.1 Amoeba in Shōri Corporation

In Shōri Corporation, amoeba management has been introduced by its parent company that is based in Japan to synchronise its operational excellence. Its top management, after being briefed and exposed to how amoeba management should work through a series of trainings in Japan, has translated it in Malaysia. The main principle underlying the application of amoeba management in Shōri Corporation lies in its effort to manage diverse organisational levels in their struggle to

produce and sell (and/or to support) the manufacturing of ICT products more effectively and profitably. The term “amoeba” is used at every organisational level, such as a departmental amoeba and a divisional amoeba to control and support organisational activities. Its Production Manager expressed the following:

Our parent company requires us to implement amoeba management in Malaysia. So we get it introduced here in line with our six organisational levels which we refer to as “amoebas”.

Ideally, amoeba management in Shōri Corporation involves integrating all organisational levels through management accounting cycle. A manager describes this cycle as follows:

Our management accounting cycle proceeds with monthly plans, which are drafted by managers in the respective divisions, with annual budgetary plans in mind, from the end of a previous month and confirmed by the beginning of a current month.

Given that this involves setting monthly and annual targets which are assigned to respective managers in respective amoebas (in accordance to their functions), Shōri Corporation has been able to plan its business activities and processes, as well as to improve its business performance.

We plan our business activities according to management accounting cycle which proceeds with monthly plans and eventually the results... Our performance results for the past months are highly likely outperforming not only the monthly targets, but also the annual ones... thanks to the wisdom of our managers. But if you ask some other amoebas, you'd hear they say something like “oh, we missed annual and monthly targets continuously. Yes, the poor performance of this section was due to unexpected events such as an unforeseen machine breakdown, but we reckon that they targets were extremely and ridiculously high...” Unfortunately, this performance shortfall affects not only them, but also us at the departmental level as the departmental performance results are the aggregate of those at the section level. Therefore, eventually you'll see that our performance will improve as the departmental level will ask the sectional level to accept additional performance targets.

Nevertheless, it is important to note that the above targets are vulnerable to the practice of transfer pricing as it involves negotiations. This practice allows the decision-making processes to be delegated to unit-level managers. For manufacturing amoebas, delegated authority includes authority to negotiate price of the (semi-finished) goods produced, i.e., authority to negotiate transfer price between manufacturing amoebas. The following subsection signifies the impacts of the transfer pricing practice on performance targets.

6.2 Transfer Pricing between Amoebas

Each production amoeba in Shōri Corporation is responsible for a series of production processes and thus operated as a profit centre. Production amoebas that engage themselves in an upstream process recognise their revenues by internally selling semi-finished products to production amoebas that engage in a downstream process. The internal selling and purchasing transactions between them are recorded using the transfer prices. Transfer price in Shōri Corporation is set based on negotiations between amoeba managers with reference to market prices of final products. The negotiation between managers in marketing and production departments proceeds in a sequentially backward direction between the two amoebas in the production line. However, as noted by a production manager in one of the amoebas, such negotiation has always resorted to low transfer prices as compared to the prevailing market prices:

They [upstream production managers] often bargain at lower prices. In order to keep progressing... to show that we have business, we just agree with them. But of course the consequence can be seen at our performance targets.

In the event where consensus between amoeba managers cannot be reached, a consultation with higher authority (e.g., heads of division) will be made. In most instances, such authority ends up suggesting (not imposing) seemingly low transfer prices. Although the upstream production amoebas can decide not only transfer price of their semi-finished products at the negotiated prices, but the practice in Shōri Corporation is not to encourage them to seek semi-finished products externally. To counter this issue, amoeba managers are required to rely on the planning and control mechanisms. These mechanisms, which are accessible through the in-house systems, provide both financial and non-financial information in which those managers can use to make decisions and monitor their performance.

6.3 The Use of Planning and Control Mechanisms

To exercise planning and control on operations of individual amoebas under the decentralised organisational structure, Shōri Corporation uses planning and control mechanisms which involve utilising the two types of planning tools known as “master plan” and “monthly plan”, as well as a controlling tool known as “target-result control”. These mechanisms emphasise yearly and monthly budgetary planning and control to avoid operational disruptions. The master plan, monthly plan, and target-result control system make up Shōri Corporation’s management control systems entailing a combination of top-down and bottom-up approaches. It is a yearly or monthly budgetary planning and control system which provides managers with, on the one hand, their performance targets established as a result of interactions between various organisational levels of managers, and on the other hand, performance results achieved by each amoeba on a monthly and even daily basis. The master plan is a yearly planning tool which presents performance targets of both entire corporation and each amoeba in terms of sales, production,

and hourly efficiency (or value-added per labour hour), which is a unique performance indicator in Shōri Corporation.

The plan is developed through eight steps with a hybrid process of top-down and bottom-up approaches. Table 1 below summarises these steps:

Step	Description	Remarks
1	Announcement of a policy for a draft plan of coming year	Announced by the head of each product group
2	Development of a draft plan of coming year and presentation of a prospective performance of current year	Developed by head of each amoeba and to be presented to top management
3	Confirmation of the draft plan	Confirmed by head of product group and present the draft plan to the managing director at the management meeting in December
4	Announcement of a policy for the master plan of coming year	Announced by the managing director somewhere in January
5	Revision of draft plan	Revised by head of product group
6	Confirmation of master plan of entire corporate level and each product group	Confirmed upon consensus by both the managing director and head of product group
7	Revision of draft plan and confirmation as master plan	Revised by head of each amoeba
8	Development of master plan for each amoeba and endorsement by top management	Developed by head of each amoeba and endorsed by top management

Table 1: The development of a planning and control mechanism

Upon the endorsement of this authorised yearly plan of all amoeba levels, amoeba managers of all the levels further develop control tool which provides more detailed information than the master plan, in addition to the monthly plan. The monthly plan is further developed (or refined) by specifying the targets of sales, production, and hourly efficiency, line item expenditures. These clearly suggest that amoeba managers responsible for their respective organisational levels are expected to plan and control. Interestingly, the planning and controlling aspects consider both the financial and non financial information. While financial information is derived from a performance measurement system called “hourly efficiency management system”, non-financial information is derived from a control system called “backlog control system”.

Additionally, the latest information about the performance variances against the monthly and

annual targets of each section is discussed and shared. A production sectional manager confirmed the existence of such information availability as follows:

A manager in a section would probably understand whether his section's performance has dropped because of so and so. Such information is made available through our internally integrated system. You can view anytime you like. We can conveniently know the progress of our achievements.

6.4 Issues of Applying Amoeba Management

Although amoeba management emerged as a direct outcome of its Japanese parent company and has been systematically applied by Shōri Corporation, it has encountered a number of issues. First, it is applied in an organisational context that gives little emphasis on integration. As a result, there appears to be a problem with regard to finding a common language between managers and operational staff in some amoebas. A respondent expressed the following:

To be honest, there are some departments here that have failed to integrate with their circles. They only have their master plan at the departmental level but not at the section level. In this case, how can they do the planning? How to communicate? They do things in silo. We don't understand the top people and neither do they understand us. We have action plans at the bottom level that do not jive with the numerical targets at the top level. Perhaps failure to integrate may be a cause for our section's poor performance... despite our master plan is being too unrealistic.

Another issue concerns ongoing changes. A departmental manager described it as follows:

Yes, we are experiencing many changes. A change after another... One might perceive that "oh, there's another change again" and feel like "it's annoying". Nevertheless, the company is always trying to find an optimal condition. Managers get replaced... It happened to my friend whereby the predecessor as a departmental manager was removed due to poor performance... and there came many other changes. In this situation, how could we concentrate and deliver?

The above two issues are amongst the many that are encountered by Shōri Corporation following the implementation of amoeba management.

7.0 Conclusion and Contribution

To this end, it can be concluded that this research has offered and promoted a Japanese management accounting innovation for other organisations to emulate and learn from so as to improve their day-to-day operations and ultimately improve business performance. It has

demonstrated the usefulness and practicality of amoeba management in coordinating complex business structure and in managing complex business activities, as well highlighted the issues that entail from the application of this Japanese management accounting system in Shōri Corporation.

Acknowledgement

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ACMASS-0091

The Application of TELES in the Enhancement of Disaster Response and Rescue Policy in Tainan Area: A Study Following 0206 Earthquake in Tainan

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Abstract

The 2016 Meinong earthquake in Kaohsiung city caused significant casualties and property damage in Tainan. This study used TELES to simulate the earthquake scenario parameters, such as PGA distribution, casualty case, liquefaction potential index and the total number of occurring fires based on the Meinong fault seismic source. Finally, according to the most damaging areas of the simulation results, we propose to strengthen the important buildings and facilities such as the reservoir area, and the emergency responsive hospitals for a better seismic risk estimation and the earthquake disaster prevention and response. According to the simulation results analysis, we found the areas with the strongest magnitude were in Meinong Dist. in Kaohsiung city. Nevertheless, the areas suffering the serious disasters were in Tainan city. Due to the serious disasters areas are in Tainan city, it is crucial to discuss how to perform anti-earthquake practices in Tainan area and how to coordinate the support from different cities and counties.

Keywords: TELES Meishan fault, 0206 Earthquake in Tainan, earthquake simulation

1. Background/ Objectives and Goals

Background

At 03:57 local time on 6 February, 2016, an earthquake of Richter magnitude 6.4 broke out, and it was measured 5 in intensity in Tainan. Damages and disasters were reported one after another. The worst affected was Weiguan-Jinlong complex, which collapsed at 04:03. The dispatch center of Tainan City Government Fire Bureau immediately dispatched all kinds of rescue vehicles to the scenes of all the affected areas. At 4:10, minutes after the earthquake, the mayor of Tainan City William Lai rushed to the dispatch center and ordered that an emergency response center be set up. Weiguan-Jinlong was a 16-story tall residential and commercial complex with a one-story basement. It consisted of nine buildings and each was marked A, B, C, D, E, F, G, H, and I respectively. The U-shaped complex housed 289 residents in 99 households. Building H and I collapsed on A and G, and the structure of the rest of the five buildings was distorted. The rescue mission was an arduous challenge as heavy machinery was called for to assist rescuers. However,

we completed the mission despite all the odds. Four sector command posts on four wings constituted the command system, and numerous rescuers worked on shift around the clock. The mission was split into three phases. Rapid search and rescue was the primary task in phase one. In phase two, life detectors and search dogs were utilized to position survivors. And in the last phase, heavy machinery was deployed for demolition and deep search. Based on the faith of “persist to the end and never give up,” every member in every sector of the Tainan City Government understood people’s suffering and shared their compassion throughout the mission.



▲ The south side of Weiguan-Jinlong complex before the earthquake.

▲ The north side of Weiguan-Jinlong complex before the earthquake.

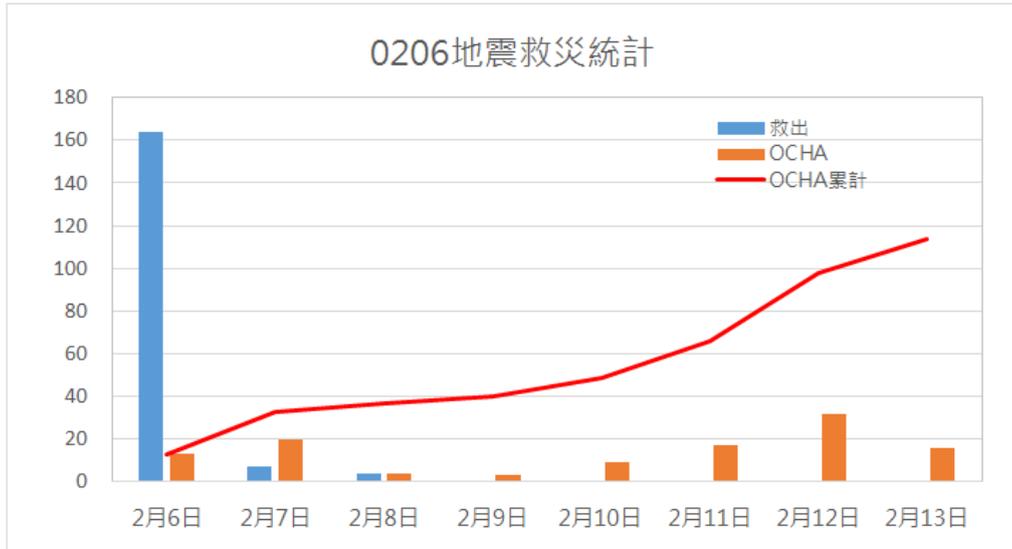


▲ The south side of Weiguan-Jinlong complex after the earthquake.

▲ The north side of Weiguan-Jinlong complex after the earthquake.

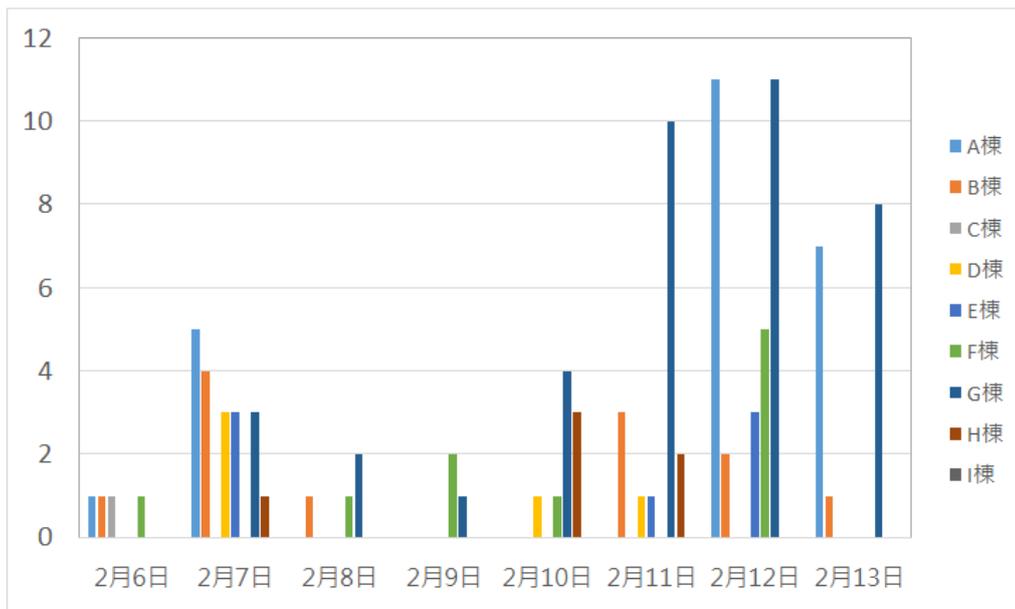
Date	Rescued	Survivors	OHCA	support agencies and organizations, and members	Note
24:00, Feb. 6	177	164	13		
24:00, Feb. 7	204	171	33		
24:00, Feb. 8	212	175	37	27 units, 545 people 18 dogs 520 soldiers	Last survivor found at 18:15, Feb. 8 Project "Demolition Shear" launched at 20:00
24:00, Feb. 9	215	175	40	20 units, 475 people 18 dogs 566 soldiers	
24:00, Feb. 10	224	175	49	25 units, 475 people 18 dogs 594 soldiers	
24:00, Feb. 11	241	175	66	25 units, 741 people 18 dogs 599 soldiers	
24:00, Feb. 12	273	175	98		
24:00, Feb. 13	289	175	114		
24:00, Feb. 18	290	175	115		Missing: LIN, HAN-FEI(林函菲)
Total	290	175	115	59 units, 1131 people, 18 dogs, 924 soldiers	

▲ Statistics of the rescued, survivors, OHCA, support agencies and organizations as well as members in the Feb. 6 earthquake of 2016.



▲ Statistics of the earthquake in Weiguan-Jinlong complex.

(Blue: survivors; orange: victims; red line: total victims)



▲ Death toll in each building of Weiguan-Jinlong complex.

▼ Death toll in each building of Weiguan-Jinlong complex.

	A	B	C	D	E	F	G	H	I
Feb. 6	1	1	1			1			
Feb. 7	5	4		3	3		3	1	
Feb. 8		1				1	2		
Feb. 9						2	1		
Feb. 10				1		1	4	3	
Feb. 11		3		1	1		10	2	
Feb. 12	11	2			3	5	11		
Feb. 13	7	1					8		
Sub Total	24	12	1	5	7	10	39	6	0
Total	115 (including the missing citizen LIN,HAN-FEI (林函霏) found on Feb. 18)								

2. Methods

In this study, all the data are collected during the 0206 earthquake in Tainan. The data are analyzed after thorough literature review, complete present investigation and interview with experts. Next, the TELES are employed to quantify various rescue resources and establish function of different variables. Furthermore, the outcomes of TELES simulation are referred to estimate the cost-effectiveness of disaster rescue and to develop rescue plan in the early stage of disaster rescue. In addition, the outcomes of TELES will facilitate how to coordinate the resources from multilevel: central government, cities and districts in the first three key days.

(1)TELES application- the estimating model of trying to lives the estimating model I

Number of people trapped in the wooden building * 0.226 / 4 = number of rescue teams required

(2)Number of people trapped in the non-wooden building * 0.226 / 4 = number of rescue teams required

Total number of rescue teams required= (1) + (2)

(a)the estimating model II

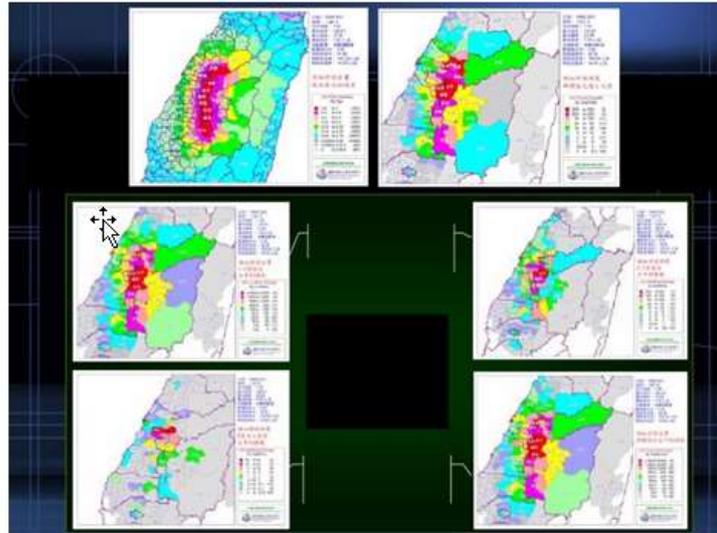
The average possibility of rescuing 2 people by 1 rescue team in one day, within 4 days after the occurring of the earthquake

Number of people trapped in the building * 0.226 / 2 = number of rescue teams required

(b)the estimating model III

The average possibility of rescuing 1.5 people by 1 rescue team in one day, within 25 days after the occurring of the earthquake

Number of people trapped in the building * 0.226 / 1.5 = number of rescue teams required



- 1.The distribution of PGA Earthquake, estimated by TELES early assessment Module
- 2.The distribution of casualties of 0206 Earthquake, estimated by TELES early assessment Module
- 3.The distribution and amount of buildings with half-collapsing or whole-collapsing caused by 0206 Earthquake, estimated by TELES early assessment Module

3. Results

The early assessment of "Taiwan Earthquake Disaster Loss Assessment System" (TELES), was applied in the Yongkang disaster area of Tainan City with the adjustment of relevant modules and parameters. The system was verified by the actual data acquired in 0206 earthquake and continuously amplified its function module.

The simulation and application of TELES system can provide the information of earthquake disaster potential, disaster extent and risk distribution, which can be further applied in the urban planning of how to prevent disaster and how to allocate support to improve the efficiency of coordinating rescue resources.

This study attempts to employ the early assessment of TELES with the actual data obtained in 0206 earthquake in Tainan to demonstrate and suggest the government how to make decisions and how to develop the urban plan of preventing disasters in the future, and the attempt has preliminary results in this study.

In addition to advancing the research with the TELES updating and adding system modules, the completed modules will be further discussed and studied in greater detail of how to be applied in various aspects with the qualitative and quantitative analysis.

In this rescue mission, the Tainan City Government rapidly set up forward command posts to effectively manage and control all the available domestic rescue force, gears, equipment, as well as related information, for the incident commander to use. Another key to the success of this rescue mission is the initiation of “Operation Demolition Shear,” which enabled us to speed up digging and send rescuers into the building early on in order to save the trapped people as quickly as possible.

(1). When rescuers are searching and cutting inside a building, it is advised to choose medium and small equipment, and send specialists to the disaster zone to assist rescuers if necessary.

Large handheld pneumatic or hydraulic equipment is either hard to manipulate or ineffective due to its relative large size and weight in a distorted and narrow space. Rescuers should detect signals of life in the preliminary phase of a rescue mission by cutting a small hole for life detectors to penetrate. Thus, medium or small electric equipment such as reciprocating saws, circular saws, or grinders will be more convenient. They are compact and handy, and will work even more effectively when a high quality cutting blade or grinding wheel is used. Once a trapped person is found, large equipment like an electric hammer will be used, and efficiency will be enhanced with the assistance of specialists (drillers) if conditions permit.

Also, we advise that a contact list of structural engineers should be created for rescuing assistance in a collapsed building like those in this case. The structural engineers engaged in this mission contributed a lot. They timely advised the rescuers on how to cut or break the buildings in an efficient and safe manner.

(2). Signs of life should be cross-verified when using life detectors.

The noise in the scene hinders a life detector’s ability to detect weak signals from life. Even if the scene is ideally silent, signals from life may be discontinuous if the trapped person’s consciousness is unstable due to physical/psychological trauma or hypoxia. Signals from the trapped people may become inaudible or indistinguishable when they are interfered by the noise at the scene. Unless the signals are regular, such as knocking three times in respond to a rescuer’s request, and with the readings of a life detector, signals from life may not be easy to identify. Some signals may be noises from other sources.

An example of that is the site F14. The readings from a sonar life detector were insufficient to determine if a survivor was trapped inside or not. A radar life detector was then used to confirm. A through-wall radar life detector emits conical ultra-high frequency waves to rubble and then analyzes the signals bounced back to determine if inside trapped a survivor or not. The readings are more reliable. If a rescue dog is paired to cross-verify the signals, the accuracy will rise. For increasing rescue efficiency in a collapsed building, we suggest that more radar life detectors be purchased.

(3). Radio channels should be properly allocated for support agencies and organizations.

The Fire Bureau has separated its radio channels for years. Available channels are Channel no.2 for island-wide communication, and Channel no. 30, 31, 32, and 36 for Tainan City only. The separation system worked well in this rescue mission. However, members of support agencies and organizations from other counties/cities and civil rescue teams could not use those channels. When radio channels were separated, support members could not reach their sector commander with radio.

Below are our solutions. First, every support agency or organization designates a liaison officer to contact their sector commander in person. When a survivor is pulled out or if there is any request for support, the liaison will be sent to contact the sector commander in person under the leader's command. Secondly, the Tainan City Government Fire Bureau provides the leader of every support agency or organization with a locally used radio and switches it to a specific channel. All the leaders will be able to contact their sector commander at any time. Thirdly, when support members are in action, the Tainan City Government Fire Bureau will designate one of its staffer to follow them, and the staffer will be in charge of contacting the sector commander.

(4). A sector command post should be set up on every wing for rescue members to assemble and be under control, and meetings should be held on a regular basis.

To complete a large scale rescue mission, it takes more than just a commander to integrate information and assign tasks. Sector command posts have to be set up in order to assign tasks more specifically. The commander of every sector command post should keep a list of support members, assemble equipment, and assign operation area and time in order to integrate the rescue resources in the sector.

Besides, a spacious area has to be designated as a rendezvous for support members to rest and be under control. A rendezvous not only allows support members to have a better place to rest and dine, it also enables sector commanders to contact support agencies and organizations more easily, so the numbers of members in and out of the disaster zone will be clear. Plus, it serves as a convenient venue for regular meetings to be held. Efficiency will be achieved when leaders of all support agencies and organizations can discuss issues regarding current situations, needed support, teamwork approaches, task transfers and so on.

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ACMASS-0094

Forces that Propel SMEs to Become Born Globals in South Korea

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The traditional models of internationalisation of firms were unable to explain the behaviour of small and medium enterprises (SMEs) that leapfrog which created a demand for new explanations to internationalisation. This sudden rise has brought about a new breed of exporters known in different parts of the world as ‘born globals’, ‘global start ups’, ‘international new ventures’ and ‘high technology start-ups’. The literature on ‘born globals’ has shown the ability of SMEs’ rapid internationalisation. This research paper investigates the current explanations to this phenomenon of ‘born global’ and in particular within the context of South Korea.

Key terms: Born globals, Global start ups, International new ventures, High technology start-ups, Small and Medium Enterprises [SMEs], Internationalisation, South Korea

1] Introduction

Since the 1980s there has been a growing interest towards firms which do not follow the normal pattern of growing first in their home countries and then starting to export. Instead, these firms commence their exporting straight away or during the first years of their commencement. Thus the traditional models were unable to explain the behaviour of firms that leapfrog which created a demand for new explanations to internationalisation. This sudden rise has brought about a new breed of exporters known in different parts of the world as ‘born globals’, ‘global start ups’, ‘international new ventures’ and ‘high technology start-ups’. The literature on ‘born globals’ has shown the ability of small and medium enterprises’ (SMEs) rapid internationalisation (Amarasena and Colombage 2017).

There is some literature available from multiple countries on the ‘born global’ concept to provide varying explanations to the dynamics that drive their internationalization. Available literature indicates that the research undertaken on born globals in particular the dynamics that propel the process involved in rapid internationalising SMEs in South Korea are still at the emerging stage (Park 2010). Thus the purpose of this paper is to investigate the current explanations to the phenomenon of ‘born global’ and in particular within the context of South Korea. In order to achieve this purpose the paper provides explanations to the topics on small firms and their contribution to national economies, small firms in South Korea, early internationalisation of SMEs, ‘born global’ concept. The detailed discussions on these topics are used to present conclusions to the paper.

2] Small firms and their contribution to national economies

Small firms are important and their significance is increasing in many industrialised countries. The small firm sector provides the foundation for the entire economy in many countries as it plays a very important role in job creation, innovation and the long-term development in their economies (Amarasena 2013; 2008; Andersson, Gabrielsson and Wictor, 2004; Fink, 1998; Hardill and Wynarczyk, 1996; Kaplan, Johnson, Pearce and George, 1997; Nieto and Fernandez, 2006; 1994; Storey, 1994).

Small firms' capabilities are recognized in terms of their flexibility, reaction time, and innovation capacity. Many writers point out that with the increasing trend of global economic production, much attention is drawn to the small firms' national and global competitiveness, market innovation, job creation in almost all economies and their capability of satisfying the niche markets (Fink 1998; Kaplan et al. 1997; Pospisil 1994).

Despite small firms' importance in the world economy, what precisely constitutes a small firm still remains a question, as there is no single, uniformly acceptable definition of a small firm. Therefore, small firm statistics are somewhat speculative which provides uncertainty for readers and researchers. It has become more complicated as statistical definitions of small firms change from one country to another. For example, in the USA, small firms generally are those which employ fewer than 500 people whereas in Canada, firms which employ fewer than 100 are considered small (Small Business Research and Policy-Canada, 2003). Some countries also use turnover, capital employed or a combination of all three for definitions (Story, 1994). It appears that the definition for small firms is not universally the same. Therefore use of the internationally available literature on small firms in business related research is an issue for concern of the researchers as such literature does not follow a universally accepted definition of small firm (Holmes and Gibson, 2001). However this article does not go into details of this unresolved issue which needs attention in the future. Nevertheless, business related literature, which was classified as small firm literature by the individual international markets, was used in this article.

It is evident that small firms enter into international business within a shorter period than before and they are effectively carrying out their international businesses quickly. These internationally active small firms tend to grow faster than the small firms which serve only domestic markets (Andersson et al., 2004). Thus, the international activities of small firms are drawing great interest from researchers around the world.

3] Small Firms in South Korea

As Eunsun (2016) pointed out nearly 840, 000 small firms were formed during 2014 in South Korea where the population is approximately 50 million. This suggests that opening a business is a popular option for many South Koreans as it is a way to find employment. However statistics

show that the survival rate of these individual enterprises is remarkably low. For example, on average, only 60 percent of new SMEs are still in business after the first year and this number falls to less than 30 percent after five years (Eunsun, 2016). The importance of small firms for economic growth has been amply documented in recent years (Carree and Thurik, 2002). Literature shows that most research attention has concentrated on further promotion of the big Korean conglomerates (Regnier, 1992). In recent years, however, Korean government policy has been increasingly oriented toward assuring SMEs of access to finance, markets, and technology, independent of chaebol and large enterprises (Nugent and Yhee 2001).

The establishment of the Small and Medium Business Administration in 1996 with its regional offices at 11 locations to promote the development of local small businesses is an example to the government initiative to strengthen the SMEs sector in South Korea. This was also a South Korean Government initiative to assist the small firms sector of the country where the chaebol-dominated economic structure had impeded the development of small firm sector of the economy (Mukoyama, 1999). These family firms of individual entrepreneurs are well known brands in the world. For example, some prominent chaebol structures in South Korea are Samsung, Hyundai and LG Group which are managed by the founder and their family of the conglomerate. Even though these big conglomerates form the backbone of the South Korean economy, small and medium-sized enterprises (SMEs) are responsible for more than 80% of the country's jobs (Williamson 2011). This shows that the significant contribution of SMEs' to the overall performance of the South Korean economy. Statistical information indicates that there is a surge of export share of SMEs in South Korea from 31 % to 43% for the period 1998 to 2001 (Lee 2010).

Public and corporate policy makers thus have emphasised the value of export development as a result of macro and microeconomic benefits gained from external trade (Amarasena and Colombage 2010; Leonidou and Katsikeas, 1996). From a macroeconomic perspective, exporting can lead to an increase in foreign exchange reserves, provide employment, create backward and forward linkages, and ultimately lead to a higher standard of living. In microeconomic terms, exporting can give individual firms a competitive advantage, improve their financial position, increase capacity utilisation, and raise technological standards (Czinkota, Rivoli and Ronkainen, 1992).

4] Early Internationalisation of Small Firms

In the current state of an increasingly internationalised economy, many firms are motivated to expand their business to international markets. The conceptual approaches of the eclectic paradigm, the Uppsala staged theory and the network theory have been developed with the purpose of primarily explaining the internationalisation of MNEs. However, a firm's internationalisation seems difficult to explain using these theories because internationalisation is

no longer limited to large firms but increasingly involves medium and small firms too. Thus many researchers have argued that the development of ICT, particularly the Internet, allows rapid internationalisation of firms which make them 'born global'. Hence the internationalisation of these firms displays a new process which can not be explained by the traditional theories of internationalisation (Amarasena and Colombage 2017; Chetty, 2004; Gluckler, 2006; Knight and Cavusgil, 2004).

Previous research found that exporters initially went through distinct stages in their internationalisation process described as an incremental pathway of internationalisation (Johanson and Vahlne, 1977; 1990). In the past, differences in language, culture and the slow speed of communication and transportation channels between countries have created difficulties in getting market information which therefore increased the risk of undertaking international business (Knight and Cavusgil 2004; Moen and Servais 2002; Oviatt and McDougall, 2005).

The traditional way of internationalisation was a process in which a firm gradually increased the number and diversity of the markets they served. This staged model, which describes the traditional pathway, assumes that internationalisation activities develop incrementally over time and firms establish themselves domestically before entering international markets. The model further explains that firms chose export to the markets in close proximity before going into distant and culturally different markets in order to minimise the uncertainty involved in such markets where market knowledge is limited. It appears that the psychic distance is the major barrier and firms minimise this through experiential learning ((Johanson and Vahlne, 1977; 1990).

Although this staged theory, which has focused on MNEs, gained general acceptance in academia since its development in 1970s, several studies have questioned the validity of this internationalisation model because the increasing number of early internationalising firms brought challenges to the traditional models of internationalisation. The main argument has been that the traditional models were unable to explain the behaviour of firms that leapfrog or emerging phenomenon of 'born globals' which created a demand for new approaches to internationalisation (Andersen 1993; Coviello and Munro 1995; Fletcher, 2001; Knight and Cavusgil 2004; McNaughton, 2000; Moen and Servais 2002; Oesterle 1997; Oviatt and McDougall, 2005; Rialp, Rialp and Knight, 2005; Rutashobya and Jaensson, 2004). Studies on the relationship between firm size and export propensity are also ambiguous since some studies show a positive relationship, some no significant relationship and others still argue that size matters (McNaughton, 2003). The literature on 'born globals' has shown the ability of small firms' rapid internationalisation. It is also shown that these firms either have completely ignored their home market while entering the international markets or chose to enter the home market and international market at once (Madsen and Servais, 1997; McNaughton, 2003, p. 299).

5] Explanations to Born global concept

The International business literature has historically focused on large and mature corporations. Many multinational enterprises (MNEs) are the developed form of large, mature domestic firms (Chandler, 1986) which drew the attention of researchers with their significant economic power. Large firms have long enjoyed major advantages over small firms since they have the resources to compete in export markets (Buckley and Casson, 1976; Dunning, 1981; Oviatt and McDougall, 2005). Nevertheless, in the current business environment, it is possible for a person who possesses international experience and a moderate amount of finance to conduct business anywhere in the world within a relatively short period. The ability to identify international business opportunities is therefore not limited to large corporations in the current business environment due to the advantages of low cost communication and transportation. Thus new firms with limited resources are able to successfully compete in international business (Oviatt and McDougall, 2005).

Since the 1980s there has been a growing interest towards firms which do not follow the normal pattern of growing first in their home countries and then starting to export. Instead, these firms commence their exporting straight away or during the first years of their commencement. This sudden rise has brought about a new breed of exporters known as 'born globals' (Rennie, 1993; Knight and Cavusgil, 1996; Madsen and Servais, 1997), 'global start ups' (Oviatt and McDougall, 1994), 'international new ventures' (McDougal, Shane and Oviatt 1994), 'high technology start-ups' (Jolly, Alahuhta and Jeannet, 1992). Reports appeared in the press and academic journals in the late 1980s and early 1990s about small firms internationalising from their inception or at the early days (Oviatt and McDougall, 2005; The Economist 1992; 1993; Gupta, 1989; Mamis, 1989). Literature shows that such firms are formed with internationally experienced business people who could link resources from multiple countries to meet the demand of markets. The ability of discovering and taking the advantage of international business opportunities are not only limited to large or mature corporations but firms with limited resources which can also compete successfully in international markets (McDougall and Oviatt, 1991).

A survey conducted in 1993 by the United Nations found an increasing number of small firms found the stage by stage pattern of internationalisation no longer relevant to their needs, which is a limitation of the staged model. This was documented by the OECD (1997) which reported that the time taken for business to internationalise has reduced from about ten years in the 1980s to about four or five years in the 1990s. Studies have found a large numbers of 'born globals' in Australia, the United States, Canada, Norway, France, and Denmark (Moen 2002; Rennie, 1993).

The empirical study of Moen (2002, p. 160) involved 335 and 70 responses received from small exporting firms from Norway and France respectively. This study found that more than 50% of

the firms that had been formed after 1990 could be described as 'born globals'. This study revealed that the owners' or managers' global orientation is as one of the important factors responsible for this phenomenon. A detailed survey of Australian Manufacturing Council and McKinsey and Co. (1993, p. 45) undertaken in Australia involved 300 high value added manufacturing small and medium sized firms. Out of these firms 60 participated in a focus groups. This study identified two types of exporting firms. One type had the characteristics of the traditional idea which described exporting firm who first established in their home market and then looked into possible growth through exports. However their main focus of the business activity was intact with their home market. The average of these firms was 27 years with average exports of 20 percent of their sales. The other type of exporting firms with the average age of only 14 years had started their exporting activities within two years of formation. They have also been exporting 76 percent of their total sales. These firms were identified as the 'born globals'.

The explanations given for the occurrence of this emerging phenomenon of 'born globals' is described by various trends that are taking place in the current business environment. Increasing trends of niche markets, advances in process technology, communication technology and the increased importance of international networks and alliances have positively contributed to the capability of internationalisation for all firms. The efficient use of transportation, more corporative government policies which have resulted in a decrease in geographically protected market niches are also suggested as main reasons for the existence of 'born globals' (Knight and Cavusgil, 1996; McDougall and Oviatt, 2000).

A research study by Andersson and Wictor (2003) based in Sweden that involved 89 hi-tech firms was able to identify only four 'born globals' within their sample which indicates that 'born globals' are still uncommon in Sweden. Based on this research Andersson and Wictor (2003) argue that the firms with the owners who could see the global opportunities what others cannot see have the ability to drive their firms to make 'born globals'. The researchers suggest that the capable owners not only identify these opportunities but also use their personal networks both local and global as vital tools in implementing their strategies to become 'born globals'. The researchers suggest that theories that emphasise the vital role of internal resources such as the owner of the firm which add to the capabilities of such firms could provide better explanation to this phenomenon (Andersson and Wictor, 2003, p. 268).

The research study by Knight and Cavusgil (2004) involved a survey of 900 randomly selected manufacturing small firms across the United States which was established in 1980 and after. The firms that exported more than 25% of their production were selected for this study. Knight and Cavusgil (2004, p. 124) suggested early internationalisation related to innovative culture, knowledge and capabilities. The knowledge of the firm particularly works as a critical resource in the internationalisation process. Thus such firms are able to enhance their strategies from the

use of knowledge based resources in winning business opportunities in international markets early in their evolution. The remarkable features of these ‘born globals’ are that they commence with a global concept of their markets and build up the capabilities required in achieving the firm goals at the early stage of formation.

As suggested by Knight and Cavusgil (2004, p. 125) the smaller size distinctive of young firms appears to present a kind of flexibility that provides key benefits for succeeding in overseas markets. The argument here is that the bureaucratic nature of large and long-established firms tends to block their innovativeness. The less bureaucratic small and young firms with their more flexible nature tend to encourage the innovativeness of the firm. This innovativeness of the firm assists the development of firm specific knowledge and capabilities that enhances firm performance with market expansion. The flexibility of small and active firms takes this advantage to gain superior business performance by transforming their innovations into business functions (Knight and Cavusgil, 2004; Lewin and Massini, 2003). Knight and Cavusgil (2004) present an explanation for ‘born globals’ taking support from the RBV of the firm. Their explanation suggests that the firm's resources are primarily important to develop strategies of the firm which suits diverse business environments. Thus it is the function of the internationally focused managers of newly formed small firms to develop unique and inimitable knowledge. This knowledge assists them in enhancing the superior international performance. Thus Knight and Cavusgil (2004) argue that this special knowledge creates the required firm capabilities. Such capabilities carry the potential to be part of the firm culture which can also be tacit or inimitable to the firm (Autio, Sapienza and Almeida, 2000; Barney, 1991; Grant, 1996b). It is suggested that technology, ICT in particular facilitate the marketing process of ‘born globals’ learning about customers, competitors and efficient channel interaction (Knight and Cavusgil, 2004, p. 130).

The literature indicates that the main focus of research analysing ‘born globals’ is in the high technology sectors rather than in other sectors because these firms are marked by very rapid technological change (Larimo, 2005). The studies of Johnson (2004) and Knight and Cavusgil (1996) support this view. Knight and Cavusgil (1996, p. 11) for example interpret ‘born global’ firms as “small, [usually] technology-oriented firms that operate in international markets from the earliest days of their establishment”.

However there are research studies undertaken in other sectors as well although they are limited. For example, even trading companies provide examples of born globals (Andersson and Wictor, 2003; Madsen and Servais, 1997). It is clear this emergent field is still in its infancy. Thus research focussing on other sectors will help to generalise the finding so far on ‘born globals’ which are mainly based on high-tech firms (Rialp et al., 2005).

In a literature review by Rialp et al. (2005, p. 153) approximately one third of research studies undertaken in the period 1993 to 2003 focused on the following main factors as being vital for small firms to compete internationally:

- increasing importance of niche markets that are being created worldwide
- technological developments which include production, transportation and communication
- increasingly importance of global networks
- capabilities of owner/ managers who initiate the ‘born global’

Rialp et al. (2005) state that these factors have not fully been integrated into theoretical frameworks used in past empirical research although a number of researchers have tried to establish their explanations by incorporating insights from the RBV of knowledge based view (Autio et al. 2000; Burgel and Murray, 2000). For example some authors suggest the RBV provides a holistic view of the firm since it explains the coordinated effect of resources and capabilities that provides the ability to market their product overseas (Knight and Cavusgil, 2004; Young, Bell and Crick, 2000). In contrast, Rialp et al. (2005) suggest that the combined use of multiple theories, mixed and improved conceptual approaches would pave the way to presenting robust explanations of the early internationalisation of small firms than the use of single theoretical framework. Jones and Dimitratos (2003) also suggest that consideration of both effects of internal and external environmental conditions of the firm would be able to provide exciting direction of research in this exercise.

We can see this in a very recent study of Fink and Kraus (2007) that involved a survey with 146 small and medium sized firms in Austria, the Czech Republic and Slovenia. This showed that firms need to receive cross-boarder cooperation with overseas partners for access to their resources in order to overcome the insurmountable financial difficulties that they have to confront in the process of internationalisation (Fink and Kraus, 2007; Kirby and Kaiser, 2003; Lu and Beamish, 2001).

The research sample consists of firms from a broad range of sectors. Seventy seven per cent of the firms were small firms and the rest were medium sized. The study was conducted with the purpose of investigating whether trust-based coordination is a logical explanation to the internationalisation process of these firms. The outcome of the research showed that development of trust-based cooperation relationships with foreign firms works positively for small firm internationalisation (Fink and Kraus, 2007).

The small firms in Austria were able to quickly internationalise by entering into markets in the new CEEC (Central and East European Country). This was explained by cooperation theory which linked Austria’s geographical, historical and cultural closeness to CEEC countries. Cooperation theory explained the value of development and maintenance of trust-based

cooperative relationships with the firms dealing in foreign markets which lead to the success of firms in international business. The owners' or managers' self-commitment was vital in developing this cooperative relationship and their psychic closeness to the CEEC countries was an advantage. Mutual trust and commitment were based on common long-term business goals rather than short-term plans that encourage early defection. This helped firms in business to maintain sustainable trust-based cooperation relationships with minimum business conflicts (Fink and Kraus, 2007; Gemser, Brand and Sorge, 2004).

Thus Fink and Kraus (2007) argue that firms in this form of relationship could grow uninterruptedly together and it further makes firm activities easy and helps them to save resources. Fink and Kraus (2007, p. 685) also provide examples from Japan of trust-based relationships such as '*Kaizetsu*'. They advise that firms must harness the advantages of stable, long-term business relationships which carry a minimum level of conflict. The Japanese concept of '*Kyosei*' could also ensure owner/managers of firms take lessons in business diplomacy and responsibility for themselves and others while keeping to entrepreneurial attitudes and make profits. Diplomacy assists in business to build trust and develop relationships which is considered the key to long-term sustainable success (Kaku, 1995, p. 8; London, 1999, pp. 171 & 172).

Although firm resources, the entrepreneurs, their networks and industry factors have been identified as some of the important factors in the early internationalisation of small firms that make them 'born globals', new technologies and lowering of trade barriers have also been suggested as the way to increase this trend of internationalisation (Andersson and Wictor, 2003, p. 268; Jones and Dimitratos, 2003, p. 243). Thus, the phenomenon of 'born global' needs to be examined in the context of traditional ways in which firms enter new markets. The literature indicates that trade is another mode of internationalisation in addition to foreign direct investment (FDI) and international strategic alliances (Dunning and Wymbs, 2001; Wymbs, 1997).

6) Born globals in South Korea

In the light of the characteristics of Born Global discussed in this paper and their importance to the global trade, Born Global seems much more important to South Korea than as well. In South Korea such a firm would have a relatively smaller domestic market size and an expected stronger export-led policy than in many other developed countries. However, very little research on Born Globals has been carried out in South Korea. There still remains much to be done, even if a few nascent studies of Born Globals in the country have already been done. Research is thus needed to gain greater understanding of the roles of individuals and the dynamics of opportunity seeking in rapid internationalization (Park 2010).

Sung-soo (2016) quoted from the head of the K-ICT Born2Global Center in South Korea

“South Korean startups’ performance was relatively poorer than those of their U.S., Chinese and Singaporean counterparts. This was because of the lack of PR. Their advanced and excellent technological and service models were underestimated and failed to be publicized to a sufficient extent as the South Korean startups could not blend in due to the lack of their linguistic and cultural capabilities. This is why we are trying to help them in PR and networking by means of our public relations services.”

“Although growing attention has been paid to Born Globals around the world, there has been little research on early internationalising SMEs in the context of Asian economies such as South Korea. Moreover, there has been limited investigation, using large scale surveys, on the associations between key factors such as the international business experience of managers and the use of networks that are said to underpin the ability of SMEs to undertake international activities. Interestingly, SMEs have steadily grown towards building solid contract relationships with large enterprises in South Korea, as the majority of South Korean SMEs operate in industrial and intermediate goods industries” (Park 2010).

7] Conclusion

Traditional theories have developed with the purpose of primarily explaining the internationalisation of large MNEs. The review provides evidence that a firm’s internationalisation is not limited to those large MNEs but increasingly smaller firms are engaging in international business. Internationalisation of these firms has been a rapid process which can not be explained by the traditional theories of internationalisation. Therefore researchers have looked to many explanations as factors contributing to rapid internationalisation and being ‘born global’.

Some of the factors that seem to contribute to this phenomenon worldwide in general are the Internet, increasing trends of niche markets, advances in process technology, capabilities of owner/managers of firms and increased importance of networks. In addition, the efficient use of transportation and more supportive government policies in the form of trade facilitation have also been suggested as contributing to the current trend of ‘born global’.

However the review of the available literature indicates that factors which contribute to this phenomenon in South Korea are still at the emerging stage. This creates a research gap to investigate explanations for the phenomenon of ‘born global’ within the market context of South Korea.

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How Negative Behaviors of Leaders are Conceptualized and Measured

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1. Background & research goals

Interest and research on negative leadership began in the 1990s with the argument that there is a dark side among positive leadership (Conger, 1990). Most organizations still have insulting and abusive bosses that are negative and disruptive behaviors (Aasland et al., 2010), which negatively impacts the performance of organizations and organizational members. Therefore, this study will first try to conceptualize negative behaviors of leaders and develop related measurement tools according to domestic situation.

2. Theoretical background

The main terms and concepts of negative leadership or negative behaviors of leaders, which are derived from previous research results, are shown in Table 1.

3. Research methods

The measurement tools for 'negative behaviors of leaders' were developed through the first, second, and third studies as shown in Table 2.

4. Development of measurement tools for negative behaviors of leaders

Finally, the measurement tools for negative behaviors of leader were identified as 8 factors and 35 items.

5. Conclusions and contributions

'Negative behaviors of leaders' are conceptualized as a leader's behavior that consistently and repetitively undermines the targets, tasks, resources, and effectiveness of an organization and its members—ultimately putting the very existence of the organization at risk. The eight lower variables include dogmatism, irresponsibility, authoritarianism, biased preference, egoism, inconsistency, poor self-restraint, and the inability to distinguish between public and private matters. And regression analysis shows that negative influence of negative behaviors of the leaders, which is an independent variable, affects 'organizational effectiveness', which is a dependent variable, while for organizational commitment, six factors except for 'biased preference' and 'poor self-restraint' have negative effects on 'organizational commitment' and 'inconsistency' and 'inability to distinguish between public and private matters' for 'job satisfaction'. Only two factor affected the negative effect.

Keywords: negative behaviors of leaders, dogmatism, irresponsibility, authoritarianism, biased preference

1. Background & research goals

Interest and research on negative leadership began in the 1990s with the argument that there is a dark side among positive leadership (Conger, 1990). Most organizations still have insulting and abusive bosses that are negative and disruptive behaviors (Aasland et al., 2010), which negatively impacts the performance of organizations and organizational members. In other words, many bosses (leaders) are still ignoring or insulting their subordinates based on their authority on the job, dealing with non-personalities, and making threatening statements (Liu, Liao & Loi, 2012). In addition, they do not correct bad behavior and habits, they deteriorate them continuously to reduce the organization's performance, and lower the satisfaction of subordinates to the organization (Tepper, 2000). Therefore, systematic and comprehensive research on 'negative leadership' and 'negative behaviors of leaders' is needed. It is necessary to explore what is the nature of negative and bad leadership, how it is formed, and why it is important (Kellerman, 2004).

Many of the previous studies have focused on deriving sub-variables of negative behaviors of leaders, predominantly on the derivation of outcomes and outcome variables (Son et al., 2009; Lim & Lee, 2010, 2011; Dotlich & Cairo, 2003; Finkelstein, 2003; Kellerman, 2004; Rasch et al., 2008). In addition, in the case of some studies, it is focused on revealing negative effects of leader's negative behavior, which is an independent variable, on the performance of organizations and organizational members of subordinate variables (Lim, 2012; Lim & Lee, 2013), .

However, there is still a lack of research on the proper conceptualization of such negative behaviors of leaders, the development of measurement tools, and the relationship between other variables such as leadership and organizational effectiveness. Therefore, this study will first try to conceptualize negative behaviors of leaders and develop related measurement tools according to domestic situation. In other words, by examining the cases of negative behaviors of the leaders perceived by the subordinate to the organizations of the local agriculture cooperative, the concept of the negative behaviors of the cooperative leaders is carried out and the subordinate variables are explored and measurement tools for each are developed, too.

2. Theoretical background

1. Concept and definition of leader's negative behavior

The research on 'negative behaviors of leaders (leadership derailment)' has difficulty in empirical analysis due to the bias of the social desirability on the subject, therefore it is not as active as other studies of positive leadership, and it is also lacking quantitatively. However, in many

organizations today positive leadership is not only a positive influence on organizational effectiveness, but negative leadership also negatively affects organizational effectiveness. Negative leadership takes a lot of weight, and there is a need for research. Therefore, systematic and comprehensive research on negative leadership is needed.

First, the main terms and concepts of negative leadership or negative behaviors of leaders, which are derived from previous research results, are shown in Table 1 below.

Table 1: Key terms and concepts related to negative behaviors of leaders

Terms	Researcher	Concept
Petty tyranny	Ashforth (1994, 1997)	Bosses (leaders) abuse their power and exerts a negative and destructive influence on others and the whole organization
Derailed leader	Schackleton (1995)	Bosses (leaders) see themselves as obstacles to their continued growth
Leadership derailment: leadership deviation, leadership dropout	Leslie & Van Veslor (1996)	Not only does the bosses (leaders) show themselves an obstacle to their continuous growth, but also have a negative influence on others and the organization
Abusive supervision	Mitchell & Ambrose (2007), <u>Tepper</u> (2000, 2007)	When bosses (leaders) continue to see linguistic and nonverbal antagonistic behavior other than physical contact to subordinates
Unethical behavior	Kellerman (2004), Peterson (2002)	Bosses (leaders) behave in violation of the organization's core values, standards of behavior, sharing norms and expectations. Showing unethical and ineffective behavior. * Also called bad leadership
Destructive leadership	Einarsen, Aasland & Skogstad (2007)	A repetitive and systematic action by bosses (leaders) to undermine or hinder an organization's purpose, mission, resources, efficiency, motivation and satisfaction of subordinates
Negative / Destructive Leadership	Aasland <u>et al.</u> (2010)	Bosses (leaders) show direct or indirect dysfunctional behavior that interferes with the achievement of the goals of the organization and its members

Source: Researcher summarizes previous research results

2. Similar study on negative behaviors of leaders

Next, the major research results of the previous researchers are as follows.

2.1 . Leadership derailment of Leslie & Van Veslor

Leslie and Van Veslor (1996) found that leadership is not only an obstacle to the continuous growth of the bosses (leaders), but also the dysfunctional behavioral characteristics of 'leadership derailment'. They interviewed 20 top executives from 15 Fortune 500 companies and 42 top executives from 24 companies of 6 European countries, and to discuss the four issues of interpersonal relationships, team building and team leadership, failure to achieve business goals, and failure to adapt to change (Leslie & Van Veslor, 1996).

However, these studies are based the relationship between the bosses (leaders) and subordinates. These studies focused on the personal problem of the leader in the conduct of duties such as the personality and qualities of the leader.

2.2 Tepper's abusive supervision

Tepper (2000) argues that supervisors are more likely to use abusive supervision to keep subordinates' verbal and nonverbal insults. Subordinates can lead to serious stress and burn-out and negative attitudes (Carlson et al., 2012). Ultimately, the abusive behavior of the bosses (leaders) also has a negative impact on organizational performance (Aryee et al., 2007).

2.3 Kellerman's bad leadership

'Bad leadership' is empirically viewed as 'ineffective' and 'unethical', which is worse. In addition to claiming that the type of bad leadership or seven subordinate factors is 'indifferent', 'exclusiveness', 'incompetence', 'excessively clean', 'immorality', 'wickedness' and 'stubbornness' (Kellerman, 2004).

3. Research methods

The measurement tools for 'negative behaviors of leaders' were developed through the first, second, and third studies as shown in Table 2 below.

Table 2: Development of measurement tools for negative behaviors of leaders

Division	The details
First study	Exploratory research: Basic research for conceptualizing variables and deriving sub-variables, conducting literature research on similar studies and surveying internet usage examples
Second study	<p>Development of measurement tool draft</p> <ul style="list-style-type: none"> - Research subjects: 100 employees of the local agriculture cooperative - Research content <ol style="list-style-type: none"> ① Data collection: A total of 234 opinions were gathered by describing the types of leader's negative behavior and the main act contents, ② Organizing, analyzing and reclassifying: sorting and analyzing opinions of the collected negative behaviors of leaders and reclassifying them into 13 types ③ Development of a measurement tool draft: The main words (or phrases) of 13 types (sub-variables) reclassified were derived, and based on this, a measurement tool (questionnaire item) development
Third study	<p>Validation of measurement tools</p> <ul style="list-style-type: none"> - Pilot test <ol style="list-style-type: none"> ① 216 employees of the local agriculture cooperative: 5 factors, 25 items, exploratory factor analysis and Cronbach's α coefficient survey (4 factors, 15 items confirmed) ② 40 employees of Nonghyup University: 13 factors, 44 items, exploratory/confirmatory factor analysis and Cronbach's α coefficient survey (7 factors, 29 items confirmed) <ul style="list-style-type: none"> - Experts and employees advisors: content validity * Confirmation of questionnaire items (8 items, 35 items confirmed) through consultation about the typification contents, main words (or phrases), measurement tools (questionnaire items) * Use p-statistics (Light, 1971) as a variant: Divide the number of words (or phrases) and question items that experts and general employees agree on into the total words (or phrases) rate * If the agreement rate is 0.6 or more (Miles & Huberman, 1984, 1994) <ol style="list-style-type: none"> ① Expert advisors: 4 university professors (Ph.D., HRD / Leadership major), <ul style="list-style-type: none"> 2 HR consultants(master's degree, 15-20 years experience) 4 Related business professionals (large corporations and korea agricultural cooperative federation) (10-25 years of experience) ② Employees adviser: Nonghyup University 10 employees (3 ~ 20 years of experience) <ul style="list-style-type: none"> - Test - 309 employees of local agriculture cooperative: 8 factors, 35 items, exploratory/confirmatory factor analysis and Cronbach's α coefficient survey. The effect of regression analysis on the organizational effectiveness, the dependent variable (8 factors, finalization of 35 items)

4. Development of measurement tools for negative behaviors of leaders

4.1. Exploratory research

The basic exploration for the conceptualization of the variables and the derivation of the sub-variables was conducted as the first exploratory study such as the literature survey on the similar studies and the internet usage examples survey. As a result, the negative behaviors of leaders are negative behaviors among non-task behaviors, and they continually and repeatedly inhibit the goals and tasks of the organization and its members, And the behavior of the leader who endangers the existence of the organization.

4.2. Development of measurement tool draft

A total of 234 cases of negative behaviors of leaders were drawn from 100 researchers who participated in the second study. The number of cases that are considered to be completely duplicated in terms of expression and context among the total 234 cases are divided into frequency (number of cases) and ratio (%) were calculated.

Table 3 shows the behavior types of the negative behaviors of leaders derived, ie, the sub-variables and the sub-variables of the previous study. In the table below, the subcollections of 13 (excluding other opinions) derived from this study and the sub-variables of the previous study are found to be horizontally identical or similar in the table.

Table 3: Key prior studies on negative behaviors of leaders and behavior types (sub-variables) of this study

Dotlich & Cairo (2003)	Finkelstein (2003)	Kellerman (2004)	Rasch, Shen Davies & Bono (2008)	Lim Chang- hyun & Lee Hee-su (2011)	In the case of Derived (2014)
	dogmatic / fulsome self- confidence			assertive behavior / fulsome self- confidence	arbitrariness
indifference	neglect of duty	Indifference			irresponsibility
arrogance	arrogance			authoritarian behavior	authoritarianism
					flattery
	opposition exclusion	exclusivity (intolerance)		biased attraction preferences and utilization	favoritism

	personal benefit first				selfishness
excessive attention (indecision)			lack of indecision		lack of indecision
whim				disagreement	disagreement / inconsistency
			over control	excessive management and control	interference *

Dotlich & Cairo (2003)	Finkelstein (2003)	Kellerman (2004)	Rasch, Shen Davies & Bono (2008)	Lim Chang-hyun & Lee Hee-su (2011)	In the case of Derived (2014)
			spreading rumors (misuse of information)		other gossip **
			lack of emotional self-control		lack of emotional self-control
		inability			inability / lack of qualities ***
			lack of job performance / lack of planning power, organizational management, communication / work processing delay / lack of load management capability / lack of individual care		inability to distinguish between public and private matters
<Other> habitual distrust / harmful / reality / oddity / exaggerated behavior	<Other> obsession with the practice	<Other> too clean / immorality (not honest) / wickedness / stubbornness (no flexibility)		<Other> resistance to change / unethical behavior / non-personal accusation / strengthening self authority / for the boss over reliance	

*, **, *** There were not many cases of behavior described by the subjects. Therefore, it is excluded from the factor analysis stage.

Source: Researcher reconstructs based on previous research

4.3. Validation of measurement tools

In order to verify the first validation of the negative behaviors of leaders, the questionnaire was conducted on the 216 members of the local agriculture and livestock cooperative for the five

sub-variables. And the results were analyzed with factor analysis. Principal component analysis was used for factor extraction and varimax method, one of the orthogonal rotation methods, was used. Factor analysis showed that the factor loadings of all items were more than 0.4.

As a result of the analysis, there were 4 factors explaining negative behaviors of leaders, and total explanatory amount was 78.598. The irresponsibility and authoritarianism, which were derived before the initial validity survey. As a result of the factor analysis, 10 items of 25 items were deleted.

In order to test the reliability of the measurement tools, Cronbach's α coefficients were used to test reliability for the four sub-variables selected through factor analysis. The reliability of each sub-variable is higher than 0.8 and higher than 0.9.

As a result of the validity (factor analysis) and the reliability test, the negative behaviors of leader was composed of 5 sub - variables, 4 sub - variables and 15 items rather than 25 items.

Next, in order to verify the second validation of the negative behaviors of leaders measurement tool, we made a measurement tool (plan) for all 13 (other opinions not included) behavior type , And Nonghyup University 40 employees. Factor analysis and reliability test. As a result, 7 factors and 29 items were confirmed again.

In addition to the first and second validation tests, the consultant consisted of 10 professors, HR consultants, and on-the-job experts. Of the 13 sub-variables and 44 items of measurement, after eliminating 'intervention', 'other gossip', and 'inability / lack of quality', which consisted of one item, 10 experts had 10 sub-variables, 41 \circ , \times , and Δ were marked for the main words (or phrases) and the question items (draft) of the question. The scores of the experts were calculated by converting them to 1.0, 0.0, and 0.5, respectively. As a result of the expert consultation, five major words (or phrases) and seven questionnaires were judged to require the deletion or integration into other types with an average of less than 0.6.

The results of the first and second validation and the expert consultation were used to determine the consensus among 10 general employees. As a result, it was pointed out that four key words (or phrases) and two question items need to be deleted or reviewed. The 10 general staffs were marked with \circ , \times , and Δ in the main words (or phrases) and questionnaires, and their scores were converted to 1.0, 0.0, and 0.5, respectively. The average of less than 0.6 of each of these scores was judged to be subject to deletion or review.

Finally, the measurement tools for negative behaviors of leader were identified as 8 factors and 35 items.

4.4. Final statistical analysis results

The questionnaire for the empirical analysis was distributed 366 copies to 346 copies, and 309 copies were used for statistical processing. The final recovery rate of the questionnaire was 84.4% except for the poor response questionnaire.

According to the demographic characteristics of the collected samples, 228 male and 74 female students were male and female, respectively, and 26.0% were female and 80.0% were male. The age group was 57.9% in their 40s, 26.8% in their 30s, 11.3% in their 50s and over, and 4.0% in their 20s. Education was the highest with 42.3% of university graduates.

1) Validity analysis

As a result of the factor analysis, there were no items deleted because the factor load value was less than 0.4, and 8 variables were closely linked to one factor.

Confirmatory factor analysis was also conducted. When determining the model fit of a confirmatory factor analysis, there is no specific reference value that must be followed. The model is not interpreted as appropriate if it meets all the criteria. Even if some of them are in conformity and some of them do not meet the conformity criteria of the model, it is finally judged whether or not they are acceptable based on the judgment of the researcher.

As a result of the confirmatory factor analysis of negative behaviors of leaders, one factor was out of the goodness criteria as in Table 4 below, but the remaining satisfied the fit of the optimal model.

Table 4: Confirmatory factor analysis of negative behaviors of leaders

Suitability index	Analysis result	Fitness standard value	Suitability
P value	0.000	P > 0.05	Unsuitable
CMIN / DF	2.227	Less than 3	Suitable
RMSEA	0.063	Less than 0.05: Good 0.08 or less: somewhat good	Suitable
CFI	0.941	0.9 or more	Suitable
TLI	0.931	0.9 or more	Suitable
NFI	0.900	0.9 or more	Suitable
IFI	0.942	0.9 or more	Suitable
(Final judgment) RMSEA: 0.063, CFI: 0.941, TLI: 0.931, NFI: 0.900, IFI: 0.942, and so on. Confirmatory factor analysis results are acceptable (Kim, Gyu-su, 2007; Song, Ji-joon, 2011)			

2) Reliability analysis

As a result of the reliability analysis, most of the variables were 0.8 to 0.9 or more. In order to develop a measurement tool, independent variables are negative behaviors of leaders and dependent variables are 'organizational effectiveness' in order to confirm the results of regression analysis by setting dependent variables in addition to exploratory, confirmatory factor analysis and reliability analysis The research model was designed and analyzed.

3) Correlation analysis and regression analysis

Table 5 shows the correlations and regression results with sub-factors of organizational effectiveness by sub-factors of negative behaviors of leaders. In regression analysis, negative influence of 'negative behaviors of leaders' on the dependent variable 'organizational effectiveness' is negatively related. For organizational commitment, six factors except for 'biased preference' and 'poor self-restraint' have negative effects on 'organizational commitment' and 'inconsistency' and 'inability to distinguish between public and private matters' for 'job satisfaction'. Only two factor affected the negative effect. The results of this study are as follows.

Table 5: Analysis of the effect of negative behaviors of leaders

Independent variable	Dependent variable	Correlation Analysis	Regression analysis
Dogmatism	Organizational commitment	o	o
Irresponsibility		o	o
Authoritarianism		o	o
Biased preference		x	x
Egoism		o	o
Inconsistency		o	o
Poor self-restraint		x	x
Inability to distinguish between public and private matters		o	o
Dogmatism	Job satisfaction	x	x
Irresponsibility		x	x
Authoritarianism		x	x
Biased preference		x	x
Egoism		x	x
Inconsistency		o	o
Poor self-restraint		x	x
Inability to distinguish between public and private matters		o	o

o: Adoption, x: Rejection

5. Conclusions and contributions

First, the negative behaviors of the leaders proved through various procedures and validation studies are negative behaviors among the non-task behaviors, and they continually and repeatedly inhibit the goals and tasks of the organization and its members, endangers the existence of the organization. in the end and it is conceived that the subordinate variable is the concept of dogmatism, irresponsibility, authoritarianism, biased preference, egoism, inconsistency, poor self-restraint, and the inability to distinguish between public and private matters.. In addition, the related measurement tool was finally developed with 35 questions.

Second, regression analysis shows that negative influence of negative behaviors of the leaders, which is an independent variable, affects 'organizational effectiveness', which is a dependent variable, while for organizational commitment, six factors except for 'biased preference' and 'poor self-restraint' have negative effects on 'organizational commitment' and 'inconsistency' and 'inability to distinguish between public and private matters' for 'job satisfaction'. Only two factor affected the negative effect.

The contribution of this study is as follows. First, it confirms the importance of weakness complementary leadership paradigm in addition to strengthening leadership paradigm through identification of influence of 'negative behaviors of leaders' on 'organizational effectiveness (organizational performance)'. Second, in addition to presenting the direction of leadership development and leadership education as described above, in detail, development of leadership and leadership curriculum, evaluation of factor, identification of influences of subordinate variables of negative behaviors of the leaders. It would be possible to provide clues.

The limitations of this study and future challenges to be overcome are as follows.

First, This measurement tools of leader's negative behavior have been refined through various stages, it is necessary to re-verify and elaborate through subsequent empirical studies. Second, the results of this study can be applied to public organizations such as large corporations, financial institutions, government organizations, etc. in addition to local agricultural cooperative. Future development and research of various organizations should be followed.

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Strength, Art and Creative Approach to Counseling and Social Work

Tuesday, August 15, 2017

13:00-14:30

Room 1007

Session Chair: *Prof. Adam Chi-Chu Chou*

ACMASS-0027

The Effects of Psychodrama on High Risk Students in University Freshmen

Lun-Hui Su | *TransWorld University*

ACMASS-0038

The Effects of Integrating Visual Cards in Creative Counseling Supervision Model

Ching-Feng Wu | *Ling Tung University*

ACMASS-0040

Exploring the Application of Expressive Arts Therapy to the Warm-Up Phase of Psychodrama

Mei-Hua Chiu | *Overseas Chinese University*

ACMASS-0046

Finding Strengths out of Problems: A Qualitative Study of the Social Workers Experience in Family Initial Assessment for High-Risk Family

Chien-Hui Hung | *Asia University*

ACMASS-0049

An Interdisciplinary Approach to Empowering Family Strengths and Well-Being

Adam Chi-Chu Chou | *Feng Chia Universtiy*

ACMASS-0027

The Effects of Psychodrama on High Risk Students in University Freshmen

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Abstract

1. Goals

The aim of this study is to investigate the effects of psychodrama on high risk students in university freshmen.

2. Methods

The participants for this study were selected among the mid-Taiwan university freshmen. They received psychodrama group for five weeks, each week with six hours. After psychodrama group sessions, the research conducted focus groups and individual interviews. The researcher verbatimly translated all recorded interview videos and audio tapes into texts and conducted qualitatively content analysis.

3. Results

The effects of psychodrama were: (1) the change of their emotion: Participants increase understanding and acceptance to their emotion. They turn the negative emotions to the positive emotions. (2) the change of their cognitive perspectives: Participants experience a different perspective, and see what they have not seen before. (3) the change of self-view: Participants expand ideas and increase their diversity toward themselves. (4) changes in interpersonal relationships: Participants experience their family members' feelings and thoughts. It helps member to change the views of the family and the attitude of the family.

Keywords: psychodrama, high risk, the effects of psychodrama

Introduction

According to the Ministry of Education Statistics (2014) data shows that college freshman students are about 25 million people from 1998 to 2013. The number of the college students are growing fast. However, in recent years, the campus self-injury incidents increase. It's more than 30.4% of college students have a significant tendency to depression (Wang Chun, 2004). In addition, the Dong Foundation's survey in 2008 and 2012 also shows that college students are about 5 people, there is a person has depression tendency, who needs to seek professional assistance (Ye Yaxin, 2008, 2012). Therefore, to provide the appropriate and effective assistance for the depression of college students is important counseling work. To help the depression

tendency college students to promote the healthy psychological tendency is also important. The aim of this study is to investigate the effects of psychodrama on high risk students in university freshmen.

The results of the study of the treatment of depression have pointed out that cognitive therapy and cognitive behavior therapy are the most widely used schools in practice, and their effectiveness is supported by many researches (Beck, 1993). Hamamci (2006) suggests that psychodrama combined with cognitive behavior groups and cognitive behavior groups all have a significant reduction in the degree of depression and negative thinking.

The study in Kellermann (1985) points out that the greatest effect of psychodrama is in self-awareness, emotional catharsis and interpersonal reaction. In 1987, he research the therapeutic factors of psychodrama with the method of comparison between the experimental group and the control group. The questionnaire included six categories which include emotional catharsis, interpersonal relationship, cognitive perception, behavioral study, the quality of the treatment and the non-specific help of the treatment. The research found that 90% of the experimental subjects considered the psychodrama to be helpful and had the highest score in both emotional and cognitive (Kellermann, 1987). Then, in his book in 1994, he pointed out that the main healing factors of psychodrama group therapy were insightful, emotional catharsis and interpersonal relationship learning.

In the study of college students, Kellermann (1987b) found that the majority of volunteers participated in the psychodrama are college students. For example, psychodrama helps college students socialization, psychological stability, psychological adjustment, social skills and behavior changes. In addition, Hamamci (2006) for the study of the effect of psychodrama treatment, found that significantly reduced the attitude of moderate depression and loss of function, 70% of college students did not relapse in moderate depression.

Kipper and Hundal (2003) analyzed 34 published professional journals on the "psychodrama" research papers, found that the skills of psychodrama and other psychological treatment can be achieved as the treatment of change and produce efficacy, the biggest feature is the psychodrama is the "role-playing" action.

Fuhriman and Burlingame (1990) pointed out that the factors of efficacy in the psychodrama group are the emotional catharsis, thinking insight, self-worth real experience, self-disclosure, expectations and hope for change And the connection and assimilation of individual self and external environment. In addition to these basic common factors, Ormont (1992) in the group therapy experience in the book referred to the group's main function is from the members of the

interaction. The process of interaction promote healing which includes the self-expression, and acceptance and recognition from others.

Psychodram plays a scene to appreciate thanks to yourself and others. Psychodrama expands the participants of the understanding of self, others and things, resulting in common sense and the change motivation (Lai Huahua, 2013). Psychodrama through the role play of the exchange and the role of the expansion of the tendency of college students to expand the diversity of views, change the views and views of things, re-view their own different angles, thus reducing the negative self-thinking model. Encourage the protagonist to explore the self in the psychodrama, to truly see and hear their own needs with others, with deep sensitivity and compassion (Blatner, 2000), through understanding to accept and forgive themselves or others.

Methods

The participants for this study were selected among the mid-Taiwan university freshmen. They fill out the "Taiwan people depression scale". This scale is for the assessment of student mental state. If their score is equal or more than 19 points, for depression tendency. The total volunteer freshmen who have high score and reach the high risk level are 14 people.

They received psychodrama group for five weeks, each week with six hours. After psychodrama group sessions, the research conducted focus groups and individual interviews. The main topic of the focus group interview are as follows: 1. What is the most impressive experience in the psychodrama? 2. How do you deal with emotions, pressure, self- concept, interpersonal relationships, the original troubled issue before ? What do you make a different chang after psychodrama? 3. What is the experience and learning of the different roles in the psychodrama group? What is the effect of sharing and interacting among the members of the group? 4. What is the positive experience or negative experience in the psychodrama?

The contents of the individual interviews mainly include the impression of the warm-up activity. What do the participants who have played the protagonist or auxiliary role expernce? What do they feel or think before and after the psychodrama? What kind of changes before and after psychodrama do they have? What is the most help for them in psychodrama?

The researcher verbatim translated all recorded interview videos and audio tapes into texts and conducted qualitatively content analysis (Krippendorff, 2014).

The interview verbatim content encoding, the first English alphabet presents a member of the group. The second English letter presents "F" that is focus interview, and " I" presents the content is from the individual interview. The third word is the Arabic numbers, which presents the sequence of speaking. For example: M-F-4, that M members in the focus of interviews verbatim in the fourth speech.

Results

The effects of psychodrama were: (1) the change of their emotion: Participants increase understanding and acceptance to their emotion. They turn the negative emotions to the positive emotions. (2) the change of their cognitive perspectives: Participants experience a different perspective, and see what they have not seen before. (3) the change of self-concept: Participants expand ideas and increase their diversity toward themselves. (4) changes in interpersonal relationships: Participants experience their family members' feelings and thoughts. It helps member to change the views of the family and the attitude of the family.

(1) the change of their emotion:

Participants increase understanding and acceptance to their emotion. They turn the negative emotions to the positive emotions.

Members B found herself after psychodrama group more mature. She changed the negative emotions to the positive emotions. In the past, she wanted to commit suicide. But now, she can stop the the thought to commit suicide and change to the positive thinking.

"Like I was in the psychodrama before, I felt my emotions always negative. I always think of negative. But after the psychodrama, I begin to slowly lead to positive think and feeling. (B-F-01)

"In the past, my reaction was more extremely. And then my tolerance of frustration is so low. For example, I felt useless when my parents yelled at me. And then I would like to commit suicide. But now , I become more positive. I think differently. If I died my father and mother ,what can they do. My brothers focused on play, and they are not mature. They do not know how to filial and respect parents. So I didn't react extremely like before, I start to calm down and think what I want to do. (B-I-29)

(2) the change of their cognitive perspectives:

Participants experience a different perspective, and see what they have not seen before.

The psychodrama director carries out the multi-faceted things, so that participants can see the occurrence of their if through other members. Hence they change their views on things. Because the participants ' working themes are similar to others '. By watching other participants ' psychodrama, participants linke to their own similar situation. They have further understanding from seeing other's conflict. The deeper understanding lead them to rethink of their own perspectives .

"... exchange different perspectives through look into other's positions. In every seat, not everyone can see the same thing, but in fact you can find someone else can not see things, and then others will find you can not see things. (O-F-1)

"In the part of the sharing, you will find that you do not put your point of view on someone else, because you think so, he does not necessarily think so. (I-F-7)

(3) the change of self-view: Participants expand ideas and increase their diversity toward themselves.

Psychodrama provides opportunities for members to self-exploration through multiple ways, thereby increasing self-understanding, self-confidence, and change the self-point of view.

a. increasing self-understanding

In the psychodrama group activities, participants selected props to introduce themselves and listen to other people's introduction. It increase self-understanding. They understand what they want and what they don't want. When the awareness of their thought and ideas increased, they can more understand themselves.

"It is time to find out what I belong to and more like my own thing, and then through someone else's introduction, I will know more about who I am." (F-I-8)

"... it is possible to know more about what I am thinking. In the past, I simply do not know myself, do not understand myself. Through this time I may know whow I am , and also can think about what I want. " (D-I-126)

"...more understand what I want and what I do not want. " (J-F-01)

b. Increase self confidence

Participants through the interaction in the psychodrama group to get other members of the affirmation, increase their confidence and self-affirmation. Even some participants encourage to be themselves.

" I had no confidence in myself. But after I came here. a lot of people recognize me, so I feel more comfortable be myself. " (K-F-02)

"I feel more confidence" (K-F-04)

"More sure about myslef." (L-F-06)

c. change the self-point of view.

During the interaction with other members in the psychodrama group, from the feedback given by the members, the members' self-view has changed. And some participants found out that they are not so bad which they imagined before. Some participants change from the lack of confidence into more be confident. Some find out they are not so difficult in interpersonal relationships.

" In this psychodrama group, I find myself not so bad which I thought I were so terrible. " (I-F-1)

"More comfortable and more sure about myself." (K-F-3)

"Came here, I find I am not so difficult to get along." (O-F-3)

(4) changes in interpersonal relationships:

From the participants' information about the interpersonal relationship, they make a big change with the family relationship. They experience their family members' feelings and thoughts. It helps member to change the views of the family and the attitude of the family. They change the way of communication with their families. From the psychodrama, they experience the family member's thoughts and feelings. After that they not only changing the attitude toward to the family, but also change the action to the family.

"... because C say out her sister's feelings and let me know that I didn't know what my sisters' thinking. or what they did! But from the mouth of C, let me understand, from their perspective, ... My three sisters were more indifferent, ... from his point of view I will be able to experience more and understand them. ... " (L-I-9)

"I thought my grandmother is a very control person. But now I see she is afraid of lonely. " (B-I-23)

"Before the psychodrama groupe, I would not care about my grandmother. But now, I start to show my caring and greetings . " (I-F-04)

In addition, members also change the way they interact with friends. They play different roles and observe others. It helps them to increase the understanding of others. The process of understanding others involves understanding the process of understanding yourself, others, and the whole story. When there is such an in-depth understanding, and realize the emotions of different roles and history. Members change the way they communicate, which helps to improve relationships.

"In the sharing part, I find that I should not put my point of view on someone else, because everyone could think differently . " (I-F-01)

"... and I would think more about other people, sometimes others' thinking inside is not as the same as mine. " (D-I-122)

"Then I will try not to guess what other people think. And then, I will tell them my inner thoughts and feelings. " (N-I-64)

"I start to talk with my high school classmates. " (D-I-77)

Discussion

The purpose of this study was to explore the effectiveness of psychodrama on the high risk freshmen . The study result reveals the decreased levels of depression due to the psychodrama

intervention. This is consistent with the findings of the studies by Hamamci (2006) carried out on the effectiveness of psychodrama on the reduction of depression. To explain this, the role-play and role-reversal, offering an opportunity to share feelings, thoughts, analysis, and repressed emotions, and to receive appropriate feedback. During psychodrama, people learned to make relationships with others. In addition, the role-play provides an opportunity for the participants to experience and repeat life situations and facts. Therefore, the participation in psychodrama is to turn the negative emotions to the positive emotions, also to change of their cognitive perspectives. Participants experience a different perspective, and see what they have not seen before. Psychodrama helps them build up higher self-confidence. Participants expand ideas and increase their diversity toward themselves.

According to Moreno," Psychodrama is a group therapy modality for the purpose of behavior modification, as well as a relationship-oriented approach (Hamamci, 2006). From the study, participants experience their family members' feelings and thoughts. It helps member to change the views of the family and the attitude of the family. Zerka Moreno (2006) also mentions that Moreno thinks healing is carried out quietly in the inner depth of the self. Healing can not be completely touched by words, but through the understanding and action, and this healing process often after the end of treatment for a long time to continue to continue.

Psychodrama can encourage the participants to reduce the feeling of hopelessness and loneliness, and enable them to gain new perspectives and connections with others. Furthermore, the participants can build up their higher confidence and self-concept and live a meaningful life by a more understanding of themselves and adapt with difficulties.

The results of this study the changes in emotional and cognitive perspectives. This is consistent with the findings of the studies by Zheng Yuying (1990). Zheng Yuying (1990) analyzed the degree of benefit of the members of the group, the results found that the protagonist in the group to get the support most, second is to get cognitive benefits, the third is emotional benefits. Kellermann (1987a) found that the members of the experimental group felt that the most helpful thing in the psychodrama was emotional catharsis and cognitive awareness.

To sum up, it can be concluded that psychodrama can have a good effect on high-risk freshmen. It seems that changes in emotion, cognitive insight, self-concept, and interpersonal relationships.

Conclusion

From the results of this study and other studies can be seen through the effectiveness of psychodrama in high risk freshmen, emotional and cognitive changings. In addition, it contributed to changes the self-concept and interpersonal relationships

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ACMASS-0038

The Effects of Integrating Visual Cards in Creative Counseling Supervision Model

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1. Background and Goals

Counseling supervision is the vital check for counseling quality; yet, few studies have covered the incorporation of visual cards. The purposes of current research are combing three counseling supervision focuses (conceptualization skills, intervention skills, individualization skills) to create new counseling supervision model through COPE, OH, and Red Flower (images styles) cards, building correspondence between counseling skills and visual cards, and developing the operation procedure of visual cards.

2. Methods

The participant for this qualitative study is a graduate-level counseling intern. After counseling supervision, the researcher, also the supervisor collected the feedback and conducted qualitatively analysis.

3. Results

The effects of this creative counseling supervision model were: (1) Visual cards allowed the supervisee to precisely focus on case conceptualization, which helped her to understand her client and his need and desire which deepen the context of client analysis. (2) The representation of visual cards enabled the supervisee to see through the myths. When operating the technical cards, the supervisee is more aware of the inefficient counseling skills adopted before. Thus, the supervisee would strategically switch to the skills that facilitate the counseling quality. (3) The supervisee gained more understanding that her familiar counseling skills might bring her powerless feelings and counseling impasse. During visual cards supervision process, the supervisee re-experience the reflection of her individual counseling styles. (4) The supervisee accumulated deep and clear awareness of the changes during counseling process. This not only helped her realize the counseling relationship and boundary, but also let her reflect on the future counseling direction. (5) Visual cards supervision became a journey intertwined by joy and faith. Thus, integrating visual cards is worth recommending. It is suggested that future research extend this supervision model to supervisees in other professional fields and analyze its process effectiveness.

Keywords: visual cards supervision, conceptualization skill, intervention skills, individualization

skills

ACMASS-0040

Exploring the Application of Expressive Arts Therapy to the Warm-Up Phase of Psychodrama

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1. Background/ Objectives and Goals

Expressive arts therapy can often evoke greater imagination and inspiration through imaginal thought, whereas psychodrama is a practical method. We will perform an in-depth investigation on the application of expressive arts therapy in the warm-up skills of psychodrama. This study has three aims: Firstly, to explore the overall views of group members towards warm-up activities. Secondly, to understand the relationship perceived by group members between warm-up and their own roles. Thirdly, to examine the impact of the design and application of warm-up activities on subsequent dramas.

2. Methods

The researchers conducted experiential activities involving the introduction of expressive arts therapy to psychodrama between May and August 2016. The sessions were conducted once a fortnight, and each session was 6 hours. A total of six sessions were conducted, giving 36 hours of experiential activities, and 6 members participated in each session. As this was an exploratory study, data analysis was performed using a qualitative, narrative research approach. At the end of each group warm-up, the researcher conducted 20 minutes of sharing on the members' overall views towards warm-up activities. After casting, members were also asked to explain the relationship between the warm-up and their own roles. At the end of each drama, the members were once again asked to share the impact of the design and application of warm-up activities on subsequent dramas.

3. Expected Results/ Conclusion/ Contribution

Based on the sharing and insights collected at three stages for each group session (end of warm-up, after casting and end of each drama), 18 experiences were obtained for each member (over 6 group sessions). Thus, the 6 members gave 108 instances of textual data, which were collated according to the study aims.

Results: 1) Use of artistic media during warm-up activities allowed members to be more involved in the group, and to lower their defenses more easily.

2) Relationship between warm-up and self-role: From the perspective of using role dynamics, all

6 members were better able to use their roles in subsequent dramas to display the gap between their self and the roles played in real life.

3) Design and application of warm-up activities: All members believed that with regards to the design of warm-up activities, the results will follow the theme to present inner feelings and emotional expressions in a spiral manner, and be integrated into daily life.

Keywords: Expressive arts therapy, psychodrama, warm-up skills, narrative research

ACMASS-0046

Finding Strengths out of Problems: A Qualitative Study of the Social Workers Experience in Family Initial Assessment for High-Risk Family

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Initial assessment is the beginning of the family social services, it often determines the follow-up services. Although the Service Program for High-risk Family has developed the assessment indicators, the judgements of social workers are the key factors of the initial assessment. Therefore, the perception and interpretation of the social workers plays an significant role in the family initial assessment process.

The purpose of this study is to explore the experience of the social workers in High-risk family initial assessment process and factors that affect the initial assessment.

This study uses the case of the Service Program for High-risk Family in a county in central part of Taiwan to inquire the questions stated above. Using in-depth interviewing method, the researcher interviews six social workers of the program and analyzes their experiences with qualitative research method.

The discussion of the results will focus on the following three aspects: (i) the initial assessment of high-risk families by social workers; (ii) awareness and reflection from social workers; and (iii) factors that affect the initial assessment.

The study finds that in the initial assessment for high-risk family, social workers not only identify the risk factors in the family, but also see family's strengths and opportunities. Other findings related to social workers' professional competence are: while confronting with the limitations of professional competency as well as constraint of external environment, social workers are nonetheless managing to find strengths and possibilities from themselves and external environment. The study will propose implications and suggestion for practices in providing services for high-risk family.

Keywords: high-risk family, family initial assessment, family strength

ACMASS-0049

An Interdisciplinary Approach to Empowering Family Strengths and Well-Being

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Enhancing and accumulating family strengths and well-being has been one of several new approaches as opposed to traditional pathological models (Seligman, 1999, 2011; Seligman & Csikszentmihalyi, 2000; Seligman, Steen, Park, & Peterson, 2005). On the same line of thinking, this paper develops an interdisciplinary framework in which a household production conceptualization in family economics is used as basis for extending the original Beckerian extended utility function (Becker, 1973, 1974, 1991). A more extended and holistic utility function is constructed which denotes a “Well-being Function.” Although literatures in family economics do not explicitly use the terms in promoting family strengths, the framework does show implicitly implications which can integrate core concepts from positive psychology, family psychotherapy, and family economics. A set of propositions on family strengths and achieving family well-being are derived from the analysis. In addition, the paper will experiment and explore interdisciplinary ways to empowering family strengths and well-being.

Goals of the Study

1. To propose and test hypotheses about mechanism of enhancing and cultivating family strengths and well-being.
2. Utilize a theatrical methodology and techniques to experiment and test hypotheses derived from well-being function.

Methods

1. Constructing a theoretical model: Develop and construct a well-being function which is extended from Beckerian household production function and utility function in the discipline of family economics. The well-being function serves as a holistic instrument and mechanism to help conceptualize family strengths and well-being.
2. Enactment and experiment: The study will apply psychodramatic methods and other action techniques to construct an experimenting family theatre. Simulated family and role-played family members will enact according to pre-assigned stories and also improvise based on any assigned circumstance. The family members will co-sculpture a few family sculptures and express significant elements in family script. Guided by the researcher, a sequence of questions

of finding strengths and opportunities will be explored. The family will try to re-enact and re-write their family script in the process of finding strengths.

In the end, the researcher will conduct family interview from the perspective of well-being function. The effects of enhancing family well-being in the process of and after enactment will be assessed and analyzed according to videotaped data.

Expected Results and Contributions

This paper proposes an interdisciplinary framework for understanding family strengths and well-being. The analysis integrates constructs and instruments from positive psychology, family therapy and family economics. The results of experimenting with family theatre and exploring the propositions of the theory developed in this paper are expected to bring new insights to family study, and develop potentially new methods into empowering family well-being.

Keywords: Strength, Well-being, Well-being Function, Family Theatre, Family Economics,

Finance & Law

Tuesday, August 15, 2017

14:45-16:45

Room 1006

Session Chair: *Prof. Zhengwei Ma*

ACMASS-0006

The Role of Risk and Usefulness in Determining an Adoption of Islamic Mobile Banking Services: The Case of Malaysia

Mohamed Asmy Bin Mohd Thas Thaker | *International Islamic University Malaysia*

Raisudin Bin Saharin | *International Islamic University Malaysia*

Amir Hariri Bin Mohd Sa'adon | *International Islamic University Malaysia*

Syarifah Mardhiah Bt Syed Salim | *International Islamic University Malaysia*

Anwar Bin Allah Pitchay | *Universiti Sains Malaysia*

Hassanudin Mohd Thas Thaker | *HELP University*

ACMASS-0009

Developing Idle Waqf (Endowment) Lands through Cooperative-Waqf Model: The Case of Malaysia

Anwar Allah Pitchay | *Universiti Sains Malaysia*

Tajul Ariffin Masron | *Universiti Sains Malaysia*

Zubir Azhar | *Universiti Sains Malaysia*

Mohamed Asmy Mohd Thas Thaker | *International Islamic University Malaysia*

Al Amin Mydin | *Universiti Sains Malaysia*

ACMASS-0041

Application of Structural Equation Modeling to Evaluate Chinese Peer-to-Peer (P2P)

Lending Risk: The Customers' Perspective

Zhengwei Ma | *China University of Petroleum (Beijing)*

Jiangliang Wang | *China University of Petroleum (Beijing)*

Lili Wu | *China University of Petroleum (Beijing)*

ACMASS-0116

Cash Holding Deviation and Speed of Adjustment of Indonesian Firms

Arni Surwanti | *Universitas Muhammadiyah Yogyakarta*

ACMASS-0103

Intellectual Property Protection for Farming Cropping Patterns and Rice Farming Products in Supporting Food Security

Rahmi Jened Nasution | *Airlangga University*

Agung Sujatmiko | *Airlangga University*

Ria Setyawati | *Airlangga University*

ACMASS-0006

The Role of Risk and Usefulness in Determining an Adoption of Islamic Mobile Banking Services: The Case of Malaysia

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Abstract

This study is designed to identify the factors that are influencing adoption of Islamic mobile banking services in Malaysia. The primary data are collected from the survey administered to existing customers of Islamic banking and services in the Klang Valley and the analysis is conducted using Partial Least Squares (PLS). This study has verified the factors of risk and usefulness are found to have a positive impact on the adoption of Islamic mobile banking services. The findings of this study can be used to develop a specific framework or policy and to plan appropriate intervention strategies to increase its capacity in nurturing adoption of Islamic mobile banking services.

Keywords: Islamic Mobile Banking, Risk, Usefulness, Partial Least Squares (PLS).

1. Introduction

The revolution of information and communication technology has transformed the world economy from production-based to knowledge-based economy. Many people prefer to stay connected to do any transactions or obtaining services, wherever they are and they want to do that at the fastest speeds. It is where the mobile banking has emerged. The innovation in technology has successfully embraced the advancement of connectivity and also innovate a different culture of using mobile banking.

Mobile banking is meant by the ability of customer to perform the banking or financial transactions by using a mobile device, or mobile terminal (Drexelius & Herzig, 2001). According to Mattila (2004), mobile banking is among the most recent innovation of financial channel today. Indeed, the broad use of smart phones has increased more demand for mobile banking services. Many banks have started to offer mobile banking service by inventing more new sets of products and applications in which it can reach to their clients.

Furthermore, many authors have discussed the benefits of using mobile banking services. Among the benefits that have been highlighted are in the form of its flexibility, coverage, and interactivity. Indeed, according to Sulaiman et al. (2007), mobile banking has a greater accessibility as compared to traditional banking services particularly Automated Teller Machine (ATM). Mobile phones also known to be function easily require minimum investment and minimum training, and they can perform various tasks. Mobile banking allow the users to access and check their account anytime via cell phone or other mobile device rather than visiting banks and internet banking based on computer.

The use of mobiles for banking and payments has taken place in many countries. In order to encourage the clients to use mobile banking services, the banks have taken various strategies to ensure their client constantly use mobile banking (Guriting and Ndubisi, 2006). According to research conducted by Juniper Research in 2013, more than 1 billion people are anticipated to use mobile banking services by 2017. In terms of countries comparison, adoption rates of mobile banking are highest in China and India with 60% and 70%, respectively. In Europe, the current adoption of mobile banking services is at 38%, with on average modest growth. In South Africa, the adoption rate is close to 58%, followed with Kenya, South Korea and Singapore with 49%, 54% and 52%, respectively.

Malaysia is also not excluded in recognizing the importance of mobile banking as shown by the concerted efforts by the financial institution to introduce it to the local funding ecosystem. Particularly in mobile banking services, although it is reported that the total number of cellular telephone subscription has the highest number of penetration rates in 2015 which is quarter three of population, yet the mobile banking penetration rate was only 16.5% of total population in 2015 (Mahad et al., 2015).

Realizing a remarkable potential of mobile banking into the banking industry, several studies analyze adoption factors of mobile banking services by using both qualitative and quantitative methods. Many researchers have used various theories to explain an individual's acceptance of new Information Technology (IT) particularly mobile banking services (Hanafizadeh et al. (2014); Yu (2012); Saeed (2011); Lin (2011); Tan et al. (2010); Luarn and Lin (2005). Among them are Technology Acceptance Model (TAM), innovation diffusion theory (IDT), unified theory of acceptance and use of technology (UTAUT), and theory of planned behaviour (TPB) Various factors (not limited to these factors only) such as perceived usefulness, the perceived ease-of-use, compatibility, trust, credibility, social influence, perceived cost and cost are becoming key constructs of individual adoption of mobile banking services.

Despite there are considerable researches on factors influencing mobile banking adoption that has disclosed in many international journals across disciplines, there are limited studies that

empirically investigated on Islamic mobile banking adoption factors. Currently, many of researches on mobile banking are focusing on mobile banking services offered by conventional banking industry. However, there is lack of studies to access Islamic mobile banking adoption factors by its customers, particularly in Malaysian context. Presently, there are a number of Islamic banks (both full- fledged and window banks) that offer mobile banking in Malaysia which included Al Rajhi Banking & Investment Corporation (Malaysia) Berhad, CIMB Islamic Bank Berhad, Hong Leong Islamic Bank Berhad, AmBank (M) Berhad, Bank Islam Malaysia Berhad, Bank Simpanan Nasional, Malayan Banking (Islamic) Berhad, RHB (Islamic) Bank Berhad and Standard Saadiq Chartered Bank Malaysia Berhad. However, the consequence of this dearth of research is that many adoption factors of Islamic mobile banking remain poorly understood.

In lieu with this, the present study fills the research gap by determining the factors determining Islamic mobile banking adoption in Malaysia. This study encompasses three main questions, among which are; (i) what are the elements or factor that influencing consumer to adopt mobile banking services? ii) does riskiness, perceived ease of use, usefulness, relative advantage, and social norms will give significant impact on adoption of Islamic mobile banking services? iii) what is the recommendation to enhance consumer's adoption of Islamic mobile banking services?.

In addition, the present study has used self-developed models comprising various constructs that can explain Islamic mobile banking adoption among its customers. Consequently, this study attempts to apply the Partial Least Squares (PLS) approach to to test the relationship or causalities in the proposed model.

2. Influential Factors on Mobile banking adoption

2.1 Perceived of Riskiness

Study found that willingness of adoption is highest when the risk is low (Lovelock et al., 2001). Risk is a main factor that influence on adoption of Islamic mobile banking. The risk is associated with mobile banking because the mobility of the phone and also the internet connectivity requirement. The application in the mobile phone or the browser need the secure internet connection and it need personal internet rather than the public connectivity. The probability of losing of mobile phone also can discourage the public to adopt and use the mobile banking. According to Coursaris et al. (2003), there were 62,000 mobile phones were left in taxis in London during half of 2001. Thus, the banks should installed proper safety program to provide secure transaction for customer.

H1. The lower the perceived of risk associated with Islamic mobile banking transaction, the higher the intention to use and adopt it.

2.2 Perceived Ease of Use

Technology Acceptance Model (TAM) included the easiness of the use of technology as one of the significant factor which influences the adoption of using it (Davis, 1989; Luarn and Lin, 2005; Venkatesh and Davis, 1996, 2000; Wang and Liao, 2007). This factor positively related with the adoption of the mobile banking transaction.

H2. The higher the perceived ease of using Islamic mobile banking services, the higher the intention to adopt it.

2.3. Perceived of Usefulness

Usefulness of the technology will spark the usage of the new innovation. Usefulness in mobile banking means the use of the mobile banking is useful to perform the banking transaction through mobile phone devices. This factor also one of the significant factor in adoption of the technology based on the Technology Acceptance Model (TAM) and positively related with the adoption of Islamic mobile banking.

H3. The higher the perceived usefulness of using Islamic mobile banking services, the higher the intention to adopt it.

2.4. Relative Advantage

The advantages of the usage of the mobile banking should be significant compare to the previous banking transaction medium such as online transaction using the computer or other medium to perform the banking transaction. According to Rogers (1983) and Karayanni (2003), relative advantage is known as the extent where any innovation is perceived to be better than its original idea. For example, mobility of mobile phone can replaced the fixed PC monitor which limited the access to banking transaction and it also take the lots of space and costly when included with the instalment of the internet.

H4. The higher the relative advantage of using Islamic mobile banking services, the higher the intention to use and adopt it.

2.5. Social Norm

Social norm is the factor related to the personal behaviour of individual and it influenced by the relatives such as friends and family in adoption of Islamic mobile banking for economic transaction. This factor bank do not have control on it and totally depend on the view of the individual itself and the decision sometime because of impact from external party. This factor cannot be ignored as long as it directly related with the consumer behaviour.

H5. The social norms have a positive and direct effect on Islamic mobile banking services

adoption.

3. Conceptual Framework of Islamic Mobile Banking Adoption

After discussing the potential factor that influencing mobile banking adoption and developing hypotheses, this study has developed a conceptual framework to represent Islamic mobile banking adoption in Malaysia. This is shown in Figure 1.

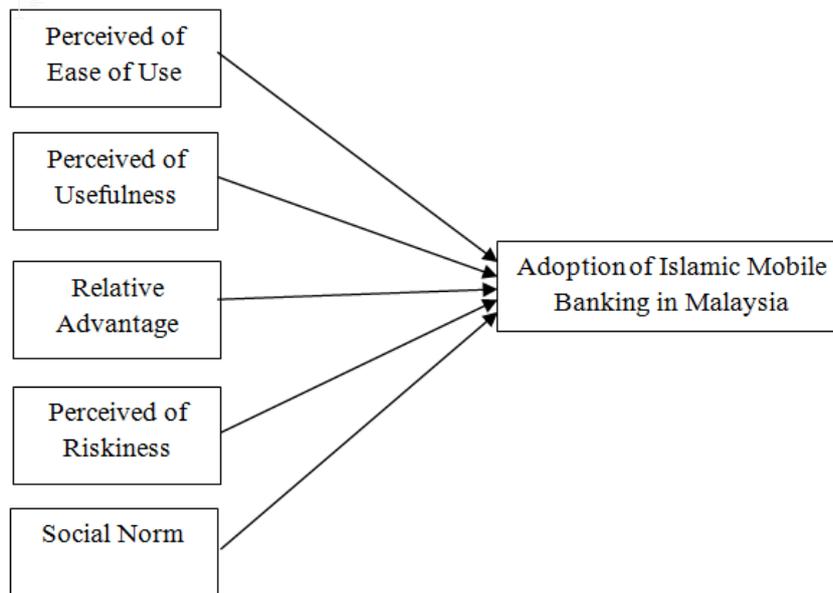


Figure 1: Islamic Mobile Adoption

4. Research Methods

4.1. Data Collection

Data are collected from the current customers of Islamic banking and finance services in the Klang Valley (Selangor and Kuala Lumpur), who are above 18 years old. Around 260 current customers are sent the questionnaire. Out of 260 questionnaires, only 250 questionnaires are returned, where all 250 are usable for data analysis purpose.

The factors that influence adoption of Islamic mobile banking were tested by using Partial Least Squares (PLS) regression. According to Thakur (2014), PLS examines the reliability and validity of particular theoretical constructs. Later, the constructs are estimated simultaneously. Also, this approach enables the test of measurement parameters and structural path coefficients. This approach is widely used in many information science researches (Bock et al., 2005) since it has many advantages particularly related to sample size, minimal restrictions on measurement scales and residual distributions (Chin et al., 2003).

5. Research Findings and Discussion

The questionnaire is tested with Common Method Bias by using Harman's single factor test. All research must ensure that there is no Common Method Bias. Common Method Bias indicates

that the variances are represented in measurement method rather than to the construct itself in the questionnaire. Based on finding, it showed that the first factor accounted for 37.89% of variance. This figure meets the threshold level where less than 50 percent suggested by Podsakoff et al. (2003).

Only 250 respondents had participated in this research. Most of the respondents (52.4%) were male followed by female of 47.6%. Besides, about 92.4% of the respondents are populated by Muslims while others were Christian, Buddhist, Hindu, and other religion as well have the percentage of 1.6% , 3.2% , 2.4%, and 0.4% respectively. Almost three-quarters (76.4%) of the respondents are between the age group of 20-40, few are over 40 years of age (23.6%). There was a majority of 54.4% respondents are single, followed with 42.4% respondents are married and 3.2% respondents are divorced.

Besides, in terms of educational level, majority of respondents are having a good level of education level, with almost 14.8% holding a college diploma or matriculation and about 70% holding at least a bachelor degree or above. Most of the respondents (72.8%) were working at private sector followed with 11.2% were working at public sector. Only 14.4% of the respondents are students. Meanwhile, majority of respondents (60.8%) fall in below RM 3000 income group, followed with (39.2%) are in the income group of more than RM3000.

Table 1: Distribution of Respondents by Gender, Age and Marital Status

		Frequency	%
Gender	Male	131	52.4
	Female	119	47.6
Age Group	20-30	146	58.4
	31-40	45	18
	41-50	28	11.2
	Above 50	31	12.4
Marital Status	Single	136	54.4
	Married	106	42.4
	Divorced	8	3.2
Educational Level	No Education	4	1.6
	Secondary School	35	14
	Diploma	37	14.8
	Bachelor	152	60.8
	Postgraduate (Master or PhD)	22	8.8
Occupational	Public	70	28
	Private	43	17.2
	Self employed	21	8.4
	Housewife	15	6.0
	Retired	12	4.8
	Student	89	35.6
Income Level	Less than RM1000	83	33.2
	RM1001- RM2000	30	12
	RM2001- RM3000	39	15.6
	RM3001- RM4000	34	13.6
	RM4001- RM5000	29	11.6
	More Than RM5000	35	14

5.1. Measurement

Extant literatures have been used to extract the constructs and the items. All the constructs and items were adapted and modified to suit the purpose of this study. All major scale items are based on a five-point Likert-scale ranging from strongly disagree (1) to strongly agree (5). In terms of items development, they are adapted from Riquelme & Rios (2010). Risk consists of (4-item), ease of use consists of (4-item), adoption consists of (3-item), usefulness consists of (4-item), relative advantage consists of (5-item) and social norms consists of (3-item).

5.2. Assessment of Measurement Model

The convergent validity was tested at the initial stage. During the test of convergent validity, indicator or items loadings, average variance extracted (AVE) and composite reliability (CR) were taken into the consideration. Based on the results presented in Table 2, items' loading exceeded 0.5 for all items, which meet the recommended value suggested by Hair et al. (2009).

In terms of AVE threshold or requirement, Hair et al. (2009) suggested that AVE should exceed 0.5. In the current study, AVEs were in the range of 0.5 and 0.76. The CR value ranged from 0.833 to 0.929, which meet the recommended value of 0.7 suggested by Hair et al. (2009). Table 2 shows the results of measurement model.

Table 2: The Results of Measurement Model

Variables	Items	Factor Loading	AVE	CR
Risk	R1	0.801832	0.582346	0.847762
	R2	0.778605		
	R3	0.723358		
	R4	0.746308		
Ease Of Use	EOU1	0.805217	0.707267	0.905958
	EOU2	0.797242		
	EOU3	0.917293		
	EOU4	0.838851		
Adoption	ADO1	0.865646	0.707847	0.878932
	ADO2	0.85701		
	ADO3	0.799833		
Usefulness	U1	0.898499	0.768532	0.929918
	U2	0.906039		
	U3	0.853775		
	U4	0.846752		
Relative Advantage	RA1	0.37942	0.516343	0.833385
	RA2	0.802266		
	RA3	0.866882		
	RA4	0.817428		
	RA5	0.611926		
Social Norms	SN1	0.773503	0.662211	0.854309
	SN2	0.789669		
	SN3	0.874499		

After conducting earlier test of convergent validity, later, the research is testing discriminant validity. The test of discriminant validity can be performed by examining correlations between the measures of potentially overlapping constructs (Fornell & Larcker, 1981). The result shows that the square root of AVEs (in bold) are larger than off-diagonal elements in their corresponding row and column for all cases (see Table 3). Thus, it is suggesting that the required discriminant validity has met the criteria. Based on these results, it indicates that measurement model has adequate convergent validity and discriminant validity.

Table 3: The Results of Discriminant Validity Analysis

	ADO	EOU	R	RA	SN	USE
ADO	0.841336					
EOU	0.698394	0.840992				
R	0.266753	0.269878	0.763116			
RA	0.498445	0.66995	0.321732	0.71857		
SN	0.100994	0.304154	0.205401	0.321838	0.813763	
USE	0.724498	0.826016	0.213693	0.620375	0.268349	0.87666

5.3. Descriptive Statistics of the Latent Constructs

In this sub section, mean and standard deviation for all latent variables were examined based on a five point Likert scale. The mean for all the five latent variables range from 4.073 to 4.221 (please see Table 4). Risk has a highest mean value with the value of 4.221 followed with social norm with the lowest mean value at 4.073. Meanwhile, standard deviation representing spreading or dispersion value range from 0.259 to 0.458 (please see Table 4). Relative advantage has a

highest standard deviation value of 0.458 followed with social norms with the lowest standard deviation value of 0.259 (please see Table 4).

Table 4: The Results of Descriptive Analysis

	No of Items	Mean	Standard Deviation
Risk	4	4.221	0.411358
Ease Of Use	4	4.195	0.396431
Adoption	3	4.131	0.331192
Usefulness	4	4.178	0.38297
Relative Advantage	5	4.176	0.458402
Social Norms	3	4.073	0.259203

5.4. Assessment of Structural Model

Ramayah et al. (2016) have suggested using R^2 to observe the goodness of the structural model. According to Hair et al. (2011), coefficient of determination and the level of significance of the path coefficients (beta values) can be captured by R^2 . The R^2 for the current research is 0.56. It is suggesting that 56% of the variance in adopting Islamic mobile banking can be explained by risk, ease of use, adoption, usefulness, relative advantage and social norms.

Later, in order to assess the statistical significance of path coefficients, the current study has calculated the path coefficients of the structural model and performed bootstrap analysis (re-sampling = 5000) (please see Table 5). Based on results, it revealed that only the factors of risk and usefulness has a positive relationship with adoption of Islamic mobile banking among its existing customers with $b = -0.114$, $p < 0.05$ and $b = 0.530$, $p < 0.01$, respectively. Thus, H2, and H5 are supported. In addition, the results of structural model also indicated that ease of use, relative advantage and social norms are found to be insignificant. Thus, H1, H3 and H4 are not supported. Table 5 shows the results.

Table 5: The Results of Structural Model

Hypothesis	Relationship	Beta	SE	t-Value	Decision
H1	EOU > ADO	0.195	0.176	1.108	Not Supported
H2	R > ADO	-0.114	0.053	2.142	Supported
H3	RA > ADO	0.046	0.059	0.774	Not Supported
H4	SN > ADO	-0.139	0.085	1.628	Not Supported
H5	USE > ADO	0.530	0.174	3.052	Supported

Based on above results, the adoption of Islamic mobile banking was found to depend on the factors of risk and usefulness. According to Laforet and Li (2005) and Yang (2009), an individual will consider to acquire a new technology or services based on him/her perception of risk involve.

Adoption of technology-enabled service delivery will be higher when the risk of using it is lower. Thus based on this study's results, since Islamic mobile banking is technology-based, its adoption is based on degree of risk involved. The risks factors such as threat of security violations, and lost of phone lower the adoption of Islamic mobile banking services. This finding is consistent with Wu and Wang (2005), and Lovelock et al. (2001).

On the other hand, the extent where a customer perceived that using the system would help them to perform a better jobs or duties is known as usefulness. In other words, an individual will use Islamic mobile banking services if they find the systems useful to their transactions. Indeed, an individual prefer to use Islamic mobile banking services because it has relative advantage compared to other methods such as cash, and card payment. This finding is also similar and consistent with the findings by Arvidsson (2014).

5.5. Predictive Relevance (Q^2)

According to Ramayah et al. (2016), predictive sample which is previously known as Stone-Geisser's Q^2 can be used to look at the predictive relevance of research model. This measure has also been used by Henseler et al. (2009) to assess their research model's predictive relevance. Predictive validity has assessed by using blindfolding procedure. Our results shows that the Q^2 of adopting Islamic mobile banking is ($CV\ Red = 0.246$). Based on Hair et al. (2011) suggestion, if Q^2 values are larger than zero, they indicate that the exogenous constructs have predictive relevance for the endogenous construct. Thus, it can be conclude that the current research model has good predictive relevance

6. Conclusion and Recommendation

This paper has identified the factors that influencing Islamic mobile banking adoption among its customers and tested using Partial Least Squares. Based on the framework, several corresponding hypotheses were posited.

This study has shown that only factors of risk and usefulness are influencing Islamic mobile banking adoption in Malaysia. The findings of this study can be used to develop a specific framework or policy and to plan appropriate intervention strategies to increase its capacity in nurturing adoption of Islamic mobile banking services.

For the future research suggestion, other independent variables such as awareness, gender, religiosity, flexibility and other relevant variables can be identified as prominent in investigations of the Islamic mobile banking adoption.

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8. References

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Developing Idle Waqf (Endowment) Lands through Cooperative-Waqf Model: The Case of Malaysia

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Abstract

Purpose – This paper attempt to offer an alternative mode of financing for developing idle Waqf land using cooperative and Waqf.

Design/Methodology/Approach – The present study evaluated relevant existing literatures on the; (i) issues of financing faced by Waqf institution in developing idle Waqf lands, and (2) existing models of cash Waqf have been reviewed and based on this gap, we proposed a hybrid model of Cooperative-Waqf.

Findings – The proposed model is unique due to the new dimension which is membership is embedded into the Waqf project. This means the donors are given privilege to received benefit from the commercialise project which is develop on the Waqf lands. So far, the existing models of cash Waqf are using traditional method which means the donors only contribute cash Waqf and they do not aware about the utilisation of the cash Waqf. Commonly, this agency problem is occurred due to the lack of two-way communication between cash Waqf donors and Waqf institution. Therefore, the proposed model is able to boost more participation to develop Waqf land and also create harmonisation relationship between cash Waqf donor and Waqf institution.

Research limitation/Implication – The paper is based on conceptual explorations of existing literatures in the area of Waqf and cash Waqf, and the finding is not empirically investigated.

Practical Implication – The proposed hybrid model in this study will provide an alternative way of boosting cash Waqf and develop Waqf lands. This model is significant to policy maker such as government, private and NGOs to promote philanthropy based development.

Originality/Value – The present study extent the existing literatures in area of Waqf and cash Waqf models especially the practise of this instrument in the context of Malaysia. Besides the literature, the present also offers new hybrid model which currently are not practised in any Muslim and minority Muslim countries.

Paper Type: Conceptual Paper

Keywords: Waqf, Cash Waqf, Cooperative, Malaysia

1. Introduction

Waqf is an Islamic voluntarily contribution which was recommended by Prophet Muhammad (peace be upon him- hereinafter pbuh)¹ at the early age of Islam. Word Waqf is an Arabic term literally means “restraining”, “prevention” and “stop” which is recognized by the Islamic law as one of the voluntary charitable acts that become a source of fund for the social and economic development. Waqf aims to establish a charitable scheme for improving the welfare of less privilege segments such as poor, insolvent, needy, orphans, widows and so on (Cizakca, 2002). In addition, Waqf also has covered to enhance the public services such as the building of mosques, madrasah, educational institutions, libraries, hospitals, travellers’ lodges, and inns (McChesney, 1991). Notably, Waqf played a key role in strengthening the spirit of brotherhood in the Muslim society, facilitated education as well as spreading the true spirit of Islam among the Muslims (Siraj, 2012). The benefits of Waqf assets are not only restricted for the use of Muslim community and religious activities but its role covered the broader scope of activities which to improve and strengthen the development of social and economic of a society (Cajee, 2007). However, Waqf institution and the contributions of Waqf assets are not sustained as indicated by Cizakca (2002). The Waqf system went through various trends that include significant growth, stagnant and even downturn periods. One of the main reasons for the despicable condition of Waqf institutions in Muslims countries as argued by Aun (1975) is due to western colonisation.

Just like most Muslim countries, the practise of Waqf in Malaysia was negatively affected during

¹ It is highly encouraged in Islam that, when any prophet’s name is mentioned, we have to say “peace be upon him” after mentioning any of the prophets’ name.

the period of colonisation. Waqf practice in Malaysian can be traced to the 14th century after the embracement of Islam by the Malacca Sultanate (Aun, 1975). During this period, some of the Waqf properties, as stated by Aun (1975), were in the form of mosques and Islamic schools. The development in the Waqf practice, one century after the Sultanate started, was truncated by the commencement of colonization in Malaysia. The colonisation period beginning with the Portugese from the year 1511 to 1641, followed by the Dutch from the year 1641 to 1824, and then by the British from the year 1826 to 1946, had a devastating effect on the development of Waqf in Malaysia. British occupation was interrupted from the year 1941 to 1945 due to Second World War (WWII), which paved the way for the Japanese occupation of Malaysia. Thereafter, the British regained the control of Malaysia from the Japanese in the year 1946. Malaysia became an independent country following the end of British colonisation in the year 1957. Salleh (2009) says Waqf practice went through tremendous changes during the post-colonisation period in terms the role of trustee, restructure of Waqf properties in the country due to loss of Waqf deeds and even some of the Waqf properties were no longer considered as Waqf due to the loss of documents that could serve as evidence.

The statistic of idle Waqf lands² and funding issues have spark the current research to formulate a sustainable model of generating cash Waqf which can assist the Waqf institution to develop Waqf lands in Malaysia. There are various models such as Waqf Shares Model, Waqf Takaful Model, Direct Waqf Model, Mobile Waqf Model and Corporate Cash Waqf Model, which are currently are practised in Malaysia. Beside Malaysia, these types of Models are also in other Muslim and Muslim minority countries. According to CEO³ of Perbadanan Waqf Selangor (PWS) says that the collection of cash Waqf is inconsistent and this is due to lack of *Waqf* awareness or promotion and also ineffective model of cash Waqf by PWS, which failed in establishing the trust of *Waqf* culture giving among the Muslim society (Yang, 2014). Furthermore, he is also says that participation from Islamic businesses and institutions (IBIs) is not at the satisfaction level even though the government offers a tax deduction of 10% towards the organisations that contributed cash Waqf. So far, there is no study have been conducted to hybrid the model of Cooperative and Waqf and examine the impact of this model from the perspective of donors. Therefore, proposing a sustainable cash Waqf Model called Cooperative-Waqf Model and examining the factors that boost the level of trust of cash Waqf donors are warranted that could help in boosting the collection of cash Waqf and overcome the cash problem face by the Waqf institution.

2. Literature Reviews

There are many past studies have been conducted which attempt to solve the problem of idle

² Statistics shows by Jabatan Wakaf Zakat dan Haji (JAWHAR), only 0.21 per cent out of 11,091.82 hectares of Waqf land have been developed. - See more at:<http://www.hmetro.com.my/node/53286#sthash.O2Jk91NY.dpuf>

³ Currently is En. Abu Bakar Yang

Waqf land. These scholars have divided the mode of developing Waqf lands into classical and modern methods. Among the earliest method is *Ibdal* and *Istibdal* (exchange and substitution) are the first two modes of developing the idle Waqf land (Kahf.M M., 1998; Mohammad, 2008; Sabit, 2009). However, this mode faced approval problem from jurist of different school of thoughts, which generated a subject of divergence of views among scholars. Furthermore, there are many cases of fraud occurred during the process of *Ibdal* and *Istibdal* (Kahf.M M., 1998; Sabit, 2009). Other traditional modes are *Hikr* (long lease with large advance lump sum) and *Ijarah* (lease with dual payment) are used for the renovation of the Waqf properties (Sabit, 2009). However, these two modes have shortcomings in term of the involvement of sacrifice of the assets in which the lessee has perpetual staying right on Waqf assets. Furthermore, it may subject to fraud and corruption particularly in term of the use of profit generated from the selling of the long lease rights (Kahf, 1998). There are debt-based instruments are introduced for financing the development of Waqf properties such as *Murabahah* and *Salam*. These modes, the manager borrow to develop the property and the amount owed to the financing company will be settled from the revenue that generated from Waqf project (Sabit, 2006). However, the disadvantage of these modes, they expose the Waqf property to high risk which might result in confiscation and auction of the property of Waqf.

Finding an alternative method of financing becomes attractive and innovative where almost majority of the management background researchers are aggressively discussed and proposed several models of cash Waqf. Most of the studies are focused on cash Waqf because it is claim to be more flexible and ease to use for developing Waqf project compare to fixed assets. For example, Sadeq (2002) proposed a model of financing which is based on issuing Waqf certificate by Waqf institution. The mechanism of this model is as follows: the relevant body or institution will plan to build a project for the purpose of eradicate of poverty and social economic development. Then, this project is directed to Waqf administrative body (WAB) and WAB will introduce the project to the public and inviting the public to donate cash for financing the project. The cash Waqf is raised by issuing Waqf certificate of different denomination. The purpose of this model is to collect the fund from public in collective way and develop the project.

Cizakca (2004) and El-Gari (2004) proposed a model that based on the concept of cash Waqf. The authors claim that this concept is useful especially to provide loan to microfinance. The researchers suggest establishing a non-profit financial institution that based on *Qard Hassan* (free interest based loan). They say that the capital to setup the Bank is generated from the wealthy Muslim people. Similarly, Mohsin (2008) proposed to setup financial institution based on Waqf which will act as an Islamic Bank. The purpose is to generate Cash Waqf where the donor can deposit cash Waqf at the institution. This institution is basically to finance entrepreneur through Islamic mode of finance. Furthermore, the proposed model is basically to assist the projects in term of financial and the financial Waqf institution act as the trustee of the

cash Waqf.

Habib (2004) highlights the operational format of *Sukuk Al Intifa'a* with an illustrated example of King Abdel Aziz Waqf (KAAW) in Mecca. KAAW is a trustee that leases a Waqf land at the centre of Mecca to the Bin Laden Group under the contract of Build-Operate-Transfer (BOT) for 28 years. In return, the group should build Zam Zam Tower which consists of shopping complex, tower and hotels. Bin Laden Group subcontracts the construction of the tower to Kuwait Real Estate Company (Manshaat) which undertakes to finance the operation and operate it for 24 years. At the same time, the whole project will be transferred back to Bin Laden Group after getting an expected return of 26% per annum which is derived from the difference between the rentals rates received from *Sukuk* holder and the rate paid to Bin Laden Group. The Manshaat Company issued \$390 Million *Sukuk Al Intifa'a* for 24 years. This is to raise fund from investor to finance the construction of the project where the *Sukuk* holder will have the right to lease or utilize the specific unit of the tower for the period of 24 years. The advantage of this model of financing is after 28 years both the Waqf land and projects that development on the Waqf lands will be transferred to KAAW. Hence, later KAAW will fully manage the project and the return generated from the project will be used to support the society development. This type of financing is applicable for commercial development only because of the private participation required to gain back their return to cover their construction cost.

Mohammad (2008) argues Waqf institution should be independent and self-reliant which should have income generating Waqf land. The author suggested a framework for the marketability of Waqf properties as permitted by Islamic law and is achievable through the reformed concepts of Malaysian Land Administration system and its components. The author proposed to use (1) sale and purchase market for properties held as investment assets and that purchased through the income of the capital of Waqf; (2) leasing market, whereby long term leases, equivalent to that leasehold alienation.

Jalil and Ramli (2008) proposed to use cash Waqf. The authors suggested using e-Waqf, Waqf share and issuing *Sukuk* to generate fund accumulation for the Waqf construction project. The method of issuing *Sukuk* also suggested by Sabit (2009) who proposed a method of financing for the development of Waqf properties by using in-housing financing method and securitization. In-house financing is comprises of obtaining advanced rentals under the concept of *Hikr*, *Ijarah*, *Istibdal*, and cash Waqf. While securitization is such as equity participation (including saham Waqf) and *Sukuk*. Hassan and Shahid (2010) study argues that is a need to introduce stakeholders' principle into body of the institution of Waqf. The professional business management technique will undoubtedly create many positive opportunities for quality improvement of the institutions of Waqf and internal delegation of responsibility. For developing the vast under-used properties of the Waqf, this paper considers that, if institutions Waqf is to

fulfil its social purpose, there is needed to create sources of funding for re-construction of Waqf building by creating cash Waqf fund and by issuing *Musharakah Sukuk*. The returns from this initiative will be significant and more beneficiaries will be benefited.

Tohirin (2010) discussed on cash Waqf in relation to the empowerment of small businesses. The researcher proposed to establish Waqf institution under Islamic public finance and this institution will be responsible to generate cash Waqf from the society and provide financing for small medium enterprise (SME). Affandi and Nufus (2010) proposed to use cash Waqf to overcome of inability of government in providing prosperity for Indonesian society. The researchers suggested to establish Indonesian Waqf Deposit (IWD) as a representative of cash Waqf in Indonesia and focused how IWD should channel their cash Waqf fund and available amount of cash Waqf toward productive sector. This study found that the collection of cash Waqf in Indonesia is still far from the expectation and the sector that become most concerning of the people of Indonesia is rehabilitation of poor family.

Alias (2012) in her conceptual paper discussed about the application of certain venture capital strategies in the both the investment and spending decisions of cash Waqf. In its investment decision, the cash Waqf might utilise some of the tools employed by venture capital firms for choosing its investment and for mitigating risk. She also mentioned that a possibility for the cash Waqf to consider certain venture capital opportunities as an alternative assets class in which to invest a portion of its corpus. In its spending decisions, the cash Waqf may choose its beneficiaries in much same way as venture capital firm would choose its investee; that is by putting together a port together a portfolio of non-profit organizations (NPOs) with proven track records for delivering social result and which is seeking to grow their organization to achieve financial sustainability. Therefore, she proposes an Enterprise Waqf Fund model that combines the cash Waqf model with relevant concept from venture capital to enhance the dynamism of cash Waqf.

Hashim and Rahman (2012) review a case of Waqf lands development by Islamic Religious Councils of Pulau Pinang (MAINPP) which is endowed by Setee Aishah located at Seberang Jaya Pulau Pinang. This Waqf land has been in idle for many years due to the lack of financial capital by MAINPP to carry out the development of Waqf property. The study find that joint venture model where collaboration between MAINPP and house developer (UDA Holding Bhd) has successfully develop the Setee Aishah land into real estate housing town. The joint venture model implemented by MAINPP can used an example to other state in Malaysia to construct Waqf property more productive.

Pitchay, Kameel, Meera, & Saleem, (2015) examined factors that influence the behavioural intention of Muslim employees in Klang Valley, Malaysia to contribute cash Waqf through salary

deduction. The researchers employs theory of reasoned action (TRA) to measure whether attitude of the Muslim employees and subjective norms surrounding them have significant influence on their behavioural intention to contribute cash Waqf through salary deduction. 380 Muslim employees were participated in this study and the findings show that the attitude of the Muslim employees and the subjective norms surrounding them have significant influence on the behavioural intention of Muslim employees to contribute cash Waqf.

Based on the past studies findings, the current study intent to follow the similar effort to identify an ideal solution by proposing new mechanism of collecting cash with the aims to mitigate the problem of cash faced by Waqf institution in developing Waqf land and also to rejuvenate the culture of Waqf among the Muslim society.

Existing Models of Cash Waqf

There are various types of cash Waqf models are currently practised in most Muslim and Muslim minority countries. The following are the examples of the models with detail modus operandi.

i. Waqf Share Scheme (WSS)

WSS is a public *Waqf* practised in several Muslim and Muslim minority countries such as Malaysia, Indonesia, Kuwait, and United Kingdom (UK). The objective of the scheme is to collect money from the public and to channel the funds for upgrading the society's welfare. In general, the modus operandi of the WSS is as follows:

- i. Any specified institutions appointed by the government may establish this scheme and become the trustee or *Mutawalli*.
- ii. The appointed trustee will issue *Waqf* shares in different values and sell the shares to donors for a specific project.
- iii. The donors can buy the shares, according to their affordability.
- iv. In return, donors will receive cash *Waqf* certificate as an evidence for purchasing the *Waqf* share with a specific amount and project.
- v. The amount collected from the selling of *Waqf* shares will be managed by the trustee in term of investing the funds.
- vi. The revenue generated from the investment will be used for financing the specified projects.

Abdel Mohsin (2013) says that although there is no specific information on how these countries invested the accumulated cash *Waqf*, this scheme has successfully benefited the beneficiaries in term of providing good and services. Gadot (2006) says that in 1990s, WSS gained popularity and had widely been accepted, as a fund raising scheme which, will later be invested (cited from Abdel Mosin, 2013). The revenue generated from the investment has financed different types of projects such as developing existing *Waqf* land, constructing mosques and religious schools,

financing medical facilities, providing physical amenities for the Muslim community and maintaining the religious infrastructure, purchasing vehicle for Da'wah and building religious centre (SIRC Annual Report, 2009).

ii Deposit Cash Waqf Scheme (DCWS)

DCWS is a public *Waqf* which has been practised in Singapore, Bahrain and South Africa (Abdel Mohsin, 2013).

- i. The donors contribute directly to *Waqf* institution by depositing money as cash *Waqf* to a specific bank account.
- ii. The bank is responsible to invest the cash *Waqf* according to the agreement with the *Waqf* institution.

The *Waqf* institution will receive the revenue generated after investment and then will channel to the said charitable areas.

Abdel Mohsin (2013) says that this scheme succeeded in providing different good and services needed by societies. For example, the DCWS started at the beginning of the twentieth century in Singapore. During that time the Muslimin Trust Fund Association, which was founded on 31 August 1904, came into existence when Alsagoff and Co. and other Muslim Businesses and individual contributed cash *Waqf* to be invested. Cizakca (2000) says that the main purposes of this investment are to finance the burials of poor Muslims, give aid to Muslim orphans, and give aid to the Alsagoff School and to finance other charity projects.

iii Compulsory Cash Waqf Scheme (CCWS)

CCWS is a public *Waqf* which has been practised only in Singapore. Abdel Mohsin (2013) demonstrates the modus operandi of CCWS as follows:

- i. The Muslim employee's salary is deducted through the Central Provident Fund (CPF) Board, i.e. Singapore's national social security organisation
- ii. Monthly contributions of between US\$1 and US\$7 are made by Muslim employees. The amounts of deduction are depending on the Muslim employees' monthly gross salary.
- iii. The salaries of the Muslim employees are automatically deducted through an automatic check-off system, i.e. the Muslim employee salary is deducted by their employer and channel through the CPF, and Majlis Ugama Islam Singapore (MUIS) as the collecting agent.

The collected amount is to finance charitable purposes such as building and maintaining mosques, educational programs, and building Dah'wah centre.

iv Corporate Waqf Scheme (CWS)

CWS is a public *Waqf*, which has been practised in Malaysia, Turkey, India, Pakistan and Bangladesh (Abdel Mohsin, 2013). The founder of the scheme can be an individual or also private and public corporations. For example, in Malaysia, Wakaf An-Nur Corporation Berhad (WanCorp) is the first corporate *Waqf* established under Johor Corporation (JCorp.) Tan Sri Muhammad Ali Hashim (former CEO of JCorp.) practised CWS in year 2006. JCorp established WanCorp and declared RM 200 million of JCorp net assets as *Waqf* to WanCorp. This corporation was established to manage *Waqf* organisations such as TPM Management Sdn Bhd and Larkin Sentral, which had been declared as *Waqf* by JCorp. A periodical article by Bank Muamalat (2012) reported that current accumulated total asset of WanCorp as being RM538 million. Hashim (2012) says WanCorp has operated seventeen (17) clinics entire Malaysia, which have served more than 800,000 patients with a small charge of RM5 that covers doctor's fee plus medicine. The following is the detail of this model.

- i. The first founder, either a private or public corporation known as the mother corporation/main founder will establish an associated *Waqf* institution as the trustee.
- ii. The main founder will ask all its subsidiaries to contribute part of their profit or dividends to the corporate *Waqf* on a regular basis, besides calling other donors such as individuals, companies and institutions contribute cash *Waqf* to this associated *Waqf* institution.
- iii. The Associated *Waqf* institution in its role as the trustee will manage and invest the accumulated cash *Waqf* from the different contributors.
- iv. The revenue generated is then channelled to the specific project after operational expenses have been deducted.

v. Deposit *Waqf* Product Scheme (DWPS)

This *Waqf* scheme is similar to DCWS, but in this scheme, the bank acts as the trustee. Abdel Mohsin (2013) noted that this scheme has been practised by two banks in Bangladesh, the Social Investment Bank Limited (SIBL) and the Islamic Bank Bangladesh Limited (IBBL). The modus operandi for this scheme is as follows:

- i. The founder deposits the cash *Waqf* into cash *Waqf*-based account in IBBL or SIBL.
- ii. Before depositing the money the contributors are provided with a list of beneficiaries from which they can select or the donor can specify their own beneficiaries.
- iii. The banks act as trustee to collect and invest the cash *Waqf* (capital) based on *Mudarabah* contract.
- iv. The revenue generated from the investment is then channelled to the said beneficiaries.

Currently, DWPS is practised in Malaysia. Bank Muamalat Berhad (BMMB) acts as the special trustee appointed by the Selangor state *Waqf* institution. The donors can deposit the cash *Waqf* directly to BMMB account. BMMB is responsible for investment the pooled of deposit money

and return on investment will be channelled for education and health activities. The above five (5) types of Waqf models are currently practised in most Muslim and Muslim minority countries. Each of this model may has its unique strength and contribution. In the context of Malaysia, researchers in the area of Waqf still believe on improving and introducing new sustainable model to boost the real contribution of Waqf. Therefore, following the similar effort of the researcher in the area of Waqf, the present study emerge with new idea of integrating the concept of Waqf and Cooperative into one model.

vi. Cooperative-Waqf Model (CWM)

Cooperative-Waqf Model is proposed with the aim to address two main issues such as encouraging consistency donors of cash Waqf and solve the liquidity problem face by Waqf institution. The following Figure 1 demonstrates the modus operandi of Cooperative-Waqf Model.

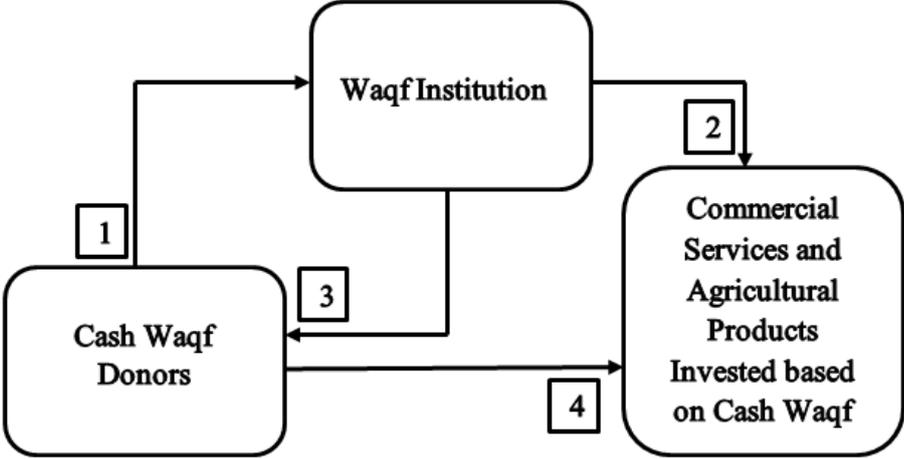


Figure 1: Cooperative-Waqf Model

The following are the detailed explanation of Cooperative-Waqf Model.

STAGE 1: Donor will contribute cash Waqf to Waqf institution via various available methods of payment system such as salary deduction (auto deduction according pre-agreed amount), over the Waqf institution counter (based on individual financial capacity), and issue certificate for a specific development such as mosque, school, etc. (The amount is fixed and it is stated on the certificate and the money is channelled for a specific type of development). The current practised is the role of donors **STOP** at

STAGE 1 and, then the donors do not have any idea how their cash is been utilised and they do not received any incentive besides rewards from Allah SWT and aggregate tax deduction from their income tax. The following stage is fully under the control of Waqf institution.

STAGE 2: Waqf Institution will proceed to development.

STAGE 3: However, the proposed Cooperative-Waqf model, in the additional **STEP 3**, Waqf institution will issue membership card called Sahabat Waqf to the donors who have contributed more than RM 500.00 per annum (it can be a summation of a series donation by the donors).

STAGE 4: The function of this membership is to provide a privilege or at discounted rate to the donors to stay at any Waqf-Based Hotel or purchase any agricultural products which are currently available in Malaysia.

3. Significant of the Cooperative-Waqf Model

Currently, there are no evidence in practise or past literatures that integrate the concept of Waqf and Cooperative in developing Waqf asset. Therefore, the proposed model in this study is considered as a new innovation and integrative model that will be tested in the field of research. This model has a high potential to enhance the check and balance between the donors and Waqf institutions which is currently become one of the main constraint that impedes the development of Waqf assets and decrease the level of trust among the donors. Hence, the proposed model, Cooperative-Waqf model, covers the satisfaction of both parties, which is first to enhance the level of trust of the donors through memberships privilege and, second, the reputation of Waqf institutions will improve through the consistent collection of cash Waqf and development of Waqf assets. Besides the positive implication on the donors and Waqf institutions, Cooperative-Waqf model will reduce the dependency of Waqf institution towards government funding and the successful of this model will assist the government in providing essentials needs to the society which are at a cheaper price compare to the current price.

3.1 Significant to the Society

The Cooperative-Waqf model is expected to encourage the circulation of money among the society in general instead of benefiting only the rich people. The benefit of public wealth circulation can overcome the problems created by capitalist in the society.

3.2 Significant to the Economy

The Cooperative-Waqf model is expected to promote circulation of wealth among the society. The participation of Muslim employees will enhance the economic growth of a nation in a sustainable way instead of depending through internal/external borrowings.

3.3 Significant to the Nation

The Cooperative-Waqf model is expected to enhance the national development with sustainable and harmony. This model reduce the dependency on loan based development and the coming

generation will lead the country in a sustainable way compare to present environment which are highly volatile with interest and inflation.

4. Conclusion

The present study illustrated that large number of Waqf lands in Malaysia still underdeveloped due to the financial and management constraints faced by the Waqf institution. Currently, the method of cash Waqf collection seems to be lack effective to collect huge amount of cash Waqf to develop Waqf lands. In this research, we find there are various steps and action need to be taken by Waqf institution in order to develop potential Waqf. Therefore, the present study proposed a sustainable model of generating cash Waqf which will address the financial constraint and motivate more donors to participate in Waqf based development in Malaysia.

5. Limitation and Recommendation for Future Research

The present study has two (2) limitations; first, the present study is only examine the case of Waqf land development from the case of Malaysia. Second, the paper is without any empirical analysis and the development of the paper is based on the existing literatures which discussed various existing models of cash Waqf which practised in Muslim countries. Recommendation for future research is such as conducting a survey to donors and interviews to gauge the intentions of the stakeholders in using the model.

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ACMASS-0041

Application of Structural Equation Modeling to Evaluate Chinese Peer-to-Peer (P2P) Lending Risk: The Customers' Perspective

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Peer-to-Peer (P2P) lending are developing so fast in China. At the end of 2016, the transaction amount of Peer-to-Peer (P2P) lending is about 2.8 trillion RMB (Iresearch report), with a year-on-year growth of 137.59%. And the number of the transaction amount is continuing increasing. In China, the P2P lending services become more and more important. But P2P lending risk of the customers' perspective related study is few in China. So, the authors would like to reveal the customers' perspective risk of P2P lending in China. Through the study of various literature and carrying out interviews with experts about P2P lending, the authors collected 205 valid questionnaires from customers of P2P lending and then used Structural Equation Modeling (SEM) to analyze the data; illustrate the relationships among information security, service quality, industry's management situation, legal rights defense and consumers intention; and finally establish P2P lending evaluation model. And model fit is accepted. The research findings would help P2P lending corporations advance online platform development, and improve further studies in P2P lending area.

Keywords: Peer-to-Peer (P2P) lending, Risk, Customers' Perspective, Structural Equation Modeling (SEM), China

ACMASS-0116

Cash Holding Deviation and Speed of Adjustment of Indonesian Firms

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Abstract

1. Background/ Objectives and Goals

Every corporate need cash. Corporate cash holdings always involve a trade-off between benefits and costs. Companies must hold cash on hand for different reasons such for the requirement of liquidating current assets to make payments of the companies transactions, dealing with unpredicted events, and so on. On other hand liquidity has high potential costs that will reduce corporate profit. Cash is unproductive asset that have small added value. In this this study has some specificity. First, this research analyse determinant of optimal cash holding in Indonesian Firms. The Second this research is to identify speed of adjustment to reach the targeted cash holding of Indonesian firms.

2. Methods

This research use panel data of Indonesian non-financial listed firms in Indonesian Stock Exchange during the period 2000-2015 with dynamic model. Cash holding of the firm may deviate from the targeted, it is because of adjustment cost. Panel regression analysis has been conducted to determine the major factors affecting cash holdings. these variable are investment opportunity, Firm Size, Leverage, Profitability, Dividend, and Asset tangibility. The Formula is $CH_{i,t} = f(\text{Inv, Size, Lev, Prof, Div, Tang})$. The adjustment of the firms for target level cash cannot be immediately achieved due to the associated adjustment costs. The speed of adjustment equation are: $CH_{i,t} - CH_{i,t-1} = \alpha_i (CH_{i,t}^* - CH_{i,t-1})$ or $CH_{i,t} = (1 - \alpha_i)CH_{i,t-1} + \alpha_i CH_{i,t}^*$

3. Expected Results/ Conclusion/ Contribution

Corporate cash holdings always involve a trade-off between benefits and costs. Companies must hold cash on hand for different reasons, but on other hand, over cash holding have consequences. On other hand liquidity has high potential costs that will reduce corporate profit. Cash is unproductive asset that have small added value. The companies in Indonesian need to balance of the benefit and the consequences of cash holding. The optimal Cash holding in Indonesia determined by firm characteristics.

Firms with higher investment opportunities are expected to hold larger amounts of cash to reduce the likelihood of forgoing these investments. Firms with greater investment opportunities hold cash to reduce financial distress costs. Both of these arguments are consistent with trade-off

theory, and therefore, we expect a positive relation between investment opportunities and cash holdings. Pecking order theory suggests that investment opportunities increase a demand for accumulating cash, thus leading to a positive relationship between investment opportunities and cash holding.

Firm Size has positive relationship with cash holding. Larger firms are better diversified and have a lower financial distress. The research confirm the pecking order theory that predicts positive relationship between the firm size and corporate cash holding because large companies usually do better compared to small companies and for that reason, they must have extra cash, thus leading to a positive relationship between size and cash holding.

The companies that have fixed asset can be used as collateral, thus higher borrowing reduces the need of holding cash, which means the increase in capital expenditures reduces cash holdings. Thus, we assume a negative relation between cash holdings and asset tangibility.

Dividend payout also significantly affects the cash holding level. The companies that paying dividend showed held a lesser amount of cash. These studies found the negative relation between dividend payment and cash holdings.

Leverage have positive relationship between with cash holding. According to the trade-off theory, highly leveraged firms are likely to face financial distress and go into bankruptcy, and therefore they are expected to hold more cash to reduce this likelihood. Debt maturity influences the level of cash holdings because the use of more short-term debt forces the company to renew it on periodic basis; it puts pressure on the companies to hold higher amount of cash, in case of repayment or insolvency.

Profitability firms can have positive relationship with cash holding, because based on pecking order theory, profitability firms can add internal financing. The increasing in internal financing can be invested in cash. So there is positive relationship between profitability and cash holding.

Firms in Indonesia constantly need to adjust their cash levels to achieve the level of optimal cash holding. The speed of adjustment of Indonesian firm on the period 2000-2015 is 0.69, less than 1. It means that the companies in Indonesia need more than one year to reach the targeted cash holding.

Keywords: *Cash Holding, Speed Of Adjustment, Target Cash Holding,*

1. Background/ Objectives and Goals

Every company can not avoid to have cash. Companies must hold cash on hand for different reasons such for the requirement of liquidating current assets to make payments of the companies transactions, compensating balance for loan or service provided, dealing with unpredicted events, and speculation to take advantage of bargain, to take discount and so on (Brigham, 2008). Corporate liquidity enables firms to invest, thus avoiding transaction costs from debt and equity issuance and associated financing costs. Cash holdings enable firms to invest even when they are financially constrained (Almeida, Campello, and Weisbach, 2004) and can guarantee long-term investments such as research and development (Brown and Petersen, 2011). Finally, cash holdings can serve as a defense mechanism against possible takeovers (Faleye, 2004).

On other hand liquidity has high potential costs that will reduce corporate profit. Cash is unproductive asset that have small added value (Brigham, 2004). Cash holdings allow opportunistic managers to invest in negative net present value projects or spend firm resources to their own benefit thus destroying shareholder wealth (Dittmar and Mahrt-Smith 2007; Pinkowitz, Stulz, and Williamson 2006 in Lozano & Durán, 2016). Opler et al. (1999) states that there are trade-off between the marginal costs and benefits of holding liquid assets determines a firm's optimal cash holdings. This refer on trade off theory suggests that firms set their optimal cash holding level by considering the trade-off between the marginal benefits and the costs of keeping such liquid assets (Al-Najjar and Belghitar, 2011).

Different studies which analyzed cash holdings and its determinants with reference to target level of cash holdings are consistent with studies on leverage (Jani *et al.*, 2004). By considering transaction costs, agency problems and information asymmetry, the debate on corporate cash holdings features trade off theory (Baxter, 1967 in Hanafi, 2008) and pecking order theory by Myers (1984) and free cash flow hypothesis by Jensen (1986) very prominently.

On the dynamic trade-off theory of cash holding, corporate are periodically adjusted to the target level. Target level of cash holding is estimated. Target cash holding determined by many factors. Rehman (2015) Cash Holding of China Firms determined by firms and industry characteristic. Chang, Deng & Wang (2016) stated that the firms cash holding determined by characteristic and economic condition. Uyar & Kuzey (2014) add internationalization for factors that determined the cash holding of the firms.

In this This study has some specificity. First, this research analyse determinant of cash holding in Indonesian, using firms characeristic. The Second this research to identify speed of adjustment to the targeted cash holding of Indonesian firms.

2. Methods

This research use panel data of Indonesian non-financial listed firms in Indonesian Stock Exchange during the period 2000-2015 with dynamic model. Cash holding of the firm may deviate from the targeted, it is because of adjustment cost. Panel regression analysis has been conducted to determine the major factors affecting cash holdings. these variable are Growth, Firm Size, Leverage, Profitability, Dividend, and Asset tangibility. The Formula is $CH^*_{i,t} = f(\text{Growth, Size, Lev, Prof, Div, Tang})$. The adjustment of the firms for target level cash cannot be immediately achieved due to the associated adjustment costs. The speed of adjustment equation are:

$$CH_{i,t} - CH_{i,t-1} = \alpha_i (CH^*_{i,t} - CH_{i,t-1})$$

or

$$CH_{i,t} = (1 - \alpha_i) CH_{i,t-1} + \alpha_i CH^*_{i,t}$$

3. Results

Companies that observed in this research are non financial company that listed in Indonesian Capital Market, in 16 years observation period, unbalance sampel, so that the number of observations is 4654. The descriptive statistics of a sample of firms in this study are listed in Table 3.1.

Table 3.1. The Descriptive Statistic

	CH	INV	SIZE	TANG	DIV	LEV	PROF
Mean	0.04753	1.062527	20.34931	0.027725	0.268673	0.58191	0.077267
Median	0.026238	0.095344	20.46469	0.004297	0	0.509653	0.070344
Maximum	0.81587	1652.413	26.03005	0.960881	60.77076	14.73516	12.98195
Minimum	0	-0.948747	11.17337	0	0	0.000279	-3.216874
Std. Dev.	0.064597	27.88652	1.989946	0.072235	1.66135	0.589459	0.262292
Observations	4654	4654	4654	4654	4654	4654	4654

CH=cash holding; INV=investment opportunity; SIZE= size of the firm; TANG=tangibility;

DIV=divident payment; LEV=leverage; PROF=profitability.

As that have stated before, companies must hold cash on hand for different reasons, but on other hand, over cash holding have consequences. Ferreira and Vilela (2004) pointed out three benefits of cash holdings: it reduces the possibility of financial distress; allows the pursuance of investment policy when financial constraints are met; and minimizes the costs of raising external funds or liquidating assets. Keynes (1936) in Rehman & Wang (2015) argued that three motives drive the demand for money. These motives are transactionary, precautionary and speculative motives. Cash is held by corporation to meet day to day demand and to manage operational. This demand for cash is raised due to the difference in cash inflow and cash uotflow. This motive for cash termed as transactionary motive. Money is also held a safety margin for some unforeseen

events and future uncertainties. In speculative motive money is held by corporations for earning profit. However holding excess cash has its costs. This cost is the opportunity cost. Holding excess cash may leads to agency conflicts between firm's management and sharehoolder (Jensen, 1986). Censentrating on the determinant factors of holding cash, manager can be able to make necessary adjustments about the level of cash to attain an optimal cash level. Optimal cash holding was etimated. Estimation optimal cash holding using panel regression analysis has been conducted to estimate optimal cash holding that is determined the major factors affecting cash holdings. These variable are investment opportunity, Firm Size, Leverage, Profitability, Dividend, and Asset tangibility. The Formula is $CH^*_{i,t} = f(\text{Inv, Size, Lev, Prof, Div, Tang})$.

Identify Determinant of Cash Holding

Testing of the factors that determine the cash holding based on a static model to estimate the targeted cash holding, as shown in Table 3.2. The results of this analysis based Panel Least Squares, Cross-section fixed (dummy variables). This study follow refer to the study of Rehman & Wang (2015); Uyar and Kuzey (2014); Shabbir, Hashmi, & Chaudhary, (2015), that the firm characteristic determine the firm's cash holding, but in this study is not include board characteristic. The analysis firm characteristic that determine the cash holding listed in Table 3.2. are:

a. Investment Opprtunity

Firms with higher investment opportunities are expected to hold larger amounts of cash to reduce the likelihood of forgoing these investments. This analysis tell that investment opportunity has negative relationship with cash holding, but not significant. This study is not consistant with study of Ferreira and Vilela (2004) in Uyar and Kuzey (2014) argue that firms with greater investment opportunities hold cash to reduce financial distress costs. Both of these arguments are consistent with trade-off theory, and therefore, a positive relation between investment opportunity and cash holdings. Pecking order theory also suggests that profitable investment opportunities increase a demand for accumulating cash, thus leading to a positive relationship between investment opportunities and cash holding.

Table 3.2 Results Analysis of Factors Determining Optimal Cash Holding

Variable	Coefficien t	Std. Error	t-Statistic	Prob.
C	-0.095476	0.019264	-4.956209	0.0000
INV	-2.58E-05	2.95E-05	-0.876264	0.3809
SIZE	0.007049	0.000936	7.530366	0.0000
TANG	0.010652	0.014184	0.750996	0.4527
DIV	-0.000785	0.000506	-1.551101	0.1210
LEV	-0.001767	0.001883	-0.938602	0.3480
PROF	0.008163	0.003258	2.505218	0.0123
R-squared	0.395196	Adjusted R-squared		0.337156

b. Firm Size

Larger firms are better diversified and have a lower financial distress (Rajan and Zingales, 1995). These factors suggest a negative association between firm size and cash holdings. The analysis tell that Size has positive relationship with cash holding, and significant, support the pecking order theory that predicts positive relationship between the firm size and corporate cash holding because large companies usually do better as compared to small companies and for that reason, they must have extra cash (Opler et al.,1999).

c. Asset Tangibility

The companies that have fixed asset can be used as collateral, thus higher borrowing reduces the need of holding cash, which means the increase in capital expenditures reduces cash holdings (Dittmar et al., 2003). Firms with more tangible assets are expected to hold less liquid assets since tangible assets can be sold in case of cash shortage, and they can be used as collateral when issuing debt (Drobetz and Grüniger, 2007). Thus, we assume a negative relation between cash holdings and asset tangibility. The analysis tell that asset tangibility has positive relationship but not significant with cash holding.

d. Dividend

Dividend payout also significantly affects the cash holding level. The companies paying dividend are generally observed to be less risky and therefore, the precautionary motive of cash holding is weak for dividend paying companies as compared to non-dividend paying companies (Afza &Adnan, 2007; Opler et al.,1999). The analysis tell that Dividend has negative relationship but not significant with cash holding. The analysis support in sign with the study of Shabbir, Hashmi, & Chaudhary (2015). The companies that paying dividend showed held a lesser amount of cash. These studies found the negative relation between dividend payment and

cash holdings.

e. Leverage

According to the trade-off theory, highly leveraged firms are likely to face financial distress and go into bankruptcy, and therefore they are expected to hold more cash to reduce this likelihood (Ferreira and Vilela, 2004; Al-Najjar and Belghitar, 2011; Kim et al., 2011). Debt maturity influences the level of cash holdings because the use of more short-term debt forces the company to renew it on periodic basis; it puts pressure on the companies to hold higher amount of cash in case of repayment or insolvency. So there is a positive relationship between leverage and cash holding (Guney et al., 2007). The analysis tell that leverage has negative but not significant relationship with cash holding. This study support the pecking order theory suggest when the investment greater than the retained earnings, the company will get external financing, the debt level will be growth and cash holding will be fall. So there is a negative relationship between leverage and cash holding (Uyar and Kuzey, 2014).

f. Profitability

The analysis tell that Profitability has positive and significant relationship with cash holding. Consisten with study of Shabbir, Hashmi, & Chaudhary (2015) that stated profitability can have positive and negative relationship with cash holding. This study also support Dittmar et al., 2003, pecking order theory expects a positive relation between profitability and cash holding because cash is a result of financing and investment activities. This study do not support the trade-off theory, that tell about there is negative correlation between cash holding and profitability; because a profitable firm has sufficient cash flows, and the firms will use the cash to invest in another asset to avoid the underinvestment problems Kim et., al (1998).

Speed of Adjustment to the Targeted Cash Holding

Based on the dynamic trade-off theory of cash, the optimal level of cash is not the same across firms or over time. Firms constantly need to adjust their cash levels to achieve the level of cash that balances the benefits and costs of liquidity in each specific scenario and at each point in time.

When cash holding is viewed as a target-adjustment model, corporate cash holdings are periodically adjusted to the target level or optimal level. In this sense, The firms are not always at their optimal level, they may carry high cash balances or low cash balances. Firms with cash holdings higher than the optimal level are prone to having different financial characteristics from those with an optimal level or insufficient cash holdings. Firms may hold large amounts of cash when seeking financial flexibility to avoid the need to raise outside capital. Of course, they also risk accumulating cash in excess. In this case, the cost of cash holding can be too high when the firm loses investment opportunities, when managers have the incentive to accumulate cash to

invest in negative net present value projects, or when the firm suffers from organizational inefficiencies that destroy shareholder wealth (Jensen 1986).

The empirical evidence indicates that excess cash accumulation can be expensive for shareholders (Opler et al. 1999). In contrast, firms can also carry less than optimal cash balances. This kind of firm sacrifices its financial flexibility by not accumulating sufficient cash due to the associated high agency costs. These firms can easily resort to capital markets but must take the risk of not being financially flexible and, in extreme situations, the higher risk of bankruptcy. The target ratio adjustment of both types of firms will be faster or slower depending on opportunity costs (Lozano & Durán, 2016).

The adjustment of the firms for target level cash cannot be immediately achieved due to the associated adjustment costs. Equation $CH_{i,t} - CH_{i,t-1} = \alpha_i(CH^*_{i,t} - CH_{i,t-1})$ implies the following relationship between current cash holding and cash holding at time $t-1$. Thus the term speed of adjustment take value 0 to 1. If $\alpha=0$ it means $CH_{i,t} = CH_{i,t-1}$, This mean implies that the firm want to remain with the same level of cash due to high cost of adjustment to achieve a target level corporate cash holdings. However if $\alpha=1$ then $CH_{i,t} = CH^*_{i,t}$, this refers that in such a case a firm will opt to achieve its target level of cash holding immediately.

Based on analysis speed of adjustment company is Indonesia to reach the optimum cash holding, with Panel Least Square, Panel Unbalance observation, we can see that Indonesian firms need to adjust their cash levels to achieve the optimal level of cash holding, and the speed of adjustment are listed in Tabel 3.3. The Tabel 3.3 tell that speed of adjustment to the targeted cash holding company in Indonesia are 0,69. It mean that cash holding of Indonesian firm has not achieve the optimal cash holding, so they need time more than one year to reach the optimal cash holding or holding targeted. If we compare with speed adjustment to the targetes cash holding in another countries are adjustment coefficient in China for state owned enterprises is 0,42, while for non state owned enterprises is 0.47. This means that state-owned enterprises in China takes relatively faster to adjust to their targeted cash levels (Rehman & Wang, 2015). This speed adjustment is relatively faster that found by ozkan and ozkan (2004) for UK's firms is 0,605 and for French and Japanese firms is 0.0561.

Tabel 3.3 Analysis Speed Of Adjustment Company In Indonesia To Reach Optimum Cash Holding Or Cash Holding Targeted

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000809	0.005226	-0.154802	0.8770
CH _{t-1}	0.314542	0.015175	20.72779	0.0000
CHEST	0.713328	0.109681	6.503654	0.0000
R-squared	0.450534	Adjusted R-squared	0.398369	

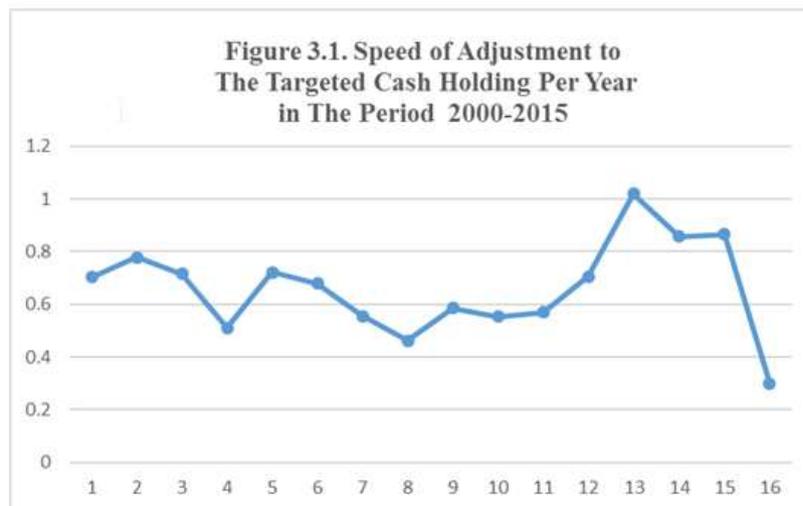
CHt-1=cash holding last yeear; CHEST= cash holding targeted

This analysis mean that firms in Indonesia in 16 year on the avarage speed of adjustment to reach the optimal cash holding are 0.69. It mean the firms need 17 months to reach the targeted leverage. The speed of adjustment per year of Indonesian firm that can be seen in Table 3.4.

Table 3.4 Speed of Adjustment to The Targeted Cash Holding Per Year

No	Year	α	Speed of adjustment
1	2000	0.295982	0.704018
2	2001	0.222285	0.777715
3	2002	0.283884	0.716116
4	2003	0.490031	0.509969
5	2004	0.278447	0.721553
6	2005	0.321645	0.678355
7	2006	0.444942	0.555058
8	2007	0.539053	0.460947
9	2008	0.414102	0.585898
10	2009	0.44667	0.55333
11	2010	0.430152	0.569848
12	2011	0.294218	0.705782
13	2012	-0.019169	1.019169
14	2013	0.14156	0.85844
15	2014	0.13434	0.86566
16	2015	0.701184	0.298816

The speed of adjustmet to the targeted cash holding of the Indonesian per year in 16 years can be seen in the figure below:



This figure tells there is a downward trend in the speed of adjustment to the cash holding targeted in 2008 and 2015. The global economic crisis that occurred in 2008 actually started in the economic crisis of the United States which then spread to other countries around the world, including Indonesia. The American economic crisis is increasingly creeping into the global economic crisis because in fact the world's economy is connected to each other, events that occur somewhere will affect elsewhere. In 2008 showed a decrease in the speed of adjustment to the targeted cash holding, but it soon showed afterwards showing an increasing direction. This is likely because Indonesia is not so affected by the 2008 crisis, one of which is because the proportion of Indonesian exports has only 29% of export ratio. This condition actually saved Indonesia from the influence of global economic crisis. In 2015 showed a drastic decline, due to global pressure, Indonesia experienced an economic slowdown. Indonesia's economic growth in 2015 amounted to 4.79 percent, the lowest rate of economic growth for 6 years, the weakening rupiah exchange rate that has touched the level of Rp 14,000, - per US dollar was more triggered by external conditions. Senior Deputy Governor of Bank Indonesia said there are three external factors that become the main 'destroyer' of the national economy. First, the price of plantation commodities and mines slumped in the international market; China's economic slowdown, and the strengthening of the US dollar against almost the currencies of all countries.

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Intellectual Property Protection for Farming Cropping Patterns and Rice Farming Products in Supporting Food Security

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Abstract

The Republic of Indonesia is the largest archipelagic country in the world with nearly 17,000 islands in an area of 1,826,440 square km. The largest islands are Kalimantan, Papua, Sulawesi, Sumatra and Java. Most of the smaller islands are not yet inhabited and even only the island of Java alone occupies nearly 60% of the total population in Indonesia which recorded 306,264,595 people in 2005 (Central Bureau of Statistics, 2006).

Indonesia which has bio mega diversity coupled with local wisdom of society in conducting agricultural cropping patterns and rice farming products has a very big potential, or should it be called risk, to be exploited by foreign companies. As an illustration, an incident occurred in Sulawesi where local farmers were persuaded by Monsanto, the largest seeds multinational company in the world, to switch from the rice seeds usually farmed there to the cotton seeds from Monsanto. Monsanto promised to buy the harvested cotton products at a high price. However, the harvested products were eventually said to not meet Monsanto's standards and were not purchased. Another example of problems that occur to Indonesian farmers is criminalization over traditional farmers by PT BISI as a subsidiary of Monsanto in Indonesia.

This research's objective is to study what types of cropping patterns and their each subsequent rice farming product usually used in Indonesia, what existing laws and regulations that are related to the protection of such patterns and products in Indonesia, and which among the patterns and products can be an immense potential to support food security in Indonesia.

Key words: cropping pattern, rice farming product, intellectual property, food security.

1. Introduction

The Republic of Indonesia is the largest archipelagic country in the world with more than 17,000 islands in an area of more than 1,9 million square km.¹ The largest islands are Kalimantan, Papua, Sulawesi, Sumatra and Java. Most of the smaller islands are inhabited and even only the island of Java alone occupies nearly 60% of the total population in Indonesia which recorded 306,264,595 people in 2005.²

Indonesia consists of 34 provinces. Every province has its own special products that generate income per capita (gross domestic product/ GDP) by 6% in 2005.³ GDP comprises the private and governmental expenditures. Contribution of agriculture and plantation sector amounted to US \$ 2,438,500 and other related sectors amounted to US \$ 5,400,000.⁴ However, it turns out from these amounts, there are a lot of agricultural/ plantation products that are managed by Multinational Corporation (MNC) or Transnational Corporation (TNC).⁵

In relation to the Richard Cook, a former analyst with the US Federal Government, in his "*Crisis In Food Prices Threatens Worldwide Starvation: It Is Genocide*",⁶ states that it is the time for the country to reaffirm the importance of a distinct policy in agricultural sector, so that the food production will not be controlled by agribusiness companies and financial capitalists internationally through MNC.

According to the annual report issued by *The South Center* in 2006 that 75% of cereal products (grains) is controlled by 2 MNC, 50% of banana production and trade is also controlled by 2 MNC, 83% of cacao product and trade by 3 MNC, 85% of tea products and trade by 3 MNC, 83% of sugar products and trade by 3 MNC, and pesticide and supporting agricultural/ plantation products are controlled by 4 MNC.⁷

One of the giant MNCs is Monsanto a leading biotechnology company from the US which has a production capacity, mainly in food crop seeds, that has amounted to US \$ 6 billions in 2005-2006 to US\$ 20 billions in 2010.⁸ Nowadays, Monsanto has mastered 91% of the total

¹ <http://data.un.org/CountryProfile.aspx?crName=indonesia>

² Central Bureau of Statistics, Annual Report, Jakarta, 2005, p.3

³ Asean Development Bank (ADB), Indonesian Report, Manila, p. 23

⁴ *Ibid.*

⁵ Defined by John H. Dunning as: "A multinational enterprise is one roommate undertakes foreign direct investment, the which owns or controls income assets in more than one country and in doing so produces goods and services outside its country of origin ie. Engages in international production". Rahmi Jened, *Teori dan Kebijakan Hukum Investasi* (Theories and Policies of Investment Law), Prenada Media, Jakarta, p. 133 (quoted from Ray August p. 202)

⁶ Kompas, Global Food Crisis, Jakarta, 8 Agustus 2008, p.1

⁷ <https://www.southcentre.int/>

⁸ *Op.Cit.*, ADB, Indonesian Report, Manila, p.23

area under cultivation of organic crops around the world together with Sygenta and Aventis Corp Science, which each holds 287 patents, 173 patents and 77 patents on transgenic seeds of food plants.⁹

There seems to have been a lot of acts of exploitation and abuse of intellectual property rights (IPR) by this MNC, which ultimately damage the farmers. For instance, an incident occurred in Sulawesi where local farmers were persuaded by Monsanto, the largest seeds multinational company in the world, to switch from the rice seeds usually farmed there to the cotton seeds from Monsanto.¹⁰ Monsanto promised to buy the harvested cotton products at a high price.¹¹ However, the harvested products were said to not meet Monsanto's standards and were not purchased because of their high water content.¹² The farmers did not gain profit from farming the cotton and instead, they suffered a huge loss as the rice farming period had passed and the potential economic gains they could have achieved was gone. Another instance was criminalization over local farmers by BISI Ltd. Co., a subsidiary of Monsanto in Indonesia. BISI brought their case before the court with claims that traditional farmers in Jember and Kediri (in East Java Province) had contaminated their crops which had been protected by Plant Varieties Rights (PVR).¹³

Such instances show how important intellectual property rights (in this case patent and PVR) are. Protection for cropping patterns and rice products is very crucial for the world's needs of food, fibers and as well as of raw materials used in different industries. Nevertheless, the need of food is, and if still is not, should be the paramount objective of such protection. It is estimated that by 2020 the world population will reach 80 billions and 83% of them live in developing countries.¹⁴ Therefore, annual food production will increase to 3,000 *metric tons* from currently 1,800 *metric tons*.¹⁵ The annual demand of food production will continue to rise while in contrast, agricultural land will continue to decline as a result of the construction of housing and industrial purposes among others. Besides that, the increase in the demand for flower species plants and other ornamental plants for their visual or entertainment value also becomes the cause of the decrease

⁹ *Op.Cit.*, <https://www.southcentre.int/>

¹⁰ Discussion with *PT. Pegadaian (PERSERO)*, the state-owned financial services company with main services in pawning, during field research about the grain pledge in the area of Bulukumba and Makassar (The Province of South Sulawesi); Rahmi Jened, "Potential and Protection on Intellectual Property of *PT. Pegadaian (PERSERO)*", Jakarta, 2008. It can also be seen on the news "45 Officers of Ministry of Agriculture Involved in Monsanto Case", www.antikorupsi.org/en/content/45-pejabat-deptan-terlibat-kasus-monsanto, also at Liputan 6, Metro TV, "The Department of Agriculture Banten Reject Monsanto Transgenic Cheap Seeds Offers, Business Coverage", Ridho Syaiful Ashadi, "Imperialism in Corn Field"

¹¹ *Ibid.*

¹² *Ibid.*

¹³ *Ibid.*

¹⁴ Graham Dutfield, Plant Variety Protection, Teaching Material, European Community and ASEAN Intellectual Property Cooperation Program (ECAP)II, Queen Mary Intellectual Property Research Institute University of London, London UK, 2005, p. 2

¹⁵ *Ibid.*

in agricultural productivity. On top of that, the research and development of new plant varieties to sustain food security and be commercially successful requires a long and difficult process. It takes a lot of time, energy and money. All that can lead to a process of 10 to 20 years.

2. Methods

The importance of this study is to provide a solution on the protection of cropping patterns and rice products in order to contribute some ideas for the decision makers for creating policies and regulations that support the national food security.

The type of this research is normative juridical and empirical legal. Normative juridical research is conducted by reviewing and analyzing laws and regulations pertaining to the protection of cropping patterns and rice products. It uses statutory approach, conceptual approach and comparative approach. Empirical legal research is conducted by field research.

The location of the research is selected agricultural areas in the provinces of East Java, Bali, Central Java and West Java. These selected areas are dense with both, farms and thus, the knowledge related to farming.

Primary data collection is done by field observation and structured interview. Secondary data collection is done by inventory and categorization based on card system. All data were analyzed qualitatively and presented descriptively.

The research problems are: 1. What types of cropping patterns and their each subsequent rice product that are used in Indonesia? 2. What existing laws and regulations pertaining to the protection of cropping patterns and rice farming products? 3. What are the types of cropping patterns and rice farming products that can be an immense potential to support Indonesian food security?

3. Results

3.1 Types of Cropping Patterns and Their Each Subsequent Rice Product

From the results of field research, it is known that rice products can be planted through different types of cropping patterns, they are:¹⁶

- (a) Conventional cropping pattern;
- (b) System of Rice Intensification (SRI), whether conventional or organic;
- (c) *gogo rancah*;
- (d) poly-culture;

¹⁶ Interview with Koos Kuntjahjo, S. H., Agriculture Business Unit Manager of *Induk Koperasi Purnawirawan ABRI (INKOPEPABRI)*, the Retired Indonesian Armed Forces' Parent Coop Institution, 8 April 2016.

- (e) *mina padi*;
- (f) *jajar legowo*;
- (g) *hazton*;
- (h) organic supplement plant (OST); or
- (i) *ratoon* cropping pattern.

Land management for conventional cropping pattern uses human power, animal or tractor with the orders of plowing the soil, raking it and then leveled it. In conventional farming is, there no special technique for selecting seeds. Seeds just soaked in water for 1 day 1 night and they are ripened for 2 days and 2 nights. Then, the seeds are ready to be seeded, unnecessary part is removed and cleaned of soil attached to the roots and the leaves are cut and divided into portion to be ready to be planted. Seeds must be rested for 1 hour to 1 day before planting. On conventional farms seeds that are ready for planting are 18-25 days after sowing.

SRI method is a cropping pattern where the soil is raked and then fertilized using organic fertilizers. In the SRI method there is special technique to select seeds, which is using a salt solution. Water is poured into a jar and an egg is inserted. Then salt is added into the water and it is stirred slowly until the egg floats (as a marker of solution ready for use). Then the seeds to be planted incorporated into the salt solution. The seeds that sink are good quality seeds. Seeds are well taken, set aside and cleaned with water so the salt solution does not stick. Further, the seeds ripened for 1 day and 1 night (no more), and the seeds are ready for nursery. SRI method can be done by using a container with a seed between 5-10 kg /ha together with soil attached to the roots and be planted directly in the field (less than 30 minutes seedlings). Seeds ready for planting are the ones 7-12 days after sowing. One of the planting holes contains 1 seed plant. Seedlings are planted at a depth of 2-3 cm with a horizontal form-shaped root L. There is a good drainage system in each rice plot.

Gogo rancah is upland paddy cultivation on dry land. Upland rice paddy fields are grown directly on dry land. Farming the paddy fields done without cultivating the land (without being hoed), but enough with making holes with '*tugal*'. *Tugal* is a wooden stick with a diameter of 5-10 cm which is sharpened at the edges. This stick is used to make the planting hole. In *gogo rancah* water control is by means of a simple drainage to facilitate the conversion of water from dry to wet, especially on heavy textured soils. Arrangement of plants should be in a row and rectangular. Into this planting hole is inserted between 3-4 grains of rice seed. Furthermore, plants are allowed to grow naturally. Field rice is usually long-lived (in rice) that is between 5-6 months, with average production about 3-4 tons per hectare. Harvest and post-harvest management is made in line with the local economy and social traditions.

Polyculture (also called intercropping) is planting of two crops together on the same plot of land or planting them with short time intervals in between. Intercropping is a cropping system in

sequence between annual crops and annual crops. Intercropping is aimed at making the best use of the environment (nutrients, water and sunlight), utilizing the excess fertilizer provided to the main crops, increasing the income of each land area, providing income before the main crops produce to obtain maximum production. There are various polyculture cropping methods such as multiple cropping, relay cropping, mixed cropping and sequential cropping.

Mina padi, in principle, is the same cropping pattern as polyculture, but it creates some sort of fish pond. It forms a combination of rice planting area with fish pond on the sidelines of the bed or irrigation.

Jajar legowo farming cropping pattern as follows first Every two lines interspersed with one blank line with a width of twice the spacing, and at a spacing in a row that extends in shorten to half the spacing in the row. It can also be every three rows of rice plants interspersed with one empty row with a width of twice the spacing, and for planting distance of rice crops half-spaced into a row. Every four rows of rice crops interspersed with one empty row with a width of twice the spacing of the plant, and for the spacing of rice crops that are marginalized into half the spacing in the row.

Hazton comes from the word taken from the inventors' names: Hazairin and Anton. At the time of inventor doing research not through testing varieties with most tillers, plant spacing settings, the effect of fertilization, soil processing and so on. However, Hazairin and Anton used a simple initial hypothesis of how to multiply uniform and simultaneous productive breeds when removing the panicles. The research was conducted by planting seeds with the amount of 1, 5, 10, 20, 30 and 40 per planting hole. And the results show the best result is the number of seeds 20 - 30 per hole. The secret is due to the adaptation of rice physiology, where with the number of 20-30 seedlings each of the rice seedlings in the middle of the clump will be pinched and tend to be the main breed productive and produces the prime panicles. While the seeds that are on the edge of the clump will produce 1-3 tillers that are all productive. So the conclusion: with the number of seeds 20 - 30 per hole will produce productive till about 40 -60 tillers / clumps so that the number of sires and productive tillers that will result in increased productivity and production.

F1 rice seeds or Superior Hybrid Varieties (VHU) and which have a high specific gravity. The method of selecting specific gravity is carried out by a special method which begins to separate the seed by bucket fill with 8 liters of water and then insert 1 raw chicken egg to measure the amount of salt that must be entered bit by bit and stir until dissolved, but the chicken eggs do not break. Stop Adding salt when the eggs are floating, take the eggs and insert the rice seed that has been selected into the salt solution stir briefly then let stand. After the stable and no longer the

possibility of floating seeds, just do the separation. Remove all floating seeds, while drowned seeds are taken and cleaned with plain water to avoid getting any more water.

Ratoon rice farming products can only be applied to rice grown in paddy fields. After harvesting the remaining rice cutting remains harvested at an average height of 10 cm from the soil surface or if the dry season is cut to a height of 5cm from the soil surface. The media soil should dry at 0 days. Then the paddy fields are cleared of the remaining harvest straws and the former level of alignment up to 5 days. Rice fields in the water with humid watery conditions.

3.2 The Existing Legal Instruments pertaining to the Protection of Cropping Patterns and Rice Products

Pursuant to Article 33 paragraph 3 of the 1945 Indonesian Constitution, it is stated that: “The earth, the water and all the wealth contained therein are controlled by the state and as much as possible used for the welfare of the people”.¹⁷ The article is the legal politic principle for Indonesia to carry out economic development activities. It is the principle that the state has to uphold in managing its natural resources which is based primarily on agrarian society. Therefore the plants that exist in the earth of Indonesia and how the management and cultivation of its plants is part of The Constitution and should give the right for the people of Indonesia to participate in enjoying the prosperity. Thus, criminalization over local farmers by BISI Ltd. Co., a subsidiary of Monsanto in Indonesia should not have happened. Local farmers use traditional farming methods and the evidence whether they had contaminated crops protected by PVR should have been done more thoroughly. Even if there was a possibility that PVR was breached, there should have been considerations taken carefully related to the fact that the farmers use traditional farming methods.

The cropping pattern and rice farming products are regulated sporadically in various laws and regulations¹⁸ such as the Law number 5 year 1960 on Principles of Agrarian, Law number 11 year 1974 on Waterworks, Law number 5 year 1990 on Conservation of Natural Resources and Ecosystems, Law number 6 year 1994 on Ratification Of The United Nations Framework Convention On Climate Change, Law number 23 year 1997 on Environmental Management, Law number 41 year 1999 on Forestry, Law number 63 year 2002 on City Forest, and including customary law within the communities.

¹⁷ Indonesian Constitution Year 1945

¹⁸ Indonesian Law number 5 year 1960 on Principles of Agrarian; Law number 11 year 1974 on Waterworks; Law number 5 year 1990 on Conservation of Natural Resources and Ecosystems; Law number 6 year 1994 on Ratification Of The United Nations Framework Convention On Climate Change, Law number 23 year 1997 on Environmental Management, Law number 41 Year 1999 on Forestry, Law number 63 year 2002 on City Forest; Law number 12 year 1992 on Plant Cultivation System; Law of number 13 year 2016 on Patent

Unfortunately, these regulations do not expressly state the rights of traditional farmers in relation to management activities and cultivation of their crops either in a conventional way, based on their hereditary practices, based on their self-found practices or based on organic test that have not yet reached sophisticated genetic engineering activities.

Little about the rights of the farmer and his cultivation are listed in several articles of the Law number 12 year 1992 on Plant Cultivation System essentially regulates 3 (three) main points. Firstly it regulates the relationship between the State and farmers. Secondly it states the preservation of the environment and thirdly, the preservation of biodiversity. The national agricultural policy seems to be under review because the existing problems are unlikely to be resolved without a fundamental change in agricultural development policy. Especially with the desire and efforts made for food security will be more severe, if associated with the population. Some of the policies that need to be reviewed are:

- a. Less policies facilitate research on industrial-supported commodities or export-oriented enterprises;
- b. Policies and guidance are less supportive of agro-business and agro-industry developments that are shifting to farmers or rural communities;
- c. Agricultural policy does not support the development of specific commodities from locations or regions that have competitive and comparative advantages.

Considering the lack of regulations governing the cropping pattern and the production of rice including of farmers' right no wonder traditional farmers become a tool for the exploitation of the industry and if it is like that must not be assured farmers with the management of rice crops can support the food security of the state of Indonesia.

3.3 *Ratoon* Cropping Pattern and Its Rice Product in Supporting Food Security

Food security is defined as: "a broad concept used to determine people's general wellbeing.¹⁹ Food security exists when all people at all the times have physical economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for and healthy life" (World Food Summit 1996).²⁰ The Parameter of Food Security are:²¹ (1) physical availability of food, (2) economic and physical access to food, (3) food utilization and (4) stability of the other of three dimensions overtime.

Based on the results of the field study the researchers noticed that the pattern of planting and cultivation of rice through paddy "*Ratoon*" may be able to support the food security given the many advantages. *Ratoon* does not requiring new land, does not need a complex system of

¹⁹ <http://www.fao.org/forestry/13128-0e6f36f27e0091055bec28ebe830f46b3.pdf>

²⁰ *Ibid.*

²¹ *Ibid.*

irrigation, does not require seed lot and the result is almost the same even 90% of as the result of the former native rice harvest paddy organized into “*Paddy Raton*”.

Observed the result of cropping pattern and the management and production of *Paddy Raton rice* for four months in farmer Koos Kontjahjo’s farm, the researcher team is optimistic to register it as a simple patent/ utility model whose ultimate purpose will give exclusive rights to farmer Kontjahjo who wishes to donate this invention in order to be practiced all over Indonesia and while preventing the abuse of this invention by irresponsible parties. The hope with patent rights, then Kontjahjo will be able to contribute to Indonesia and his invention of cropping pattern and management of *Ratoon* rice production able to support the food security in Indonesia.

The invention is already filed under Simple Patent (Utility Model) Registration with agenda number S0020101600 on 11 October 2016 titled, “Management Method of Paddy *Ratoon*”, and the description is as follows:²²

1. Flatten the pieces of the remaining trees harvested paddy has been completed with an average height of 10 cm from the ground (in the dry season was cut to a height of 5 cm), the planting medium dry conditions (age 0 days).
2. Clean the area of rice fields of the remnants of the former hay harvest and smoothing the cut tree trunk rice (age s / d 5 days).
3. Rice filled * with water until humid conditions watery condition.
4. At the age of 7 days sprinkle NPK plus as many as 20 bags @ 25 kg.
5. Conditions humid conditions watery planting medium.
6. Do *ngoyos* or revocation of grass and weeds at the age of 12 days.
7. At the age of 14 days to apply as much as 100 kg urea, planting in the conditioned media remainsin humid conditions watery.
8. Spraying liquid organic fertilizer super 5 bottles (@ 500 ml) per hectare (at 15 days).
9. Keep the growing medium conditions remain humid conditions watery conditions.
Spraying drug improvement
10. 5 tablets mixed with a liquid organic fertilizer super 3 bottles at the age of 19 days.
11. At the age of 20 days to apply *NPK mutiara* 100 kg, condition humid conditions watery planting medium.
12. Harvesting is done when the rice is ripe, aged between 45-60 days.

There are many advantages²³ of *Ratoon* cropping pattern and management compared to others cropping patterns. First, rice principal requires land management, while the *ratoon* rice is not.

²² Simple Patent (Utility Model) Registration, Agenda Number S0020101600, 11 October 2016 titled, “Management Method of Paddy *Ratoon*”

²³ Interview with Koos Kuntjahjo, S.H., *INKOPEPABRI*, 13 Agustus 2016.

Second Activities seedbed or seedling production necessary staple rice crop, rice *ratoon* crop residues principal capitalized after harvest to be managed. Third the amount of water needed in *ratoon* rice is only about 30% of staple rice crop water needs. Fourth, on the main crop planting seedlings, rice *ratoon* without their planting activities. Fifth activity no stitching staple rice crop, while the *ratoon* rice crop just maintain the rest of the staple rice crop. Sixth, the total requirement of urea in staple rice crop as much as 400 kg, while the *ratoon* rice only takes as much as 100 kg, the total requirement of *NPK mutiara* staple rice crop is 200 kg, while the total requirement of rice *ratoon* 100 kg. Seventh, the need NPK plus staple rice crop as much as 625 kg, 500 kg of rice *ratoon*. Eighth, the age staple rice harvests an average of 110 days, while the *ratoon* rice harvest life of 45-60 days. Finally, if staple rice crop yields as much as b kg, *ratoon* rice yields about 90% - 110% of kg, it means Raton production of rice is the same as its staple harvested rice crop.

This registration is regulated by Law of number 13 year 2016 on Patent. Patent is based on patentability requirements as is article 3 article to 5 and not included invention which is prohibited to be patented as stated in Article 9. A simple patent/ utility model is any new invention of development of a process or product that already exists and can be applied industrially.

4. Conclusion

1. There are different variations the cropping pattern paddy farming and agricultural products such as conventional cropping pattern, System Rice Intensification (SRI), *gogo rancah*, poly-cultural, *mina padi*, *jajar legowo*, *hazton*, organic supplement plant (OST), and *Ratoon*.
2. Sporadically there are various legal instruments governing the cropping pattern paddy farming and agricultural products, but unfortunately does not provide adequate protection for farmers and less able to guarantee food security for mutually coordinated and well integrated sector.
3. The cropping pattern paddy farming and agricultural products *Ratoon* would be the solution to food security Indonesia with many of its advantages. The protection of the cropping pattern paddy farming and agricultural products *Ratoon* through the patent system would allow the dissemination of this invention widely through government programs to ensure food security.

Acknowledgments and Legal Responsibility

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Ministry of Agriculture Involved in Monsanto Case”)

Society & Culture & Communication

Tuesday, August 15, 2017

14:45-16:45

Room 1007

Session Chair: *Prof. Seungkoo Kang*

ACMASS-0039

Research on the Retirement Anxiety among Middle-Aged Social Workers in South Korea

Hyuk Im | *Dongseo University*

Jong-Hyun Chae | *Busan Geumjeong Community Senior Club*

ACMASS-0061

A Study on the Relationship between the Gender Characteristics of Consumers and Canned Beer Packaging

Tung-Yi Cheng | *National Taipei University of Technology*

Wen-Dih Yeh | *National Taipei University of Technology*

Ting-Yu Lai | *National Taipei University of Technology*

Hui-Chen Chou | *National Taipei University of Technology*

ACMASS-0114

Factors Correlated with Adoption of Paddy- Livestock Integration Systems in Central Sulawesi Province, Indonesia

Anna Fatchiya | *Bogor Agricultural University*

Istiqlalayah Muflikhati | *Bogor Agricultural University*

Tatie Soedewo | *Bogor Agricultural University*

ACMASS-0044

Economic Value of the Korean Intangible Cultural Heritage Dance: Using Contingent Valuation Method (CVM)

Ji-Young Yoo | *Korea National Sport University*

Hyun-Soon Baek | *Korea National Sport University*

ACMASS-0058

Doujinshi: Understanding Fan-Fiction in Japan's Manga Market

Dong Whan Kim | *Phillips Exeter Academy*

ACMASS-0082

A Comparative Study of Image Presentation Style in Advertising

Seungkoo Kang | *Korea National Open University*

ACMASS-0099

The Social Capital for the Exterlity Development of Sustaible Tourism

Ahmad Ma'ruf | *University of Muhammadiyah Yogyakarta*

Nita Hindayani | *Institute of Public Policy and Economic Studies*

Nazovah Ummudiyah | *Institute of Public Policy and Economic Studies*

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A Sustainability Analysis of Hong Kong's Logistics Sector

Peter K.C. Lee | *The Hong Kong Polytechnic University*

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ACMASS-0039

Research on the Retirement Anxiety among Middle-Aged Social Workers in South Korea

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Abstract

Retirement readiness is a very important issue for middle-aged adults. It could also be a big burden for middle-aged social workers to prepare for their retirement alone. The retirement is a kind of general life events but it brings the biggest changes to their life style of middle-aged people. This study describes patterns of retirement readiness and explores associations between retirement anxiety and psychological well-being among middle-aged social workers. Study subjects consisted of 384 social workers working at the community social welfare agencies in Busan, South Korea. The data were collected by self-administered questionnaires and analyzed using multiple regression model. The major findings of this study were as follows: First, there was only one significant difference by gender regarding to retirement anxiety among social workers. Second, such variables as professional identity, career self-efficacy and social support for social workers were significantly associated with the dependent variable. Third, the anxiety about retirement was, in terms of statistical significance, most affected by their financial readiness levels, and some interaction effects were shown at vocational psychology and social resources. In the conclusion, the authors discussed the implications of the study outcomes, and offered some recommendations to reduce the retirement anxiety of Korean social workers.

Keywords: retirement anxiety, middle-aged, social worker, retirement readiness

1. Background/ Objectives and Goals

The middle-aged adults have to experience the retirement for old age. It will be a very humble for middle-aged social workers to ready their post-retirement life alone (Levinson, 1978). The retirement is a kind of general life events but it brings to the biggest changes for their life style for middle aged adults. The sooner a person prepare their retirement, the better it is for them. If they cannot, Retirement anxiety or stress can lead to serious social-psychological problems relatively (Kahn & Antonucci, 1980).

According to KIHASA (2015) study, the biggest social anxiety is reported as the lack of

preparation for retirement financially. KOSIS (2015) also revealed that the awareness of the old parents is changing. Many analysts are skeptical about whether younger Koreans will be capable of supporting their parents. A low birth rate and general aging trend in the population mean the productive population is poised to assume a growing support burden. And they have addressed that the next generation will be the only generation that will earn less than the current generation in Korean society. The opinion that the care problem in the elderly should be solved by themselves among the middle-aged is increasing from 16.5% in 2008 to 23.8% in 2014.

Therefore, the middle-aged who are not be prepared enough to live without any difficulty seem to be more anxious about the coming old age. Most of the prospective retirees seem to be afraid of retirement and have a fear of retirement because they have a lot of anxiety about adaptation after retirement and the living as the elder. Such as fear can be transferred to be the severe retirement anxiety. Retirement anxiety is a psychological phenomenon that requires management because it can cause a decrease in the productivity of middle-aged workers (Lee, 2014).

It is well known that the job quality of social worker in Korea is generally poor (Kim & Park, 2009). They had been received lower wages compared to the intensity of the labor they carried out (Lee et al., 2014). Recently it is encouraging that there has been a major improvement of labor conditions of social workers improved owing to the establishment of *Enforcement Decree of the treatment and Promotion for social worker Act* in 2012. Nevertheless, the economic conditions of social workers are still poor and it is hard to see that they have enough income to prepare for retirement. It is also difficult to find out about retirement problems of social workers. Moreover, few studies have addressed retirement anxiety of Korean social workers. This Study describes patterns of changes and explores association between retirement anxiety and a variety of factors affecting Korean social worker's psychological burden that they have to prepare their retirement in the near future.

2. Methods

Data and participants

The current study used data collected from a sample of Korean social workers while they were being worked at several kinds of social welfare centers. After securing informed consent by the participants and approval of the study by the ethics review board, a total of 440 survey questionnaires were distributed from July 29 to August 26, 2016. Out of 390 surveys returned (response rate : 87.3%), a total of 390 surveys were used for this study after excluding 6 surveys with no responses to key demographic questions (e.g., gender, age, education) or invalid responses to almost all the questions. A pre-survey was conducted and some errors in expression and meaning were rechecked. The final survey questionnaires were revised considering socio-cultural issues.

Measures

Retirement anxiety. The survey participants responded to the Middle-Aged of Retirement Anxiety Scale (MARAS) to measure their level of psychological retirement developed by Lee & Lee (2015). This scale is a kind of modified version of Fletcher & Hansson's (1991) Social Retardation Anxiety Scale (SCRAS). The MARAS contains 18 items with the following response categories: not at all (1), a little (2), a fair amount (3), much (4), and very much (5). The composite scales for each sub-dimension were created by averaging individual item scores, with higher scores reflecting greater anxiety. These items tap into four sub-dimensions of retirement anxiety: 5 items on "psychological anxiety" indicating to be nervous or worry about post-retirement life (Cronbach's $\alpha = 0.961$), 5 items on the "physical anxiety" indicating worry about diseases caused by aging (Cronbach's $\alpha = 0.837$), 5 items on the "finance anxiety" indicating the capacity to adapt to any changes in post-retirement life without fearing financial challenges (Cronbach's $\alpha = 0.804$), 3 items on the "social life anxiety" that allows individuals to set a satisfactory social relationship with their colleague (Cronbach's $\alpha = 0.659$).

Professional Identity. It was assessed using the item from Park (1994) that studied about the professional identity of Korean Social Workers. Among the 25 items, we used all the items. Each item was rated from 1 to 5, where 1 indicated "not at all" and 5 indicated "excellently". The Cronbach's α was 0.805.

Career Self-Efficacy. It was measured in four domains: self-evaluation, goal setting, job information, problem solving. Career Self-Efficacy was evaluated with 20 questions based on Yoon & Kim's (2012) strategies for career developing for baby-boomers. Subjects answered and choose their proper situation from 1 to 5 with responses code included "very poor" = 1, "poor" = 2, "so-so" = 3, "good" = 4, and "very good" = 5. The higher score they have, the better condition with career self-efficacy they had. The Cronbach's α for this measure was 0.908.

Family Relationship. Family Relationship was assessed using Yang & Lee's (2003) Family Relationship Sale. This scale includes three sub-scale with 24 items. The response categories was ranged as follows: not at all (1), a little (2), a fair amount (3), much (4), and very much (5). The composite scales was measured with higher scores reflecting better company with their family. The Cronbach's α for this measure was 0.937.

Social Support. It was measured using the Social Support Questionnaire with 6 items that Abbey, Abrams and Caplan (1985) has developed. This short-form scale measure suggests that perceived social support in adults may be a reflection of early attachment experience. Each of the six items was answered using a 5-point scale, very dissatisfied to very satisfied, and indicating the number of support sources for each item. The Cronbach's α for this measure was 0.845.

Retirement Readiness. It was used to measure their life-style financial plan to prepare for retirement with PRePS (The Process of Retirement Planning Scale) developed by Noone et al (2010). 9 items were rated from 1 to 5, with higher scores indicating better readiness for post-retirement. These items tap into two sub-dimensions of retirement anxiety: 4 items on “life-style readiness” indicating to be comfort about post-retirement life (Cronbach’s $\alpha = 0.797$), 5 items on the “financial readiness” indicating to be well prepared for living after retirement (Cronbach’s $\alpha = 0.885$).

Analytic strategy

Descriptive statistics and hierarchical linear regression analyses were performed to explore the influences of the factors on the retirement anxiety of Korean social workers. All statistical evaluations were conducted using SPSS software (ver. 21.0). The hierarchical regression analysis examining factors influencing retirement anxiety was performed step by step in four stages. It was used sociodemographic factors as independent variables in regression model 1. And then, the vocational psychological factors was added in model 2 after that additional variables regarded as social resources factors was added in model 3. In the final regression process (model 4), we included all of the variables, including retirement readiness.

3. Results

General characteristics of the subjects

General characteristics of the subjects are presented in Table 1. The average age of the social workers in this sample was 46.8 years (SD = 5.44), representing two age groups (40–49 years: 39.3%, over 50 years: 30.7%). Education level was mostly college and below (55.0%) and graduate school and higher (45.0%) years. The sample was composed males (29.2%) and females (29.2%). Importantly, the sample include social workers with diverse job career (under 10 years : 39.3%, 11–20 years: 46.4%, over 21 years: 14.3%) and annual salary in US dollars(less than 17000 : 10.7%, 17001-34000 : 47.7%, 24001-51000: 40.1%, 51001-68000: 1.6%).

<Table 1 about here>

Descriptive Statistics of variables

We testified the distribution of the samples by descriptive statistics, before testing statistically significant differences in retirement anxiety between sociodemographic characteristics. Skewness and Kurtosis was acceptable and it is regarded as showing normal distribution. Dependent variables, Retirement Anxiety rage from 1.33 to 5.00 (M=3.112, SD=.715). Other normal distribution of independent variables were showed in Table 2.

<Table 2 about here>

Correlation Analysis

Table 3 showed the factors that were correlated with retirement anxiety. These results indicated that more they have positive professionalism, social resources and well prepared for retirement lead to lower retirement anxiety. The correlation analysis between retirement anxiety and the other variables was conducted and the authors checked up the multicollinearity before multiple regression analysis. The correlation between retirement anxiety and professional identity was not significant ($r = -.024, p > .05$). But the other variables were statistically significant with dependent variables. Career self-efficacy was $r = -.157$ ($p < .001$), family relationship was $r = -.157$ ($p < .001$), social support was $r = -.180$ ($p < .001$), retirement readiness (life-style) was $r = -.244$ ($p < .001$), and that retirement readiness (financial) was $r = -.395$ ($p < .001$). We did not find any multicollinearity.

<Table 3 about here>

Hierarchical regression Analysis

Hierarchical linear regression analysis were performed to examine those factors associated with the retirement anxiety of social worker. We confirmed that the only one variables such as gender influenced their retirement anxiety. Men felt more anxious about the post-retirement living than women. These influences persisted in all models, but the influence of gender steadily declined in models 3 and 4. Education level did not influence mental health in model 1, but it did in models 4, although the effect was small. Professional identity was positively associated with retirement anxiety, and the effect increased after the variables of social resource were added in regression model 3. It could be related with something mental and their 'passion toward work' and the clearer professional identity they have, the longer they want to have present post. Career self-efficacy had a negative effect on retirement anxiety. It was seen to that the higher career self-efficacy can reduce the retirement anxiety of social worker. Social support had significant effect than did family relationship on retirement anxiety among social resources. Regarding to the retirement readiness, there is not significant in life-style readiness but financial readiness had a very powerful influence on retirement anxiety. Among all the independent variables, financial readiness had the greatest influence on retirement anxiety ($\beta = -.328, p < .001$) and then the next influential variable was a social support.

<Table 4 about here>

Discussion

In this study, we investigated retirement anxiety and its associated factors, focusing on sociodemographic factors, vocational psychology, social resources and retirement readiness among Korean social workers. Many factors were related to retirement anxiety, with financial readiness showing the strongest impact power on retirement anxiety. Social support, professional

identity, education and gender were also significantly associated with retirement anxiety. This study points out the importance of social worker's retirement anxiety in Korea, Additionally, to reduce social worker's retirement anxiety, it needs to be a help to prepare themselves financially enough to live without hardship after retirement. Also, we should encourage *The Korean Association of Social Worker* and/or facilitate the Social worker's participation in meetings that help them to ready for their post-retirement life.

The major findings of current study were as follows: Firstly, only gender issue was regarded as significant variables influencing their retirement anxiety of Korean social worker. Secondly, vocational psychology and social resources for the subjects have some significant impact on retirement anxiety. Thirdly, financial retirement readiness was seen to be the greatest influential variables on retirement anxiety. Based on these results, this study suggest to keep the importance of improvement of labor conditions for reducing the Korean middle-aged social worker's retirement anxiety and organizational supports of social welfare agencies besides systemic preparation for retirement. Most of all, it could be the most powerful influencing polices that retirement readiness plan is provided during their term of office.

Additionally, it need to be considered separately as follows. There could be various methods to lessen retirement anxiety. If high level of retirement anxiety is due to a lack of financial preparation toward living after retirement or a lack of aging cultural understanding (Atchley, & Barusch, 2004), Retirement planning programs or social support could be useful to lower this problem. On the other hand, although family relationship didn't have a significant association with retirement anxiety in this current study, marital satisfaction or relation of the parent-child also reflects successful lives of the elderly. Thus, approaches to improve marital satisfaction of middle-aged person should help them to be the acting elderly. For middle-aged social workers, the need to adapt to upcoming life-style raised in a different culture may create a significant mental burden. Thus, factors associated with the sound family connection must be considered seriously and facilitate social participation could be helpful.

3.1 Figures and Tables

Table 1: Description and general characteristics of the samples

		Numbers of respondents (NR)	Percentage of NR
Gender	Male	112	29.2%
	female	272	70.8%
Age	40 ≤ age < 50	266	69.3%
	50 ≤ age	118	30.7%
Education	High School or below	16	4.2%
	College or university	195	50.8%
	Master degree	149	38.8%
	Doctor degree	24	6.2%
Marriage	Married	306	79.7%
	Single	50	13.0%
	Divorce or separation	15	3.9%
	Bereavement	10	2.6%
	Else	3	0.8%
Annual income	\$17000 ≤	41	10.7%
	\$17001-\$34000	183	47.7%
	\$34001-\$51000	154	40.1%
	≥ \$51001	6	1.6%
Job career	Under 10 years	151	39.3%
	11-20 years	178	46.4%
	Over 21 years	55	14.3%

Table 2. Descriptive statistics of variables

variables	Min	Max	Mean	SD	Skewness	Kurtosis
Retirement anxiety	1.33	5.00	3.112	.715	.092	-.213
Professional Identity	2.64	4.52	3.514	.333	.196	-.019
career self-efficacy	2.00	5.00	3.548	.452	.127	1.032
Family Relationship	2.17	5.00	3.994	.496	-.342	.405
Social Support	2.64	5.00	3.871	.437	.192	.291
Retire-Readiness (Life-style)	1.00	5.00	3.039	.802	-.159	-.272
Retire-Readiness (financial)	1.00	5.00	2.677	.742	-.046	.305

Table 3. Summary of correlation analysis: Retirement anxiety and the other variables

	1	2	3	4	5	6	7
1. Retirement anxiety	1						
2. Professional Identity	-.024	1					
3. Career self-efficacy	-.223**	.397**	1				
4. Family Relationship	-.157**	.323**	.348**	1			
5. Social Support	-.180**	.408**	.288**	.515**	1		
6. Retire-Readiness (Life-style)	-.244**	.213**	.528**	.115*	.078	1	
7. Retire-Readiness (financial)	-.395**	.054	.324**	.129*	-.003	.434**	1

Table 4. Hierarchical regression on retirement anxiety of Korean social workers

	Model 1		Model 2		Model 3		Model 4	
	b	β	b	β	b	β	b	β
Sociodemographic variables								
gender (male=1)	.365	.232***	.382	.243***	.360	.229***	.241	.153**
age	-.006	-.043	-.001	-.006	.000	-.001	.002	.018
education (graduate school=1)	-.140	-.097	-.115	-.080	-.135	-.094	-.156	-.108*
marriage (married=1)	.025	.014	.013	.007	.065	.037	.122	.069
annual income (\geq \$34001=1)	-.043	-.030	-.058	-.040	-.064	-.044	.021	.014
job career	.003	.032	-.003	-.029	-.003	-.030	-.006	-.058
Vocational psychology								
professional identity			.240	.112*	.384	.179**	.357	.166**
career self-efficacy			-.422	-.267***	-.365	-.231***	-.105	-.067
Social resources								
family relationship					-.103	-.072	-.064	-.044
social support					-.210	-.128*	-.314	-.192***
Retirement readiness								
life-style readiness							-.073	-.082
financial readiness							-.316	-.328**
R^2	.058		.113		.136		.242	
adjusted R^2	.043		.094		.113		.217	
R^2 Change	.058		.055		.023		.106	
F	3.838***		5.964***		5.860***		9.853***	

* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

3.2 Acknowledgments and Legal Responsibility

Our study should be helpful in designing effective retirement-planning programs and welfare services for Korean social worker. However, there were several limitations that should be considered in examining the results. First, our data were cross sectional, and we could not employ probability sampling due to accessibility limitations and the low number of respondents. Our study design precluded any inferences about causation, and reverse causation is possible. These problems could be addressed with longitudinal studies of Korean social workers. Second, this study examined factors associated with social worker's retirement anxiety, but we could not cover a diverse factors that we actually affecting individual's attitude toward retirement, which are mixtures of associated factors. This could be examined in future studies. Additionally, we only considered a limited number of factors associated with retirement anxiety.

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ACMASS-0061

A Study on the Relationship between the Gender Characteristics of Consumers and Canned Beer Packaging

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Abstract

Trends in research on gender development have prompted a diversity of masculine and feminine characteristics over the last decades. This has contributed to a transformation in attitudes held by basic-commodities industries toward the evolution of gender roles and a rising concern over whether consumers with different gender characteristics have different preferences for product packaging design. Products do not have a gender, yet product attributes elicit emotions in consumers and affect their perceptions of that product. Will these perceptions sway the purchase decisions of consumers with different gender characteristics? This study discusses canned beer packaging design in order to explore how the gender characteristics of consumers are associated with product attributes. The scope of research encompasses a range of questions: how do consumers with different gender characteristics perceive canned beer packaging? What preferences do they have for canned beer packaging design? What kind of canned beer packaging they would choose using psychoanalysis theories as a measure?

The beer sample was chosen from the aisles of supermarkets across Taiwan; brands with strong impressions were not included. A total of 20 canned beers comprised the sample for this questionnaire survey. Based on the Gender Characteristics Scale developed by Li (1981), this study employed the Simplified Gender Characteristics Questionnaire developed by Xie (1998) using adjectives that denote masculinity or femininity. The 40 items are measured using a 5-point scale. An online questionnaire was created through an app called Google Forms and distributed over Facebook using random and snowball sampling from Dec. 18—Dec. 23, 2016. A total of

212 effective copies were returned. Then an independent sample t-test, one-way ANOVA, and hierarchical cluster analysis were employed to examine the relationship between consumers' preferences and canned beers.

Research findings indicate that all consumers (with two physiological genders and four gender characteristics) hold similar perceptions toward canned beer packaging design. The packaging design of Beer No. 1, commonly thought to exhibit feminine attributes, appealed to most of the surveyed respondents, whereas No. 12, which exhibited the most masculine design, was the least liked. However, respondents selected No. 17 and No. 4 as the beers they were most likely to purchase. Under the mental states of "ego" and "super ego", male (defined physiologically) consumers did not want to buy No. 1, whereas under the mental state of "superego," all consumer groups did not intend to buy beers as they were under an "ego" mental state.

Keywords: gender characteristics, product gendering, canned beers

ACMASS-0114

Factors Correlated with Adoption of Paddy- Livestock Integration Systems in Central Sulawesi Province, Indonesia

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Abstract

The Indonesian government attempted to suppress the value of food imports by increasing domestic food production through integrated farming system, and agricultural extension agent has introduced paddy-livestock integration system into the farming community. However, the rate of adoption by farmers did not show a significant increase. The purpose of this study was to analyze the factors correlated with farmers' adoption level on technological innovation in the paddy-livestock integration system. The data collection was conducted by Focus Group Discussion (FGD) for qualitative data and surveys for quantitative data. FGDs were conducted in three locations: in two research villages with farmers groups, and in IAARD. The survey uses a questionnaire given to 120 people in two villages, 60 each. Data were analyzed descriptively (sum, the average, and percentage) and tested with Spearman Rank correlation. Data were processed with software Excel and SPSS ver 16. The results showed that the internal factors of farmers, the characteristics of innovation, and external support were related to the phases (knowledge, interest, and adoption) of farmers' adoption of the technology innovation of paddy-livestock integration system in the form of fermented feed and organic fertilizer. First, the farmers' characteristics indicated by education, ownership of land and livestock ownership are related to the phase of knowledge, and livestock ownership is associated with the phase interest in the technology of organic fertilizer. As for fermented feed, only work experience variable is related to the adoption phase (application). Second, agricultural extensions carried out to introduce organic fertilizers and fermented feed are proved to be positively related to the adoption level of the farmers, that is the suitability of the methods used in organic fertilizers is significantly correlated with the phase of knowledge and interest, and intensity of the agricultural extension is

positively related to the three phases of adoption. As for silage feed innovation, the three adoption stages are correlated with intensity and extension methods. Third, external factors, supports from community figures, natural resources, facilities, and farmers' groups are positively correlated with adoption stages. In organic fertilizer innovation, all variables are positively correlated with the stages of knowledge and adoption, and in the stage of interest it is correlated with community figures, and farmers' groups. In silage feed innovation, factors that are positively correlated at the stage of knowledge are supports from community figures and farmers' groups, and at the stage of adoption, supports from community figures, natural resources and farmers' groups. Finally, innovation characteristics (complexity, compatibility, triability, relative benefits), all these variables have significantly positive correlation at the stage of knowledge and interest on the organic fertilizer innovation, and have positive correlation at the stage interest and adoption on the silage feed innovation.

Keywords: adoption, innovation, integrated farming, livestock, paddy

ACMASS-0044

Economic Value of the Korean Intangible Cultural Heritage Dance: Using Contingent Valuation Method (CVM)

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Abstract

The purpose of this study is to estimate the value of preserving Korean intangible cultural heritage dance in the perspective of economics by using the Contingent Valuation Method (CVM). To attain the goal, this author has chosen 400 adults who are living in Korea and are over 20 year old and estimated WTP (Willingness To Pay) for a preservation fund to maintain Korean intangible cultural heritage dance performances. According to the results, WTP for a fund to preserve Korean intangible cultural heritage dance equals 12,901 won per person monthly. If you convert it based on the population of Koreans who are over 20, effective value to preserve Korean intangible cultural heritage dance equals approximately 540 billion won (about USD 4,808,000) monthly.

Keywords: Korean Intangible Cultural Heritage Dance, CVM, Economic value of dance

1. Necessity and Aim

Traditional dances that depict the historical, cultural, and artistic characteristics of a country can be considered as the intangible cultural heritage of that country. Traditional dances that need special preservation are called UNESCO Intangible Cultural Heritage and are protected under a certain law in that country.

Since the medium of the cultural heritage is the human body, a dancer could vary depending on time and space, even if it is performed by the same dancer, and who the transmitter is. Since the intangible cultural heritage law was reformed in March 2016, the value of the intangible cultural heritage changed from maintaining the original form to implementing and enhancing its value by maintaining the model. However, the word ‘model’ refers to “a representative form that embodies the most essential and typical characteristics of objects of the same kind.” Due to its terminological ambiguity, there was a social controversy over selecting the holder of the dance. This was the first time the selection of the dance holder of a specific type of intangible cultural heritage dance was postponed (August 2016). In response, the standard of deciding how to judge

the value of a traditional dance became the ultimate point of interest in the Korean dance circle thus raising the necessity of research on this topic.

Dance, however, is intangible art hard to be quantified and is open-ended as it is recognized or interpreted differently by who experiences it. It means that evaluating the artistic value of dance may impede the ultimate attributes of that art itself; therefore, this author is going to estimate the value of Korean traditional dance focusing on the value of preserving dance. Also, to figure out the value of preservation positively, this study will employ the CVM that is applied to figure out WTP under a virtual condition and estimate it as the value of resources.

The CVM is a way to estimate the economic value of non-market goods, such as forest, rivers, and cultural heritages, which do not have a trading price because there is no existing market (Lee & Chun, 1999; Loomis & Gonzalez-Caban, 1997). Studies on the non-market value of cultural heritages have been conducted worldwide starting with a study on the value of the Nidaros Cathedral in Norway in 1991(Park & Song, 2016, p.259). In Korea, too, studies to estimate the value of cultural or historic sites or tourist spots(Kim & Kim, 2003; Lee, 2006; Park & Park, 2004; Kang & Ahn, 2009) have been performed, and in the field of art, some of the studies attempted to estimate the value of a prominent novelist's presence itself(Lim & Shin, 2006) or evaluate performing art conducted in public space(Lee & Lee, 2012).

Accordingly, this study aims to apply the CVM and estimate the value of preserving Korean intangible cultural heritage dance economically.

2. Methods

2.1 The Spirit and Value of Korean Traditional Dance

The study is going to investigate Korean traditional dance designated as intangible cultural heritages under the Act on the Protection of Cultural Heritages established in 1962. Korean traditional dance is the culture and art of our nation containing not only the history of Korea but the culture and lifestyles of Koreans as well. The dance is characterized diversely according to its purpose, functions, the place it is done, performers, and those enjoying it..

In the meantime, Chong Pyong-ho, a dance folklorist(1927-2011), distinguished the spirit of Korean traditional dance into five types and revealed the unique value of Korean traditional dance. The first is the spirit of dance that is grounded on the present and also the future. Koreans tend to be keenly interested in the future though they are living in the present. Particularly, those involved in religion or special condition lengthen human life up to after death, so we have many types of dance including funeral dance, Buddhist dance, and shamanistic dance. The second is the spirit of dance based on the view of God. Koreans' view of God is not about worshiping the absolute being as in Christianity but having God under control by humans. Koreans' gods are

divided into good and evil ones. They dance wishing blessings from good gods for those living in the present and hoping no evil ones will come close and stay around. The third is the spirit of dance changing sadness into joy in life. From a long time ago, Koreans had the culture of relieving grief or sadness with dance. In other words, Koreans has a sense of aesthetics enjoying sadness and changing it to joy. Japanese regard death as the beauty of tragedy while Koreans see it as delight attributed to persevere will for life. The fourth is the spirit of community dance. Korean traditional dance or rituals were intended for union to protect the villagers or the nation as a community of a village or labor rather than for the well-being of individuals. Through this, they thought it gave all people blessings from God commonly. The fifth is the spirit of dance for Tao(道) and Ye-Ak (禮樂). Korean artists tried to cultivate themselves morally and mentally to create works. Painters, calligrapher, and ginyeo, too, were all equipped with a means for their own mental cultivation and courtesy(Chong, 1999, pp.288-291).

Korean traditional dance internalizing Koreans' such spirit and styles of life and culture plainly has been constantly changed, declined, distinguished, and also generated along with the flow of time and changes in society and come to reveal its own unique value as culture and art.

2.2 The CVM and Study Design

Korean traditional dance involves various kinds of value that are hard to be evaluated actually in the market. The value can be largely divided into use value and preservation value, and preservation value can be again subdivided into option value, existence value, and bequest value(Lee, 2013, p.121). Option value is the value preserved in the state identical to the currently transmitted Korean traditional dance. Existence value is the value that what is present is equipped with. Bequest value is the value preserved so that Korea traditional dance can continue to be performed and appreciated by descendants.

Here in this study, as a useful method to evaluate the preservation value of Korea traditional dance, this author establishes a virtual market artificially as if the market that is not present in reality existed by applying the CVM to figure out the payment about WTP based on the information acquired from the virtual market.

The CVM-based survey has two steps: planning and actual investigation. In the step of planning, data are collected, and the questionnaire is formulated. In the step of actual investigation, with the questionnaire definitely settled, the actual questionnaire is prepared. Through the steps of checking and correction including entering data, necessary information is drawn(Lim & Shin, 2006, pp.256-257). In this study, too, before beginning the survey, a conditional market is set up for the selected goods. In other words, this researcher has set up a virtual condition that Korean intangible cultural heritage dance that has been performed every month for free will stop being

provided for financial reason, so to continue it, they have to fund monthly to preserve traditional performing art.

To collect data, this author requested Macromill Embrain(www.embrain.com), a specialized research firm, for an online survey. Research lasted from March 27 until March 29, 2017 with adults who were older than 20 and living in Korea after gaining their voluntary consent about the participation. For more accurate evaluation on its value, this researcher controlled the ratios of the subjects' sex and age and then performed proportional quota sampling reflecting the ratios of population in different regions. Finally, total 400 respondents participated in the survey. Questions for CVM analysis were chosen as a method of dichotomous-bounded choice. The amounts suggested at first are three kinds, 10,000, 20,000, and 30,000 won, based on the pilot.

2.3 The Formulation of the Questionnaire and Analysis Methods

There are over 500 kinds of Korean traditional dance. Among them, 37 are designated as intangible cultural heritages. But not all Koreans know about the types or contents of Korean traditional dance. In setting up a virtual market, to enhance their understanding of Korean intangible cultural heritage dance, this researcher adds the photos of intangible cultural heritage dance that is introduced in the elementary school curriculum or relatively more familiar to Koreans as examples.

Also, because it is now absolutely needed to keep performing Korean intangible cultural heritage dance, this author sets up the preservation fund not as an admission fee for performance paid once but as a type of fund to be paid regularly. The virtual situation and questions provided to the respondents are shown in <Table 1>.

Table 1: The virtual situation and questions

			
National Intangible Cultural Heritage No. 12 Jinju Geommu	National Intangible Cultural Heritage No. 97 Salpuri-chum	National Intangible Cultural Heritage No. 8 Ganggangsulrae	National Intangible Cultural Heritage No. 17 Bongsan Talchum

<The virtual situation>

Cultural Heritage Administration holds Korean intangible cultural heritage dance performances in the local centers of culture and arts once a month for free so as to transmit and preserve Korean traditional dance and also provide residents with opportunity to enjoy culture and arts. As it is free performance and no gains arise from admission fees, it is absolutely needed to provide financial support for it.

Let's suppose budgets for operating free performances are discontinued for financial reasons. As a result, we can no longer enjoy Korean intangible cultural heritage dance's diverse functions related to public interest, for instance, functions as cultural heritages, functions to cultivate arts, functions to develop a region, or functions as tourist resources. Let's suppose you have to form a **fund (traditional performing art preservation fund)** led by the private sector in order to support Cultural Heritage Administration to maintain the performances as it does now.

1. Do you have any intention to pay _____ won monthly as a fund to maintain and improve free Korean intangible cultural heritage dance performances sponsored by Cultural Heritage Administration?

① Yes (Go to 2_1.) ② No (Go to 2_2.)

2_1. If you are willing to pay it, do you have any intention to pay _____ *2_ won monthly per person?

① Yes (Go to 3.) ② No (Go to 3.)

2_2. If you are unwilling to pay it, do you have any intention to pay _____ *0.5_ won monthly per person?

① Yes (Go to 3.) ② No (Go to 3.)

• On the questionnaire, _____ *2_ is twice as much as the initially suggested amount.

• On the questionnaire, _____ *0.5_ is half as much as the initially suggested amount.

By using SPSS 21.0, the Logit Model is estimated. With the mean WTP estimated in the final model as a standard, Korean intangible cultural heritage dance's preservation value is measured.

3. Results

3.1 The demographic characteristics of the respondents

The demographic characteristics of the respondents participating in this research are shown in <Table 2> below. According to the analysis results, men are 199(49.8%), and women are 201 (50.3%). About age, there are 80 persons(20.0%) in each group. About regions they are from, 111(27.8%) are from Seoul, 91(22.8%) from Gyeonggi, and 198(49.5%) from other regions. 50.5% are from Seoul/Gyeonggi, and 49.5% are from other regions.

66.3% of the entire respondents are married. About their educational background, 12 belong to the group of middle school graduation or lower(3.0%), 76(19.0%) to that of high school graduation, 61 (15.3%) to that of two or three-year university graduation, 214(53.5%) to that of four-year university graduation, and 37(9.3%) to that of graduate school graduation. About their occupations, 22(5.5%) are in public office/administrative position, 39(9.8%) have a specialized job, 113(28.3%) are office workers, 18(4.5%) are involved in service industry, 17(4.3%) are in sales, 4(1.0%) are engaged in agriculture, forestry, and fishery, 14(3.5%) are living through

simple labor, 41(10.3%) are soldiers or students, and 84(21%) have no job. About their income, 42(10.5%) belong to the group of 1 million won or lower, 152(38%) to that of 1-3 million won, 90(22.5%) to that of 3-5 million won, 64(16%) to that of 5 million won or higher, and 52(13.0%) have no income.

Table 2: The Characteristics of Respondents

	Division	Frequency	Percentage
Sex	Men	199	49.8%
	Women	201	50.3%
Age	In the 20's	80	20.0%
	In the 30's	80	20.0%
	In the 40's	80	20.0%
	In the 50's	80	20.0%
	In the 60's	80	20.0%
Regions	Seoul	111	27.8%
	Gyeonggi	91	22.8%
	Other Regions	198	49.5%
Marital Status	Married	265	66.3%
	Unmarried	135	33.8%
Academic Background	Middle School Graduation or Lower	12	3.0%
	High School Graduation	76	19.0%
	2 or 3-year University Graduation	61	15.3%
	4-year University Graduation	214	53.5%
	Graduate School Graduation or Higher (Masters · Doctors)	37	9.3%
Occupations	Public Office/Administrative Position	22	5.5%
	Specialized Jobs	39	9.8%
	Office Workers	113	28.3%
	Service Industry	18	4.5%
	Sales	17	4.3%

	Agriculture, Forestry, and Fishery	4	1.0%
	Simple Labor	14	3.5%
	Solders/Students	41	10.3%
	No Job	84	21.0%
	Others	48	12.0%
Monthly Income	None	52	13.0%
	Lower than 1 Million Won	42	10.5%
	1-3 Million Won	152	38.0%
	3-5 Million Won	90	22.5%
	Higher than 5 Million Won	64	16.0%
Total		400	100.0%

3.2 Evaluation on the Economic Value of Korean Intangible Cultural Heritage Dance

① The probability of willing to pay for the preservation fund

Willingness to pay for the fund according to the amount suggested for Korean intangible cultural heritage dance performances is shown in <Table 3> below. The initially suggest amount is 10, 20, and 30 thousand won, and it is doubled or cut in half according to their willingness to pay. The result has shown that as the amount suggested increases, their willingness to pay reduces.

Table 3: The Probability of the WTP for the Preservation Fund

Division		Intention to Purchase				Sum	
		No		Yes			
		N	%	N	%		
Suggested Amount	5,000 Won	67	50.4%	66	49.6%	133	100.0%
	10,000 Won	186	69.9%	80	30.1%	266	100.0%
	15,000 Won	105	78.4%	29	21.6%	134	100.0%
	20,000 Won	239	89.8%	27	10.2%	266	100.0%
	30,000 Won	117	87.3%	17	12.7%	134	100.0%
	40,000 Won	130	97.7%	3	2.3%	133	100.0%
	60,000 Won	131	97.8%	3	2.2%	134	100.0%

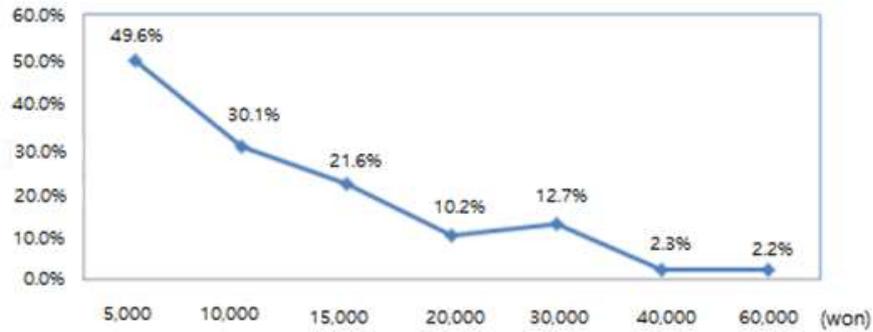


Fig 1. Tendencies about Willingness to Pay According to the Amount Suggested

As reasons they are willing to pay for the preservation fund to maintain Korean intangible cultural heritage dance performances, this study has found ‘It is practically needed for the welfare of traditional performing artists.’ (49 respondents (36.0%)), ‘It will promote traditional performing arts programs.’ (38 (27.9%)), ‘The government’s support fund for performing arts is rather little.’ (26 (19.1%)), ‘It would be helpful for the residents.’ (13 (9.6%)), and ‘I am interested in Korean traditional dance.’ (10 (7.4%)) in order. Meanwhile, as reasons for their unwillingness to pay, this research has also found ‘It might be used for other purposes than performing arts.’ (92 (34.8%)), ‘I have no interest in Korean traditional dance.’ (79 (29.9%)), ‘It would not be any help for the residents.’ (55 (20.8%)), ‘Traditional performing arts programs are already too much.’ (21 (8.0%)), and ‘Support for it is already enough.’ (17 (6.4%)) in order.

Table 4: Reasons for Willingness/Unwillingness to Pay for the Preservation Fund

Items		N	%
Reason for willingness to pay	I am interested in Korean traditional dance.	10	7.4
	It would be helpful for the residents.	13	9.6
	The government's support fund for performing arts is rather little.	26	19.1
	It is practically needed for the welfare of traditional performing artists.	49	36.0
	It will promote traditional performing arts programs.	38	27.9
	Sum	136	100.0
Reason for unwillingness to pay	I have no interest in Korean traditional dance.	79	29.9
	It would not be any help for the residents.	55	20.8
	Support for it is already enough.	17	6.4
	It might be used for other purposes than performing arts.	92	34.8
	Traditional performing arts programs are already too much.	21	8.0
	Sum	264	100.0
Total		400	100.0

② The result of estimating the Logit Model

The results of estimating the dichotomous-bounded choice CVM model for Korean intangible cultural heritage dance performances are as shown in <Table 5> below. According to the results of analyzing the Logit Model for the goodness of fit-test on the estimated model, variables influencing their WTP for the preservation fund for Korean intangible cultural heritage dance performances significantly have been found to be paid amount (B= -.000) and income (B=.117). In other words, when paid amount is lower and income is higher, their WTP increases; therefore, this conforms to the general theory of economics.

Table 5: The Results of Estimating the Logit Model

Division	B	S.E.	Wald	df	p	Exp (B)
Amount paid	-.000	.000	235.796	1	.000	1.000
Sex	-.090	.123	.541	1	.462	.914
Age	.016	.055	.080	1	.778	1.016
Region	-.001	.013	.009	1	.925	.999
Marital Status	.136	.161	.709	1	.400	1.145

Academic Background	-.104	.064	2.654	1	.103	.901
Occupations	-.006	.021	.080	1	.777	.994
Income	.117	.058	4.115	1	.042	1.124
Constant Term	1.058	.598	3.126	1	.077	2.879

2 Log Likelihood : 1700.600

Cox & Snell R²: .241

Nagelkerke R²: .326

③ The Results of Estimating their WTP for the preservation fund for Korean intangible cultural heritage dance performances

The results of calculating the WTP by using the Logit Model drawn earlier are shown in <Table 5>. This study uses three measured values suggested by Hanemann(1984). The mean WTP is gained by calculating the area of cumulative probabilities setting amount A presented randomly up to infinity, and the median WTP is calculated by substituting the value when the mean of the error term in Logit distribution and the median equal 0. The cut-off mean WTP is calculated by considering amount A presented randomly with regard to the range of minimal to maximal values. Formulas to calculate each of the measured values are shown below.

$$\begin{aligned}
 WTP_{mean} &= \int_0^{\infty} [1 - G_{WTP}(P)] dP = \int_0^{\infty} F_{\xi}(\Delta V(P)) dP = \frac{1}{r} \ln(1 + \exp(a_1 - a_0)) \\
 WTP_{median} &= \int_0^{\infty} F_{\xi}(\Delta V(P)) dP - \int_{-\infty}^0 [1 - F_{\xi}(\Delta V(P))] dP = \frac{a_1 - a_0}{r} \\
 WTP_{truncated} &= \int_0^{Max(P)} F_{\xi}(\Delta V(P)) dP = \frac{1}{r} \ln \left[\frac{1 + \exp(a_1 - a_0)}{1 + \exp((a_1 - a_0) + rMax(P))} \right]
 \end{aligned}$$

Fig 2. Formulas to Calculate Measured Values

According to the results of analyzing the mean WTP, median WTP, and cut-off mean WTP using the Logit Model, the mean WTP per person equals 14,176 won, the median WTP equals 11,383 won, and the cut-off mean WTP is estimated to be 12,901 won. If the cut-off mean is set as the estimated value in general, the WTP for the fund to preserve Korean intangible cultural heritage dance is found to be 12,901 won.

Table 6: The Results of Estimating WTP Amount as an Admission Fee

	Coefficient estimate (A)	The mean (B)	Multiplication (A*B)
Paid amount	-0.000		
Sex	-0.090	1.503	-.136
Age	.016	4.000	.063

Region	-0.001	5.958	-0.007
Marital status	.136	1.338	.182
Academic background	-.104	3.470	-.361
Occupations	-.006	5.705	-.034
Income	.117	3.180	.372
Constant term	1.058		1.058
The mean WTP	14,176.225		
The median WTP	11,383.682		
The cut-off mean WTP	12,901.713		

4. Conclusions and Implications

According to the result of estimating the WTP for the fund to preserve Korean intangible cultural heritage dance performances, the amount per individual is found to be 12,901 won monthly. If this preservation value of Korean intangible cultural heritage dance is converted with 42 million people, that is, the Korean population at the age of 20 or higher(referring to the material announced by National Statistical Office(NSO) in April, 2017), the amount is estimated to be approximately 540 billion won(USD 48.08 billion). In other words, to preserve Korean intangible cultural heritage dance, the effective value of about 540 billion won arises.

Also, regarding their WTP for the preservation fund, most of the respondents said, ‘It is practically needed for the welfare of traditional performing artists.’ About their unwillingness to pay, most of them answered, ‘It might be used for other purposes than performing arts.’ This implies that Koreans think it is needed to improve welfare for artists as it is rather poor now, but they hardly trust political funds managed by the government.

As a matter of fact, the value of dance is variable and subjective, so it is very hard to evaluate it objectively. This study, however, attempted to estimate the preservation value of Korean intangible cultural heritage dance economically in order to help Koreans to be aware of the importance of our culture. Also, this study is expected to be used as grounds to make policies and secure finances to maintain and also enhance traditional dance performances. In addition, so far, the value of traditional dance has just been appreciated as abstract concept, but this study adopts a more objective and empirical method for its evaluation. The method of estimating the value of traditional dance applying the CVM will be used worldwide afterwards.

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ACMASS-0058

Doujinshi: Understanding Fan-Fiction in Japan's Manga Market

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Abstract

1. Background/ Objectives and Goals

The term “*otaku*” refers to members of a specific subculture in Japan who devote themselves to not simply consuming but living through a visual culture based on products derived from *manga* (comic books) and *anime* (animated films). Of particular interest are developments in the *manga* industry since the 1980s, which saw the proliferation of fan-produced amateur *manga* (*doujinshi*) by the *otaku*. In fact, a key component of *otaku* lifestyle is the private, unauthorized production of *doujin* goods (derivative fan works), based on characters from original published works, as well as consumption of similar such goods created by likeminded peers. Ranging from *doujinshi* to figurines, videos, and games, the majority of these products are bought and sold at the Comic Market, or Comiket, the largest *doujin* product event in Japan today.

What makes Comiket particularly fascinating is that the majority of the products sold are verging on violation of Japanese Copyright Law. However, as the large scale of Comiket indicates, with an average 590,000 visitors over its three-day period, it is evident that *manga* and *anime* producers are not only aware of but turning a blind eye to the violation of copyright.

In the current paper, the author seeks to examine the dynamics governing copyright law and *doujin* work creation within Japan's *anime* and *manga* industry in an effort to understand what can be described as the symbiotic relationship between producers and the *doujinshi* authoring *otaku* consumers. These insights may suggest an alternate mode of operation for the creative content and intellectual property industries, which have been combating increased piracy and copyright violations with the development of communications and technology.

2. Methods

The current study is a qualitative theoretical research of academic opinions on the dynamics within Japan's *anime-manga* industry, especially concerning copyright laws and fan created works. This was carried out by reviewing published scholarly articles on topics such as “fan fiction (*doujinshi*),” “*manga*,” and “copyright.” The Copyright Law of Japan was referenced for an understanding of the government's official position on copyright violations, and the Comic Market Committee presentation provided market figures regarding *doujin* product sales. Furthermore, due to the fan-driven nature of the *anime* and *manga* industry, fan websites were

examined to gain insight on the “*otaku* reasoning” behind creating potentially illegal *doujin* products.

3. Results/ Conclusion

Examination of the discourse regarding *otaku*-produced *doujinshi* within Japan’s *anime-manga* culture reveals several understandings among industry agents that enable the *doujin* goods market to thrive without prosecution for infringement of copyright laws. The first is the justification that the sales of such fan created works often do not produce enough revenue to directly compete with the original works, thereby circumventing the need for prosecution by law. Furthermore, even *doujinshi* in violation of copyright is deemed beneficial for garnering interest in the original work. On the whole, the *anime* and *manga* industry takes advantage of *doujinshi* production as a means of discovering new talent, not to mention gaining free promotion.

Besides the capitalistic considerations, there are a set of sociocultural understandings that recognize the mentality and cultural significance of the *otaku* as well. The *otaku* who create fan-fiction are not seen as intellectual property thieves or usurpers, but simply as die-hard fans seeking to commune through their genuine passion for a particular work. Thus their remixing and redistributing of copyrighted material are not threatening to the original producer. The *otaku* are not concerned with capitalizing on the success of the work they parody. They are understood to be cultivating individual identities by creating fanworks based on specific *moe* elements (desirable traits of manga or anime characters) and sharing these creations with other like-minded individuals.

The continued existence of *doujinshi*, the coexistence of original and imitation within the *manga* and *anime* market of Japan, can be seen as exemplifying an alternate type of business model. Here, the consumers drive the industry forward through their own, albeit illegal, productive efforts and the producers recognize the beneficial effects of these works and even cultivate an understanding of and appreciation for their audience’s possibly illicit behavior.

The acceptance of *doujinshi* in Japan as neither detrimental nor depleting on the original market provides an example of an alternative mode of thought in terms of intellectual property and consumer behavior. The insights from the current study may serve as a model from which novel modes of industry can be constructed, which is especially pertinent in light of the advancement of information technologies and increased piracy and copyright violations. It is important to apply the findings from studies such as this one to the development of measures that strengthen copyright holders’ rights while promoting creative freedom.

Keywords: Otaku, Fan-fiction, Doujinshi, Copyright, Anime, Manga

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ACMASS-0082

A Comparative Study of Image Presentation Style in Advertising

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This study is trying to figure out what differences exist in image-presentation style between USA & Europe and Korean advertisements. The 195 CF videos were examined for finding the differences of image-presentation style between USA & Europe and Korean advertisements. The 95 videos are American & European commercial films, and the 100 videos are Korean commercial films. This study is not only focusing on the brand image advertisements, but also the general product advertisements. Even if the advertisements are product ads, those ads were examined if they were the image-driven advertisements.

♠ Questions for Analysis

Question 1: In image presentation style, are the advertisements of two regions (USA & Europe and Korea) image-driven or non-image-driven?

Question 2: In image presentation style, are the advertisements of two regions recognized as message-driven or video-image-driven / music-driven?

Question 3: In image presentation style, are the advertisements of two regions classified as the advertising using a hard-sell or a soft-sell strategies?

Question 4: In image presentation style, are the advertisements of two regions sorted out as the model-character-centered or the background-centered?

Question 5: In the time of product/brand presentation in ads, do the advertisements of two regions have the differences?

♠ Results of Research

In the table 1, we can see 29% of USA & European CFs (Commercial Films) is image-driven advertisements, but only 6% of Korean CFs is image-driven advertisements. 94% of Korean CFs is classified as non-image advertisements, but only 71% of USA & European CFs is non-image advertisements.

[Table 1] Image-driven Ad vs. Non-image-driven Ad

	Korean CFs	USA / European CFs
Image-driven Ad	6 (6%)	28 (29%)
Non-image-driven Ad	94 (94%)	67 (71%)
Total	100 (100%)	95 (100%)

$\chi^2=18.647$, $df=1$, $p<0.001$, $\lambda= 0.062$

In the table 2, 92% of Korean CFs is message-centered advertisements, but only 58% of USA & European CFs is sorted out as message-centered advertisements. And 42% of USA & European CFs is video-image-driven or music-centered advertisements, but only 8% of Korean CFs are classified as those advertisements.

[Table 2] Message-centered Ad vs. Video-image-driven / Music-centered Ad

	Korean CFs	USA & European CFs
Message-centered Ad	92 (92%)	55 (58%)
Video-image-driven / Music-centered Ad	8 (8%)	40 (42%)
Total	100 (100%)	95 (100%)

$\chi^2=30.538$, $df=1$, $p<0.001$, $\lambda=0.126$

In the table 3, 92% of Korean CFs(Commercial Films) is classified as the advertisements using hard-sell strategies, but only 53% of USA & European CFs is on the hard-sell strategies. 47% of USA & European CFs is sorted out as the advertisements using soft-sell strategies, but only 8% of Korean CFs is on the soft-sell strategies.

[Table 3] Hard-sell Strategies vs. Soft-sell Strategies

	Korean CFs	USA & European CFs
Hard-sell Strategies	92 (92%)	50 (53%)
Soft-sell Strategies	8 (8%)	45 (47%)
Total	100 (100%)	95 (100%)

$\chi^2=38.150$, $df=1$, $p<0.001$, $\lambda=0.182$

In the table 4, 92% of Korean CFs is sorted out as the model-character-centered advertisements, but 65% of USA & European CFs is sorted out as those advertisements. 35% of USA &

European CFs is classified as the background-centered advertisements, but only 8% of Korean CFs is those advertisements.

[Table 4] Model-character-centered Ad vs. Background-centered Ad

	Korean CFs	USA & European CFs
Model-character-centered	92개(92%)	62개(65%)
Background-centered	8개(8%)	33개(35%)
계	100개(100%)	95개(100%)

$\chi^2=20.974$, $df=1$, $p<0.001$, $\lambda=0.088$

In the table 5, 51% of Korean CFs is presenting their products or brands in the front time-point of CF, but only 22% of the USA & European CFs presents their products or brands in the front time-point of CF. 78% of USA & European CFs is presenting their products or brands in the rear time-point of CF, but only 49% of Korean CFs presents their products or brands in the rear time-point of CF

[Table 5] The Differences of Presentation Time of Products or Brands

		Korean CFs	USA & European CFs
Presentation Time-point of Products/Brands	Front Point of CF	51 (51%)	21 (22%)
	Rear Point of CF	49 (49%)	74 (78%)
Total		100 (100%)	95 (100%)

$\chi^2=17.465$, $df=1$, $p<0.001$, $\lambda= 0.012$

♠ Conclusion

Korean CFs are showing the message-driven tendencies in product representation, otherwise American and European CFs are showing the image-driven tendencies rather than the Korean CFs. American & European CFs are also showing the music-centered and video-image -centered tendencies rather than Korean CFs. It is evaluated that American & European CFs are more skewed to the soft-sell strategies in image-presentation style than Korean CFs. It is finally concluded that American & European CFs are more image-centered in the style of product representation on the advertising strategy frame than Korean CFs.

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ACMASS-0099

The Social Capital for the Exterlity Development of Sustaible Tourism

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Abstract

This research aimed to discover the social capital and externality value as well as formulating an alternative strategy for social capital enhancement to enforce the positive externality value of sustainable tourism sector. This research is a case study by using qualitative approach and descriptive analysis. The data obtained through observation, depth interview, and questionnaire towards tourism Small Medium Enterprise (SME) and the community of Candran and Wukirsari Tourism Village in Yogyakarta Special Province. The tool of analysis to assess multiplier effect from the tourism activity is Ratio Income Multiplier, while SWOT analysis is used to formulate of social capital enhancement strategy.

The important findings in this research are the Bounding Social Capital is the category of the social capital type which occurs in this sustainable tourism destination. The community is assured that social capital is the key to success in developing sustainable tourism. The tourism activity is having a positive impact towards the community in the aspects of economic, socio-culture, and physical aspect of the living environment which indicated from the Ratio Income-multiplier value. Four strategies are formulated to enhance social capital that able to increase positive externality, which are maintaining social institution/order; forcing social literacy; the extensification of the attraction of local culture art, and the strengthening of economic sharing management towards tourism village management.

Keywords: Social Capital, Sustainable Tourism, Externalities

1. Background/ Objectives and Goals

The tourism sector has been the biggest industry and currently developed swiftly after its integration with the other industries which has a trickle-down effect towards other sectors. The growing numbers of international tourist in 2014 quantitatively have reached 1,161 billion

people and keep escalating as the main sector in producing foreign exchange in many countries (Santoso, 2011; World Bank, 2016).

Fundamentally, tourism generates high multiplier effect. This externality occurs due to the relation between one and another economic activity, such as craft industry, tourism small medium enterprise (SME), education, culture, arts, investment, and security (Astuti, 2010, Utama, 2014, Samaji, 2015, Setiawan, 2016). The impact concept of tourism economic sector is based on the concept that the expenditures of a foreign citizen are stimulated towards local economy and will benefit the local community (Dixion et al., 2013).

Currently, the transformation of tourism tendency is happening in many parts of the world. The tourists' reluctance in visiting artificial tourism object is influencing the development of particular tourist interest such as village tourism. Tourism Village has the strategic position in the tourism industry because it's able to generate clean profit for villagers and increase their participation towards the development of tourism product. Tourism Village is able to fulfill the tourist needs and provide differential benefit for tourism management as well as conserve the nature heritage and village culture (Lanfranchi, 2010, Okech et al., 2012, Dorabantu and Nistoreanu, 2012, Sasidharan et al., 2012, Mustabsirah, 2015).

The development of sustainable tourism business such as tourism village requires the combination of general business managerial and social capital. Social capital can be the economic pusher and also strengthen the solidarity and norms lie inside the community (Grassi and Habisch, 2011, Avis, 2012). Social capital as the resources embedded in the social structure that can be accessed or mobilize by the purposive action (Harvey, 2006).

According to Woolcock (1998), there are three types of social capital; Bounding Social Capital, Bridging Social Capital and Linking Social Capital. Social capital as the network of the cooperation between people that could ease or accelerates problem-solving from the mutual action and able to give efficiency towards various coordinated action (Brehm and Rahn, 1997, Putnam, 2001). In the tourism sector, social capital owns bigger contribution in promoting tourism through a unique atmosphere by narrating local history, local culture, folktale, and providing advice during traveling as well as actively involved in the community development (Toader, et al., 2013).

Yogyakarta Special Region is one of the regions in Indonesia who develop the potency of tourism village, such as Candran and Wukirsari Tourism Villages in Bantul Regency that obtain the status of tourism villages with achievements from Department of Culture and Tourism of Yogyakarta Special Province in 2015-2016. Candran Tourism Village conceived the uniqueness in local art and farmer museum. In this tourism village, there are 54 units of tourism SME.

Wukirsari Tourism Village itself conceived the uniqueness in batik painting and natural objects such as waterfall, and the grave sites of the past Mataram Kings and the grave of Sunan Cirebon. The development of business activity, including tourism sector, is influenced by many factors, including the role of social capital. Meanwhile, the development of tourism site is conducted to enhance the local economic capacity for sure, especially the economic added value and non-economic value for the local community, as well as orientating in the conservation of environment, art, and culture. In that order, it becomes a necessity to preserve the expansion of positive externality from the sustainable development of tourism site which alternatively can be realized through the enforcement of social capital. The phenomenon found in Candran or Wukirsari Tourism Villages is the waning of social capital due to the internal and external change of tourism village.

This study aimed to a) discover the forms of social capital and the externality value of tourism village that implemented the principle of sustainable tourism development and b) formulating alternative strategy of social capital enhancement to expand the positive externality value from the sustainable tourism sector.

2. Methods

This research is a case study by using a qualitative approach with descriptive analysis. Data obtained through observation, depth interview, and questionnaire towards tourism SME and the community who live in Candran and Wukirsari Tourism Villages of Yogyakarta Special Province. The data collection was conducted gradually during the period of April-July 2015 and May-August 2016.

The analysis of social capital was using descriptive analysis. While the analysis instrument to assess the multiplier effect from the tourism activity was using Ratio Income Multiplier that calculates the amount of impact resulted from the tourist's expenditures that impacted on the entire local economy (indirect and induce effects), and the strategy formulation for enhancing social capital was using SWOT analysis.

3. Results

According to the result of data analysis in relation to the identification of social capital forms that occur in two samples of sustainable tourism site, which are Candran and Wukirsari Tourism Villages in Yogyakarta Special Province, it was acquired that the social capital is still growing on the actor of tourism SME and the community of the tourism village. The community assures that the social capital is the key towards a successful sustainable development of tourism, although for the objective condition there is a tendency of social capital waning due to internal and external factors.

The type of social capital formed and growth in the research location is categorized as Bounding Social Capital. The category of social capital that occur in those two tourism villages own the characteristic of powerful bound in one community system in accordance with the value, culture, customs, and kinship relationship.

The trust that occurs in tourism SME and common people is formed due to the open process between business actors as well as between community in the Candran and Wukirsari Tourism Villages. This process performs good reception between them, as well as custom, kinship relationship, cooperation, reputation, and interaction which conducted simultaneously.

The networking of tourism SME is not only limited between them with another SME and the tourism village management as well as the tourist but expanded through the economic activity with the actor outside the tourism village. In the beginning, the initiation of the pioneer of tourism village to invite the community for cooperation and developing the tourism village to earn additional income besides work as farmers, but in the beginning, this initiation hasn't earned a positive response. Along with the expansion of tourism actor network, the community starts to understand that working in the tourism sector would have more value. The network is easing the individual or group to obtain information swiftly and widely regarding all the information needed, including economic opportunity. An individual or group who own decent social network tends to faster in receiving economic valued information.

The social norm believed by the tourism SME is in accordance with what grows in the community of Tourism Village. The developed social norm is the values that apply in the community, including verbal rules which mutually accepted. The violence against social rules will be punished by the social sanction. In conclusion, social capital of tourism SME and community in Candran and Wukirsari Tourism Villages can be summarized as below:

Table 1: Social Capital in Tourism Village

Concept	Form	Field Findings	Synchronization towards theory
Trust	Honesty, transparency, hospitality, togetherness,	Sociability (values build together), mutual trust in business and social relationship. Mutual aid if there are people who are struggling or there is a certain event, a helping/supportive relationship	The trust is the relevant economic component that attached in the community culture which would create social capital wealth. Trust is dynamic, it grow and disappear if the built trust is undependable. The manifestation of trust is not only hope that based on belief, nut also on sensibility.
Norm	The values that embraced together, the rules that apply, the sanctions that apply, the tradition exist in the community	There are verbal rules that apply in the community, such as transaction and payment depends on the number of visitors; damage will be solved together. Flexible rule, there is social sanction in the form of marginalization of the community for people who broke it.	Social norm in social capital is formed from the values, rules, and sanctions that apply in one community or organization.
Network	The interaction between related party, cooperation, organization, work relation, recruitment	The intense interaction pattern between SME/UKM with the management of Tourism Village, tourist, supplier, and related party. Business network between SME/UKM are build in the activity of Tourism Village. There is organization owned by the SME/UKM. There is cooperation between SME/UKM in production and distribution of goods or services.	Social capital not only built by one individual, instead it tend to grow in a group that socialized as the important part of attached values. The employment network filled with unique typology along with the group characteristic and orientation.

Source: Primary Data Analysis, 2016

Based on the observation result and primary data analysis, it was discovered that the existence of Candran and Wukirsari Tourism Villages as the sustainable tourism destination has lifted the life of local economy, especially on the aspects of employment, business enhancement opportunity, the enhancement of income which confirmed through consumption pattern (direct effect). Aside from that, it was also identified that there is a positive externality in the form of the general improvement of community living standard (indirect effect). The analysis result of primary data regarding economic and non-economic impact of tourism village through the analysis process of descriptive statistic is summarized as below:

Table 2: The Externality Analysis of Tourism Village

Variable	Mean	Minimum	Maksimum	Std. Error of Mean	Variance	Std. Dev
Economic Impact	22,4328	18	25	0.19081	25	2,2083
Socio-Culture Impact	21,0672	17	25	0.15395	25	1,78211
Physical Impact	17,9925	15	20	0.15186	20	1,75789

Source: Primary Data Analysis, 2016

The mean value for the economic variable is bigger than the socio-culture variable, it means that the community perception that lives in tourism village judging that economic impact is relatively more essential rather than socio-culture and physical impact. The standard deviation is used for dispersive indication (data dissemination) from the research respondent towards the research population. The number of samples are 134 respondents with 95% trust level and mean value is bigger in compared to standard deviation value that indicated good data distribution towards all variables.

The economic impact from tourism expenditure that occurs in tourism village is asses with multiplier value of the existing money flow, after gathering the direct and indirect income data from tourist expenditure in tourism village, multiplier analysis of Vanhove (2005) is used to obtain multiplier value as described below:

Table 3: The Value of Multiplier Effect of Tourism Village

Description	Amount	Information
Average Income (IDR/month)	20.148.667	Visitor retribution
Average Expenditure (IDR/month)	14.724.778	Operational Cost
<i>Ratio Income Multiplier Type I</i>	1.73	

Source: Primary Data Analysis, 2016

If the coefficient multiplier value is less or equal to zero, then the tourism location has not been able to give economic impact, while the value between zero and one (0-1) indicate the low economic impact. If the multiplier value is bigger or equal to one (≥ 1), then the tourism location is able to give economic impact towards its environment (Dritasto dan Angraeni, 2013). The data result obtained from the estimation value of ratio income multiplier type 1 is 1.73, which means that the Candran and Wukirsari Tourism Village are able to give positive economic impact towards their community.

The value of ratio income multiplier type 1 in Candran and Wukirsari Tourism Villages is 1.73, which statically explains that every addition of 1 rupiah local income from tourism expenditure will impact on the 1.73 rupiah addition of local community total income which includes direct and indirect income.

The Tourism Village emerge positive impact for the community and environment. The real impacts due to the existence of tourism village are the enhancement of community living standard on the aspects of economic, socio-culture, and the aspect of physical quality of the living environment (Zaroh, 2012, Sari, 2015, Brida, et al., 2016). The direct positive impacts in Candran and Wukirsari Tourism Villages are the escalating numbers of tourist visit which enhanced the selling of tourism SME; the addition of family income causing the escalation of their consumption; the availability of new employment opportunity which directly absorbs local labor. Aside from that, the indirect effects are the women empowerment in order to facilitate the women to work in the tourism sector, as well as the enhancement of community knowledge in developing nature tourism.

As what explained in the past section, social capital is contributing to the enhancement of sustainable tourism, therefore the enforcement of social capital is required to enhance positive externality on tourism village destination. Based on the SWOT analysis, by concerning the internal and external factor in human resources dimension, the behavior of community and tourist, social institution, destination diversity, and policy in the tourism sector, several formulations of strategy are identified to enforce social capital which able to enhance positive externality. Based on the priority, there are four main strategies, 1) maintaining social institution that grow inside the community in tourism village; 2) pushing social literacy, especially towards the young age group in the community; 3) extensification of the attraction of local culture art which become the main attractiveness for international tourist; and 4) the pattern enforcement of economic sharing management on tourism village management.

4. Conclusion

From the social capital that occurs in sustainable tourism destination, it can be discovered that the type social capital that formed and growth is Bounding Social Capital category. The characteristic of powerful bond in the community system is based on the value, culture, customs, and kinship relationship. The community is assured that social capital is the key to success in developing sustainable tourism, although for the objective condition there is a tendency of social capital waning due to internal and external factors.

The tourism activity contributes positive impact towards community on the aspects of economy, socio-culture, and physical aspect of the living environment which indicated from the >1 of Ratio Income multiplier value. Four main strategies were formulated to strengthen social capital that able to increase positive externality, which are maintaining social institution that grow inside the community in tourism village; pushing social literacy, especially towards the young age group in the community; extensification of the attraction of local culture art which become the main attractiveness for international tourist; and the pattern enforcement of economic sharing management on tourism village management

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ACMASS-0032
A Sustainability Analysis of Hong Kong's Logistics Sector

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Abstract

The logistics sector plays a crucial role in global supply chain. It links manufacturers and service providers to their suppliers and buyers and drives global economy. However, the transportation of goods consumes energy and material resources directly and indirectly and produces pollutants and wastes. This paper presents a sustainability analysis of Hong Kong's logistics sector using a triple-bottom line approach i.e. taking economic, environmental and social performance into consideration simultaneously. The analyzed results showed that Hong Kong's logistics sector produced HKD 77.9 billion value added (3.35 percent of Hong Kong's gross domestic product), employed 180 thousand people (4.76 percent of Hong Kong's total employment figures), but produced 36.1 million tons of CO₂-equivalent in 2015. When only outbound logistics transport is considered, it produced 20.9 million tons of CO₂-equivalent (21.6 percent of Hong Kong's GHG emissions due to local fuel consumption) in 2015. Some suggestions to improve Hong Kong's logistics sustainability performance are given.

1. Introduction

As globalization proceeds with the advance of information and communication technology, consumers can purchase products from a range of suppliers all over the world. In manufacturing and service businesses, industrial buyers and procurement managers purchase components, raw materials, and products from suppliers in different parts of the world, as long as the product price and quality are competitive. Hence, the global logistics sector has continued to grow over the past decades.

According to the statistics provided by the World Bank, the world's container port traffic increased from 224 million twenty-foot equivalent units (TEU) in 2000, to 542 million TEU in 2010, then to 679 million TEU in 2014 (the World Bank, 2017). The world's air-freight transport increased from 118,257 million ton-km (MT-km) in 2000, to 182,052 MT-km in 2010, then to 188,000 MT-km in 2015 (the World Bank, 2017). In 2015, Hong Kong container port handled 20.1 million TEU and was ranked the fifth busiest port in the world (Hong Kong Marine Department, 2017; the World Bank, 2017). Hong Kong's air-freight outbound transport

amounted to 11,294 MT-km and was also ranked the fifth in the world. As an aviation hub, Hong Kong International Airport has been ranked as the busiest airport for international air cargo since 1996 (Hong Kong International Airport, 2017).

In terms of cargo weight, Hong Kong's sea freight cargo throughput amounted to 256.56 MT, air freight cargo throughput was 4.38 MT, and land freight cargo throughput was 22.94 MT in 2015. When freight cargo transport was characterized in terms of MT-km, sea freight cargo transport between Hong Kong and its Asian partners amounted to 232,276 MT-km, followed by sea freight cargo transport between Hong Kong and North American countries (mostly to the United States) at 196,790 MT-km. Air freight cargo transport between Hong Kong and its North American countries (mostly to the United States) amounted to 10,251 MT-km, followed by air freight cargo transport between Hong Kong and its Asian partners at 6,744 MT-km.

The Hong Kong Government considers trading and logistics as one of the four industries that drive Hong Kong's economic growth and create employment opportunities. The other three industries include financial service, tourism, and professional and producer services (Hong Kong Census and Statistics Department, 2016). The Hong Kong Government has published an annual report entitled "The Four Key Industries and Other Selected Industries in the Hong Kong Economy" since 2003. In the latest version of this report published in 2016, the trading and logistics services industry generated HKD 515.7 billion value added and employed 748 thousand people. The logistics sector itself generated HKD 77.9 billion value added and employed 180 thousand people.

The remainder of the paper is structured as follows. In Section 2, the approach of triple-bottom line is presented and economic, environmental, and social indicators are discussed, followed by the section of Method. Section 4 presents the results and analysis. The paper is ended with conclusions and suggestions.

2. Triple-Bottom Line Analysis and Indicators

Sustainability is a worldview that considers the needs of the present generation as well as the needs of future generations. More important, humans should live harmony with nature and understand that the earth has limited resources. According to the report "Our Common Future" published by the World Commission on Environment and Development, sustainable development refers to the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (the World Commission on Environment and Development, 1987; p.43). As such, sustainability and sustainable development consider human needs, safety, and health – "People" and impact from our activities on the environment – "Planet" within an economic context – "Profit" (Elkington, 1998a). Elkington (1998a,b) advocated the concept of "the triple bottom line" to reflect economic,

environmental, and social performance of an activity, organization, community, city, or country. Since then, the triple bottom line has been a popular term in academic and business communities (Fritz, Schoggl, and Baumgartner, 2017; Mark-Herbert, Rotter, and Pakseresht, 2010). However, each of economic, environmental, and social performance can be evaluated by a number of indicators and metrics (Beames, Broekx, Lookman, Touchant, & Seuntjens, 2014; Finkbeiner, Schau, Lehmann, & Traverso, 2010; Mickwitz and Melanen, 2009). Sikdar (2003) suggested that environmental indicators include resource consumption such as energy use, material use, water use and land use, and environmental impacts such as global warming, acidification, ozone depletion, human health and ecological health. All in all, it should be noted that the selection of indicators should be context specific, holistic, and focusing on sustainability. In the study of the logistics sector in which a significant amount of energy is consumed and greenhouse gases (GHG) are the key pollutants of concern at the global level, GHG emissions due to the burning of fuels was chosen as the environmental indicator (To, 2015; To & Lee, 2017). Sikdar (2003), and Clift and Wright (2000), and Sikdar (2003) suggested that value-added measures and Research & Development expenditures could be used to assess the economic benefits of an activity or a chain of activities. In this study, we followed To and Lee's (2017) study to use the value added by sector as the economic indicator. The US Department of Commerce (1973) suggested that education, health, housing, public safety, employment, and income could be used to assess social performance. Specifically, Noll (2004) suggested that the number of employment should be considered as a key social benefit of a sector. Thus, we selected the number of employment in the sector as the social indicator. In sum, we used the following three indicators.

$$(1). \text{GHG emissions in MT of CO}_2\text{-equivalent} \propto \frac{1}{\text{environmental performance}}$$

in which GHG emissions are determined from the weights of cargo freights from Hong Kong to different destinations (and vice versa) by different transport modes in tons, the distance between Hong Kong and a destination/country of origin in km, and the emission factors of different transport modes. The emission factors were 0.0121 kg CO₂-equivalent per ton-km for sea freight, 0.95 kg CO₂-equivalent per ton-km for air freight, 0.1197 kg CO₂-equivalent per ton-km for land transport by truck, and 0.0227 kg CO₂-equivalent per ton-km for land transport by rail (To & Lee, 2017).

$$(2). \text{Value added in HKD billion} \propto \text{economic performance}$$

$$(3). \text{The number of employment} \propto \text{social performance.}$$

3. Method and Data

When sustainability performance is tracked over time (i.e. indicators are compared year to year), environmental, economic, and social indicators must be normalized because the total production, consumption, and population of a city changes year after year. Thus, three normalized performance indicators were used to reflect the normalized environmental, economic, and social performance of the logistics sector. The normalized environmental performance ($EnvPerf_{normalized}$) is defined as follows:

$$EnvPerf_{normalized} = \frac{\sum_{k=1}^l Fuel_k \times EF_k}{(GHG \text{ emissions from the logistics sector})_{outbound}}, \quad (1)$$

where the numerator ($\sum_{k=1}^l Fuel_k \times EF_k$) is the total GHG emission due to the consumption of fossil fuels, including oil products, natural gas, and coal in Hong Kong (EF_k stands for emission factor of the k th fuel in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006); the denominator is the total GHG emission due to outbound cargo freights.

The second normalized indicator, normalized economic performance ($EcoPerf_{normalized}$) is defined as follows.

$$EcoPerf_{normalized} = \frac{Value \text{ Added}_{logistics}}{GDP}, \quad (2)$$

where the numerator is the value added by the logistics sector and the denominator is the gross domestic product (GDP) of Hong Kong.

The third normalized indicator, normalized social performance ($SocPerf_{normalized}$) is defined as follows.

$$SocPerf_{normalized} = \frac{Employment_{logistics}}{Total \text{ employment}}, \quad (3)$$

where the numerator is the employment in the logistics sector and the denominator is the total employment in Hong Kong.

Data were collected from the publications of the Hong Kong Census and Statistics Department for the Year 2000, 2005, 2010, and 2015. The Hong Kong Census and Statistics Department publishes “the Hong Kong Annual Digest of Statistics” in which different freight transport data

in terms of tonnage and destination/country of origin are given. In addition, the Department also publishes an annual report entitled “The Four Key Industries and Other Selected Industries in the Hong Kong Economy”. In this annual report, the value added by the logistics sector, i.e., the magnitude of gross revenue minus the value of goods and services used up in the course of service delivery is given to reflect how much economic contribution is generated from the sector. Besides, the number of people employed in the logistics sector is also given.

4. Results and Analysis

The total cargo throughput of Hong Kong increased from 217.26 MT in 2000 to 283.87 MT in 2015. Figure 1 shows Hong Kong’s cargo throughput in the Year 2000, 2005, 2010, and 2015. Among different modes of freight transport, air freight cargo throughput increased from 2.24 MT in 2000 to 4.38 MT in 2015, sea freight cargo throughput increased from 174.64 MT in 2000 to 256.56 MT in 2015 while the land freight cargo throughput decreased from 39.93 to 22.94 MT by trucks and from 0.45 to 0 MT by trains. However, it should be noted that there was a significant decrease of 13.8 percent in total cargo throughput from 2014 to 2015, particularly in both sea and land freight transport. Besides, there has been no freight train between Hong Kong and the mainland of China since 2011.

Figure 2 shows the total GHG emissions from Hong Kong’s logistics sector. The total GHG emissions increased from 23.5 MT of CO₂-equivalent in 2000, to 31.2 MT of CO₂-equivalent in 2005, then to 36.2 MT of CO₂-equivalent in 2010. The total GHG emissions were 36.1 MT of CO₂-equivalent in 2015.

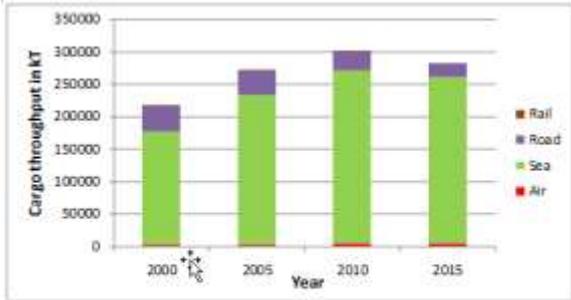


Figure 1. Cargo throughput

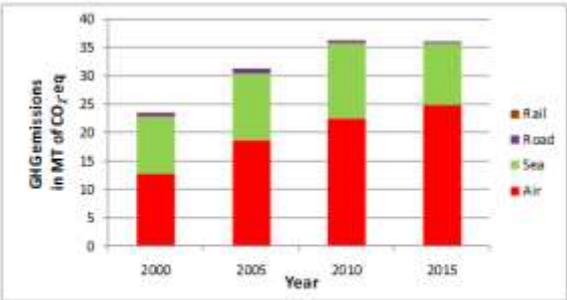


Figure 2. GHG emissions

Figure 3 shows the value added by the logistics sector and the employment in the logistics sector. It was found that the value added increased from HKD 56.1 billion in 2000, to 70.3 billion in 2005, then to 82.5 billion in 2010. The value added was HKD 77.9 billion in 2015. The employment in the logistics sector was 193.4 thousand in 2000, 194.3 thousand in 2005, 190.7 thousand in 2010, and 180.1 thousand in 2015.

Figure 4 shows the normalized economic, environmental, and social performance of the logistics

sector. It was found that the normalized social performance decreased continuously from 2000 to 2015 while the normalized economic performance decreased rapidly from 2005 to 2015. However, there was no substantial change in the normalized environmental performance. A detailed inspection of our calculations shows that when only outbound logistics transport was considered, it produced 12.9 MT of CO₂-equivalent (20.8 percent of Hong Kong’s GHG emissions due to local fuel consumption) in 2000. Outbound logistics transport produced 18.7 MT of CO₂-equivalent in 2005, 22.0 MT of CO₂-equivalent in 2010, and 20.9 MT of CO₂-equivalent in 2015 (and 23.9, 21.7, and 21.6 percent of the total GHG emissions in these three years, respectively).

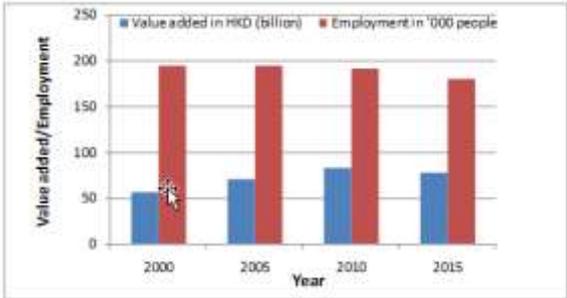


Figure 3. Value added/employment

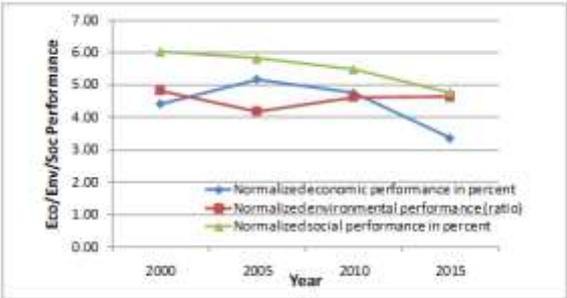


Figure 4. Eco/Env/Social performance

5. Conclusions

The paper presented a sustainability analysis of Hong Kong’s logistics sector based on the triple-bottom approach. Results showed that the logistics sector’s economic contribution (i.e. EcoPerf) decreased to 3.35 percent of Hong Kong’s total GDP in 2015. The logistics sector employed 180 thousand people and produced a social benefit (i.e. SocPerf) of 4.76 percent of Hong Kong’s total employment in 2015, decreasing continuously from 6.02 percent in 2000, to 5.81 percent in 2005, and to 5.48 percent in 2010. However, the logistics sector produced 21.6 percent of Hong Kong’s total GHG emission in 2015 and there was almost no change from 2010. Thus, the Hong Kong Government should work closely with logistics firms, container terminal operators, air cargo terminal operators to improve their efficiency and effectiveness. Besides, air freight cargo produced a significant amount of GHG emissions in recent years. The Hong Kong Government may encourage logistics firms to maximize their scheduling efficiency and to switch some cargo loads from air freight to sea or land freight.

Acknowledgements

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Economics

Wednesday, August 16, 2017 10:30-12:00 Room 1006

Session Chair: *Prof. Nano Prawoto*

ACMASS-0036

The House Price Dynamics and Heterogeneity: Evidence from China's Major Cities

Lili Wu | *China University of Petroleum (Beijing)*

Zhengwei Ma | *China University of Petroleum (Beijing)*

Xu Tang | *China University of Petroleum (Beijing)*

Jiangliang Wang | *China University of Petroleum (Beijing)*

ACMASS-0054

A Comparative Analysis of the Public-Private Partnerships of the Korean Wave and Cool Japan

Yoo Soo Hong | *Institute for Creative and Innovative Development*

Hui-Wen Chen | *Wenzao Ursuline University of Language*

ACMASS-0088

The Factors Influencing Economic Growth in Indonesia Period 1981-2014 Error Correction Model Approach

Imamudin Yuliadi | *University Muhammadiyah of Yogyakarta*

ACMASS-0089

The Analysis of Macroeconomic Variables, Regional Stock Index, and Gold Price Impact on Jakarta Islamic Index: An Approach of Vector Error Correction Model (Vecm)

Agus Tri Basuki | *University Muhammadiyah Yogyakarta*

Salma Nur Karima | *University Muhammadiyah Yogyakarta*

ACMASS-0093

Composition of Public Expenditure to Economic Growth in Supporting Good Governance

Nano Prawoto | *University Muhammadiyah Yogyakarta*

The House Price Dynamics and Heterogeneity: Evidence from China's Major Cities

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Abstract

This paper applies a dynamic factor model estimated on monthly city-level data from 2005 to 2015 to disentangle the relative importance of the regional common component in house price movements from city-specific shocks. We find that movements in house prices were mainly driven by the local component before 2009. However, the recent period (2005–2015) has been different: the increase in house prices is a regional phenomenon. We then use a VAR to investigate the extent to which expansionary monetary policy is responsible for the regional co-movement of house prices, and the extent to which the magnitude and duration of the responses to monetary policy shocks vary across regions. We find that the effects of monetary policy shocks on regional-level house prices are significant. This finding reveals that the heterogeneous increases in house prices observed in recent period are most likely attributable to the regional asymmetric responses to expansionary monetary shocks rather than local specific fundamentals.

Key Words: house price; heterogeneity; dynamic factor model; monetary policy

1. Introduction

Ever since the completion of the urban housing reforms in 1998, China's housing market has undergone rapid development, along with which is the evident spatial differentiation of house prices across cities. Among China's major cities, enormous house price differences exist not only in levels but also in the growth rates. House prices in some first-tier cities like Beijing and Shenzhen are over 20000 yuan/m² and have experienced an over 15% annual increase in the past decade. These prices are much higher than those of central and western cities.

Heterogeneity of different areas and cities in the housing market has been a constant topic for many researchers (Capozza, Hendershott, & Mack, 2004; Evans, 1990; Jones & Leishman, 2006; Jones, Leishman, & Watkins, 2003, 2004; Larraz-Iribas & Alfaro-Navarro, 2008; Millington, 1994). Most of these studies explain that local specific indicators, such as income, population, supply costs etc., are fundamental factors causing varieties in local house prices. However, it has been seldom discussed in previous literature that whether the recent steep rise of house prices in China could be explained by local specific factors. Actually, plentiful evidence shows that

adjacent cities in a certain region present similar house price patterns, and this may also be the case for cities far apart geographically but with similar economic or demographic characteristics. Therefore, is it possible that house price swings of Chinese cities in fact have some common features and are more likely to be a regional phenomenon? Understanding whether the heterogeneous increase in house price reflects a collection of “local bubbles” or a regional phenomenon has important policy implications. “local bubbles” are most likely attributable to local factors, i.e., circumstances that are specific to each geographic market, rather than to monetary policy, which is applied nationwide (Del Negro & Otrok, 2007). On the contrary, if the house price swings of cities in specific regions have some common features, and regional housing markets are highly integrated, the effect of monetary policy in dealing with the recent house price swings will be significant.

To address the issue of a potential regional housing cycle, we analyze the Chinese housing dynamics by city with the co-movement. To look into the co-movement, we estimate a dynamic factor model on city-level house price indexes, and disentangle the component of the increase in house prices that is common to all cities in a certain region from the component that is idiosyncratic, i.e. specific to each city. We then examine the contribution of each component in the house price dynamics by city through variance decomposition. We are also concerned with the behavior of regional house prices. If the house price movements are more likely to be regional phenomenon, explaining the heterogeneity in house prices now turns to explain the asymmetries in regional behavior. In this analysis, we engage in an in-depth study into the asymmetries in terms of responses to outside monetary policy shocks. In this sense, we first analyze whether regional house prices are tied with monetary policy in long-run relationships over time. In the second place, we study how regional house prices behave asymmetrically to monetary policy. This analysis improves the understanding of the recent house price swings in China from both a spatial and economic point of view.

Our study closely follows the method applied in Del Negro and Otrok (2007) and Song (2008), who investigate the recent house price boom in U.S. and Korea respectively. Both researches disaggregate the house price data into a national, regional and local factor to investigate the housing boom as a local or national phenomenon. They then use a VAR to investigate the extent to which expansionary monetary policy is responsible for this phenomenon. But in our study, we extract the regional common movements, rather than the national common cycle, in house price fluctuations. Since China’s housing market is a typical segmented market, it is inappropriate to investigate the relation between house prices and the macroeconomy on the basis of the national market. Moreover, national analysis negates the consideration of specific characteristics and might smooth out the remarkable regional heterogeneity in Chinese housing market.

2. Model

Previous studies usually use principal component analysis to measure the [co-movement](#) of many [time series](#). While principal component analysis essentially provides a compact summary of the co-movements of house prices in certain regions, it does not permit to disentangle the city-specific factors. Therefore, in this study we explore the common component by estimating the dynamic factor model in the spirit of Sargent and Sims (1977) and Stock and Watson (1989). This model not only allows us to disentangle the unobservable common component and the idiosyncratic component of the increase in the value of housing, but also allows us to characterize explicitly the dynamic behaviour of the common component.

Consider the following dynamic factor model:

$$y_{j,it} = d_{j,i} + \gamma_{j,i}(L)c_{j,t} + u_{j,it}, \quad j=1, \dots, 5, \quad i=1, \dots, k_j, \quad t=1, \dots, T \quad (1)$$

$$\varphi_j(L)c_{j,t} = \eta_{j,t}, \quad \eta_t \square i.i.d.N(0, \sigma_\eta^2) \quad (2)$$

$$\psi_{j,i}(L)u_{j,it} = v_{j,it}, \quad v_t \square i.i.d.N(0, \sigma_v^2) \quad (3)$$

where $y_{j,it}$ denotes the house price index of city i in region j . We analyze five regions in this analysis. k_j represents the number of cities in region j , and $i=1, \dots, k_j$ denotes every specific city in this region.

In the dynamic factor model (1), house prices $y_{j,it}$ is decomposed into two factors: regional common factor $c_{j,t}$ and idiosyncratic or city-specific factor $u_{j,it}$. (It is important to note that the city-specific factors are not modeled explicitly, as the city factors are implicitly denoted by the error terms). The regional factor is common across a certain region, while the city-specific factor is unique associated with individual cities. In these two kinds of factors, the regional factor can be considered as the driving force to generate the co-movement of the regional house prices.

Equation (2) and (3) describe the evolution of regional factors and the error terms respectively. Both of these components are modelled as autoregressive stochastic processes of order p and q .

We further assume that $c_{i,t}$ and $u_{i,it}$ are mutually uncorrelated at all leads and lags.

Following the suggestion by Stock and Watson (1991), the model is to be estimated in deviation from means. We can use the Kalman filter to construct the Gaussian likelihood function and to estimate the unknown parameters by maximum likelihood. Before using the Kalman filter it is necessary to transform the above three equations into the state–space form.

The state–space form of the system is comprised of a measurement equation and a transition (or state) equation. Measurement equation relates the observed variables to the elements of the state

vector and transition equation describes the evolution of the unobservable state vector. Here we choose east region from the five regions as an example to describe the transformation to the state-space form.

By choosing $p_{2,t} = 2$ and $q_{2,t} = 2$, the measurement equation can be given by¹

$$\begin{bmatrix} y_{2,1t} \\ y_{2,2t} \\ y_{2,3t} \\ y_{2,4t} \end{bmatrix} = \begin{bmatrix} \gamma_{2,1} & 1 & 0 & 0 & 0 \\ \gamma_{2,2} & 0 & 1 & 0 & 0 \\ \gamma_{2,3} & 0 & 0 & 1 & 0 \\ \gamma_{2,4} & 0 & 0 & 0 & 1 \end{bmatrix} \times \begin{bmatrix} c_{2,t} \\ u_{2,1t} \\ u_{2,2t} \\ u_{2,3t} \\ u_{2,4t} \end{bmatrix} \quad (4)$$

The transition equation can be written as

$$\begin{bmatrix} c_{2,t} \\ c_{2,t-1} \\ u_{2,1t} \\ u_{2,1t-1} \\ u_{2,2t} \\ u_{2,2t-1} \\ u_{2,3t} \\ u_{2,3t-1} \\ u_{2,4t} \\ u_{2,4t-1} \end{bmatrix} = \begin{bmatrix} \varphi_{2,1} & \varphi_{2,2} & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & \psi_{2,11} & \psi_{2,12} & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & \psi_{2,21} & \psi_{2,22} & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & \psi_{2,31} & \psi_{2,32} & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & \psi_{2,41} & \psi_{2,42} \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \times \begin{bmatrix} c_{2,t-1} \\ c_{2,t-2} \\ u_{2,1t-1} \\ u_{2,1t-2} \\ u_{2,2t-1} \\ u_{2,2t-2} \\ u_{2,3t-1} \\ u_{2,3t-2} \\ u_{2,4t-1} \\ u_{2,4t-2} \end{bmatrix} + \begin{bmatrix} \eta_{2,t} \\ 0 \\ v_{2,1t} \\ 0 \\ v_{2,2t} \\ 0 \\ v_{2,3t} \\ 0 \\ v_{2,4t} \\ 0 \end{bmatrix} \quad (5)$$

where $[\eta_{2,t} \ 0 \ v_{2,1t} \ 0 \ v_{2,2t} \ 0 \ v_{2,3t} \ 0 \ v_{2,4t} \ 0]$ is the vector of disturbances, which we assume has a diagonal covariance matrix.

3. Empirical results

3.1 Data

The house price index used in this analysis is the Price Indices for Residential Building in 70 large-and-Medium-sized cities ("the 70 Cities Indices"). This index is published by the China's National Bureau of Statistics (NBS) since 1998. It was published quarterly before July 2005 and since then it is published monthly. It provides almost the only consistent source for describing Chinese house prices (Wu, Deng, & Liu, 2012). The nominal index is deflated by the monthly consumer price index in each city. The sample ranges from July 2005 to April 2015. Only 30 cities are included due to the limitation on the length time series. The baseline specification includes five regions: Beijing area, east region, central region, northeast and west region. These

¹ Here $i = 1, \dots, 4$ denotes Hangzhou, Nanjing, Ningbo and Shanghai respectively in east region. Since the model is estimated in deviation from means, the $d_{j,i}$ term is canceled out.

regions are divided according to both geographic information and similar house price patterns. Table 1 reports selected statistics for the sample.

Table1 Selected Statistics on House Price Growth in 30 Cities

					(YOY, %)
	Variable	Mean	Std. Dev.	Min	Max
Beijing	Beijing	6.13	6.59	-4.70	19.70
	Guangzhou	3.13	7.88	-12.20	23.30
	Shenzhen	3.18	8.94	-21.50	17.30
	Xiamen	3.07	4.82	-6.60	13.60
East	Hangzhou	1.92	6.36	-12.39	15.10
	Ningbo	1.91	5.85	-9.63	13.90
	Nanjing	1.26	5.05	-8.20	11.10
	Shanghai	1.04	5.75	-7.70	15.80
Northeast	Changchun	1.82	3.05	-3.77	9.50
	Dalian	3.15	4.58	-3.47	18.30
	Haerbin	1.26	3.13	-5.61	7.80
	Huhehaote	2.05	5.38	-7.00	15.00
	Qingdao	2.02	4.38	-7.18	10.80
	Shenyang	2.50	3.84	-4.22	11.40
Central	Changsha	3.66	3.93	-4.80	13.60
	Hefei	1.05	4.00	-7.09	11.80
	Jinan	1.98	3.46	-4.83	8.80
	Nanchang	2.41	3.51	-5.23	9.30
	Nanning	1.86	4.19	-5.70	11.40
	Taiyuan	0.77	3.91	-7.20	11.00
	Wuhan	1.37	3.12	-4.35	8.60
West	Chengdu	1.87	4.23	-5.41	9.30
	Chongqing	2.35	4.16	-5.90	11.10
	Guiyang	2.15	3.35	-4.80	11.30
	Kunming	-0.15	3.54	-7.28	11.30
	Lanzhou	2.42	2.66	-2.97	9.00
	Wulumuqi	3.72	4.31	-3.14	17.80
	Xian	2.39	3.88	-3.67	12.80
	Xining	1.53	2.84	-3.60	8.30
Yinchuan	2.11	4.67	-4.26	14.30	

Note: The sample period is 2005:07-2015:04
Source: Wind Information

In order to examine the co-movement of house prices in all cities, simple correlations across the cities are reported in Table 2. This table shows the correlation among selected cities². It is obvious that correlations between any two cities in the same region are relatively higher. For example, the correlations between any two cities in Beijing area are higher than 0.6, while most of the correlations between these cities and any other cities outside this region are lower. This finding indicates that the regional factor might have a significant influence on explaining the price co-movement within the region.

² Only 14 cities are reported due to limitation on space.

Table 2 Correlation among Selected Cities

		A	B	C	D	E	F	G	H	I	J	K	L	M	N
Beijing	A	1.00													
	B	0.60	1.00												
	C	0.63	0.88	1.00											
East	D	0.86	0.51	0.51	1.00										
	E	0.73	0.26	0.28	0.89	1.00									
	F	0.61	0.73	0.57	0.65	0.48	1.00								
Northeast	G	0.57	0.48	0.54	0.48	0.23	0.21	1.00							
	H	0.72	0.51	0.51	0.66	0.47	0.62	0.67	1.00						
	I	0.47	0.48	0.52	0.42	0.14	0.20	0.87	0.62	1.00					
	J	0.53	0.54	0.52	0.52	0.28	0.52	0.71	0.83	0.65	1.00				
Central	K	0.62	0.33	0.19	0.62	0.44	0.61	0.44	0.67	0.48	0.51	1.00			
West	L	0.43	0.61	0.46	0.35	0.21	0.50	0.26	0.41	0.40	0.27	0.44	1.00		
	M	0.35	0.43	0.27	0.47	0.32	0.55	0.48	0.61	0.58	0.65	0.71	0.41	1.00	
	N	0.50	0.40	0.09	0.57	0.50	0.51	0.23	0.37	0.27	0.29	0.67	0.43	0.58	1.00

Note: To save space, we use the following abbreviation: A(Beijing), B(Guangzhou), C(Shenzhen), D(Hangzhou), E(Ningbo), F(Shanghai), G(Dalian), H(Haerbin), I(Huhehaote), J(Shenyang), K(Hefei), L(Kunming), M(Xining), N(Yinchuan).
 The sample period is 2005M07-2015M04
 Source: Wind

3.2 Dynamic factors

We use the dynamic factor model to extract the unobservable common component of house price trend in different regions and to show to what extent that house prices are influenced by common regional factors. The results of estimation in east region are listed as follows³ with standard errors in brackets.

The measurement equation:

$$Hangzhou = 0.81c_{2,t} + u_{2,1t} \quad (0.15)^{***}$$

$$Nanjing = 0.65c_{2,t} + u_{2,2t} \quad (0.14)^{***}$$

$$Ningbo = 0.49c_{2,t} + u_{2,3t} \quad (0.11)^{***}$$

$$Shanghai = 0.69c_{2,t} + u_{2,4t} \quad (0.11)^{***}$$

The transition equation:

³ The results of other four regions are available by request.

$$c_{2,t} = 1.72c_{2,t-1} - 0.76c_{2,t-2} + \hat{\eta}_{2,t}$$

(0.10)^{***} (0.10)^{***}

$$u_{2,1t} = 0.37u_{2,1t-1} + 0.30u_{2,1t-2} + \hat{v}_{2,1t}$$

(0.16)^{**} (0.12)^{***}

$$u_{2,2t} = 0.87u_{2,2t-1} + 0.04u_{2,2t-2} + \hat{v}_{2,2t}$$

(0.12)^{***} (0.12)

$$u_{2,3t} = 0.90u_{2,3t-1} + 0.03u_{2,3t-2} + \hat{v}_{2,3t}$$

(0.10)^{***} (0.10)

$$u_{2,4t} = 1.47u_{2,4t-1} - 0.48u_{2,4t-2} + \hat{v}_{2,4t}$$

(0.19)^{**} (0.19)^{***}

The log likelihood=-1038.2, Akaike information criterion=10.48, and Bayesian information criterion=5.76.

The results show that the factor loadings for all cities are significant at the 1% level, indicating that house prices in all four cities contain information about the state of the region they belong to. The factor loading for all cities are broadly similar, although the loading for Ningbo (which is 0.49) is somewhat smaller than those of the other cities.

Given the estimated parameters, we obtain the unobservable common component by running the Kalman smoother. Figure 3 plots the estimated common component $c_{j,t}$ in each region. These regional common component have marked the considerable heterogeneity of housing price across various regions. However, since 2009, the common components have followed impressively similar trend. Although amplitude in each region is different, the peaks and troughs appear almost at the same time. It seems that, on one hand, China's central government's macro-control on the real estate market has led a significant change of house price through a series of policy measures. On the other hand, all regions are influenced by the same macroeconomic shocks but their responses are various.

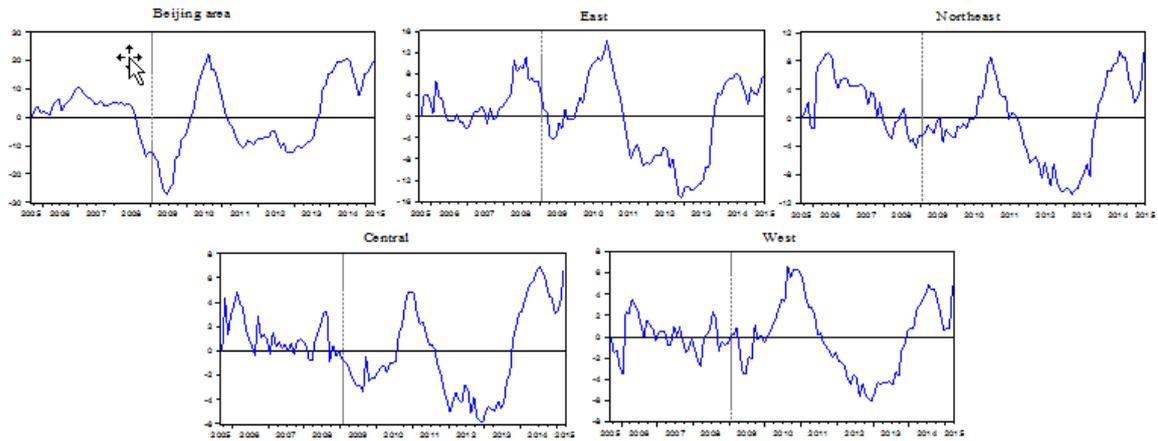
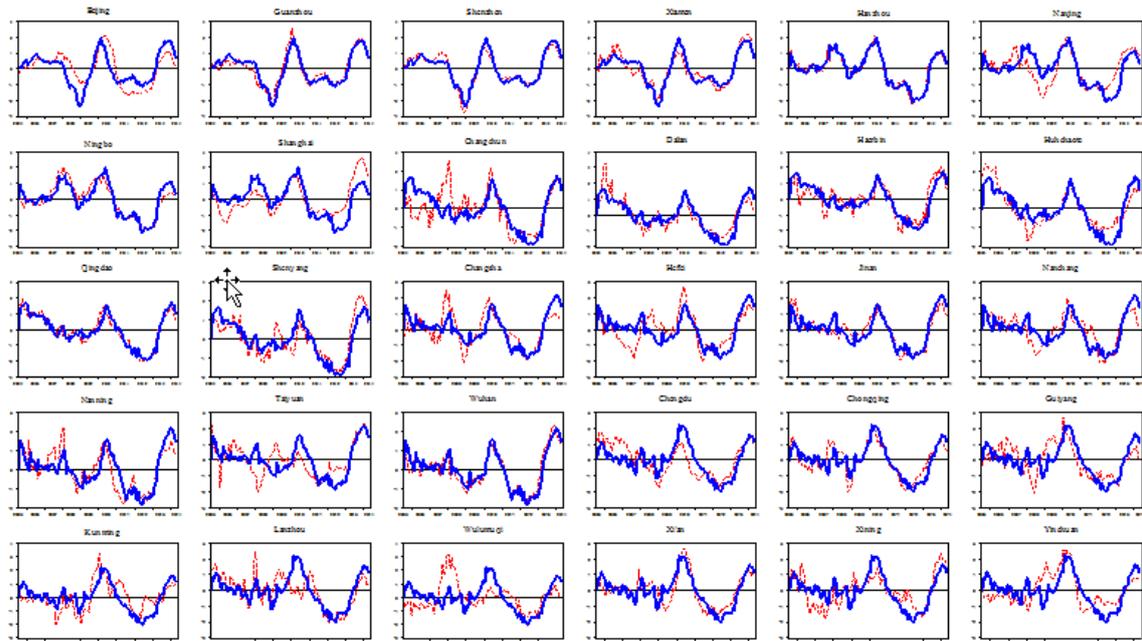


Fig.3 Estimated common component of each region

Figure 4 is made by the growth rates of house prices by the city and regional factors. Of note is that fluctuations in house prices have mainly been driven by the local component before 2009. For example, with the regional common factor, there were few that explain the movements of house prices in Nanning, Taiyuan, Guiyang, Lanzhou, Wulumuqi and Xining in central and west regions. It seems that there is no appreciable mutual effect on house prices. However, there is a high possibility that the soaring house price observed after 2009 is probably a regional phenomenon but not a local bubble. If a phenomenon like this is observed in one particular area, this could be considered as the characteristics of the house prices in that area. However, given the fact that such trend is observed in all subject areas, it can be analyzed that when it comes to the movement in house prices, the co-movement by the city within the same area is significant. Moreover, the unobservable common component evolves over time in a way more similar to the house price series in Beijing and east area than in other regions.



Note: The bold line indicates the regional common factor, the thin dotted line is the growth rate of house price of individual city.

Fig. 4 Regional factor and movements of house price by cities

3.3 Variance decomposition

To measure the relative contribution of the regional and city factors to variations in the growth rate of house price, the shares of the variance of each factor to the house price are estimated. The variance of house price is decomposed into the fraction of each factor. With orthogonal factors, the variance of the growth of house price of each city can be decomposed as follows

$$\text{var}(y_{j,it}) = (\gamma_{j,i})^2 \text{var}(c_{j,t}) + \text{var}(u_{j,it}) \quad (7)$$

Then, the variance contribution due to the regional factors can be written as

$$\frac{(\gamma_{j,i})^2 \text{var}(c_{j,t})}{\text{var}(y_{j,it})} \quad (8)$$

and the fraction of variance explained by city specific factors are defined as

$$\frac{\text{var}(u_{j,it})}{\text{var}(y_{j,it})} \quad (9)$$

Table 3 displays the variance shares of each factor in 30 cities. The average share of regional factor stands at 82%, indicating the existence of co-movement of house price in China. Especially, the fraction of volatility due to the regional factor on Beijing area and eastern region are both over 94%, accounting for the high correlation observed in Table 2.

Figure 5 plots for each city the magnitude of contribution of regional factors for the sub-sample 2005-2009 and 2010-2015. It quantifies the importance of regional factor relative to city specific factors in the recent period. For all cities except Huhehaote the regional common component of fluctuations is more important in the recent period than in the remainder of the sample. For a number of central and western cities the importance of the regional factor is negligible and heterogeneity across cities is large in the first five-year period. While between 2010 and 2015 the relative importance of regional factors has increased substantially. Although still larger in cities that witnessed large increase in house prices, the relative importance of regional factors has become much more even among regions. This evidence confirms our results in Figure 4. It also shows that housing market in China is a typical regional market. Therefore, when analyzing house price dynamics and the impacts of relevant policies on house prices it is necessary to consider regional differences.

Table 3 Variance Decomposition

Region	City	Contribution of regional factors (%)	Contribution of city-specific factors (%)
Beijing	Beijing	93.6	6.4
	Guangzhou	96.7	3.3
	Shenzhen	98.3	1.7
	Xiamen	92.7	7.3
East	Hangzhou	95.4	4.6
	Ningbo	95.2	4.8
	Nanjing	88.1	11.9
	Shanghai	98.7	1.3
Northeast	Changchun	78.4	21.6
	Dalian	84.7	15.3
	Haerbin	85.4	14.6
	Huhehaote	88.6	11.4
	Qingdao	93.9	6.1
	Shenyang	87.3	12.7
Central	Changsha	64.3	35.7
	Hefei	89.1	10.9
	Jinan	73.1	26.9
	Nanchang	71.8	28.2
	Nanning	89.0	11.0
	Taiyuan	77.6	22.4
	Wuhan	95.2	4.8
West	Chengdu	87.3	12.7
	Chongqing	88.3	11.7
	Guiyang	73.1	26.9
	Kunming	62.0	38.0
	Lanzhou	66.6	33.4
	Wulumuqi	62.4	37.6
	Xian	77.1	22.9
	Xining	76.7	23.3
	Yinchuan	79.4	20.6

Note: The sample period is from 2005M7 to 2014M4.

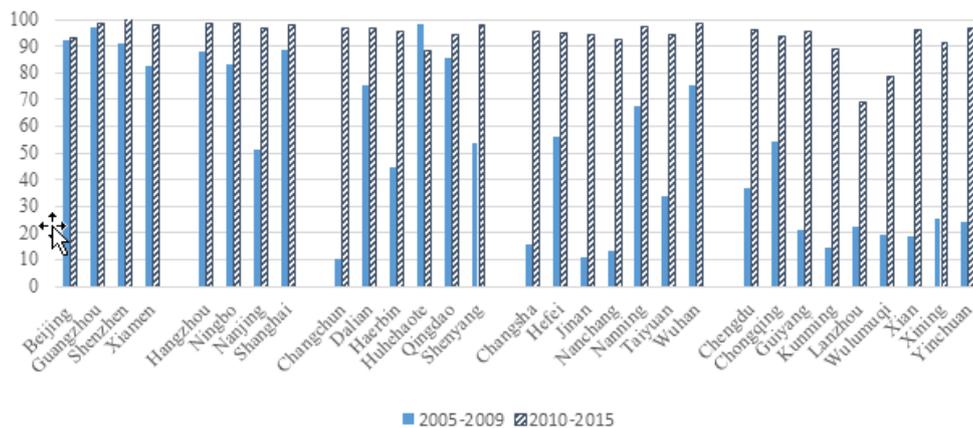


Fig. 5 Contribution of regional factors for the sub-sample 2005-2009 and 2010-2015

4. House price and monetary policy

Specifically, regional factors can lead to heterogeneous responses to macro policies, especially to monetary policies. Our analysis now turns to investigate how will the macro variables, such as aggregate money supply and long-term mortgage rates, affect housing price fluctuations in

different regions and cities.

The following Vector Autoregression (VAR) method is constructed to answer this question. The cointegrating VAR model is given by:

$$y_t = B_1 y_{t-1} + \dots + B_k y_{t-k} + \mu + \delta \tau_t + e_t \quad (9)$$

where y_t is a vector of endogenous variables comprising the regional common component of house prices, monetary policy instruments and real output. μ is a vector of constants, τ_t is a deterministic time trend and e_t is a vector of white noise error terms. We use this specification as the sequential testing procedure.

To proceed, the VAR model can be reformulated in a vector error correction form:

$$\Delta y_t = C_1 \Delta y_{t-1} + \dots + C_{k-1} \Delta y_{t-k+1} + C_0 y_{t-1} + \mu + e_t \quad (10)$$

Johansen's maximum likelihood test is applied here to identify the long-run relationships between the variables. This methodology aims at testing the rank of the matrix C_0 , which indicates the number of long-run relationships between the endogenous variables in the system.

We conduct two models to investigate the response to money supply and mortgage rate respectively. Table 4 provides the cointegration test results of the first VAR which includes house price common factor $c_{i,t}$, money supply $m2$ and real output y . The cointegration test results for Beijing area using a standard trace test are reported in Panel A. It appears that the null hypothesis of no cointegration (CI) vector can be rejected ($p=0.04$) but that of at most one CI cannot be rejected. This implies that the matrix C_0 can be factorized as $C_0 = \alpha\beta'$, where α is a (3×1) vector of loading or adjustment coefficients and β is a (3×1) vector of cointegrating or long run coefficients. The cointegrating coefficients β describe the relationship linking the endogenous variable in the long run. It shows that this coefficient on the money supply in Beijing area is -1.091 , implying that the house prices and the money supply in Beijing area grow proportionately over time. The long-run elasticity of house prices with respect to the money supply is about 1.091 , implying that about 10 percentage points' increase in money supply growth is associated with about 10.91 percentage points' increase in house prices appreciation in the long run. Panel B through Panel E show the cointegration test results in other regions. These results are similar to those in Beijing area except that the elasticity of the house prices common factor on the money supply is different. The elasticity in eastern area is a little bit lower at about -0.813 , while that in central and western region is much lower, at about -0.469 and -0.667 , respectively. And the coefficient on the growth of money supply in northeast shown in Panel C is

statistically insignificant.

Table 5 shows the cointegration test results of the second VAR which includes mortgage rate as the monetary policy instrument. The table provides the long-run relationship between house prices, mortgage rate and the real output during the same period. The trace test shows there is a clear cointegration relationship in Beijing area, east and northeast region. The long-run negative correlation between the house prices and mortgage rate becomes statistically significant in Beijing area and east region but statistically insignificant in northeast. No cointegration is identified in central and west region. The cointegration results indicate the fact that Beijing and east areas show a much greater sensitivity of house prices to the money shocks in the long run than do other regions. This is consistent with the observation that the magnitudes of house prices swings are larger in Beijing and east areas than in other regions.

Table 4 Tests for Cointegration (1)

	β	α		Null hypothesis of		
Panel A: Beijing area						
$c_{1,t}$	1.000	-0.027 (0.014)*	No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
m_2	-1.091*	-0.02 (0.014)***	Trace test statistics	24.739	9.718	0.004
y	2.429	-0.033 (0.026)	p-value	0.044	0.131	0.955
Panel B: East						
$c_{2,t}$	1.000	-0.172 (0.047)***	No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
m_2	-0.813**	0.011 (0.029)	Trace test statistics	34.974	16.477	3.689
y	-0.481**	-0.037 (0.082)	p-value	0.012	0.036	0.055
Panel C: Northeast						
$c_{3,t}$	1.000	-0.035 (0.015)***	No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
m_2	-0.149	-0.043 (0.009)***	Trace test statistics	49.545	7.642	2.372
y	2.941	-0.123 (0.026)***	p-value	0.099	0.987	0.941
Panel D: Central						
$c_{4,t}$	1.000	-0.129 (0.037)***	No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
m_2	-0.469**	-0.003 (0.041)	Trace test statistics	27.032	8.794	0.615
y	0.461***	-0.117 (0.105)	p-value	0.022	0.181	0.494
Panel E: West						
$c_{5,t}$	1.000	-0.064 (0.022)***	No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
m_2	-0.667**	-0.077 (0.023)	Trace test statistics	49.195	14.232	5.936
y	1.390	-0.224 (0.064)***	p-value	0.000	0.174	0.015

Table 5 Tests for Cointegration (2)

	β	α		Null hypothesis of		
Panel A: Beijing area						
$c_{1,t}$	1.000	-0.073 (0.022)***	No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
r	2.798***	-0.002 (0.001)	Trace test statistics	33.895	13.709	0.091
y	-2.059***	0.076 (0.044)*	p-value	0.002	0.029	0.805
Panel B: East						
$c_{2,t}$	1.000	0.026 (0.017)	No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
r	2.692***	-0.003 (0.001)**	Trace test statistics	24.171	4.285	0.169
y	-2.227***	0.098 (0.026)***	p-value	0.050	0.669	0.733
Panel C: Northeast						
$c_{3,t}$	1.000	-0.036 (0.015)***	No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
r	2.064	0.002 (0.001)*	Trace test statistics	36.165	6.284	2.264
y	3.044	-0.119 (0.025)***	p-value	0.037	0.846	0.133
Panel D: Central						
$c_{4,t}$			No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
r			Trace test statistics	19.858	7.399	2.038
y			p-value	0.433	0.532	0.153
Panel E: West						
$c_{5,t}$			No. of cointegrating vectors	$r = 0$	$r \leq 1$	$r \leq 2$
r			Trace test statistics	25.796	11.104	5.052
y			p-value	0.135	0.205	0.025

We now investigate the importance of the feedback effect from regional house prices to the monetary instruments by VAR method. Since there is compelling evidence for the existing of cointegrating relationships in the system, an appropriate method is to use error correction representation of the model, i.e. the VECM framework. Compared with VAR estimates, which focus on the dynamic short-run response of variables to one another, VECMs give information on both short-and long-run responses. The estimated VECM systems are mostly summarized by impulse-response functions (IRFs).

The standard Cholesky decomposition is used here to identify the responses in VECMs. The variables are ordered with real output first, followed by house prices and monetary policy instruments. This identification reflects the fact that output affects the other economic variables contemporaneously but does not respond to other economic variables, and monetary policy responds more actively to house price changes than the other way round.

Panel (a) of Figure 6 shows the IRFs in the first VECM system which uses M2 as a proxy of monetary policy. It shows the responses of the regional common factors of house prices to a one standard error money supply shock with a 40-month forecast horizon. Overall, it is found that there is an immediate change in house prices in each region and the degree of persistence of the money supply shock is large, which implies that house prices adjust rather sluggishly during a return to the new equilibrium. It is also found that Beijing area and east China respond largely to the money supply shock, and they are followed by the northeast and west regions, where the response in Beijing area is more than triple that in the west area. The central region, however,

has nearly no response at all. Panel (b) of Figure 6 shows the IRFs in the second VECM system consisting of house prices, mortgage rate and real output. It can be observed that the responses of all regions are highly synchronized where house prices slip down following the positive mortgage rate shocks. It shows that house prices in Beijing area are most sensitive to mortgage shocks, while house prices in the northeast and central areas have very insignificant responses. The above results show that regions have different exposures to the common monetary policy shock. Beijing area and eastern region are more strongly affected, given the fact that the investment and speculation demand accounts for a large proportion in the whole housing demand in these regions. Therefore, housing markets there are more dependent on financial credit and more likely influenced by policies and financial environment.

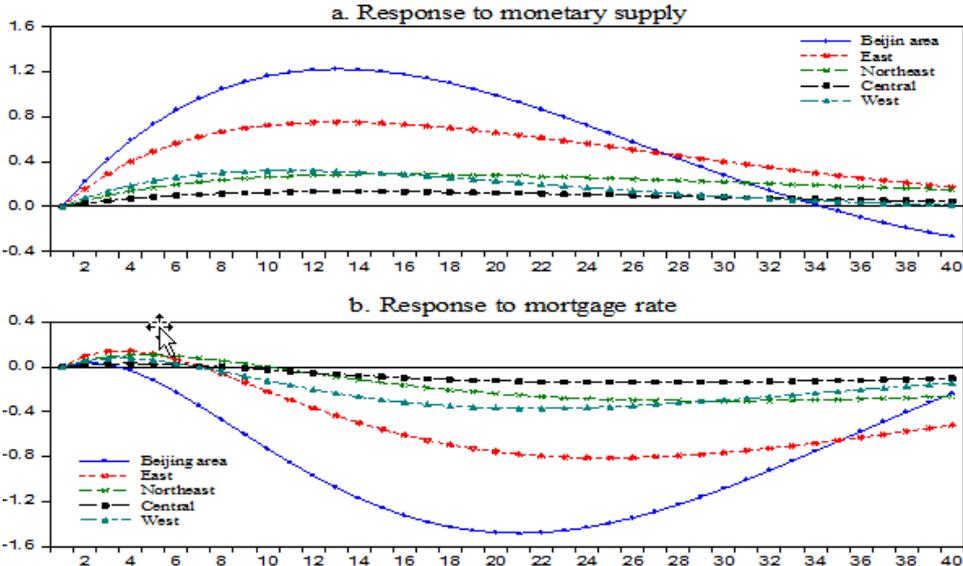


Fig. 6 Impulse responses to monetary policy shocks

5. Conclusion

In the past decade, China experienced a soaring house price increase. Although the rise of house prices is dramatic at the average level, it has been very uneven across the nation. Now an important question is whether the widespread, but not homogeneous, increase in house prices reflects a collection of “local bubbles” or rather a common phenomenon in some specific region. The answer to this question has important policy implications. “Local bubbles” are most likely attributable to local factors, i.e., circumstances that are specific to each geographic market, rather than to monetary policy, which cannot target local housing market performance. On the contrary, if the boom in house prices is a regional phenomenon, monetary policy may well be a likely suspect. And then it is necessary to consider regional differences in responses to monetary policy actions when analyzing heterogeneity house price dynamics.

In order to identify the sources of changes of house prices, we use a dynamic factor model to disentangle the relative importance of the region common component in house price movements

from city- specific shocks. Our sample consists of monthly data from 2005 to 2015. We find that historically fluctuations in house prices have mainly been driven by the local component. In the more recent (2010–2015) period, however, “local bubbles” have been important in some cities, but overall the increase in house prices is a region phenomenon. In this regard, explaining the spatial heterogeneity in house prices now turns to explain the differences in regional behavior, especially in terms of response to outside monetary policy shocks. We then use a VAR to investigate the extent to which expansionary monetary policy is responsible for the regional common component in house price movements, and the extent to which the magnitude and duration of the responses to monetary policy shocks vary across regions. We find that regions that witnessed large increase in house prices show a closer relation of house prices to the money shocks in the long run, and a greater sensitivity of house prices to expansionary monetary policy shocks.

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A Comparative Analysis of the Public-Private Partnerships of the Korean Wave and Cool Japan

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Abstract

Focusing on the public-private partnership (PPP), this paper compares the national drive for creative economic development of Korea and Japan, which are represented by “Hallyu” (the Korean Wave) and “Cool Japan”. Although both countries adopted the approach based on PPP, the mechanism, operation, and effectiveness have been different. The difference in the PPP governance and results render useful implications for the future directions of the initiatives and for other countries considering similar approaches. The role of the public sector in the Cool Japan PPP has been strong with a top-down mechanism, whereas the role of the private sector has been passive. The case of Korea is in the opposite in the earlier period, but suddenly changed to be authoritarian and resulted in a disaster. The reason is due to the difference in the motivation and formulation of strategy. This study shows the importance of the motivation and strategic formulation which determine the design and implementation of PPP for national initiatives.

Keywords: Strategic public-private partnership, Hallyu, Cool Japan, competitive strategy, governance

1. Background/ Objectives and Goals

There have been rare comparative studies focusing on the public-private partnership (PPP), for the creative economic development strategy of Korea and Japan, which are represented by Hallyu (the Korean Wave) and Cool Japan.

Japan had been a leading country for cultural capacity not only in East Asia but also in the world. However, it has been stressed by the recent uprising of the Korean popular culture. The Korean popular culture, coined as “Hallyu”, outpaced the Japanese popular culture in terms of popularity and business over the world.

As a responsive strategy, the government of Japan launched the “Cool Japan” strategy in 2012. The strategy was initiated by the government and based on a clear idea and framework of the public-private partnership (hereafter, PPP). Although the Korean government also has been

involved in the Hallyu development process, and emphasized PPP in general, compared to Japan, the involvement has been less systematic.

The purpose of this paper is to compare analytically the two countries' PPPs of the initiatives in terms of strategy, structure and performance, from which useful implications for the future directions are derived.

2. Methods

2.1. Analytical Frame work

For the analytical comparison, first a comprehensive analytical framework is introduced. Then the focal points of the comparison are selected. The analyses are drawing upon the literature, government and private sectors' documents and archives, newspapers, experts' comments, direct and indirect interviews, and available statistics.

The analytical framework is designed by drawing upon four areas of literature in economics and management: the Industrial Organization (IO), the PPP literature, the Competitive Strategy literature and the Key Success Factors literature. The basic framework is the same as the paradigm of industrial organization literature, namely, "Structure - Conduct (Behavior) - Performance" relationship. Among various PPP types this analysis focuses on the "strategic PPP" which was introduced by the OECD. The conduct focuses on competitive strategies of the governments and the private sectors. The performance part focuses on the key success factors for implementation of the strategies. For evaluation, a combination of qualitative method and quantitative method is used.

The IO literature deals with the structure of the industry or market which determines the conduct and performance of firms. Because this paper analyzes the PPP of Hallyu and Cool Japan, we do not touch all the issues of the IO literature. Instead, we focus on the issues related to the PPP of the two initiatives, corresponding to the IO paradigm. As shown in Figure 1, the structure is centered on the strategic PPP structure among various PPP types. The conduct focuses on the competitive strategies of the governments and the private sectors. The performance part focuses on the key success factors for implementation of the strategy.

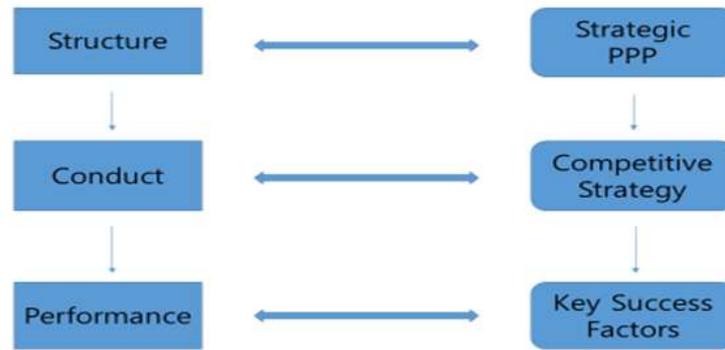


Figure 1. Analytical Framework

2.2. Competitive Strategy and Evaluation Method

The concept of competitive strategy and the parallel concept of competitive advantage were five forces that drive competition within an industry by Porter (1980, 1985). However, because Porter’s competitive strategy basically deals with domestic industrial competition, we extend the framework to deal with international competitive strategy of a nation.

Traditionally PPP was mainly for cooperation between the public and private sectors for the development and operation of infrastructure for a wide range of economic activities. However, the areas of cooperation have expanded to cover various projects or services for which a cooperation or collaboration between the public sector and the private sector. Thus, the concept of PPP has been broadened such as “cooperation of some sort of durability between public-private actors in which they jointly develop products and services and share risks, costs and resources which are connected with these products and services” (Van Ham and Koppenjan 2001, p. 598).

There have been various types and forms of PPPs. Among these we adopt the type introduced by the OECD for innovation projects, “strategic PPP” (OECD, 2014, p. 13) for two reasons. The main purpose of PPPs of Hallyu and the Cool Japan is the long-term enhancement of each country’s international competitiveness through national competitive strategy. Second, the characteristics of OECD’s strategic PPPs for science, technology and innovation (STI) are adequate for analyzing the cases of the two countries’ popular culture and the creative industry drive. Characteristics of strategic PPP are summarized as follows:

Strategic PPPs are distinguishable by their initial strategic intent, their long term and multi-partner nature, and have a strong multi- and inter-disciplinary character. The “strategic” objective of the government is to maintain or achieve competitiveness and growth of the sector of concern. Reflecting on the achievement of thematic objectives, ministries and public agencies themselves may also have a strategic goal. For profit-pursuing private actors with strong

strategic intent, the objective is long-term profit optimization. Civil organizations may be concerned with social development. In strategic PPPs the relationship between public and private partners is characterized by the pursuit of strategic goals on a longer term basis in contrast to more intermittent and arms-length relationships. Multi-partner collaborations can be particularly effective for completing large-scale development projects requiring the coordination and resources of multiple actors (Adapted from OECD, 2014, p. 13).

The comparative evaluation of PPP of the two countries is following the analytical framework. We choose broad “key success factors” as the evaluation criteria. The key success factors for PPP are chosen from the literature of key success factors. Key success factors are those few key areas of activity in which favorable results are absolutely necessary to reach goals. In addition, an evaluation of core complementary competences is also included. Definitions of success depend on the view: at the political and institutional level; at the project or activity level; or at the structure and governance level. No single view of success is applicable, and all are helpful in their own way. We focus on structural success criteria, conduct success criteria and the achievement success criteria.

PPP is an important method for an effective and successful implementation of national projects or initiatives. The background, goals, structures, strategies and achievements of the two systems are characterized and the reason for the differences and/or commonalities are examined. Especially how the characteristics and the operation of the PPP systems affect the outcomes are examined. The development of the PPPs of the two countries show the opposite and contrasting directions over time. Changes in the political regime may change PPP systems, according to policy agenda.

3. Results

3.1. Strategy, Governance and Management of PPP

Hallyu and Creative Industries in Korea

The “Korean Wave” or “Hallyu” is a word coined for the recent upsurge of cultural exports and influence of Korea over Asia and the world. It started in the late 1990s by the Korean popular culture (K-Pop)’s sudden popularity outside of Korea’s borders. In terms of the purpose of this paper, the important fact is that Hallyu was not a result of government initiative such as Cool Japan. Only when the private-sector initiated Hallyu reached a momentum, the government started to involve and support. Hallyu has also led to the national strategy of developing cultural and creative industries and opened up an interface where the government collaborates with private businesses of cultural production and distribution.

The Lee Myung-Bak government (2008-2013) has shifted its focus to creative content with the term “creative contents industry” since 2009 instead of the cultural industry. The Lee

government adopted the content industry as a new driving engine for the economic development. The emphasis on the role of content in cultural and creative industries is a new awakening of the Korean government for the creation of national competitiveness. Focus was placed on cultural technologies and content, that also facilitated the expansion of Hallyu. The compounding success of Hallyu was in part due to these strategies, and in return, it convinced the government to further expand these key strategies.

The Ministry of Culture, Sports and Tourism (MCST) has been the main government branch in charge of sponsoring and guiding Hallyu. There are also semi-governmental public organizations such as the Korea Creative Content Agency (KCCT) and the Korean Foundation for International Culture Exchange (KOFICE). The former takes care of creative content industries and the latter takes care of Hallyu as the bridge between the government and the private sector. In addition, there are several public committees and industrial associations representing the private sectors' stakes.

We may say Korea is the only country in the world that launched the development strategy of the “encompassing creative economy” in the sense that all industries are to be creative. The Park Geun-Hye government (2013-2017) has proposed the creative economy as the core national agenda to revitalize the national economy, viewing creativity and innovation as the key driving forces for the nation's future growth. Because previous governments have seldom used the term creative economy, the Park government is regarded as the first one to use it and made it as the national agenda. The controversial point is that the creative economy of the Park government is a kind of the encompassing creative economy with unclear concept and ineffective measures.

The term creative economy is not new, but the policy model that Korea is pursuing is indeed the first of its kind in the world because it does not limit the coverage to the so-called “creative industries” but covers **the whole industries in the economy**. Some countries, including the UK and Japan, already pursued creative economy policies, but they have limited the industries to the so-called cultural and creative industries. The Korean version of the creative economy differs from these existing initiatives and ideas in that it aims to apply creativity to every industry and transform all industries to be creative and innovative. Unlike other countries, Korea is approaching to the creative economy as a paradigm shift of the whole nation by adopting a concept of converging technology and culture with the emphasis of ICT.

The Park government's “Creative Economy Action Plan and Measures to Establish a Creative Economic Ecosystem” (hereafter, the Action Plan) was formulated in 2013. The Action Plan became the basic guideline for the strategy and policies to follow. The core of the Action Plan consists of 3 Goals, 6 Strategies, and 24 Tasks (MSF, 2013). One of the crucial elements in

bringing about a creative economy is the creation of a fair ecosystem. The “Creative Economy & Innovation Center” is an integrated facility located nationwide, specializing in the regional specialty to enhance the creative economy as the core of the regional innovation ecosystem network. So far altogether 17 centers have been established. Their functions are:

- Supporting start-ups and SMEs in each specialty area
- Organizing the partnership or ecological relations between the relevant big corporation and regional enterprises
- Arranging funds for them to overcome financial difficulties
- Encouraging managerial and technological innovation and advisory services (called mentoring)
- Promoting communications and cooperative works among participants
- Exploring new markets at home and overseas in a concerted manner

However, at present all the actions for the creative economy, including the centers, are on the verge of being scrapped. In addition to this, it is worthwhile to pay attention to the criticism that the Park government’s concept of and approach to the creative economy are still vague and unrealistic.

Cool Japan and Creative Industries in Japan

As the Japanese economy contracted in the 1990s, it became increasingly clear that Japan needed another way to stimulate growth. Launching of strategic creative industrial development started in the 2000s. Japanese cultural industries are facing some problems or challenges such as a widening gap between the rich and the poor in creativity and losing national branding in globalizing world. Japan has been even stressed by the success of Hallyu. In response to the problems, the Japanese government and society have increased their efforts to resume its competitiveness of cultural and creative industries. The strategy for this, prepared and lead by the government, is called, “Cool Japan”.

As the start of the second Abe government, Japan launched the Cool Japan strategy to transform the appeal of Japanese culture and lifestyle (food, fashion, and various content such as anime, dramas, games, films, music, and tourism) into added value and create new growth industries (METI, 2012)¹. As clarified by the Cool Japan strategy, the definition and covering areas of cultural and creative industries in Japan (Japan uses the simpler term, creative industry) are similar to other countries, but interestingly Japan distinguishes those based on service such as music, dramas and films from those based on manufacturing such as fashion designing, crafts, toy, furniture, jewelry, etc. Cool Japan implies that non-Japanese perceive Japanese culture as

¹ Most of the review of the Cool Japan strategy in this part referred to the archives of METI Home page and closely related supplementary documents.

attractive (cool). According to the Intellectual Property Strategic Program 2011, the target of Cool Japan “encompasses everything from games, manga, anime, and other forms of content, fashion, commercial products, Japanese cuisine, and traditional culture to robots, eco-friendly technologies, and other high-tech industrial products.” This is a much broader concept than that of the actually implemented strategy.

The policies and initiatives are based on the Proposal by the Cool Japan Advisory Council in 2011. The Council put together private-sector project models and government cross-cutting initiatives, based on five perspectives on deepening and enhancing the Cool Japan Strategy as follows:

- Connecting diverse initiatives laterally through the perspective of design
- Bringing policies and businesses together
- Constructing a human resources hub
- Incorporating the views of non-Japanese
- Enhancing regional attractions

METI promotes overseas advancement of an internationally appreciated Cool Japan brand, cultivation of creative industries, promotion of these industries in Japan and abroad, and other related initiatives from cross-industry and cross-government standpoints. Its core Government Cross-Cutting Initiatives Action plan is: Creating a public-private partnership platform to organize joint public-private projects; Government branches work together to assist private-sector initiatives aimed at constructing hubs that bring together people and information from many fields and disseminates information; Creation of networks of ambassadors composed of non-Japanese Japan fans.

All of these confirm that the main goal of the Cool Japan Strategy is the growth in export. The Cool Japan Strategy as the core national brand strategy aims to disseminate Japan’s attractiveness to the world and to incorporate global economic growth for domestic growth. The basic strategic concept of Cool Japan is that creative industries are strengthened for increasing exports to the world. The Cool Japan Strategy prioritizes the country’s creative and cultural sectors as drivers of the national economy with an ambitious target, it has an economic target to reach 9% to 12% share of the USD 8.5 trillion global creative and cultural Industries revenue estimation by 2020, the year of Tokyo Olympics. The Cool Japan Strategy aims at boosting new growth engines and creative industries by 2020.

The Cool Japan Strategy Promotion Council was formed in 2015 with the participation of members from the private sector for the Cool Japan Strategy Public-Private Partnership Initiative. The idea is that private-sector businesses are the prime actors in moving Cool Japan efforts forward, whereas the government’s role is to back forward-looking private-sector businesses. By

this division of roles, businesses produce new attractive goods and services targeted under Cool Japan, and traditional Japanese attractions are expected to be revived through competition and renewal. However, as to be seen, the public-private partnership lead by the government has been criticized for being one-sided.

3.2. Governance and Management of PPP

Hallyu and Creative industries Initiatives in Korea

The Lee Myung-Bak government actively showed its desire to maximize market and brand values of Hallyu. By proposing “Korea, a high-class cultural nation” as its cultural policy goal, it called for the branding of Korean traditional culture and support for the export of Korean cultural content. Presidential initiatives such as the National Brand Committee and the pan-cultural-ministry initiative such as the Hallyu Promotion Taskforce indicate the importance of Hallyu as the government agenda. Success stories of K-pop and TV drama beyond Asia motivated the government to advance Hallyu from Asia-centered to all over the world.

Since the mid-2000s, Hallyu policy has extended to cover a variety of activities such as funding, investment, marketing, branding, training, consulting, event and networking. The Korean Wave, Hallyu has become the core of the cultural policy, and some existing cultural initiatives have been merged to the Hallyu initiative. Cultural policy focused on fostering for popular culture, Hallyu to contribute to both cultural diversification and economic development.

Hallyu, like Cool Japan, became the stimulator for Korea’s creative economic development. The main difference between Hallyu and Cool Japan is that in Korea it first started as the private sector’s initiative of popular culture and later the government has been involved through less formal PPP than Japan. Similarly to Japan, the process of the cultural industry development of Korea has been gradual except for the drastic and different approach by the Park Geun-Hye government from 2013.

Although it cannot be denied that the Korean government has played an important role for the PPP for Hallyu and creative industries development, it has been the private sector with some large firms and many smaller firms together that initiated Hallyu’s great success in Asia and over the world. A few Korean firms have gathered and mastered the elements necessary for a world success. Through the experience in the very competitive Korean markets, Korean entertainment firms and K-pop stars accumulated the abilities to go abroad. Also, Korean entertainment firms have greatly benefited from the fast developing Korean ICT.

Korea has formulated the cultural content concept and implemented creative industrial development policy with that concept for more than a decade, then suddenly jumped on the full-scope creative economy or the encompassing creative economy in 2013. This concept of the

Korean creative economy strategy confused the experts who were more familiar with the main stream concept of the “limited” creative economy. The implementation was almost one-sided by the top-down drive of the government. The Korean economy and society were not ready to be transformed that way, and the strategy shortened the life of the government itself and failed.

Cool Japan and Creative industries Initiatives in Japan

Japan was active for the formulation and implementation of developing creative industries with the symbolic brand, Cool Japan. Like other plans and initiatives in Japan, the Cool Japan initiative also has been stable and gradually implemented. The implementation framework is a typical Japanese one, a PPP. It was expected that the private sector and the government together deepen and enhance the Cool Japan Strategy.

Members of the Cool Japan Strategy Promotion Council consist of government members, private-sector experts and related private and public organizations. The Council’s discussions and debates have pushed forward considerations about what is important from the perspective of deepening and enhancing the Cool Japan Strategy. The five areas of action and programs such as design, human resources hub, regional attractions (tourism), content, and cuisine were recommended by the council. It was expected that the private sector will implement these projects while making use of government assistance.

It is noticeable that the action plan for government cross-cutting initiatives also included, which means the government was well aware of the importance among government and other stake-holders’ cooperation. They are summarized as:

- Create a public-private partnership platform to organize joint public-private projects
- Government branches work together to assist private-sector initiatives
- Creation of networks of ambassadors composed of non-Japanese fans
- Establish regional Cool Japan consulting offices in cooperation with local governments
- Create lists of regional producers and provide regions with information

Japan has many public and private organizations in the field of arts and culture such as the Saison Foundation for providing long-term support to artists and their activities, Sponsorship/Co Sponsorship Programs awarding to arts practitioners from overseas, the Daiwa Anglo Japanese Foundation and the Nomura Foundation. The Cool Japan initiative emphasized the collaboration between the government and the private companies. However, it has been heavily criticized by many observers as an initiative of the METI-centered and being government dominant.

3.3. Performance and Achievements

Korea

Hallyu refers to the phenomenon of Korean popular culture which came to be explosively

popular in Southeast Asia and mainland China in the late 1990s. Hallyu started with K-drama exports in the late 1990s. Hallyu with Korean music (K-pop), dramas (K-drama), movies, fashion, food, and beauty is very popular especially among young people in China, Taiwan, Hong Kong, Vietnam and others. It was successively upgraded to Hallyu 2.0 (K-pop music) and Hallyu 3.0 (K-culture). This cultural phenomenon has been closely connected with multi-layered transnational movements of people, information and capital flows in East Asia. Ministry of Culture, Sports and Tourism (MCST) of Korea has been trying to expand the cultural space over the world. Companies like CJ have been actively promoting Hallyu abroad, even without government help.

In the early 2000s, Korean cultural content exports hovered about USD 500 billion. By 2011, that had increased to more than USD 4 billion. By 2012, Korea's MCST estimated Hallyu's economic asset value at USD 83.2 billion, of which USD 5.26 billion was thought to be attributable to its music industry

The world E&M market size in 2013 was USD 1.77 trillion. Korean E&M market size was USD 49.2 billion, 2.9 percent of the world total. As the 8th trade country in the world, Korea has substantial world market shares in major manufacturing industries. As of 2013 Korea has 5.2 percent of world automobile market, 1.0 percent of the IT service, 16.2 percent of semiconductor market. Korea's total of four E&M industries has 2.8 percent share of world. The amount is comparable with the automobile industry and the IT service industry.

These achievements show that Korea is already a globalized economy. This worldwide Korean cultural popularity created a huge business potential for Korean corporations. By analyzing the export data during 2001 and 2011, the Korea Export-Import Bank found out that a 100 dollars increase in the export of Hallyu cultural products resulted in a 412 dollars increase in the export of consumer goods. In a survey from the Korean Chamber of Commerce & Industry in 2012, 82.2% of participating Korean corporations responded that Hallyu enhanced the positive image of Korea and Korean products and almost half of them mentioned Hallyu actually increased the company sales. This sales increasing effect was especially strong in service industry including culture (86.7%), tourism (85.7%), retail (75%) and also obvious in manufacturing industry including food (45.2%), electronics (43.3%), cosmetics (35.5%), and automotive (28.1%). (KAIST, 2015)

Countries currently most affected by Hallyu in East Asia are China, Taiwan, and Japan. Although Japan was mildly interested in Korean strategic policy for the creative economy, China and Taiwan were strongly interested in the cause and effects of Hallyu.

Japan

Creative industries are a relatively small segment of the economy in Japan and their exports are also not significant. The total income of the cultural industries was JPY 45.2 trillion, 7.3% of all industries in Japan in 2010 and the employment of the sector was 2.15 million, 5.6% of all industries (METI and Hakuhodo, 2010). As summarized below, Kakiuchi and Takeuchi (2014) assessed slightly differently with the same classification of creative industries as the METI. The sales of creative industries in Japan were estimated as JPY 51.5 trillion in 1999, and JPY 44.0 trillion in 2011, which is a decrease. But the share slightly increased to about 6.6% of all industries' sales.

Among creative industries, service sectors are the major part (amounting to JPY 38 trillion, 86.2% of the total sales of creative industries in 2011), and “software and computer service” is the single largest sector (JPY 17 trillion, and 39.0%). In the service creative industries growing sectors were the software & computer and TV & radio, which once declined but has recovered. The architecture sector and other sectors (advertising, publishing, film, music & video, performing arts, design, and arts) declined in the same period. The total sales of content industries (digital text, text, game, digital music, music, digital image and image), including manga and animation, has been about JPY 12.0 trillion in the decade, with a slight decrease.

According to PwC (2014), US is the number one entertainment and media (E&M) country in the world with USD 598.5 billion and 33.7 % share of the world market in 2013 and expected still dominating in 2018 with USD 723.7 billion. It was followed by Japan (9.6%), and China (8.3%). Korea was 7th country with a share of 2.9 %. An interesting forecast is that the growth rate of Japan will be substantially slow for the period, 2013-2018, from USD 170.3 billion to 174.7 billion (CAGR 0.7%), whereas China is expected to grow very fast from USD 147.4 billion to 219.4 billion (CAGR 10.9%). The growth rate of Korea would be in the middle from USD 51.8 billion to 60.5 billion (GAGR 4.2 %).

Regardless of the current drive for the Cool Japan strategy, still many domestic and international observers are not optimistic on its success. Critics are saying the strategy may not be successful. For example, Japanese anime was worldly popular, but creators have been struggling amid a decline in sales of packaged media, such as DVDs, and the increase in free content from video-sharing sites. Japan's anime industry saw overseas sales peak at JPY 16 billion in 2006, but by 2010 sales had fallen to JPY 9.2 billion. It seems that Japan needs a more effective and realistic strategy to promote and increase exports of such products.

K-pop overshadows J-pop because Japan never attempted to expand and adapt to foreign tastes like K-pop did. However, different from the popularity, actual trade performance of Japan has been much better than Korea, reflecting its economic scale and level. Because the classifications are not unified, statistical evaluation of cultural and creative industry trade should be careful.

From the UNCTAD's Cultural Trade Statistics we can compare cultural goods exports of Japan and Korea in 2004 and 2013. Export of Japan was USD 2,417.1 million in 2004 and USD 4,120.0 million in 2013. Korea's exports was USD 2,419.7 million in 2004 and USD 2,745.4 million in 2013. During this period Japan's increase was much higher than Korea.

3.4. Comparative Evaluation and Implications

Japan was active for the formulation and implementation of developing creative industries with the symbolic brand, Cool Japan. Like other plans and initiatives in Japan, the Cool Japan initiative also has been stable and gradually implemented. The implementation framework is a typical Japanese public-private partnership (PPP). It emphasized the collaboration between the government and the private companies. However, it has been heavily criticized for being government dominant by the top-down approach.

Korea's creative economic development has started with Hallyu, like Cool Japan. The main difference between Hallyu and Cool Japan is that Hallyu first started as the private sector's initiative of popular culture and later the government has involved through less formal PPP than Japan. Similarly to Japan, the process of the cultural industry development of Korea has been gradual except for the drastic and different approach by the Park Geun-Hye government from 2013.

The success of Hallyu is mainly due to the efforts of the private sector at the earlier period and due to the PPP in the later period. After a rapid penetration to the East Asian market, Korea has recently started to penetrate to European and North American countries with popular music (K-Pop) and other cultural content. Hallyu has been unique for the unusual growth of local creative industries in the midst of fluctuating global economy. Once peripheral and small, the Korean creative industries have unexpectedly developed their own local cultural products and services, and Korea's creative industries have been among the most successful contributors to the national economy.

Korea already attempted to move towards an encompassing creative economy during the former President Park era. Because of serious problems in the process of implementation, it failed. This failure is a serious blow to the encompassing creative economy in Korea. It is too early to assess the causes, at least three factors can be pointed out at this stage. First, a fundamental problem is the ambition based on a hasty preparation. The ambition was the transforming the entire industries and economy to be creative and innovative in a shortest period (Lee and Cha, 2013). This kind of an encompassing creative economy was not well understood and supported by the people in general and stake-holders in particular. Second, the government tried to achieve all things in a short period by authoritarian implementation. Third, there were no sufficient monitoring and control by the bureaucrats of possible manipulations of the implementation

process by corrupted stake-holders.

The implementation framework of Cool Japan was the PPP, but the government has dominated the implementation. Different from the government's expectations, the performance of the initiative has not been satisfactory, except for the software-related service industry.

The main challenge facing the Korean economy now is to reduce the pervasive economic influence of the government, which is the undesirable legacy of the authoritarian economic development drive of the period, 1960s-1980s. In the earlier period of Korean economic development the active government role was generally positive, but its negative side-effects now far outweigh the benefits. Thus, both countries have the problem of implementing more balanced PPP in terms of fair sharing responsibilities between the government and the private sector.

3.5. Conclusion

Both of the Korean Wave, Hallyu and Cool Japan are the representative initiatives of the creative economies of the two countries. Although both countries have emphasized the approach by PPP, the mechanism, operation, and effectiveness are quite different. The main purpose of PPPs of Hallyu and the Cool Japan is the long-term enhancement of each country's international competitiveness through national competitive strategy and collaborative efforts.

Since 2012 the PPPs in Korea and Japan have traced contrasting tracks. The role of the public sector in the Cool Japan PPP has been strong with a top-down mechanism, whereas the role of the private sector has been passive. The case of Korea is in the opposite in the earlier period, but suddenly changed to be authoritarian and resulted in a disaster. The reason of the different development is due to the difference in the motivation and formulation of strategy.

Korea has increased top-down characteristics, whereas Japan has increased bottom up. The Korean top-down PPP resulted in confusion and political risks. Although the Korean government has been involved in the Korean Wave, Hallyu development process and emphasized PPP in general, the involvement has been less systematic. Regardless of the differences in the role of the public sector, in the case of the Cool Japan initiative the role of the private sector has been passive than Korea. The case of Korea is in the opposite. The reason is due to the difference of the private sector rather than the public sector. This study shows that excessive government intervention is harmful for sound and effective PPP, especially for cultural creative industries.

The most important lesson from this case study seems that the one-sided or extreme top-down governance of PPP may not achieve the desired goals and even destroy the system.

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The Factors Influencing Economic Growth in Indonesia Period 1981-2014
Error Correction Model Approach

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Abstract

This study aims to analyze the factors influencing economic growth in Indonesia. The study employed the quantitative approach by using secondary data from 1981 to 2014. Analysis tool that is used in this study is Error Correction Model (ECM). Variables that are used namely Foreign Direct Investment (FDI), Export, Infrastructure (Road Length), and Inflation Rate, in which economic growth represented by Gross Domestic Product (GDP).

The result of this study indicates that Foreign Direct Investment (FDI) and export have positive and significant impact in short and long run. Meanwhile, both in short and long run, the inflation rate has negative and significant impact. The different result shows by infrastructure (Road Length) that has negative and insignificant relationship on economic growth in Indonesia, both in short and long run.

Keywords: Foreign Direct Investment (FDI), Export, Infrastructure (Road Length), Inflation Rate, Gross Domestic Product (GDP), Error Correction Model (ECM)

Introduction

Economic performance is an assessment of its success in areas related to its assets, liabilities and overall market strength. Many countries take regular stock in either formal or less formal basis of the general economic performance of their countries to make sure that it remains on the right track financially. Economic performance can be seen from economic growth. Economic growth is an indicator to perceive a country's performance whether in good or bad performance. The success of the development of a country can be seen from the level of economic growth. Therefore, each country always set target of high economic growth rates in the planning and development objectives. By high sustainable economic growth means as the main condition for sustainable development economy.

In the narrow sense, economic growth means the increase in total production of both goods and services. This is measured by the change in real gross domestic product (GDP) and by the change of real gross domestic product per capita. GDP is the total value of all final goods and services produce in a country in a one-year period. The value of GDP would give a view of how a country's ability to manage and utilizing existing resources.

Indonesia is one of the developing countries in the world. As a developing country Indonesia has been joined as a member in G-20 major economies and classified as the newly industrialized country. Based on the data from world-bank in 2013, the gross domestic product of Indonesia reached 3,475.25 USD. Indonesia experienced a GDP growth of 5.8% per 2013, it is of course a good hope for the Indonesian's government to realize the improvement of people's welfare.

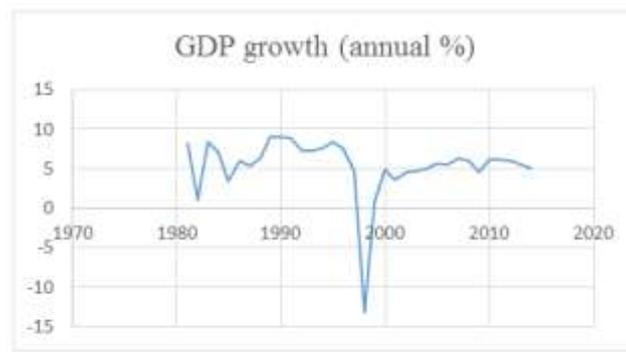


FIGURE 1.

The Annual GDP Growth in Indonesia

Source: World Bank

The graph above explained about the development of economic growth in Indonesia for 34 years from 1981 until 2014. Given the fact from World Bank, it can be concluded that the economic growth in Indonesia moving into fluctuation ways for 34 years. In the crisis 1998, the economic growth in Indonesia decreased dramatically around -13.12%. As for Indonesia, the main cause of financial crisis happens because of the internal source at that time. The crisis started when huge capital flight out from Indonesia. The direct result of capital flight that occurred in Indonesia, result in Indonesia's national currency (rupiah) then deteriorated against the US dollar. Moreover, many companies bankrupted and the national banking sector collapsed (Tambunan, 2010).

In macroeconomic analysis, besides explaining the supporting factor that possibly affect the economic growth, it also discusses on the issues such as; inflation. Inflation is a process of rising prices in general and continuous (continuous) for a certain time. In other words, inflation is also a process in which the declining in currency values continuously. Inflation is a process of an

event, not the high-low level of a price. That is, if the high price level it has not conclusively point to inflation. If a process of price increase continues to happen and influence each other means there is inflation. To achieve sustainable economic growth along with price stability continues to be the main objective of economic policy macro to most countries in the world today.

Based on the data from World Bank, the rate of inflation in Indonesia has fluctuated over the time. The highest level of inflation is happen when Asia financial crisis in 1997. Because of that problem, the inflation rate reach 58.3% and 20.48% in 1999. It became the hardest-hit country because the crisis not only had economic but also significant and far-reaching political and social implications. And after that, the inflation rate in Indonesia gradually back to normal.

In this globalization era, foreign direct Investment (FDI) plays an important role in international business. Economic integration occurs between the countries in the world encourage the emergence of cooperation in the economic, political, social and cultural. As the developing country in the world, Indonesia requires substantial funds in implementing national development. It is due to the undertakings in pursuit of the underdevelopment of the developed countries in the world globally. The fact that Indonesia itself is not able to provide the fund for development itself.

Foreign investment in Indonesia, has become a funding source that can be used as financing for development and economic growth. By using foreign investment, it is intended to replace the use of foreign debt as a source of financing. Because with the increasing uncontrolled interest rates on foreign debt and the rupiah exchange rate against foreign currencies make Indonesia will decrease the difficulties in the repayment of the debt.

Beside investments, Export also play an important role in the economic activities of a country. Exports will generate income that will be used to finance imports of raw materials and capital goods needed in the production process that will create value-added. Aggregation value added generated by all production units in the economy is the value of products GDP (Sutawijaya & Zulfahmi, 2010).

Through productivity gains, from the micro level, infrastructure can promote economic growth. Kuznets in his theory mentioned that the economic growth of a country is affected by the accumulation of capital, natural resources, human resources, with a view of quantity and quality. On the other hand, infrastructure can be categorized as capital accumulation. So, infrastructure can be used as inputs to production indirectly.

The developing countries has made an investment of 200 billion US dollars each year for the

construction of the new infrastructure (World Bank, 1994). With the investments were acquired, the expected increase value of infrastructure will be better in the future, in fact sometimes the performance of infrastructure is disappointing. One of the causes is an error in the allocation of funds. For example, the development of infrastructure continued without maintaining the existing infrastructure.

The effort to revamp the infrastructure conditions to realize an important role in reducing inequalities of income and long-term effects for gross domestic product is important. Improvements in infrastructure have contributed to increasing productivity and is expected to support economic growth in the long term (Maryaningsih, Hermansyah, & Savitri, 2014). In this research, it focuses on the long road infrastructure in Indonesia in Kilometer units. By having the best quantity and quality road infrastructure in Indonesia, country will able to provide convenience in the distribution of economic activities in the community. Based on World Bank in 2013, Roads are the main transport in Indonesia, and the total road network recorded more than 477,000 km with an asset value of more than 15% of GDP. However, the number and quality of road infrastructure in Indonesia is still below neighboring countries. The Indonesian government has increased infrastructure spending way to 70 trillion Rupiah per year (USD 7 billion per year), representing 40% of total spending on infrastructure.

However, the level of investment of this magnitude cannot pursue increased demand and growth in the last ten years. Productivity and efficiency management of national roads are still less than optimal. The spending of national roads has tripled in real terms between 2005 and 2011, but output which is generated in the road length only rose 20% whether if counted from the existing road or the road under construction.

Based on the terms describe above, the need for scientific assessments of the factors that affecting economic growth in Indonesia is highly needed. In this case the factors that will be analyzed are the factors in economic which are foreign direct investment, export, infrastructure, and inflation rate.

Literature Review

Economic growth can be defined as an increase in per capita real output. It also defined as a broad perception that refers to the process of economic growth that has capacity to raise the welfare of its people (Berg, 2001). The economic growth represent as the development of the activity in the economy that causes the good and services produced increases in economic activity in the community, regarding growth and development dimensional measured by the increased production and income (Sukirno, 2002). It also can be said as one indicator is in seeing the development of a country. A growth is not synonymous with development, growth is one of the conditions required in a development (Meier, 1989).

Economic growth occurs when an increase in the production of goods and services. In the real world to record the number of units of goods and services is a difficult thing to do. This is due to a wide variety of goods and services produced in one period that have different sizes. Therefore, the calculation uses to estimate the change in output which is the value of money is reflected in the value Gross Domestic Product (GDP). Gross Domestic Product (GDP) is the market value of all final goods and services, produced in the economy in a country in a period (Mankiw G. N., 2006).

Based on Adam Smith's Theory in Sukirno (2002) total output in the economy is affected by the factors of production. The factors of production namely capital, labor, and technology. From those factors, it can be seen from the formulas the following equation:

$$\Delta Y = f(C, L, T)$$

Where,
 Y= Economic Growth
 C= Capital
 L= Labor
 T= technology

Smith explains that country's production system consists of three elements namely, available natural resources, human resources or population, and the stock of capital goods.

There are 4 assumptions in economic growth in Harrod-Domar Theory. Firstly, in the economy there are full employment and maximum use of capital. Secondly, the economy consists of two sectors, namely the household sector and the corporate sector. Thirdly is the amount of public savings is proportional to the amount of national income, which means saving function starting from the zero point. The last is the propensity to save in fixed amount, as well as the capital output ratio and the incremental capital output ratio (Jones, 1975).

Harrord-Domar theory doesn't focus the requirement to reach the maximum capacity if the economic is consisted with 3 sectors or 4 sectors. On that condition, the capital increases if $AEI = C + I_1 + G_1 + (X - M)_1$, where equal with $I_1 + G_1 + (X - M)_1$. The conclusion from Harrord Domar theory is that the theory completes the Keynesian analysis. Keynesian focuses on the short-term economic problem. While on Harrord Domar theory, it describes the long-run economic problem. It describes the long aggregate is needed to be reached to realize the economic growth. The robust economic growth can be reached if $I + G + (X - M)$ increases significantly with positive relationship.

Moreover, Harrod- Domar theory model focuses on how the population growth, capital accumulation, technological progress and outputs interact each other in the process of economic growth (Boediono, 1982). Although the general framework of the Solow-Swan model is similar

with Harrod- Domar model, the Solow- Swan model is more flexible. This is because the Solow- Swan models more easily manipulated algebraically.

In contradict to the Harrod-Domar theory that assumes a constant return with raw coefficients, meanwhile the neo-classical solow growth model uses the concept of diminishing return from worker and capital amount, if the two use distinct analysis. When analyzed simultaneously, the assumption of neoclassical also use the concept of constant return to scale. The advances in technology are just set as residual factor to explain the long-term economic growth. High or low growth is assumed to be exogenous or not influenced by other factors.

Foreign Direct Investment

There are two kinds of foreign investments in Indonesia which are foreign direct investment and foreign indirect investment. Foreign direct investment is the investment that apply in Indonesia territory by foreign investor which investment comes in form of building and buying a company or acquiring a company. Based on the UU No. 25 year 2007 in (Agma) represent the purpose of investment as follows: increase national economic growth, to create a vocation, to Increase the sustainable economic development, to increase the capacity and capability of national technology, and to develop community economy. Meanwhile, indirect foreign investment is made by the capital market instrument such as securities, stock, and bond.

Export

Export is the activity of selling and sending goods from the origin country to other countries. These activities can bring the flow of expenditure will be flowed into the enterprise sector. Furthermore, the aggregate expenditure will increase, this is because the export activities of goods and services, and therefore the national income will also increase. If net exports in a positive state, the aggregate expenditure will increase. Then this will increase the national income and employment (Sukirno, 2013).

Exports are one of the component in aggregate spending on the open-economy. Aggregate expenditure in an open economy means that the household expenditure on domestic production, investment, government spending, spending on imported goods and foreigner who spend the export goods. The aggregate expenditure can be expressed by this following formula:

$$AE = C_{dn} + I + G + (X - M)$$

Another theory that is used in the export is the basic theory of export. The basis theory is that the economic basis that is developing from the basis export becomes the city basis. From all of the theories, all are stressing on the demand from the external sides. On the city theory, there is a division which is its environment and external.

In export theory it can be described as the autonomic factor. It means that export is a factor to increase the income and economic growth directly. To reach the high export level, then it needs the strategy to increase the appropriate export value and appropriate investment with the high technology to be implemented punctually (Adisasmita, 2013).

Infrastructure

Infrastructure is the capital stock that provides public goods and services. Infrastructure will affect the production activities and quality of life for the households. Infrastructure is a fundamental factor behind economic growth. This variable has shown its long-enduring significance (Yoshino & Nakahigashi, 2000).

Infrastructure refers to the physical facility and organizational framework, knowledge and technology that is essential to society and economic growth. Infrastructure includes laws, public health and education systems, distribution systems, and transportation systems and public utilities.

In the economics, infrastructure is a form of public capital, which formed from the investment made by the government. In this study, infrastructure including roads, bridges, and sewer system (Mankiw G. , 2003).

Inflation Rate

Inflation is an increase in the general price level of commodities and services during a specific time period. Inflation is regarded as a monetary phenomenon due to the impairment of the monetary calculation unit to a commodity (Greenwald, 1998).

Inflation is one of the problems that need most attention by the government. The long term goal of government is to keep the inflation rate at the lowest level. The three kinds of inflation based on the causes of inflation that is demand-pull inflation, cost-push inflation, and imported inflation (Sukirno, 2013).

Besides inflation give a bad effect on the country, inflation can also give a bad effect on the individual and society. Firstly, inflation will reduce the real income of the people who have a fixed income. Generally, the increasing of wage level not as fast as the increasing of price level. Therefore, inflation will decrease the individual real wage who have the fixed income. Secondly, inflation will reduce the amount of wealth (money-from). Thirdly, inflation makes the distribution of wealth unwell. As explained earlier, the fixed income will experience the degradation in the real-income, but the owner of the fixed asset such as; land, houses can maintain or increase the value of real asset.

Previous Studies

According to Pranoto (2016), simultaneously exports has a significant and positive effect on the gross domestic product, while foreign direct investment has a significant and negative impact in Indonesia 2004 until 2013. This analysis was performed using linear regression analysis.

Based on Irsania and Noveria (2014) in their research titled “the Relationship among Foreign Direct Investment, Inflation Rate, Unemployment Rate, and Exchange Rate to Economic Growth” reveals that FDI, inflation rate, and exchange rate has a significant influence towards economic growth. But FDI and unemployment have a positive correlation. The rest variables have negative correlation. This research used multiple regression as a method.

From the result of Koojaroenprasit (2012) by using the multiple regression, the findings shows that foreign direct investment has a strong positive impact on South Korean Economic Growth. Furthermore, this finding indicates that human capital, employment and export also have positive and significant impact, while domestic investment has no significant impact on economic growth in South Korea.

Research from Mofrad (2012) shows the study on The Relationship between GDP, Export, and Investment: Case Study Iran shows that there exist a positive and significant long-term and short-term relationship between investment and export with GDP in 95% confidence level. This study used the vector error correction model as the method period 1991 until 2008.

According to Sojodi, et al. (2012) the research that used ARDL Method indicated the transportation facilities distinctively length of railway. Roadway, and telecommunication infrastructure (fixed phone line) have positive and significant impact on economic growth.

Study from Wibowo (2016) explains that the road infrastructure has no significant impact on economic growth in Indonesia period 2006 until 2013. On the other hand, electricity, health, and education has positive significant impact on economic growth in Indonesia.

The development of infrastructure in a country is a major influence on economic growth in a country (macro and micro) and the development of a country. However, it is not easy to apply in Indonesia. Moreover, since the 1997 crisis which eventually widened into a multidimensional crisis impact can still be felt today (Haris, 2005).

The other study finds that foreign direct investment has significant impact on gross domestic product in Indonesia and vice versa. This study shows that there is two way relationship between FDI and GDP. This study used Engle Granger (EG-ECM) based on the theorem of granger’s representation (Wuryaningsih, Setyowati, & Kuswati, 2008).

Research from Kasidi and Mwakanemeda (2013) investigated that inflation has a negative impact on economic growth in Tanzania. There was no co-integration between inflation and economic growth during the period 1990 until 2011. In addition, no long-run relationship between inflation and economic growth in Tanzania. This research used regression equation as the method.

Study from Acyumida and Eko (2013) employs that the Granger Causality of GDP has no causality relationship on inflation. On the contrary, there is a causality relationship between Inflation on GDP in Indonesia period 2000 until 2013.

Finally, from the result of Izuchukwu and Patricia (2015) noted in their study about the Impact of Inflation on Economic Growth in Nigeria period 2000 until 2009 that the inflation has a significant impact on economic growth in Nigeria. In addition, exchange rate has a positive impact on economic growth and that high interest rate discourages investment and hence forestalls economic growth.

Hypotheses

On the paragraph below are the hypotheses based on the previous study and theoretical framework:

- 1) Foreign Direct Investment has a significant and positive impact on economic growth in Indonesia both in long-run and short-run.
- 2) Export has a significant and positive impact on economic growth in Indonesia both in long-run and short-run.
- 3) Infrastructure has a significant and positive impact on economic growth in Indonesia both in long-run and short-run.
- 4) Inflation has a significant and negative impact on economic growth in Indonesia both in long-run and short-run.

Research Methodology

The study employed the quantitative approach by using secondary data from 1981 to 2014. Quantitative method is a method that stems from numerical data to be processed into information. So that the quantitative method is a method that is numeric and statistical analysis and then processed into information (Kuncoro, 2003).

Variables that are used namely Foreign Direct Investment (FDI), Export, Infrastructure (Road Length), and Inflation Rate, in which economic growth represented by Gross Domestic Product (GDP). Data collection technique that is used in this study was a non-participant observer, where researchers only looked at data that is already available without become part of a data system.

The analysis method in this research is Error Correction Model (ECM). By using descriptive quantitative approach, error correction model is used to determine the effect of independent variables on the dependent variable in the long term and short term. The steps to be performed first before conducting the ecm step is Classical Assumption. This test use to determine whether it meets the assumptions BLUE or not, it needs to do some testing such as multicollinearity test, autocorrelation test, heteroscedasticity test and normality to ensure that the data are normally distributed. After performing the classical assumption test, the further step is dynamic test encompassing stationary test, integration test, co- integration test, and the last is performing the error correction model. This research will be run by using E-views 4.

Result and Analysis

Classical Assumption Test

1. Autocorrelation Test.

In this study, to determine whether there is autocorrelation in a model or not, then it will be used the Lagrange Multiplier test (LM test). This test useful to determine there is a correlation between the independent variable with the disturbance variable. If the *Obs*R-Squared* value less than the table value, so there is no autocorrelation in the model. Besides that, the autocorrelation can be seen by the *chi-squares* probability value. If the probability value is more than the value of $\alpha = 10\%$, it is safe to say that; there is no autocorrelation problem (Basuki & Yuliadi, 2014). Based on the result, LM test in short term with the smallest Akaike value on the first lag can be seen that the probability value of *Obs*R-Squared* is 0.113302. Because the probability value of the *Obs*R-Squared* is more than $\alpha = 10\%$, so there is no autocorrelation problem in the Error Correction Model.

2. Normality Test.

The aims of normality test is to know the variable normally distributed or not. This test can be done through *Jarque-Berra* test (J-B test). If the J-B test is more than $\alpha = 10\%$, so it shows that the data normally distributed. But, if the J-B test is less than $\alpha = 10\%$, so the data is not normally distributed. Based on the result, the *p-value* of J-B test is 0.533376. The result shows that the *p-value* is more than $\alpha = 10\%$, so it means that the data in the Error Correction Model is normally distributed.

3. Heteroskedasticity Test

Heteroskedasticity is one of the regression problems which becomes the factor of disturbance has no similar variant. In other word, there is no consistency in its variant. It means that the *heteroskedasticity* has no similar variant for all the research. Because the *heteroskedasticity* problem, the result will be bias. In this research, the heteroskedasticity will be tested by the *White Heteroskedasticity* (cross term) test. If the probability of *Obs*R-Squared* is smaller than the critical value of $\alpha = 10\%$; so that, there is *heteroskedasticity* occurred in the Error Correction

Model. But, if the probability *Obs*R-Squared* is more than the critical value of $\alpha = 10\%$; so that, there is no *heteroskedasticity* occurred in the model. Based on the result, the probability of *Obs*R-Squared* in Error Correction Model is 0.216175. The probability of the *Obs*R-Squared* is more than $\alpha = 10\%$. It can be concluded that there is no *heteroskedasticity* problem in Error Correction Model.

4. Multicollinearity Test.

Multicollinearity is useful to test the regression model whether it has correlation among independent variables or not. Multicollinearity can be detected by seeing the coefficient value of independent variables in the matrix result. If the value of coefficient is less than 0.8, it means there is multicollinearity problem in the variables. But, if the coefficient value is less than the 0.8, it can be concluded that there is multicollinearity problem in the variables. It can be conclude from the result that, the correlation among two independent variables is less than 0.8. It means that there is no multicollinearity problem in the regression model.

Dynamic Assumption Test

1. Stationary Test

Stationary test is the first step in dynamic assumption test before estimating time series data. If the estimation is not stationary, it will cause the spurious regression and the model cannot be used.

The concept that used to test the stationary is a unit root test. A variable is said to be stationary if the average value and variance constant over time and the value of the covariance between the two time periods only depending on the difference or interval between the two time periods is not the actual time when the covariance is calculated (Gujarati, 2003).

This study will be used Augmented Dickey-Fuller test to determine whether a time series data contains the root unit or non-stationary. If the ADF t-statistic value is more than the critical value, so that the variable has a unit root, then it can be said that the variable is stationary in the certain level. In the contrary, if the ADF t-statistic is less than the critical value, so that the variable has no a unit root, then it can conclude that the variable is non-stationary.

Unit root test can be tested through each variable that will be analyzed either dependent variable or independent variables. This can be seen by the table below:

TABLE 1.

The Unit Root Test Result in Level Degree by *Augmented Dickey-Fuller Test* Method

Variable	ADF	Critical Value			Note
	T-Statistic	1%	5%	10%	
LOG(GDP)	0.173178	-3.646342	-2.954021	-2.615817	Non Stationary
LOG(FDI)	-2.488691	-3.646342	-2.954021	-2.615817	Non Stationary
LOG(EX)	0.527809	-3.646342	-2.954021	-2.615817	Non Stationary
LOG(INFR)	-3.169615	-3.646342	-2.954021	-2.615817	Non Stationary
INFL	-4.792234	-3.646342	-2.954021	-2.615817	Stationary

The result shows the unit root test through the Augmented Dickey-Fuller (ADF) test method. The result shows that there is only one variable which is stationary in level degree, and the rest variables are non-stationary in this degree because the ADF t-statistic is less than the critical value.

If the data is not stationary in level degree, so that the data cannot be used in the model, because it will cause of the spurious regression. In conclusion, in order to get the stationary variables, it is urgent to do the unit root test in the first difference degree.

2. Integration Degree Test.

The integration test is a continuation of the unit root test, if the data is not stationary in the level degree. So that, the unit root test will be tested into first difference degree. The integration degree test will be used the Augmented Dickey-fuller method. But if the data is not stationary in first difference degree, so that it will continue into second difference, until the data is stationary. Then, the result of the unit root test in first difference degree can

TABLE 2.

The Unit Root Test Result in First Difference Degree by *Augmented Dickey-Fuller Test* Method

n from the following table:

Variable	ADF	Critical Value			Note
	T-Statistic	1%	5%	10%	
LOG(GDP)	-5.639789	-3.65373	-2.95711	-2.617434	Stationary
LOG(FDI)	-8.162684	-3.65373	-2.95711	-2.617434	Stationary
LOG(EX)	-5.368711	-3.65373	-2.95711	-2.617434	Stationary
LOG(INFR)	-4.741483	-3.65373	-2.95711	-2.617434	Stationary
INFL	-6.970533	-3.661661	-2.960411	-2.619160	Stationary

The result shows that the unit root test result in the first difference degree by the ADF test. The result shows that the all variables are already stationary in first difference degree, including foreign direct investment, net export, infrastructure, and inflation rate. All in all, based on the ADF test, the data that is used in this research integrated in the first difference degree.

3. Co-integration test.

Co-integration test is the next procedure that should be passed after the integration degree test. In this test, there will be a test of time series data validation through co-integration test. Co-integration test is required to provide an early indication that the model has a long-term relationship in this study.

The method that is used in the co-integration test is the Engle-granger (EG). The co-integration test can be done, if the all variables integrated in the same degree. The first step of the co-integration test is by doing the regression of the ordinary least square equation between dependent variable and independent variables. The result from the co-integration test is that we can obtained the residual. The regression equation is as follow:

$$\begin{aligned}
 LOG(GDP) &= \beta_0 + \beta_1 LOG(FDI) + \beta_2 LOG(EX) - \beta_3 LOG(INFR) \\
 &\quad - \beta_4 INFL + e
 \end{aligned}$$

The result of the Eage-Granger co-integration test is as follow:

$$\begin{aligned}
 LOG(GDP) &= \beta_0 + \beta_1 LOG(FDI) + \beta_2 LOG(EX) - \beta_3 LOG(INFR) \\
 &\quad - \beta_4 INFL + e \\
 LOG(GDP) &= 2.162427 + 0.028365 LOG(FDI) + 1.053247 LOG(EX) \\
 &\quad - 0.223223 LOG(INFR) - 0.010121 INFL
 \end{aligned}$$

TABLE 3.

The Result of Co-integration Test in Long Term

Variable	Coefficient	Standard Error	Probability
C	2.162427	0.700476	0.0044
LOG(FDI)	0.028365	0.006596	0.0002
LOG(EX)	1.053247	0.087556	0.0000
LOG(INFR)	-0.223223	0.149462	0.1461
INFL	-0.010121	0.002681	0.0007
R-squared	0.980389		
Adjusted R-squared	0.977684		
Durbin-Watson stat	1.122951		
F-statistic	362.4409		
Prob(F-statistic)	0.000000		

Based on the result above, the variable of FDI, export, and inflation rate give the significant result on GDP (economic growth) at level 10%. Meanwhile, the infrastructure variable is not significant. The determination coefficient (R-squared) is 0.980389 which means the endogen variable can be explained in linear way by the independent variables in the equation for about 98% and the remaining which is 2% can be explained with the other factors outside equation.

From the regression equation, then it will be estimated the residual variable, as explain below:

$$ect = \text{LOG}(\text{GDP}) = \beta_0 + \beta_1 \text{LOG}(\text{FDI}) + \beta_2 \text{LOG}(\text{EX}) + \beta_3 \text{LOG}(\text{INFR}) + \beta_4 \text{INFL} + e$$

If the residual variable is already obtained, it will be followed by testing it. The test aims to observe whether the variable is stationary or not. Form the result of data processing can be seen as follow:

TABLE 4.

The Unit Root Test Result toward the Residual Long Term Equation

Variable	ADF	MacKinnon Critical Value			Prob.	Note
	T-statistic	1%	5%	10%		
Ect	-4.512906	-3.6463	-2.954	-2.6158	0.0010	Stasionary

Based on the result above, the variable passed because of the probability is lower than critical value 1%, 5%, 10% which is 0.0010. Thus, it proofs that the co-integration occurs in the model, so that Error Correction Model can be performed. And it also means that the stability occurs in the variable of this research.

4. Error Correction Model Test.

The next step is to create the Error Correction Model (ECM) equation. The equation that will be formulated by this following equation:

$$\Delta LOG(GDP) = \Delta\beta_0 + \Delta\beta_1 LOG(FDI) + \Delta\beta_2 LOG(EX) + \Delta\beta_3 LOG(INFR) + \beta_4 INFL + \Delta\beta_5 ECT - 1 + e$$

Information:

LOG(GDP) = Gross Domestic Product (reps of economic growth)

LOG(FDI) = Foreign Direct Investment

LOG(EX) = Export

LOG(INFR) = Infrastructure (in KM²)

INFL = Inflation rate

ECT-1 = Residual Equation

The equation is formulated based on the variable which is stationary in first difference degree that is being showed as Δ notation. The Error Correction model aims to determine the short term model of Economic Growth (GDP). By using the ECM, it can combine the short term effect and long term effect that is caused by the fluctuation and time lag from each

TABLE 5.

The Result of Error Correction Model Estimation

ie. Based on the ECM result, then it will obtain the following result:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.034813	0.023264	1.496471	0.1461
D(LOG(FDI))	0.012275	0.004883	2.513597	0.0182
D(LOG(EX))	0.557367	0.112073	4.973265	0.0000
D(LOG(INFR))	-0.052909	0.373788	-0.141547	0.8885
D(INFL)	-0.011567	0.00131	-8.830922	0.0000
ECT(-1)	-0.417701	0.137322	-3.041768	0.0052
R-squared	0.855998	Mean dependent var		0.071001
Adjusted R-squared	0.829331	S.D. dependent var		0.193346
S.E. of regression	0.079875	Akaike info criterion		-2.053732
Sum squared resid	0.172262	Schwarz criterion		-1.781640
Log likelihood	39.88658	F-statistic		32.09946
Durbin-Watson stat	1.456933	Prob(F-statistic)		0.000000

The equation from error correction model can be seen as follow:

$$\begin{aligned} \Delta LOG(GDP) &= \Delta\beta_0 + \Delta\beta_1 LOG(FDI) + \Delta\beta_2 LOG(EX) - \Delta\beta_3 LOG(INFR) \\ &\quad - INFL - \Delta\beta_5 ECT - 1 + e \\ \Delta LOG(GDP) &= 0.034813 + 0.012275 LOG(FDI) + 0.55736 LOG(EX) \\ &\quad - 0.052909 LOG(INFR) - 0.011567 INFL \\ &\quad - 0.417701 ECT(-1) + e \end{aligned}$$

The result shows the dynamic model of gross domestic product in short term, where the variable of gross domestic product as the denotation of economic growth is not only influence by FDI, export, infrastructure, and inflation rate but also influence by the error correction term (ECT) variable. The less value of ECT the faster of correction process through the long run equilibrium. Besides that, the error correction term variable is also said as the factor of inaction which has a value less than zero ($ECT < 0$). In this research the value of ECT is less than zero. The coefficient of ECT reach -0.417701 which means the gross domestic product higher than its long term value.

Based on the calculation above through error correction model, the constant value about 0.034813 which means that if all the variables are constant, so that the gross domestic product or the economic growth is about 0.034813 %. Then, the estimation result in long term shows that the value of R-squared is 0.855998 which means 85.59% of GDP(economic growth) model can be explained by these variables, namely: FDI, export, infrastructure (in KM²), and inflation rate. Meanwhile, 14.41% of the model can be explained by the other factors outside the model.

Conclusion

Based on the research and data analysis, the result from regression model by using Error Correction Model aims to measure the relationship among foreign direct investment, export, infrastructure, and inflation on economic growth which is represented by gross domestic product in Indonesia.

As one of the alternatives financing in Indonesia, based on the result, FDI has positive and significant influence on the economic growth in Indonesia, whether in short or long run which is relevant with the research done by Mofrad (2012). The capitalization is a media to pool the saving and investment to be allocated to the more productive, such as the land opening that lead to the more job opportunities. In the end it will stimulate the economic growth. In order to increase the FDI, government should evaluate the policy performance to ease the bureaucracy for the foreign companies. The government should also keep the decent condition in order to have stabile foreign investment in this country.

The export has positive and significant influence in short and long run. It also becomes the highest contributor for the economy. This result is relevant with a number of researches such as Pranoto (2016), Koojaroenprasit (2012) and Mofrad (2012). According to Pranoto (2012), with the high export, it helps to maintenance the trade balance and add more state budget to be used as the capital in the economic development that results in economic growth. Export has an important role in the economic growth in Indonesia, because it is one of the variables in the spending aggregate equation. Government has to keep and to protect the goods made within

the country. From time to time, there are a number of foreign goods invade the country. The protection should be done to keep the positive influence on the export value.

Infrastructure variable that is represented by road length has no significant and negative influence on the economic growth in Indonesia in short run and long run which is relevant with the research from Wibowo (2016). It can be causes that this variable is not the principal variable on the economic growth nationally. It is estimated that there is the decreasing quality on the road in Indonesia. That leads to the negative sign of the coefficient in short run, it also caused, by the huge capital from government that is used for establishing the road. Despite having a negative relationship, but the relationship between the length of road infrastructure and the Indonesian economic growth (GDP) is not significant it is proved that the budgetary resources for the length of road infrastructure in Indonesia is not only derived from the GDP, but also from other sources such as investments. Infrastructure is an important thing in Indonesia economy, because it eases the distribution from one region to another. From the finding, the government is hoping to allocate the budget efficiently in order to avoid mistakes. With the road development in Indonesia, the maintenance should be performed as well as the pivot in doing the economic activities.

Inflation has significant and negative influence on the economic growth both for short and long run. The negative value might be caused by the decreasing of economic growth that results in the decreasing of income and it hampers the economic growth in Indonesia. This result is relevant with the research Kasidi and Mwakenda (2013) that inflation has negative and significant influence on economic growth. With the inflation problem, it is a need to have a precise decision from Central Bank (BI) as a monetary decision maker. It needs an appropriate strategy to anticipate the inflation rate which is the Inflation Targeting Framework (ITF). The government should do strict action on deciding which instrument to be used, either base money or the interest rate, to keep the price stabile.

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The Analysis of Macroeconomic Variables, Regional Stock Index, and Gold Price Impact on Jakarta Islamic Index: An Approach of Vector Error Correction Model (Vecm)

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Abstract

This research examines the relationship between a number of variables influencing Jakarta Islamic Index. The study employs monthly series data panning from the period October 2012 to March 2016. Variables that are used in this research are Jakarta Islamic Index, exchange rate, oil price, FTSE Malaysia and gold price.

The analysis tool that is used in this research is Vector Error Correction Model (VECM) to establish the short-run and long-run relationship. The result indicates in the short run, gold price negatively influencing JII and oil price positively influencing JII. However, in the long run all variables are significantly influencing JII. Exchange rate and oil price are positively influencing JII, while gold price and FTSE Malaysia are negatively influencing JII.

Keywords: Jakarta Islamic Index (JII), Exchange Rate, Vector Error Correction Model (VECM)

A. Research Background

The need of capital either for company or person tends to increase each year. The increasing activities can be seen from the increasing rate of production. In order to ease the society's activities to rise capital; the government along with the related institutions should be able to create environment for the capital market participants. Furthermore, government has power to create the strict regulation to the participants to prevent the confusion in the market.

Capital market is a part of financial market that functions as both for economic and financial function. As economic function; capital market allocates fund from the issuer to the fund-seeker. While as financial function; capital market gives return (capital gain) for the fund issuers based

on the types of investments they have (Sri 2012).

Capital market development is influenced by a number of factors which is the long-term supply and demand. There are securities supply and securities demand. The companies that will issue the beneficial securities categorized in securities supply. While the investors who will buy the securities categorized in securities demand. The development of capital market is supported by the increasing of fund in the market. It should also followed by the regulation to protect the involving parties.

According to Beik and Fatmawati (2004) capital market has an important role in the development of global economy. As a country in which experiencing the booming financial market, capital market takes over the Indonesian economy to play an important role. The capital market can be used as the fund intermediary, as an alternative market to invest, or as indicator of macroeconomic stability.

Since the 1980's the capital market in Indonesia highlighted a significant growth. It marks the positive growth in accordance with the ratification of Law No. 8 of 1995 on Capital Market, and also the regulation after the crisis on 1997 on the good cooperate governance (GCG). In 2013, the supervisor of the capital market in Indonesia has been transferred from Bapepam-LK and the Central Bank to the Indonesian Financial Service Authority (OJK). IDX is a result of Jakarta Stock Exchange and Surabaya Stock Exchange merger (Jeffrey 2013)

The value of market capitalization in Indonesia started from the year of 2010 until 2016 is also increasing. According to the report from Saham OK (2016) the total value in 2010 is Rp.3.258 Trillion. While in 2011, the total is Rp.3.538 Trillion. The number increases to Rp4.128 Trillion in 2012. In the year of 2013 the total value slightly increasing to 4.219 Trillion. Afterward in 2014, the total reaches to Rp.5.228 Trillion. In fact, in the following year, the total values decreasing to Rp4.782 Trillion. By the end of 2016 the market capitalization increases to the total of Rp5.753 Trillion.

The idea of Islamic Conventional Market in Indonesia is started in the year of 1997 when PT Danareksa Investment Management issued the Islamic Mutual Fund. Then on July, 3 2000, the company along with Indonesia Stock Exchange on (formerly known as Jakarta Stock Index) launched the Jakarta Islamic Index (JII) (Oxford Business Group 2015).

Indonesia ranks as the highest Muslim population with 202.867.000 million or 88.2 % from the total population (Centre 2009). The high population gives perfect chance for JII market capitalization to grow up. From the year of 2012 until 2016, the rate keeps increasing. Although in the end of 2015, the value slumps a little.

From the research by Shiller (1988) it showed one of the things causing the volatility is the regulation made by the government. The regulation which initially aims to reduce the policy might actually increase the volatility; while the regulation aims to improve the economic performance might decrease the volatility. The volatility in 2008 can also happen because of the global crisis. The crisis led to the slump market yet the recovery took such a short time to get back to normal.

In other country cases, such as Malaysia and Bahrain, the Islamic Capital Market prolific to all level of capital market and the derivatives product. In each country, the market development is quite high. Capital market also records in rapid speed in terms of the development. For the international market, Dow Jones as one of the renowned market provider along with the prominent apprentice and scholar outline the Dow Jones Islamic World Markets (DJIWM) functions to refine the Sharia based investment (Bacha and Mirakhor 2013).

As one of the active members in ASEAN Economic Community (AEC) and in the capital market, exchange rate shows the strength of the currency. The exchange rate is a crucial tool for the industry activities. A number of companies doing import and export rely on the stability of ER. Typically, US Dollar is a benchmark for the trade in international level. Rupiah appreciation is a positive signal for investor in capital market. Meaning rupiah appreciation will make stock market stronger and vice versa. Rupiah depreciation will increase the export value of a certain company. An increasing in export value will increase the company's revenue, leads to the increasing profit that in the end will increase JII. When one company has higher profit, overall stock market will also have increasing value.

Capital market in Indonesia is developing as well. According to the report from Indonesia: Financial System Stability Assessment (2010) it declares that Indonesia capital market is still limited to several types of investments. The government has to actively maintain the strategy on getting the economic stability, for example using the macroeconomic stability.

Besides exchange rate, another important macroeconomic variable influencing stock market is oil price. Oil price impacts most of the economic activities. The impact of oil price influences the supply and demand side in the market. Oil price has continuously becomes an indicator to estimate the stock market. While majority it gives significant relationship on the stock market, different countries will have the different result on this.

Brent oil has become the standard in the international price of oil. After the normal price for a couple of years, the price drastically fell from \$112 to \$47 on the period of June 2014 until January 2015. It can be caused from the financial crisis at that time (Baumeister and Killian 2014).

As one of the AEC members, Indonesia should maintain the relationship with the neighbor countries. In terms of economy activity, the effect of regional stock market to Jakarta Islamic Index (JII) performance is also important. One of the advanced stock markets in ASEAN besides Indonesia is Malaysia. Malaysia also has stock market which is FTSE Malaysia. Established in January, 12 2006 Bursa Malaysia Berhad and FTSE International cooperation signed an agreement to establish Islamic indices in Malaysia. The index was officially launched in 26 June 2006 (Russel 2009).

The report from Arslanalp, et al. (2006) concludes that a shock from one country to the financial condition to other countries can be said as a financial spillover. There are a number of reasons on the countries shock influences to the others, namely; the magnitude, the linkage, and the vulnerability. So, it can be concluded that there are the linkages of one country financial stability to the other countries.

Another factor which is counted to the stock market influence is gold price. Gold price is likely having a correlation in the stock market. Gold becomes an important element. As one of the scarcest metal, the gold price surely is high. No wonder why the use of gold mostly used for jewelry. Besides, gold also becomes a valuable investment. Gold is also used in the financial industry as a holding. Another use for gold is also become the source of wealth for the owner of gold (Bilal, et al. 2013).

Nowadays holding gold is regarded an important to do, especially in the stock market development. The result from the gold price on the stock market relationship shows the interesting finding. According to the result from the research of (Bhunia and Das 2012) shows the movement between the gold prices and the stock market returns. The movement even occurred during the crisis period. In case of India, people not only think gold as a precious yellow metal, but also as the kind of important investment. The sentiment also reasons why people hold gold as an investment in India. It is an interesting research that suggests the investors to consider the fluctuation on oil prices and gold prices surely affect the stock market return both in short and long run.

As the macroeconomic variable such as exchange rate and oil price, and external variable such as, FTSE Malaysia and gold price are all likely having various impacts on Jakarta Islamic Index (JII), thus the factors are interesting to be analyzed.

B. Previous Study

The researches or studies on factors which affecting stock market have been conducted plenty of times. The studies are conducted in the domestic market or in the international markets. The findings show the various results in order to enrich the previous studies material. Here are a

number of the studies on the factors affecting the stock market.

Based on the finding from Hsing (2011) shows that Czech stock market is negatively effected by the CZK/USD variable. The study is using the GARCH method in the research, and the scatter graph on the test shows the depreciation value of the Czech currency causes the stock market to decline. In the contrary, according to Barakat, Elgazzar, and Hanafy (2016) shows the positive relationship between exchange rate and stock market performance. However the evidence of non-relationship exchange rate on stock market is studied by Gay (2008).

As for the oil price relationship to the stock market, there are a number of researches show various results. The finding from Gatuhi (2013) gives the information on the negative relationship between oil price and stock market in Kenya. The negative relationship between oil price and the stock market also shows by the result from Sauter and Awerbuch (2002). Study from Antonio, Hafidhoh, Fauzi (2013) declares the existence of significant and positive relationship on the oil price movement to stock market. The research uses JII as the dependent variable in the research. Another positive relationship between oil price and JII shows by the study from Rusbariand, et al. (2012).

The non-relationship between FTSE Malaysia and JII can be concluded from the study conducted by Husin, et al. (2013). However, the negative relationship between FTSE Bursa Malaysia and JII is explained by the research from Darsono, Muqorobin and Yudhi (2016). As for the positive relationship, the study between FSE Malaysia and IHSG can be seen from Jayanti, Darminto, Sudjana (2014). The positive relationship between gold price and stock market can be seen from the research conducted by Irianto (2002) that uses IHSG as the dependent variable. The negative relationship between gold price and JII is shown by the conducted by Putra and Damansyah (2015). The last is the non-relationship between gold price and stock market done by the research from Surbakti, Achsan and Maulana (2016). The dependent variable uses JCI (Jakarta Composite Index).

C. Data Collecting Method and Sources

This research aims to examine the effect of macroeconomic variables, FTSE Malaysia and gold price on Jakarta Islamic Index (JII) performance. This study employs secondary data on monthly basis starting from October 2013 until March 2016 taken from various sources. The following table represents the data variables and its sources.

TABLE 1
Data and Sources

No	Variables	Sources
1	Jakarta Islamic Index	Fusion Media.Ltd
2	Exchange Rate	University of British Columbia
3	Brent Oil Price	U.S Energy Information Administration
4	FTSE	Fusion Media.Ltd
5	Gold Price	World Gold Council

This study also applies other relevant sources such as; journal, articles, books and website to enrich the information.

D. Econometric Model

$$\text{Model 1 } JII_t = A_0 + A_1 JII_{t-1} + A_2 ER_{t-1} + A_3 O_{t-1} + A_4 FTSE_{t-1} + A_5 G_{t-1} + e_t$$

$$\text{Model 2 } ER_t = A_0 + A_1 JII_{t-1} + A_2 ER_{t-1} + A_3 O_{t-1} + A_4 FTSE_{t-1} + A_5 G_{t-1} + e_t$$

$$\text{Model 3 } O_t = A_0 + A_1 JII_{t-1} + A_2 ER_{t-1} + A_3 O_{t-1} + A_4 FTSE_{t-1} + A_5 G_{t-1} + e_t$$

$$\text{Model 4 } FTSE_t = A_0 + A_1 JII_{t-1} + A_2 ER_{t-1} + A_3 O_{t-1} + A_4 FTSE_{t-1} + A_5 G_{t-1} + e_t$$

$$\text{Model 5 } G_t = A_0 + A_1 JII_{t-1} + A_2 ER_{t-1} + A_3 O_{t-1} + A_4 FTSE_{t-1} + A_5 G_{t-1} + e_t$$

Where JII is Jakarta Islamic Index, ER is exchange rate, O is oil price, FTSE is FTSE Malaysia, G is gold price, and e_t is error term ($t = 1, 2, 3, 4, 5, 6$), l is lag length with $t = 1, 2, \dots, x$ and x is maximum lag.

E. Analysis Method

The method of analysis that is applied in this study are; Co-Integration test and Vector Error Correction Model (VECM) in order to see the relationship of four independent variables on the dependent variable both in short-run and long run.

In order to get the precise result, there are steps to be done as the standard procedure. The following steps on VECM procedures are: Unit Root Test (Augmented Dickey Fuller Test), Lag Length Criteria, Stability VAR Model Test, Co-integration Test, Vector Error Correction Model (VECM), Impulse Response Function and Variance Decomposition Test. The thorough explanation will be explained as follow:

1. Unit Root Test.

Unit root test can be described as an estimation to test stationarity in time series data. A certain equation can be described having stationarity if a movement in time causes no change in the distribution. Unit root test contributes to the non-stationary variable (Andale 2016).

2. Lag Length Criteria.

Lag is an important thing in VAR system. It functions to show how long the reaction from one variable to the other, the optimum lag also functions to erase the autocorrelation in VAR system (Firdaus 2011).

Lag length test can be identified by using *Akaike Information Criterion (AIC)*, *Schwarz Information Criterion (SIC)*, *Hanan-Quinn Criterion (HQ)*, etc.

3. Stability VAR Model Test.

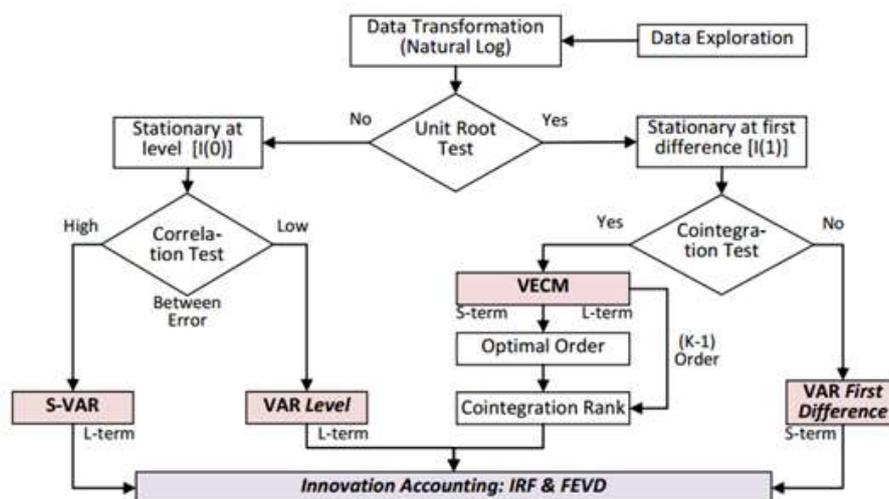
VAR stability test is conducted to estimate the roots of characteristic polynomial. If all the roots of characteristic polynomial within circle, then it passes VAR model, so that the IRF and FEVD valid (Firdaus 2011).

4. Co-Integration Test.

This is the relationship between x_t and y_t that are both co-integrated and contains unit root test (Sorensen 2005). Based on Horvath and Watson (1995) the most recognizable way to test the co-integration is by using Johansen method. The estimation on Johansen test functions to estimate the co-integration when two variables or more employ in the data (Dwyer 2015).

5. Vector Error Correction Model (VECM).

VECM specification restricts the long-run endogen variables relationship in order to stay convergent in the co-integration relationship, yet still regard the short-run relationship existence (Basuki and Prawoto 2016). The process to decide VECM method can be seen from the figure below :



Source: Gujarati

FIGURE 1
The VAR/VECM Analysis Process

6. Impulse Response Function (IRF).

IRF can explain the response of one variable to a shock from other variables. So, the influence of shock of one variable because of other variables can be explained clearly. The IRF result shows the length of time needed from one variable to response the others.

7. Variance Decomposition.

Forecast variance decomposition is the prominent tool in interpreting the linear and non-linear multivariate time series models along with the impulse response (Lanne and Nyberg 2014). Variance decomposition aims to estimate each variables contribution because certain changes on the system. This analysis also pictures the independent variables relationship on the VAR system due to the shock (Juanda and Junaidi 2012)

F. VECM Estimation Process

1. Unit Root Test.

The method which is used to test the stationarity is ADF Test (Augmented Dicky Fuller) by using $\alpha=5\%$. If the value of ADF Test lower than MacKinnon critical value, it can be concluded that the data is stationary or having no unit root. The test will be conducted from level until first difference (Basuki 2017)

TABLE 2
Unit Root Test-Augmented Dickey-Fuller

Test	ADF					
	Level Trend & Intercept	Prob	Note	1st Difference Trend & Intercept	Prob	Note
JII	-1.864437	0.3452	Non Stationary	-5.920507	0.0000	Stationary
ER	-1.25763	0.6399	Non Stationary	-4.915848	0.0003	Stationary
O	-0.468177	0.8869	Non Stationary	-4.226654	0.0019	Stationary
G	-2.523773	0.1178	Non Stationary	-5.572937	0.0000	Stationary
FTSE	-1.681915	0.4327	Non Stationary	-7.049091	0.0000	Stationary

Source: Data processed

The result from table 2 concludes that all variables namely; Jakarta Islamic Index (JII), exchange rate, oil price, gold price, and FTSE Malaysia are all not stationary at level. Thus, the unit root test continues to *First Difference* Level. According to the result, all variables are stationary at first difference, due the *p-value* (probability) less than 5%.

Because all variables are stationary in first difference; therefore the relationship among all variables will be conducted in VECM estimation.

2. Lag Length Criteria.

After conducting the unit root test, then it will continue to the lag length test. The lag optimum test is highly needed to reduce any autocorrelation in VAR model. The lag optimum test in VAR model can be recommended by *Final Prediction Error (FPE)*, *Akaike Information Criterion (AIC)*, *Schwarz Criterion (SIC)* and *Hannan-Quin (HQ)*. Lag optimum occurs when a certain lag has the most stars sign (Basuki and Prawoto 2016).

TABLE 3
Lag Length Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1841.988	NA	9.39E+34	94.71731	94.93059	94.79384
1	-1672.834	286.2593	5.86E+31	87.32484	88.60450*	87.78397
2	-1638.25	49.65955	3.83E+31	86.83334	89.17939	87.67508
3	-1605.788	38.28877*	3.12e+31*	86.45066*	89.86309	87.67501*

Source: Data processed

The optimum lag is 3 due to the sign stars which lie in LR (sequential modified LR test statistic (each test at 5% level), Final prediction error (FPE), Swachrz information criterion (SIC), and Hannan-Quin information. Due the most recommendation, lag 3 is the optimum lag.

3. Stability VAR Model Test.

To test the stability in VAR estimation, it will be the test for roots of characteristics polynomial. A VAR system is stable if all of the roots have modulus less than 1.

On the table below, the VAR model is already stable on its optimum lag, which is 1. So, the VAR estimation that will be estimated for the IRF and FEVD analysis is valid.

TABLE 4
Test of VAR Stability

Root	Modulus
0.938848 - 0.060210i	0.940777
0.938848 + 0.060210i	0.940777
0.586029 - 0.397577i	0.708165
0.586029 + 0.397577i	0.708165
0.661301 - 0.172586i	0.683451
0.661301 + 0.172586i	0.683451
0.147559 - 0.499832i	0.521158
0.147559 + 0.499832i	0.521158
-0.112336 - 0.153049i	0.189851
-0.112336 + 0.153049i	0.189851

Source: Data Processed

4. Co-Integration Test.

The determination of co-integration can be seen from the value of trace statistic and max eigen

statistic. When the value of trace statistic and max eigene statistic is higher than the critical value, it indicates that there is a co-integration in the model.

TABLE 5
Co-Integration Test

Hypothesized	Eigenvalue	Trace	0.05	Prob.**
No. of CE(s)		Statistic	Critical Value	
None *	0.582392	107.4465	69.81889	0
At most 1 *	0.537323	73.39118	47.85613	0
At most 2 *	0.511506	43.33289	29.79707	0.0008

Hypothesized	Eigenvalue	Max-Eigen	0.05	Prob.**
No. of CE(s)		Statistic	Critical Value	
None *	0.582392	34.0553	33.87687	0.0476
At most 1 *	0.537323	30.05829	27.58434	0.0236
At most 2 *	0.511506	27.9407	21.13162	0.0047
At most 3	0.246724	11.04961	14.2646	0.1517
At most 4 *	0.105373	4.342581	3.841466	0.0372
At most 3	0.246724	15.39219	15.49471	0.0518
At most 4 *	0.105373	4.342581	3.841466	0.0372

Source: Data Processed

Table 5 displays that trace statistic value and maximum eigenevalue at $r=0$ is higher than critical value with significance level at 1% and 5%. It shows H_0 that states there is no co-integration rejected and H_1 that states there is a co-integration accepted. In conclusion, the result indicates that among the movement from all variables have stability relationship and the long-term equal movement. In other words, on each short-term period, all variables tend to adjust to reach the long term equilibrium.

5. Vector Error Correction Model Estimation.

VECM shows the short-term and long-term relationship. On short-term relationship, one variable tend to adapt with other variables to form the long-term equilibrium. This estimation uses lag 3 based on lag length criteria.

TABLE 6
VECM Estimation Result

Cointegrating Eq:	CointEq1
JII(-1)	1
O(-1)	0.000262
	-1.20E-05
	[21.7305]
G(-1)	-6.78E-05
	-3.70E-06
	[-18.1313]
FTSE(-1)	-0.968418
	-0.03477
	[-27.8538]
ER(-1)	0.066434
	-0.00308
	[21.5448]
C	1000.517

Error Correction:	D(JII)	D(O)	D(G)	D(FTSE)	D(ER)
CointEq1	-0.512443	-142.784	4377.579	0.56724	3.257696
	-0.13629	-549.965	-3484.21	-0.26109	-2.07257
	[-3.75989]	[-0.25962]	[1.25640]	[2.17255]	[1.57181]
D(JII(-1))	0.425862	-1360.718	-5438.445	0.225016	-3.536736
	-0.17574	-709.131	-4492.58	-0.33666	-2.6724
	[2.42330]	[-1.91885]	[-1.21054]	[0.66838]	[-1.32343]
D(JII(-2))	0.221371	232.1751	-6838.023	0.827726	-2.475437
	-0.17132	-691.307	-4379.66	-0.3282	-2.60523
	[1.29215]	[0.33585]	[-1.56131]	[2.52205]	[-0.95018]
D(JII(-3))	-0.549396	207.8514	3339.737	-0.315444	2.709048
	-0.17877	-721.389	-4570.24	-0.34248	-2.7186
	[-3.07313]	[0.28813]	[0.73076]	[-0.92106]	[0.99649]
D(O(-1))	7.26E-05	0.118017	-1.384835	3.45E-05	-4.15E-05
	-5.50E-05	-0.22267	-1.4107	-0.00011	-0.00084
	[1.31500]	[0.53000]	[-0.98166]	[0.32677]	[-0.04941]
D(O(-2))	-9.22E-05	-0.017684	-1.780018	-5.67E-05	-0.000788
	-5.40E-05	-0.21679	-1.37341	-0.0001	-0.00082
	[-1.71592]	[-0.08157]	[-1.29606]	[-0.55053]	[-0.96460]

Error Correction:	D(JII)	D(O)	D(G)	D(FTSE)	D(ER)
D(O(-3))	0.000133	-0.111089	0.060026	-4.49E-05	0.000734
	-4.80E-05	-0.19532	-1.23744	-9.30E-05	-0.00074
	[2.74224]	[-0.56874]	[0.04851]	[-0.48372]	[0.99676]
D(G(-1))	-1.75E-06	0.061991	0.455575	5.96E-05	0.000119
	-1.10E-05	-0.04344	-0.27523	-2.10E-05	-0.00016
	[-0.16242]	[1.42690]	[1.65523]	[2.88755]	[0.72384]
D(G(-2))	-2.42E-05	0.053484	0.28252	1.33E-05	2.97E-05
	-1.30E-05	-0.05068	-0.32106	-2.40E-05	-0.00019
	[-1.93008]	[1.05538]	[0.87997]	[0.55298]	[0.15549]
D(G(-3))	-2.74E-05	-0.02399	0.271418	1.16E-05	0.000265
	-9.00E-06	-0.03651	-0.2313	-1.70E-05	-0.00014
	[-3.02587]	[-0.65710]	[1.17346]	[0.67014]	[1.92819]
D(FTSE(-1))	0.051689	285.4714	-4316.982	0.387012	-0.430143
	-0.11805	-476.344	-3017.8	-0.22614	-1.79513
	[0.43787]	[0.59930]	[-1.43051]	[1.71136]	[-0.23962]
D(FTSE(-2))	-0.102988	1025.991	6706.966	0.188143	2.958194
	-0.11712	-472.592	-2994.03	-0.22436	-1.78099
	[-0.87936]	[2.17099]	[2.24011]	[0.83857]	[1.66098]
D(FTSE(-3))	-0.093591	448.1875	6568.744	0.000706	-1.187615
	-0.11199	-451.891	-2862.88	-0.21453	-1.70298
	[-0.83572]	[0.99180]	[2.29445]	[0.00329]	[-0.69737]
D(ER(-1))	0.023403	-65.85116	-208.5527	-0.011874	0.070643
	-0.0157	-63.3598	-401.406	-0.03008	-0.23878
	[1.49048]	[-1.03932]	[-0.51956]	[-0.39475]	[0.29585]
D(ER(-2))	-0.008579	-21.1647	-120.9877	-0.024503	-0.147797
	-0.01573	-63.4586	-402.032	-0.03013	-0.23915
	[-0.54554]	[-0.33352]	[-0.30094]	[-0.81331]	[-0.61802]
D(ER(-3))	0.015768	-28.1425	-458.6889	-0.004101	-0.109304
	-0.01603	-64.6756	-409.742	-0.0307	-0.24373
	[0.98379]	[-0.43513]	[-1.11946]	[-0.13355]	[-0.44846]
C	-1.929404	-13327.87	28278.75	5.291293	128.6298
	-4.62987	-18682.4	-118360	-8.86944	-70.4059
	[-0.41673]	[-0.71339]	[0.23892]	[0.59658]	[1.82697]
R-squared	0.715813	0.475305	0.585025	0.533761	0.486916
Adj. R ²	0.499289	0.075537	0.268853	0.178531	0.095995

Source: Data Processed

TABLE 7
Factors Influencing JII in Short Term

Variable	Coefficient	t-Statistic
Coinnt Eq1	-0.512443	[-3.75989]
D(JII(-1))	0.425862	[2.42330]
D(JII(-3))	-0.549396	[-3.07313]
D(O(-3))	0.000133	[2.74224]
D(G(-2))	-2.42E-05	[-1.93008]
D(G(-3))	-2.74E-05	[-3.02587]

Source: Data processed

According to table 7, in the short-term relationship, there are three variables significant in $\alpha=5\%$.

In the short-term relationship, oil price in lag 3 is positively influencing on $\alpha=5\%$ for about 0.00013. Meaning when there is an increase in oil price on the previous three months, it will increase the stock market price for 0.00013 unit. The next significant variable is gold in lag 2 which negatively influencing for about -2.42. It explains that an increasing of gold price on the previous two months will decrease the stock price for -2.42 unit. The last variable which significant is gold price in lag 3 which explaining an increase of gold price on the previous three months will decrease the price for -2.74.

TABLE 8
Factors Influencing JII in Long Term

Variable	Coefficient	t-Statistic
O(-1)	0.000262	[21.7305]
G(-1)	-6.78E-05	[-18.1313]
FTSE(-1)	-0.968418	[-27.8538]
ER(-1)	0.066434	[21.5448]

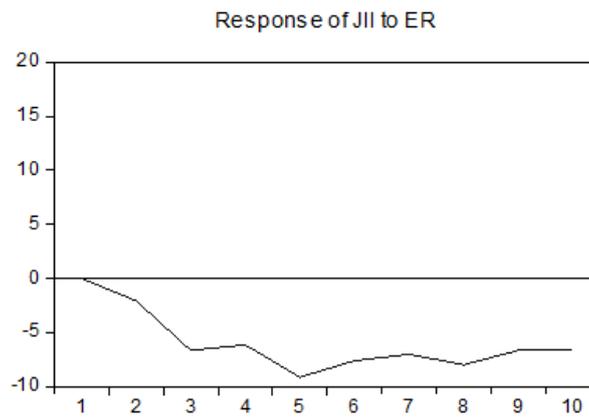
Source: Data processed

Meanwhile in the long term estimation, all variables are influencing JII at $\alpha=5\%$. Oil price has a positive impact on stock market. An increase in price will increase price for 0.000262. Gold price has negative impact on stock price. An increase in gold price will reduce the stock market price for -6.78. FTSE Malaysia also has negative impact on stock market. An increase of FTSE Malaysia price will reduce the stock market for -0.96. As for exchange rate, it positively impact JII for 0.066. When exchange rate increases the stock price increases for about 0.066.

6. Impulse Response Function (IRF).

This test may describe the response from a certain variable due to the shock from other variables. Thus, the length of afterward shock effect until the effect is gone or return to the balance point can be seen from here. This test shows how long the time is needed from one variable to response the shock from other variables.

a. JII Response on Exchange Rate.

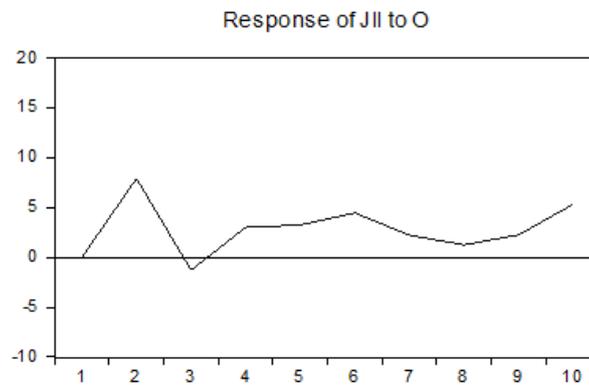


Source: Data processed

FIGURE 2
Response of JII on Exchange Rate

JII starts to respond the shock at the first period. JII tends to respond exchange rate negatively. From the third period until the fifth period, the shock is relatively unstable. However in sixth period until the tenth period which response is quite stable. The graph explains that the increasing in exchange rate will decrease the price of stock market.

b. JII response on Oil Price.



Source: Data Processed

FIGURE 3
Response of JII on Oil Price

JII is positively response on oil price. However on the third period, it negatively responses on the shock from oil price. Since the fourth period until the tenth period, the response back to normal. Although in the eight period, the shock quite slumps.

c. JII Response on FTSE Malaysia.

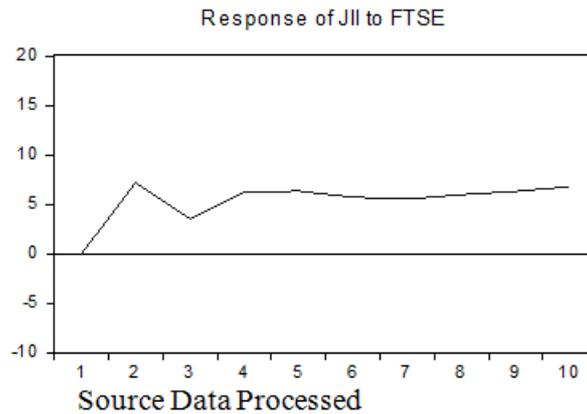


FIGURE 4
Response of JII on FTSE Malaysia

According to table 4.8, JII starts to respond to FTSE from the first period. In contrast, from the third period until the tenth period, the response tends to decrease significantly. An increase in FTSE prices will be met with an increase in JII prices.

d. JII Response on Gold Price.

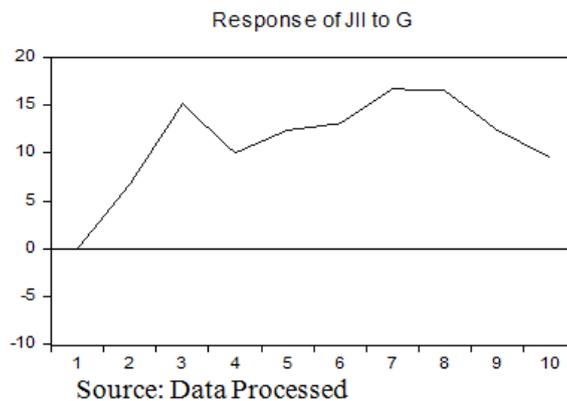


FIGURE 5
Response of JII on Gold Price

Table 4.8 shows that JII starts to respond to gold prices positively from the first period. It continues to increase until the third period. At the fourth period, the response dips slightly. The response continues to increase from the fifth period until the eighth period. After that, the response begins to decline until the tenth period.

e. Variance Decomposition.

This test aims to determine how the variance of a variable is influenced by the variances of other variables. Variance decomposition is used to break down the forecast variance of a specific variable into the variances of other variables. It measures the difference in variances before and after a shock and shows the percentage of forecast error variance that is explained by another variable in the short-run dynamics and interactions.

TABLE 9
The Result of Variance Decomposition

Variance Decomposition of JII:						
Period	S.E.	JII	O	G	FTSE	ER
1	18.0262	100.000	0.00000	0.00000	0.00000	0.00000
2	34.247	86.0118	5.34792	3.87757	4.39021	0.37254
3	54.5372	84.8263	2.16288	9.21593	2.15663	1.63824
4	66.85	85.7515	1.64258	8.36985	2.2984	1.93766
5	79.5901	85.4039	1.3275	8.32094	2.25752	2.69019
6	90.1214	85.1433	1.27936	8.60417	2.16126	2.8119
7	100.359	84.4062	1.08088	9.70581	2.04773	2.75936
8	110.718	84.1438	0.90108	10.192	1.97339	2.78972
9	118.83	84.5144	0.81908	9.93371	1.99487	2.73799
10	126.107	84.9379	0.9063	9.39198	2.05931	2.70456

Source: Data Processed

Table 4.8 displays the result of variance decomposition of Jakarta Islamic Index. In the first period JII is 100% effected by its own variable. However in the tenth period the impact of JII to its own variable decreases to 84.93%. The other variable tends to impact the movement of JII. Furthermore, JII is 0% impacted by oil price in the first period. The impact is increasing until tenth period. In the tenth period, oil price impacts JII by 0.90%. Another explanation is for gold price which 0% effected JII in the first period, while in the tenth period it effect JII by 9.39%. For FTSE Malaysia, it 0% affects JII in the first period and in the tenth period it impacts on JII by 2.05%. Lastly, exchange rate is 0% affected JII while in the tenth period it impacts JII by 2.70%.

G. Empirical Results

1. VECM in Short Term.

In the short term, the estimation indicates that oil price in 3rd lag is significantly influencing JII with the positive relationship by 0.000133. Meaning an increase in oil price will increase JII by 0.000133 unit. The positive relationship on the short period triggers the positive confidence of investors of mining sectors that significantly affect JII. The positive relationship might happen because Indonesian capital market is dominated by the mining sector with 39.7 percent. Because the stock market is dominated by the foreign investors with mostly invested in mining sector, thus an increasing in oil price will increase the stock price in mining sector and impact to the stock market in Indonesia. It is in line with the research from Rusbariand, et al. (2012) and Antonio, Hafidhoh and Fauzi (2013).

Another significant variable in short term estimation is gold price in 2nd and 3rd lag. It has negative relationship with the value of -2.42 and -2.74 respectively. The negative relationship is supported by the study from Putra and Darmansyah (2015). It might occur because gold is one of

the safe haven and alternative investment with free risk, so when economic instability occurs in the short run, investors tend to pick out gold as an investment.

FTSE Malaysia is 1st, 2nd or 3rd lag has insignificant effect JII. The result is found in the study conducted by Husin, et al. (2013). This might happen because the changes in unit of FTSE Malaysia in short term do not give huge effect to the investors on putting their assets in JII. Their confidence level can still be maintained pretty well. It might also be caused of the regional market which has the same investors' characteristics.

As for the exchange rate variable, in the short term insignificant on JII. The finding contradicts with the research from Hsing (2011) and Barakat, Elgazzar and Hanafy (2016). The previous studies show that exchange rate is significantly influencing the stock market. However the fluctuation of exchange rate in the short run is not fluctuating dramatically. So, exchange rate will insignificantly influencing the stock price. This finding, however, is in line with the study conducted by Gay (2008). On the research, the reason why exchange rate is insignificantly effecting stock market is because there are stronger domestic macroeconomic influences such as; inflation, production, trade balance and rate structure.

2. VECM in Long Term.

In the long-term all variables are significantly influencing JII. Starting from oil price, gold price, FTSE Malaysia, and exchange rate all are influencing JII with the coefficient 0.000262, -6.78, -0.968418, 0.066434 respectively.

Oil price is positively influencing JII by 0.000262. Meaning an increase in oil price will increase JII by 0.000262 unit. The positive response might happen because Indonesian capital market is dominated by the mining sector with 39.7 percent. Because the stock market is dominated by the foreign investors with mostly invested in mining sector, thus an increasing in oil price will increase the stock price in mining sector and impact to the stock market in Indonesia. It is in line with the research from Rusbariand, et al. (2012) and Antonio, Hafidhoh and Fauzi (2013).

Gold price is negatively influencing JII by -6.78. This negative relationship is backed up by the study conducted by Putra and Darmansyah (2015). However it is in contrary with the finding from Irianto (2002). The reason why gold is negatively influencing JII is because gold can be chosen as an alternative investment when the economic instability occurs. So that in the long run, investors prefer to gold as the investment instrument.

The next significant variable is FTSE Malaysia which negatively influencing JII by -0.968418. An increase in FTSE Malaysia will reduce JII by -0.968418. In the short run, this variable is insignificantly affecting JII. This result is supported by the research from Darsono, Muqorobin

and Yudhi (2016). This finding is not in line with the research from Jayanti, Darmanto and Sudjana (2014). Negative relationship may happen because Indonesia stock market is still following the regional market condition. If the crash happens in the abroad, it will trigger a crash in Indonesia capital market as well. Another important point from this relationship is when FTSE condition is better than JII, investors prefer to put their assets in FTSE to get higher return.

The last significant variable is exchange rate. This variable is positively influencing JII by 0.066434. An increasing value in exchange rate is positively increasing JII by 0.066434. This finding rejects the finding from Hsing (2011) and confirms the finding from Barakat, Elgazzar and Hanafy (2016). Rupiah depreciation will increase the export value of a certain company. An increasing in export value will increase the company's revenue, leads to the increasing profit that in the end will increase JII. When one company has higher profit, overall stock market will also have increasing value.

3. IRF Analysis.

IRF shows the response of changing from one variable to another. In this study, the IRF graph varies from one variable to another. Below is the explanation of each variable.

For oil variable, the positive relationship on the short period triggers the positive confidence of investors of mining sectors that significantly affect JII, where mining sectors dominate the trade in the stock market. It is in line with the research from Rusbariand, et al. (2012).

As for gold price, the positive relationship is in line with the research from Irianto (2002). The situation might happen because the gold purchasing by society is not for investment motive but for the consumptive motive that also can be used as jewelry. So that, the stock investment and the gold purchasing is substitution.

The positive result from JII shocks to FTSE is in accordance with the theory of economic integration in financial market. The relationship between global stock market is positively influencing each other. The result is in line with the study from Jayanti, Darminto and Sudjana (2014).

In the graph, JII responds negatively to the stock market. This might happen because the exchange rate is importantly influencing the cost of production in a company. It also effecting the amount of transaction in stock market. Exchange rate which fluctuates a lot can reduce investor confidence on stock market. That leads to the negative effect on capital market. For the foreign investor, they tend to take out the capital market and capital flow occurs in this situation that leads to the decreasing point of JII. It is line with the study from Hsing (2011).

4. FEVD Analysis.

The summary result for FEVD as the dependent variable for JII shows that variable gold price is the most shocking variable to JII, followed by exchange rate, FTSE Malaysia and oil price. Gold price gives shock for 9.39 % followed by exchange rate by 2.7%, followed by FTSE Malaysia by 2.05% and oil price by 0.9%.

In case of JII, gold price comes as the most shocking variable to JII. It might happen because gold regard as the important alternative investment when an economic instability happens. So that investors should be more cautious and aware on the increasing price of JII. For exchange rate variable, the government should do the right decision on maintaining the strength of Rupiah on other currencies. As for FTSE Malaysia impacts meaning that our policy maker and people involving in stock market have to be aware on the changing in the regional market. Lastly for oil price which contributes the least for the changing in JII. It should also be a point when a fluctuation on oil price happens and lately when the price keeps decreasing and the increasing price happens in stock market.

H. Conclusion and Policy Implications

This study is started by the structural order of VAR to VECM. It started from Unit Roots Test and finished in Variance Decomposition. Based on the analysis and the test results above on the effects of exchange rate (ER); oil price (O); FTSE Malaysia (FTSE) and gold price (G) on Jakarta Islamic Index (JII), it can be concluded that:

1. Exchange rate has insignificant impact on JII in the short run. While in the long run, it has positive and significant impact for JII. Rupiah depreciation will increase the export value of a certain company. An increasing in export value will increase the company's revenue, leads to the increasing profit that in the end will increase JII. When one company has higher profit, overall stock market will also have increasing value.
2. Oil price has positive impact on JII both in short and long run. The positive response might happen because Indonesian capital market is dominated by the mining sector with 39.7 percent. Because the stock market is dominated by the foreign investors with mostly invested in mining sector, thus an increasing in oil price will increase the stock price in mining sector and impact to the stock market in Indonesia.
3. FTSE Malaysia has insignificant impact on JII in short run. However in long run it negatively effecting JII. Negative relationship may happen because Indonesia stock market is still following the regional market condition. If the crash happens in the abroad, it will trigger a crash in Indonesia capital market as well. Another important point from this relationship is because a number of national investors are lower than foreign investors. So that it causes the capital outflow to the foreign countries.

4. Gold price has negative impact on JII both in short and long run. The reason why gold negatively impacts on JII because gold can be chosen as an alternative investment when the economic instability occurs. So that in the long run, investors prefer to gold as the investment instrument.

Regarding to the study conclusions, the researcher submits recommendations for the advancement JII as follows:

1. Exchange rate is significantly impact on JII. Then, it is expected for the government as the decision maker to control the decent expectation or confidence of society regarding the fluctuation of exchange rate.
2. The changing of oil price has also an impact on JII. In order to keep with the changing of oil price, then the investors should be more aware of the latest price.
3. The effect of FTSE Malaysia as one of the regional stock market also important for JII. All related parties should be cautious on responding to the other countries economic policy changing.
4. The movement of gold price should be the consideration for the investors whenever they want to invest in the market.

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Composition of Public Expenditure to Economic Growth in Supporting Good Governance

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Abstract

This study aims to analyze the quality of local government expenditure on economic growth. The method used in this research is linear regression of panel data. Regional spending for health has an influence on economic growth, so local governments are required to continue the Healthy Indonesia program that is protecting the health of their citizens through BPJS or other health insurance. Education spending does not have a positive effect on improving the economic growth of a region. This is due to the increase in education budget has not been matched by the increase of educational equality in certain areas, such as the lack of teachers, unfeasible school buildings and the lack of teaching and learning facilities. The child is the future investment of the nation, so the government needs to increase the children's resources through free education at least 15 years (elementary to high school), and for remote areas in 2020 must have a minimum education of 12 years.

While the relationship between CPC opinion and economic growth has an inverse relationship, it means that if the opinion of BPK to the local government financial report improved will reduce economic growth, this is caused by the BPK only check the audit of financial statements whether in accordance with the rules that have been set but do not see the performance but only see Whether the money spent is in line with the rules. The government through the minister of the interior should strive for the implementation of Performance Based Budget, meaning that every public money spent should be accompanied by a measurable performance that can encourage the welfare of the community.

Keywords: economic growth, performance-based budgeting, and community welfare.

A. Background

In order to achieve long-term goals and ultimate goals in building, Indonesia's national development of the next five years needs to prioritize efforts to achieve food sovereignty, energy adequacy and management of maritime and marine resources. Along with that, the development of the next five years should also lead to the condition of increasing sustainable prosperity, the community has the character and spirit of mutual cooperation, and has harmony between social groups, and economic posture reflects the growth of quality, that is inclusive, broad-based, Based

on the advantages of human resources as well as the ability of science and technology while moving towards the balance between economic and inter-regional sectors, and increasingly reflects the harmony between humans and the environment (RPJMN 2014-2019).

The sincerity of the government in building this area is measured by the existence of a government system known as Regional Autonomy. In support of this, the government passed Law Number 22 of 1999 on Regional Government which was subsequently revised to Law No.32 of 2004 and Law No. 25/1999 on the financial balance between the central and regional governments which was subsequently revised into Law No. 22/1999. Law Number 33 Year 2004.

The law is the foundation for the region to develop its region independently by relying more on the capability and potential of the region. This law also gives the region greater authority to design various development programs that are in line with the wishes of the local community.

The role of economic stabilization is very important because the state of the economy is not always in accordance with the desired by the government and society. The high inflation rate, unemployment and balance of payments abroad are continuous deficits are some of the macroeconomic phenomena that no nation wants on this earth. Because the problem directly concerns the aggregate economic variables and can only be overcome by controlling the course of the economy as a whole, then one of the necessary policies is fiscal policy.

The fiscal policy pursued by the government is indicated by the amount of APBN / APBD required as a guideline so that the government's activities can achieve optimal results and can make consideration in carrying out government activities. Fiscal policy includes measures by the government to make changes in the field of taxation in government expenditures with a view to affecting agrarian expenditure in the economy.

As a developing region, where the role of local government in the economy is relatively large, local government spending can practically affect economic activities in general, not only because these expenditures can create the various infrastructure needed in the development process but also one component of aggregate demand whose rise will boost domestic production.

The regular expenditure budget plays an important role to support the smoothness of government system mechanisms as well as efforts to improve efficiency and productivity, which in turn will support the achievement of the goals and objectives of each stage of development. While the development expenditure is intended to finance development programs whose budgets are always adjusted to the amount of funds successfully mobilized. Government spending in real terms can be used as an indicator of the magnitude of government activities financed by government spending and how it is proportionate to national income. The bigger and more

government activities the greater the government expenditure is concerned. But we should be aware that the proportion of government expenditure on gross national income (GNP) is a very rough measure of the role of government in an economy. As an illustration, the government's fiscal policy is often virtual in the short term or not perceived by the public because of short-term economic activity is relatively unaffected, and in the long run, the socio-economic justice dimension of poor fiscal policy arrangements will obviously burden the public from all walks of life . The problem is that the details of existing policies in the APBN / APBD often do not indicate the direction of policy and become guidelines programs that can provide stimulating opportunities for economic and private sector activity.

Research is expected to be useful in assessing the effectiveness of local government expenditure, especially in encouraging regional economic growth, so as to create a pro-poor development strategy, pro job and pro growth.

B. Theoretical Framework

According to Prof. Simon Kuznets, defines economic growth as a long-term increase in a country's ability to provide more types of economic goods to its population. This capability grows according to technological advances, and the institutional and ideological adjustments it needs. This definition has 3 (three) components: First, the economic growth of a nation is seen from the continuous increase of inventory; Second, advanced technology is a factor in economic growth that determines the degree of capability growth in the provision of various goods to the population; Third, the widespread and efficient use of technology requires adjustment in the institutional and ideological fields so that the innovations produced by human science can be exploited appropriately (Jhingan, 2000: 57).

Economic growth is a process of increasing per capita output in the long run, where the emphasis is on three things: process, output per capita and long term. Economic growth is a "process" not an economic picture at a time. Here we see the dynamic aspect of an economy, which is to see how an economy develops or changes over time. The pressure on change or development itself.

1. Boediono's view

Economic growth is also associated with an increase in "per capita output". In this sense the theory should include theories about GDP growth and the theory of population growth. For only when these two aspects are explained, the per capita output development can be explained. Then the third aspect is Economic growth in a long-term perspective, ie if over a long period of time per capita output shows an increasing trend (Boediono, 1992: 1-2).

2. Adolph Wagner's View

According to Adolp Wagner's empirical observations of European countries, the United States and Japan in the nineteenth century showed that law of ever increasing state activity is increasing. Wagner measures it from the ratio of government spending to national income. According to Wagner, there are some things that cause government spending to always increase, namely the demand for increased protection of security and defense, increase in income levels of society, urbanization that accompanies economic growth, the development of democracy and bureaucratic inefficiency that accompanies the development of government.

3. D. W.W. Rostow and Musgrave

W.W. Rostow and Musgrave connect government spending with the stages of economic development. In the early stages of economic development, the ratio of government investment to total investment, or in other words the ratio of government expenditure to national income is relatively large. This is because at this early stage the government must provide infrastructure.

In the intermediate stage of economic development, government investment is still needed to spur economic growth to take off. Together with that the share of private parties also become increasing. The role of the government is still large due to the fact that at this stage many of the market failures are caused by the economic development itself. Many cases of negative externalities, such as environmental pollution that require the government to intervene to overcome them.

In a development process according to Musgrave, the ratio of total investment to national income is greater, but the ratio of government investment to national income will shrink. Rostow, meanwhile, argues that in the later stages of development, there has been a shift in government activity, and the provision of economic infrastructure expenditures for social services such as health and education. Rostow and Musgrave, like Wagner, underlie their earnings are also based on observations of economic development experiences in many countries.

4. Keynesian view

The identity of the national income balance $Y = C + I + G + X - M$ is a legitimate source of Keynesian views on the relevance of government intervention in the economy (Dumairy 1996: 161). Many considerations underlie the decision making in managing their expenses. The government is not sufficient to achieve only the ultimate objective of any expenditure policy, but must also take into account the targets between those who will enjoy or are affected by the policy.

Increasing expenditures for the sole purpose of increasing national income or expanding employment opportunities is insufficient, but must also be taken into account who will be employed or increased incomes. The government also needs to avoid that increasing its role in the economy does not undermine the activities of the private sector.

Public economists have long been concerned with investigating the relationship between government spending and the rate of economic growth since they realized that government spending plays a very important role in the economy of a country in both low and high income countries.

C. Framework Think

The framework of thought is used as a guide or as an illustration of the flow of thought in focus on research objectives. Economic growth can be affected by several factors. If we look at the underlying framework, it can be seen that economic growth can be affected by several factors such as Local Own Revenue (PAD), Health Expenditure (KESH), Education Expenditure (EDUC), Population (PENDDK) and Opinion BPK Local Government Financial Reporting.

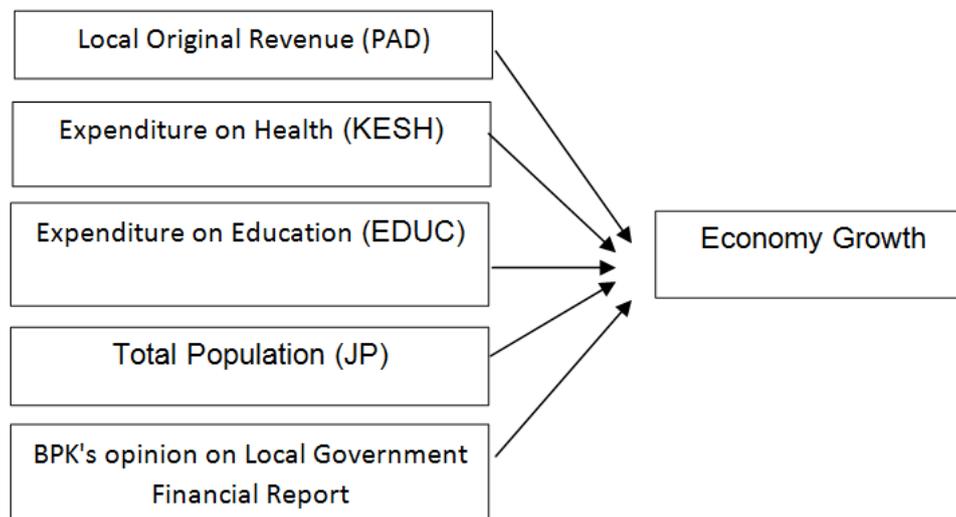


Figure 1 Research Thinking Framework

Graphically the above picture can be used as an overview in analyzing and solving the problem.

D. Analysis Tools

Regression used in this research is regression with panel data. Panel data is a combination of time series and cross section data. According to Agus Widarjono (2009) the use of panel data in an observation has several advantages gained. First, the panel data which is a combination of two time series data and cross section can provide more data so that it will produce more degree of freedom. Second, combining information from time series data and cross section can solve the problems that arise when there are omitted-variable problems.

Hsiao (1986), noted that the use of data panels in economic research has several key advantages over cross section and time series data. First, it can give researchers a large number of observations, increase the degree of freedom, the data have great variability and reduce the cholininity between the explanatory variables, which can produce an efficient econometric

estimate. Second, the data panel can provide more information that can not be provided only by cross section or time series data. And Third, the data panel can provide a better solution in dynamic change inference than cross section data.

1. Data Panel Regression Model

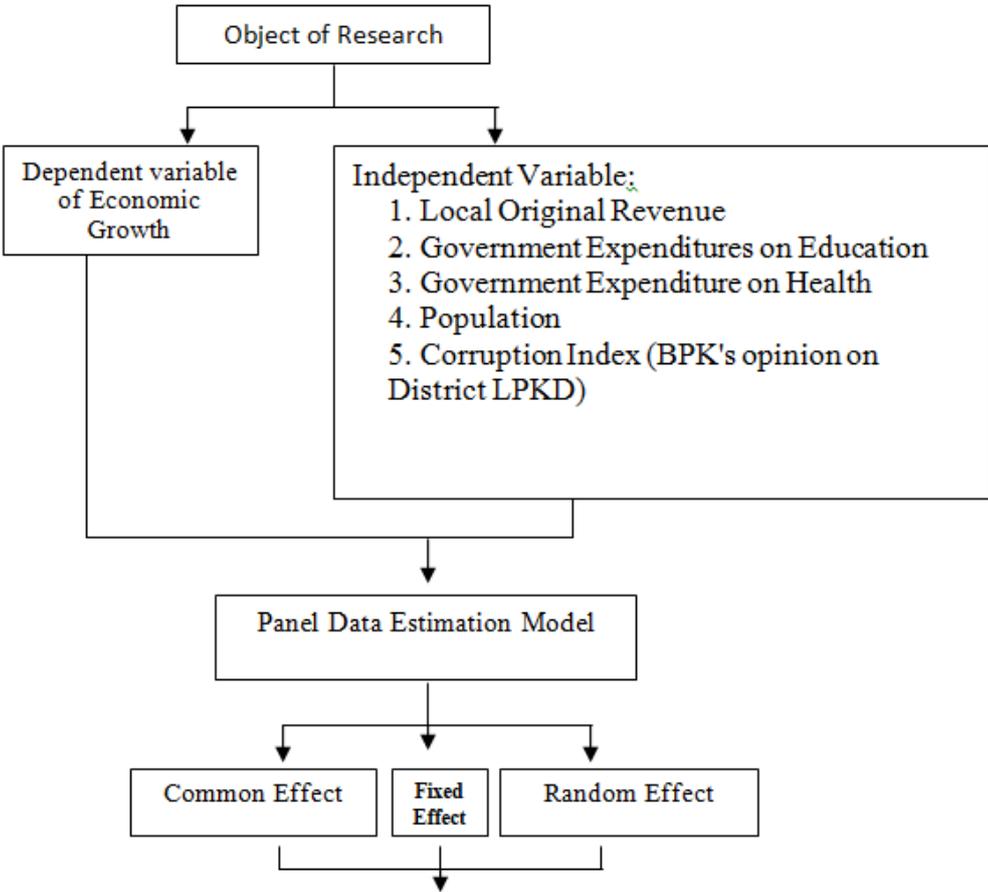
Panel Regression Model of the above title as follows:

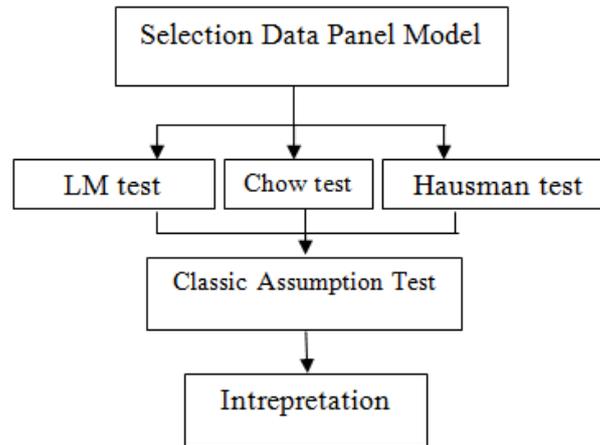
$$Y = \alpha + b_1X_{1it} + b_2X_{2it} + e$$

Information:

- Y = Dependent variable (LDR)
- A = Constants
- X₁ = independent variable 1
- X₂ = independent variable 2
- B (1 ... 2) = Regression coefficient of each independent variable
- E = Error term
- T = Time
- I = Company

2. Stages of Panel Data Regression Analysis





Source : Gujarati, 2003

Figure 2. Stages of Panel Data Regression Analysis

Judge (1980) in Fadly (2011), stated that there is a fundamental difference to determine the choice between FEM (Fixed Effects Model) and ECM (Error Component Model) among others as follows (Gujarati, 2004):

1. If T (large amount of time series data) and N (number of cross-section units) are small, the difference between FEM and ECM is very thin. Therefore, it can be done conventionally. In these circumstances, FEM may be preferred.
2. When N is large and T is small, the estimation obtained by two methods can differ significantly. In ECM, which is a random cross-section component and in FEM, is defined and not random. If very confident and believing that the individual, or cross-section unit of the sample is not random, then FEM is more suitable to use. If the sample cross-section unit is random / random, then ECM is more suitable to use.
3. The individual error components and one or more correlated regressors, the estimators derived from the ECM are biased, while those derived from FEM are unbiased.
4. If large N and T are small, and if assumptions for ECM are met, then ECM estimators are more efficient than FEM estimators.

E. Analysis and Discussion Results

1. Data Quality Test

The following test results Heteroskedastisitas results by using Park Test shown in the table below:

TABLE 1
Test Heterokedastisitas with Park Test

Variabel	Prob.
C	0.3731
LOG(PAD?)	0.9690
LOG(KESH?)	0.5807
LOG(EDUC?)	0.3566
LOG(PENDDK?)	0.9946
OPINI?	0.0252

Source: Data processed

Information :

*** = significant 1% ** = significant 5% * = significant 10%

From table 1, it can be concluded that the data used as independent variables free from the problem of heterokedastisitas.

Multicollinearity test is a state where between independent variables in multiple regression model found the existence of correlation (relationship) between one deng others. Multicollinearity test aims to test whether in this regression found the existence of such correlation. In the case of multicollinearity, the regression coefficient of independent variables will be insignificant and have a high standard error. The smaller the correlation between the independent variables, the regression model will be better (Santoso, 2005).

From the appendix can be seen that the correlation coefficient value between independent variables is not greater than [0,9] thus the data in this research does not occur multicollinearity problem.

2. Best Model Analysis

In panel data model analysis there are three kinds of approach that can be used, the least squares approach (ordinary / pooled least square), fixed effect approach, and random effect approach. The statistical test for selecting the first model is to test the Chow to determine whether Pooled least square method or Fixed effect should be used in creating panel data regression.

The selection of this model using the best analytical test is described in the following table.

TABLE 2.
Results of Estimated Local Original Income, Health Expenditure, Education Expenditure,
Population and BPK's Opinion on Economic Growth in Java and Sumatra

Dependent Variable : Economy Growth (LOG(PDRB))	Models		
	Common Effect	Fixed Effect	Random Effect
Constant	-6.07371	-26.3703	-6.18071
Standar error	1.049039	2.03595	1.436591
Probability	0.000	0.00	0.00
LOG(PAD)	0.626191	0.055386	0.134391
Standar error	0.077517	0.013214	0.021281
Probability	0.000	0.00	0.00
LOG(KESH)	-0.03303	0.007851	0.006934
Standar error	0.124984	0.005073	0.016264
Probability	0.792	0.13	0.67
LOG(EDUC)	0.078158	-0.00647	0.001521
Standar error	0.142827	0.007484	0.018637
Probability	0.585	0.39	0.94
LOG(PENDDK)	0.539554	2.623983	0.982667
Standar error	0.087343	0.167768	0.117329
Probability	0.000	0.00	0.00
Dummy	-0.12023	-0.00893	-0.01856
Standar error	0.049481	0.004154	0.009077
Probability	0.017	0.03	0.04
R²	0.784428	0.999863	0.667205

Dependent Variable : Economy Growth (LOG(PDRB))	Models		
	Common Effect	Fixed Effect	Random Effect
F_{statistik}	85.87597	18384.13	32.34642
Probability	0.000000****	0.000000****	0.000000****

Source: Data processed

Description: **** = significant 1% *** = significant 5% ** = significant 10%

Based on the test of the model specification that has been done from both analysis that is done by using Likelihood Test and Hausman Test both suggest to use Fixed Effect, and from the comparison of best selection test then regression model used in estimating Influence Number of Business Unit, Investment Value, Production Value And the Minimum Wage on Employment Absorption of Small Industry of Regencies / Municipalities in Special Region of Yogyakarta is Fixed Effect Model. Fixed Effect Model is chosen because it has the probability that each independent variable from Fixed Effect Model is more significant than Random Effect Model or Common Effect Model which each independent variable is not significant so that the better model is Fixed Effect Model.

Selection of panel data testing method is done on all sample data, Chow test is performed to choose the method of data panel testing between Pooled least square method or Fixed Effect. If the F statistic value on the Chow test is significant, the Hausman test will be performed to choose between the Fixed Effect or Random Effect method. Hausman test results with less probability

value than Alpha is significant, it means the Fixed Effect method selected to process panel data. Selection of test method is done by using the choice of Fixed Effect and Random Effect and combine, either cross-section, period, or combination of cross-section / period.

3. Selection of Panel Data Testing Method

a) Chow Test (Likelihood Test)

Based on the Chow Test table above, the two probability values of Cross Section F and Chi Square are smaller than Alpha 0,05 thus rejecting the null hypothesis. So according to Chow Test, the best model used is the model by using the Fixed effect method. Based on the Chow Test results that rejected the null hypothesis, the test data continues to Hausman Test.

b) Hausman Test

Based on the Hausman Test table, the probability value of Cross-section random is 0.0000 which is smaller than Alpha 0.05 thus rejecting the null hypothesis. So according to the hausman test, the best model used is the model using the Fixed Effect method.

4. Estimation Result of Panel Data Model Fixed Effect Model (FEM)

Based on the model specification test that has been done and from the best value comparison, the regression model used is Fixed Effect Model. Fixed Effect Model (FEM) is a panel data estimation technique using dummy variables to determine intercept differences between cross sections. The following table shows the results of data estimation with the number of observations of 31 districts / cities during the period 2011-2014 (4 years).

Table 3
Fixed Effect Model Estimate Results

Dependent Variable: Economy Growth (LOG(PDRB))	Model Fixed Effect
Constant	-26.3703
Standar error	2.03595
Probability	0,000
LOG(PAD)	0.055386
Standar error	0.013214
Probability	0.0001
LOG(KESH)	0.007851
Standar error	0.005073
Probability	0.1253
LOG(EDUC)	-0.00647
Standar error	0.007484
Probability	0.3899
LOG(PENDDK)	2.623983
Standar error	0.167768
Probability	0,000
Dummy	-0.00893
Standar error	0.004154
Probability	0.0344
R²	0.999863
F statistik	18384.13
Probability	0,00
Durbin-Watson stat	1.110336

Source: Panel data processing results

From the above estimation results, it can be made panel data analysis model of factors affecting economic growth of case studies in Sumatra and Java interpreted as follows:

$$\text{LOG (PDRB)} = \beta_0 + \beta_1 * \text{LOG(PAD)} + \beta_2 * \text{LOG(KESH)} + \beta_3 * \text{LOG(EDUC)} + \beta_4 * \text{LOG(PEND)} + \beta_5 * \text{Dummy} + e_t$$

Information:

LOG (GRDP) = Employment Absorption

LOG (PAD) = Number of Business Units

LOG (KESH) = Investment Value

LOG (EDUC) = Production Value

LOG (PEND) = Minimum Wage

DUMMY = CPC opinion against LKPD

B₀ = Constant

B₁-β₄ = Parameter Coefficient

e_t = Disturbance Error

Where the regression results obtained as follows:

B₀ = -26,3703 can be interpreted that if all independent variables (PAD, Education Expenditure, Health expenditure, population and opinion of BPK to LKPD) are considered constant or

unchanged then there will be no economic growth (antilog -26,37 equal to Close to enol) in Sumatra and Java.

$B_1 = 0.055386$ can be interpreted other factors are considered fixed then if the Revenue Original Area increased by 1 percent will have an impact on economic growth growth of 0.055 percent.

$B_2 = 0,007851$ can be interpreted other factors are considered fixed then if the Health Expenditure increased by 1 percent will have an impact on the increase in economic growth by 0.0078 percent. Increased health costs have an impact on public health status and an impact on increasing population productivity.

$B_3 = 0,00647$ can be interpreted other factors are considered fixed then if education spending increased by 1 percent will have an impact on economic growth increase of 0.00647 percent. This means that education has an important role in encouraging regional economic growth, this increase in education has an impact on increasing human resources and ultimately will increase labor productivity. But if seen from result of regresi seen that partially education expenditure do not have influence to economic growth this is caused by still low number of old school in Indonesia, average length of school less than 9 year or not yet passed junior high school.

$B_4 = 2.62398$ can be interpreted other factors are considered fixed then if the population increased by 1 percent will have an impact on the increase in economic growth of 2.62 percent. In the short term the development of the population has benefits in encouraging economic growth, but in the long term population growth can hamper the economic growth of a region.

$B_5 = - 0.00893$ can be interpreted other factors are considered fixed then if there is an inverse relationship between opinion BPK with economic growth, if the opinion BPK opinion of the local government financial statements improved it actually lowered the economic growth, this is caused BPK only check the audit financial statements Whether in accordance with the rules that have been set but do not see the performance but just see if the money spent is according to the rules.

From the table above, it can be made model of panel data analysis to factors influencing economic growth in every Regency / Town in Java and Sumatera which interpreted as follows:

In the estimation model above, it can be seen that the influence of different cross-section variables in every district and city in Java and Sumatra region to economic growth in every regency and city. Where the districts of Aceh Besar, Central Aceh, Dairi, Pasaman, Payakumbuh, Sawahlunto, Bengkalis, OKU, South Bengkulu, Kaur, Kepahiyang, Sukabumi and Blitar have a positive cross-section effect Has a coefficient value between 0.08 to 3.56. While in the districts /

cities that have the effect of cross-sectional effects (negative operational effects) of negative value, namely Bireuen, Asahan, Deliserdang, Agam, Padang, Kampar, Merangin, Tebo, Musirawas, Muaraenim, OKI, Bengkulu Utara, Lampung Tengah, Brebes, Magelang, Surakarta and Kulon Progo districts are between -3.26 to -0.07.

From each regency / city in Java and Sumatra, the region with the greatest influence on economic growth is Blitar Regency (3.56) whose economy is sustained from agriculture sector, Sawahlunto City (3.38) whose economy is supported by mining, Agriculture and tourism sector, and Payakumbuh Regency (2.01) whose economy is supported by trade and agriculture sectors.

Meanwhile, Brebes Regency (-3.26), City deliserdang (-2.433) and Central Lampung Regency (-2.08) have a very small cross section effect in economic growth.

F. Conclusion

From the results of data analysis can be concluded as follows:

Local Original Income has a positive influence on the economic growth of the region. The higher the PAD will have an impact on increasing economic growth of the region.

Health spending has a positive effect on increasing regional economic growth, the greater the health budget the greater the economic growth created. Increasing the health budget has an impact on increasing the productivity of workers, and has an impact on improving the welfare of the people.

Education spending does not have a positive effect on improving the economic growth of a region. This is due to the increase in education budget has not been balanced by the increase of education distribution in certain regions, such as the lack of teachers, unfeasible school buildings and the lack of teaching and learning facilities.

The number of residents has a positive influence on improving the economic growth of a region. In the short term the development of the population has benefits in encouraging economic growth, but in the long term need to be considered, because the bias occurs population growth can hamper the economic growth of a region.

There is an inverse relationship between BPK's opinion and economic growth, if BPK's opinion on the local government's financial report improves instead of lowering economic growth, this is caused by the BPK only checks the audit of financial statements whether in accordance with the rules that have been set but do not see the performance but Just to see if the money spent is the rule.

G. Suggestions

Education spending does not have a positive effect on improving the economic growth of a region. This is due to the increase in education budget has not been balanced by the increase of education distribution in certain regions, such as the lack of teachers, unfeasible school buildings and the lack of teaching and learning facilities. The child is the future investment of the nation, so the government needs to increase the children's resources through free education at least 15 years (elementary to high school), and for remote areas in 2020 must have a minimum education of 12 years.

There is an inverse relationship between opinion BPK with economic growth, if the opinion BPK opinion on the local government financial report improved actually lowered the economic growth, this is caused by the BPK only checks the audit of financial statements whether in accordance with the rules that have been set but do not see the performance but Just to see if the money spent is the rule. The government through the minister of the interior should strive for the implementation of Performance Based Budget, meaning that every money spent issued must be accompanied by a measurable performance that encourages the welfare of the community.

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Education (2) & Psychology

Wednesday, August 16, 2017 10:30-12:00 Room 1007

Session Chair: *Prof. Helen S. Cabral*

ACMASS-0001

Implementation of Rhe Experiential Learning Courses of the College of Teacher Education and Arts and Sciences: An Assessment

Judith S. Calamayo | *Northwest Samar State University*

Helen S. Cabral | *Northwest Samar State University*

Wilfredo A. Aurea | *Northwest Samar State University*

Bella B. Delos Reyes | *Northwest Samar State University*

Modesto M. Maniable | *Northwest Samar State University*

ACMASS-0028

Teacher Leadership Survey of Chinese Secondary School

Song-Hua Liu | *Pusan National University*

Chul-An Joo | *Pusan National University*

Zhen Yuan | *Pusan National University*

Zi-Yuan Zhang | *Pusan National University*

ACMASS-0104

Mental Health Promotion for the Ideal Communities' Elderly in Chiang Mai Province

Matree Vongverapant | *Maejo University*

ACMASS-0110

Social Support of First-Time Mother: An Exploratory Study of Indonesian Mothers

Nanan Nuraini | *University of Bristol*

ACMASS-0001

Implementation of Rhe Experiential Learning Courses of the College of Teacher Education and Arts and Sciences: An Assessment

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Background

The Experiential Learning Courses (ELC) are indispensable components of the New Teacher Education Curriculum per CHED Memorandum Order No. 30 s., 2004. This is pursuant to the National Competency Based Teacher Standards (NCBTS), core of the Teacher Education and Development (TEDP) of the government (ELC Handbook, 2009).

The ELC are intended to provide students with actual learning experiences in which they can observe, verify, reflect on and practice the different components of the teaching-learning processes in a variety of authentic school settings. Such experiences which are built around mentoring will begin with field observation and will gradually intensify into participation until students undertake practice teaching which eventually lead them to their chosen careers.

Speaking of career, the experiential learning courses paved the way of future teachers. On the other hand, Krumboltz (2008) stated that indecision is desirable and sensible as it allows the opportunity for the individual to benefit from unplanned events. He added that people with curiosity to explore learning opportunities, persistence to deal with obstacles, flexibility to address a variety of circumstances and optimism to maximize benefits from unplanned events, are more likely to capitalize on chance events and turn serendipity to opportunity.

But to Holland (Villar, 2009) in his Theory of Career Choice, he emphasized that in choosing a career, people prefer jobs where one can be around others who are like them. Individual searches for environment that will let him use his skills and abilities and express his attitudes and values while taking on enjoyable problems and roles.

Moreover, Parsons (Villar, 2009) agreed that people perform best when they are in jobs best suited to their abilities. He developed the Talent-Matching Approach which was later turned into the Trait and Factor Theory of Occupational Choice. He stated that occupational decision making occurs when people have achieved an accurate understanding of their individual traits, a knowledge of jobs and the labor market, and rational and objective judgment about the relationship between their individual traits and the labor market. Although, there are already theories like the abovementioned, challenges in college life and unemployment are still

inevitable to some people.

The adoption of National Career Assessment Examination (2014) in the Philippine educational system is one big step in addressing challenges in college life and career mismatch. NCAE is a test taken by high school students that determines their strengths in different career fields.

The teaching profession has been struggling to keep pace with the changes in society and the accompanying challenges of the technological world. With the notion that teacher education, which consists of the pre-service education teachers and the in-service teachers, has been unable to bridge the growing gap between the needs and expectations of learners and the knowledge and skill levels of both new and existing teachers. It has been initiated to advocate a greater formal partnership among the main stakeholders.

In the College, the one in-charge for the Experiential Learning Courses (ELC) particularly the Field Study Courses and Practice Teaching adopt similar scheme for the exposure of the teacher education graduating students. On the first semester, they have to undergo the lump Field Study Courses (FS 1-6) and thereby completing all the worksheets and other requirements in the field. The pre-service teachers have a half-day immersion on the selected cooperating schools nearby because they still have subjects in the College.

Objectives

The research aims to assess the performance of the practice teachers for the SY 2010 – 2014.

Specifically, it seeks to answer the following questions

1. What is the profile of the student teacher in terms of:
 - 1.1 age;
 - 1.2 sex;
 - 1.3 general weighted average?
2. What is the performance of the student teachers in demonstration teaching in terms of the following components:
 - 2.1 instructional competence;
 - 2.2 professional and personal characteristics; and
 - 2.3 punctuality, promptness and attendance?
3. Is there a significant difference in the performance of student teachers between the courses as revealed by the aforementioned indicators?

Review of Literature

Commission on Higher Education (CHED) Memorandum Order number 30 was promulgated for the purpose of rationalizing the undergraduate teacher education in the country to keep pace

with the demands of global competitiveness. The said CMO is in accordance with the pertinent provisions of Republic Act 7722, known as the Higher Education Act of 1004. CMO 30 embodies the policies and standards for the undergraduate teacher education curriculum.

Article V, section 13 of CHED Memorandum Order 30 states that, “field stud courses are intended to provide students with practical learning experiences in which they observe, verify, reflect on, in actual school setting. The experiences will begin with field observation and gradually intensify until students undertake practice teaching”.

The Field Study Courses adheres to the Vygotskian principle of social construction of knowledge and that meaningful learning and construction of knowledge will occur if learners work hands – on in relevant settings and with the proper guidance. Complementary to Vygotsky’s theory is Albert Bandura’s Social Learning Theory. Bandura asserted that learning takes place not only through imitation but also observation. Recently, the Situated Learning Theory reiterated Vygotsky’s and Bandura’s views. It emphasized that knowledge needs to be presented in an authentic context and that settings and applications that would normally involve knowledge and that learning requires social interaction and collaboration. The field study experience is geared towards exactly this, to give pre-service teachers the opportunity to learn through meaningful and systematic exposure in actual settings.

Another important theoretical basis of this field study experience is reflective education. John Dewey stressed the vital role that reflection played in the growth and development of teachers. Reflection allows the learner explore his/her experiences in order to arrive at new understandings or insights. It maybe done individually or through sharing and discussion with others.

Observation in actual setting is meant for the Field Study students to train their senses to really focus on important details of the learning situation and perceive them with clarity and objectivity. It entails that student learn to differentiate making an observation and interpreting the observation. Analysis involves the use of critical thinking to break down the components of what was observed, orchestrated or organized. Further on it will also involve the ability to synthesize, to organize into a coherent pattern the salient points of what are has analyzed and learned. Reflection involves the past, the present and future of the field study student. In light of each field experience episode, the FS students reflect on relevant past experiences that might have affected their beliefs, values and attitudes about the learning. The student also reflect on how each episode is affecting their present thinking and finally how their learnings will impact on their future as teachers.

Methods

The researchers utilized descriptive research with the aid of an instrument on Practice Teaching

used by the CTEAS Practice Teaching supervisors in evaluating the exposure of the pre-service students and the implementation of the Experiential Learning Courses (ELC). The instrument used were the accomplished evaluation rating sheets of the Practice Teachers for the first and second shifts during their deployment in the second semester from SY 2010 – 2011 to 2013 – 2014. These were accomplished by the cooperating teachers where the Practice Teachers were assigned.

The instrument is composed of three parts namely; instructional competence, professional and personal characteristics, and punctuality and attendance. There are three subcomponents of instructional competence namely lesson planning, learner’s involvement, and school, home and community involvement.

The following statistical measures were used to analyze the obtained data:

1. Use of frequency counts, percentages and ranking in tabulating the profile of the graduate-respondents.
2. Computation of mean for the extent of influence of the different factors to employability and the problems and solutions will be utilized by the researcher.

Expected Results/ Conclusions/Contributions

After the data was gathered and treated, the following are the results and findings of the study.

Table 2
Profile of the Respondents of the Study

Profile	BEED		BSED		Over-all	
	f	%	f	%	f	%
Age:	--	--	--	--	--	--
24 & above	26	16.90	16	19.80	42	17.90
21-23 yrs old	79	51.30	48	59.30	127	54.00
20 yrs old & below	49	31.80	17	21.00	66	28.10
Total	154	100.00	81	100.00	235	100.00
Sex:	--	--	--	--	--	--
Male	30	19.50	29	35.80	59	25.10
Female	124	80.50	52	64.20	176	74.90
Total	154	100.00	81	100.00	235	100.00
GWA:	--	--	--	--	--	--
below 1.71	25	16.20	28	34.60	53	22.60
1.71 to 2.05	98	63.60	48	59.30	146	62.10
above 2.05	31	20.10	5	6.20	36	15.30
Total	154	100.00	81	100.00	235	100.00
Mean	1.92		1.811		1.88	
sd	0.16		0.17		0.17	

Performance of Student Teachers in Experiential Learning Courses

The following tables present the performance of BEED and BSED student teachers in the Experiential Learning Courses during their practice teaching exposure for the SY 2010 – 2011 to SY 2013 – 2014. There are three (3) components of the instruments namely instructional competence, personal and professional characteristics, and punctuality and attendance.

Instructional Competence. Table 3 presents the performance of BEED and BSED student teachers in terms of the classroom instructional competence during the Experiential Learning Courses, practice teaching aspect. From the table, it can be seen that there are three sub-components as to lesson planning, learner’s achievement, and school, home and community involvement where there are 16 performance indicators for first component, 2 for the next, and 4 for the last component.

For the performance of BEED, there is an overall weighted mean of 8.4 for the instructional competence with a verbal description of very satisfactory while BSED have an overall weighted mean of 8.8 and also describes as very satisfactory.

With this, it is implied that both BEED and BSED are exhibiting very satisfactory traits in lesson planning, managing learner’s achievement and facilitating school, home and community involvement. This is the result of the preparation and exposure made by the College for every student teacher.

Table 3
Mean and Standard Deviation of Performance of Student Teachers in the in terms of Instructional Competence

Performance Indicator	BEED			BSED		
	Weighted Mean	SD	Description	Weighted Mean	SD	Description
A. Lesson Planning						
1. Formulates/adopts objectives of lesson plan	9	1.02	O	9.2	1	O
2. Selects content and prepares appropriate instructional materials/teaching aids	8.4	1.3	VS	8.3	1.2	VS
3. Selects teaching methods/strategies						
4. Relates new lesson with previous knowledge/skills	8	1	VS	8	1	VS
	8	1	VS	8	1	VS
5. Provides appropriate motivation	8.1	1.2	VS	7.9	1.4	VS
6. Present and develops lessons	10	0.3	O	9.8	0.6	O
7. Conveys ideas clearly	9.5	1.2	O	9.7	0.7	O
8. Utilizes the art of questioning to develop higher level of thinking	9.1	1.3	O	9.5	0.9	O
9. Ensures learner's participation						
10. Address individual differences	8.7	1.2	VS	8.7	1	VS
11. Shows mastery of the subject matter	8.1	0.9	VS	8.4	0.8	VS
12. Evaluates learning outcomes/performance of learners	7.9	0.7	VS	8.2	0.6	VS
	8	0.8	VS	8.1	0.5	VS
13. Assesses lesson to determine desired outcomes within the allotted time						
14. Maintains clean and orderly classroom	8	0.9	VS	8.3	0.7	VS
15. Maintains classroom conducive to learning						
16. Handles disciplinary problems with tact and good judgment	8	0.9	VS	8.4	0.8	VS
B. Learners' Achievement						
1. Improves learners' achievement	8.4	1.2	VS	8.6	0.9	VS
2. Conducts appropriate RRE activities						
C. School, Home and Community Involvement						
1. Observes and participates homeroom PTA activities	8.5	1.1	VS	8.5	0.9	VS
	8.2	0.9	VS	8.4	0.8	VS
2. Reports learners progress to parents/guardians	8.1	0.8	VS	8.4	0.8	VS
3. Participates in school/community projects, co-curricular activities and in civic organizations	8	0.7	VS	8.4	0.8	VS
	8.2	0.9	VS	8.3	0.7	VS
4. Encourages involvement of parents and stakeholders in school programs and activities	8.4	1.1	VS	8.4	0.8	VS
	8.5	1.1	VS	8.3	0.8	VS
Overall	8.4	0.55	O	8.8	0.44	O

Legend:

- 10 – 9 – Outstanding
- 7 – 8 - Very Satisfactory
- 5 - 6 - Satisfactory
- 3 – 4 - Poor
- 1- 2 - Needs Improvement

Professional and Personal Characteristics. Table 4 presents the performance in demonstration teaching of BEED and BSED in terms of professional and personal characteristics. It is describe as 5 - outstanding being the highest and 1 – needs improvement. There are 10 performance indicators along this component which are as follows, decisiveness,

honesty/integrity/dedication/resourcefulness, courtesy, human relations, leadership, stress tolerance, fairness/justice, proper attire/good grooming.

From the table, it can be seen that BEED has a total weighted mean of 7.9 described as very satisfactory and BSED with a weighted mean of 7.8 and described as very satisfactory also. With this, it implies that both BEED and BSED are showing very satisfactory personal and professional characteristics. They can be trusted for duties and responsibilities along their line.

Table 4
Mean and Standard Deviation of Performance of Student Teachers in the in terms of Professional and Personal Characteristics

Performance Indicator	BEED			BSED		
	Weighted mean	SD	Description	Weighted Mean	SD	Description
1. Decisiveness	8	2	VS	8	1	VS
2. Honesty/Integrity	8	1	VS	8	1	VS
3. Dedication/Resourcefulness	8	1	VS	9	1	O
4. Initiative/Resourcefulness	8	1	VS	8	1	VS
5. Courtesy	8	6	VS	8	1	VS
6. Human Relations	8	1	VS	7	1	VS
7. Leadership	8	1	VS	8	1	VS
8. Stress tolerance	7.6	1.2	VS	7.6	1.2	VS
9. Fairness/Justice	7.7	1.2	VS	7.5	1.2	VS
10. Proper Attire/Good grooming	7.7	1.2	VS	9.3	1.2	O
Overall	7.9	0.18	VS	7.8	0.49	VS

Legend:
 10 – 9 - Outstanding
 7 – 8 - Very Satisfactory
 5 - 6 - Satisfactory
 3 – 4 - Poor
 1- 2 - Needs Improvement

Punctuality and Attendance. Table 5 presents the performance in demonstration teaching of BEED and BSED in terms of punctuality and attendance. There are three (3) performance indicators for this aspect and described as outstanding as the highest and needs improvement as the lowest.

From the table, it can be seen that BEED has a weighted mean of 7.9 which is described as very satisfactory and for BSED, the weighted mean is 7.8 which is described as very satisfactory. The result implies that both BEED and BSED student teachers are conscious of their punctuality and attendance to school and they are conscious the importance of promptness in the submission of reports and other documents in school.

Table 5
Mean and Standard Deviation of Performance of Student Teachers in the in terms of Punctuality and Attendance

Performance Indicator	BEED			BSED		
	Weighted mean	SD	Description	Weighted Mean	SD	Description
1. Punctuality – number of times tardy during the period of practicum	7.83	1.02	VS	7.63	1.2	VS
2. Attendance – number of days absent during the period of practicum	7.8	0.9	VS	7.6	0.98	VS
3. Promptness in submission of required reports	7.9	1.04	VS	7.6	1.33	VS
Overall	7.9	0.18	VS	7.8	0.49	VS

Legend:
 10 – 9 - Outstanding
 7 – 8 - Very Satisfactory
 5 - 6 - Satisfactory
 3 – 4 - Poor
 1- 2 - Needs Improvement

Summary of Results. Table 6 presents the summary of the performance of BEED and BSED student teachers in the demonstration teaching during their deployment. There are three (3) components in the instruments used in evaluating demonstration teaching namely instructional competence, professional and personal characteristics, and punctuality and attendance.

From the table, it can be seen that no significant difference on the professional and personal characteristics of BEED and BSED students teachers in their performance in demonstration teaching. However, there is significant difference on the instructional competence and punctuality and attendance of BEED and BSED student teachers. This implies that the BEED and BSED have common professional and personal characteristics such as being decisive, honest, dedicated, resourceful, courteous, and the like. They showed very satisfactory display of such professional and personal characteristics. On the other hand, there is felt difference between the BEED and BSED in terms of instructional competence and punctuality and attendance in terms of submission of reports and others documents. Perhaps, such difference is attributed to the academic environment, exposure and other factors like resources in addressing the instructional competence and punctuality and attendance of student teachers.

Table 6
**Summary Table for Test of Significant Difference of BEED and BSED student teachers
in their Performance in the Demonstration Teaching**

Aspects	t-value	df	p-value
Instructional Competence	2.915524*	21	0.008269
Professional and Personal Characteristics	0.632886 ns	9	0.542552
Punctuality and Attendance	7.46203*	2	.000862

Legend:

* = significant at 0.05 level ($p < 0.05$)

** = highly significant at 0.05 level ($p < 0.05$)

ns= not significant at 0.05 level

Conclusion

Based on the findings of the study, the following conclusions are considered:

1. The student teachers both for BEED and BSED are within the age expected of them to be completing for the tertiary level of education. Mostly are female and have a very satisfactory academic performance.
2. The performance of BEED and BSED student teachers in demonstration teaching is very satisfactory in instructional competence, professional and personal characteristics, and attendance and punctuality.
3. The BEED and BSED student teachers displayed difference in terms professional and personal characteristics.

Contributions

1. The profile of BEED and BSED student teachers should also consider variables such IQ and teaching aptitude test results.
2. The general weighted average should be categorized further under professional and general education.
3. The College should develop scheme of providing incentives for student teachers who are performing excellently on demonstration teaching.
4. The College should establish best practices in demonstration teaching.

Keywords: demonstration, practicum, competence, involvement, supervision

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ACMASS-0028
Teacher Leadership Survey of Chinese Secondary School

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Abstract

At the department of education, if we talk about school reform or leadership, principal leadership will jump out of our mind. Because teacher that usually obey orders from supervisor or principal as top-down, in our mind. Therefore principal leadership has been more noticed than teacher leadership. However, in recent 20 years, teacher leadership as the new school reform ways raised in England and America (Smylie etc, 2002). We can know teacher leadership is also important. And as Ma(2016), Lee(2012), Seo(2013), Du(2010), Liu(2014), Ma(2009) and Tu(2015) these papers, we can know teacher leadership plays a positive role not only at classroom, score, but also at colleague relation, teacher efficacy and school organization on effectiveness which are good for school reform.

At present, there is an active school reform for improving educational quality in China. If the teacher leadership developed well, the school reform will be more smoothly and successful. But before developing teacher leadership, what does the present level of teacher leadership, and how about the teachers' thinks of teacher leadership, these questions which we should solve by first. As a result the teacher leadership survey is necessary. Nevertheless it's insufficient by seeing the articles appear about teacher leadership survey in China.

So at this paper, we will do a survey of teacher leadership in Chinese secondary school to make an initial value for developing teacher leadership. Thereupon we raise three research problems as follows:

First, what teacher think about teacher leadership?

Second, how about the differences about factors of teacher leadership (developmental focus,

recognition, autonomy, collegiality, participation, open communication, positive environment)? Third, how about the differences on the basis of teachers' background variables, for example sex, work experience and post position.

Keywords: principal leadership, teacher leadership, school reform, school survey.

1. Background

1.1 Teacher Leadership Emerges and Significance

Traditional school leadership places the principal in the position of decision-making.

Over time, schools have moved away from this singular leadership model to share leadership possibilities. In fact, leadership must be shared, or distributed, to be effective (Gronn, 2000). The more important thing that teacher is an important member at school reform. Through some research like Lieberman(1992), Stone etc(1997) and so on, we can also get the importance of teacher leadership.

Students, teachers, and schools benefit from the leadership of teachers. These benefits for students include a significant positive impact on student engagement (Leithwood & Jantzi,1998), and improving the lives of disadvantaged high school students (Crowther, as cited in Muijs & Harris, 2003). Teachers' self-esteem and satisfaction increase along with motivation and retention in the profession (Katzenmeyer & Moller, 2001; O'Connor & Boles, 1992; Ovando, 1996). Decreased teacher absenteeism (Sickler, 1988), and improved attitudes towards teaching have also been documented (O'Connor & Boles, 1992). In addition, the presence of strong teacher leadership can help alleviate disturbances during times of head teacher change (Davidson & Taylor, 1999).

1.2 Definition of Teacher Leadership

The definition of teacher leadership is different from researchers' view. Definition of finishing as follows:

Smylie (1995) said teacher leadership as an instance of change as well as a vehicle for change by review some researchers' articles. Stone (1997) considered that teacher leaders have more years of teaching experience; teacher leaders assume leadership roles for personal and professional reasons and increased involvement in decision making; teacher leaders are supported by encouraging individuals, time, decision making/teaching empowerment, and professional opportunities; teacher leaders are constrained by time, power, and politics; teacher leadership improves professional practice by encouraging collaboration and decision making; teacher leadership assists in school improvement efforts by recognizing and utilizing teachers' views and voices.

And Mujis (2003) agree with Goleman's view that every person in one way or another can demonstrate leadership, suggested that distributed leadership is significance. Gunter (2006) said that teachers show an embedded deference to hierarchy in ways that make the policy drive towards collaboration and development, it also seems that teacher activism to build collaborative practice was stifled by role structures, and they needed both internal and external support otherwise: "the would-be charter teachers were reliant on their personal credibility and skills in securing the permissions and resources they needed to act". And Lieberman (2011) shows that teacher as researcher, teacher as scholar, and teacher as mentor. It seems that the definition of teacher leadership is developing and becoming abundant. In the end I'll review the Katzenmeyer & Moller(2009), they arrived at their definition of teacher leadership after a review of the educational literature, careful consideration of their experiences, and much conversation with teacher leaders, principals, and others. This definition continues to evolve as they continue their exploration and learning. Their definition is teachers leaders lead within and beyond the classroom; identify with and contribute to a community of teacher learners and leaders; influence others toward improver educational practice; and accaepct responsibility for achieving the outcomes of their leadership. This definition is more comprehensively and is established in school reform, so we'll use this definition to do our school survey. And Katzenmeyer & Moller(2009) has put forward 7 factors of teacher leadership, developmental focus, recognition, autonomy, collegiality, participation, open communication, and positive environment.

2. Methods

2.1 Object

The object of this research is the teachers working at Hunan province secondary school in China. Recruited 200 secondary school teachers, which consist of 100 middle school teachers and 100 high school teachers.

2.2 Survey

TLSS was established by a panel of teacher leadership experts and pilot survey (M. Katzenmeyer, personal communication, July 24, 2015). Each member developed items that they believed would assess readiness for teacher leadership. Items were collaboratively reviewed by all members of the panel. More than 300 teachers for a variety of schools responded to the items. Katzenmeyer and Katzenmeyer (2005) completed a series of analyses, such as factor analyses, principal component analysis, varimax rotation, and oblique rotation to identify seven factors, or categories. The final scale was developed through multiple repetitions of this process. To further establish reliability, the authors used Cronbach's Alpha to analyze a sample of 312 responses. The Alpha reliability estimates indicated that the scales of the TLSS have above average reliability(table 1). And TLSS consist of 49-item (developmental focus, recognition, autonomy, collegiality, participation, open communication, and positive environment) requires teachers to reflect upon the leadership beliefs and behaviors of the school. Each item was scored on a

5-point Likert-scale ranging from “never” to “always.” Responses were categorized into seven categories, each receiving a sub score. At this paper we’ll use TLSS to do teacher leadership survey.

Table 1 Internal Consistency (Cronbach Alpha) Reliabilities of the TLSS Scales

Scales names	Alpha Reliability	Items
Developmental focus	.87	1-7
Recognition	.88	8-14
Autonomy	.87	15-21
Collegiality	.83	22-28
Participation	.87	29-35
Open Communication	.93	36-42
Positive Environment	.87	43-49

Source: Katezenmeyer, 2003.

2.3 Data Analysis Methods

This research will apply spss22 to process and analyze the valid questionnaire as follows:

First, counting the frequency and percentage to understand what teacher think about teacher leadership.

Second, calculating the average and standard deviation to grasp the differences about factors of teacher leadership (developmental focus, recognition, autonomy, collegiality, participation, open communication, positive environment).

Third, doing independent sample t-test and one-way ANOVA to clarify differences on the basis of teachers’ background variables, for example sex, work experience and post position.

3. Expected Results

Through this survey of teacher leadership in Chinese secondary school, we are expected to make an initial value for developing teacher leadership.

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Mental Health Promotion for the Ideal Communities' Elderly in Chiang Mai Province

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Abstract

The purpose of this study was to analyze the processes and activities of mental health promotion for the ideal communities' elderly and to seek a model of the same for the elderly in other groups of people. The methodology was of the research and development design with participatory action cum interviews and group discussions. Data were collected there from for analysis and put out working practices.

The results of the study showed that the processes and activities of mental health promotion on the ideal communities' elderly participating therein had been proceeding well in Chiang Mai with the cooperation of authorities and networking groups in providing them with what were necessary, such as, funds for rehabilitation & physical therapy through local knowledge and wisdom. Apart from these, there were volunteers ready to help them recreate a way of life so as to brighten up, in addition to spiritual and mental pursuit in terms of religious studies, practicing meditation, making merit, or even other ways of psychological relaxing like watching movies, listening to music and so on.

Socially, they got along well with their neighbours and took part in communal activities regularly, while ready to help others both materially and financially. Mentally, they were optimistic, willing to forgive people for everything, tolerant, and making use of Buddhist teachings in daily life to manage stress and other psychological problems in life. And physically, nutritive food was known to them sufficiently.

As to the development of mental health promotion, herbal food and proper energetic movements were widely used. Besides, the spiritual and religious development activities were emphasized and went hand in hand with making friends with all around and giving society a hand with "public mind", plus extending the elderly capacity to pass local knowledge and wisdom out to others; and what could not be lost sight of was to support the said activities including setting the elderly club, network and welfare so as to take care of each other sustainably.

Keywords: Mental Health Promotion, Elderly, Ideal Community

1. Background/ Objectives and Goals

At present the number of the Thai elderly has increased in the proportion of the total population and average age from 6.7 % in 1990 to approximately 15.2 % in 2020 ,the highest age of which would be 80 and over, accounting for 13 % of the ageing people.(The College of Demography, 2007). It is expected that in 2020 Thailand's ageing population will stand at about 10,776,000; and the average age of the Thais will reach 75 for males and 80 for females in all parts of the country. (The Research Institute of Population and Society, 2014). This is, to some extent, because of the advancement of medical science and public health. However, the majority of the elderly found has suffered from mental problems due to many a cause .such as being worried, anxious about something and feeling unhappy that lead to such illness as dizzy, palpitation, chest pain, dyspnoea, anorexia and so on. In some there arise moodiness, depression, fussiness, insomnia and the like.

Moreover, the elderly often become self-centred in thinking about themselves in the past with sorrow or missing opportunity of doing something good, and at the same time loneliness for some is a big problem causing anxiety or suspicion, all of which have gradually been vulnerable to nagging, annoyance and even touchiness. The following problems often found in ageing people are interfering, Alzheimer's disease and sexual relations. As such, some of them cannot help themselves in daily living and so they need some assistance and care including medical advice and treatment.

Therefore, the ageing people's topmost problems often found are 1)worry, 2)depression, 3)insomnia, 4)Alzheimer and 5)sexuality. In other words, we can attribute the elderly mental health deteriorating to the main causes as follows :

1. The physical declining day by day has resulted in low performance of their duty comparable previously. It is then a matter of boredom and lacking in self-confidence. This would be a lot of trouble with most of them.

2. Economically, it is of course financial difficulty as they have left their jobs and stopped working, or though some have their own enterprises , lower incomes they earn due to the bodily incompetence. One certain group of ageing persons faces a high risk of poverty and has to depend on their sons or daughters for financial support, while another deals with child misconducts, all of which create mental tension and even stress.

3.Socially, some older persons used to hold a high position in any section of the government, and enjoyed a great deal of power ,influence and respect in their respective units concerned .After retirement, powerless they are and have had no social bargain anymore. Because of the so-called change, they have to suffer more mental problems than average.

Apart from this, each ageing person has his own problems varying from person to person, causing anxiety or stress . It is clearly responsible for each to adjust himself and solve once for all. If not, his mental health would be worsened and finally lead to mental and nervous disorder.(The Faculty of Pharmacy, 2015).

In addition, the survey conducted by the National Statistics Office on the elderly health through the select ways of happiness No.15 in 2011 revealed that the elderly average marks were lower than people in general. And about 1 in 3 of the elderly had been easily provoked owing to chronic illness and some be put into the feeling of useless life on earth.

Since 2011 there had been launching the elderly health promotion activities with the preventive measures at the district hospital level by emphasizing the implementation of the plan in the elderly community so as to choose real problems therein and giving support to mental health activities, along with preventive services.

In 2012–2015 onwards, the development and support for mental health services in the elderly clinics/NCD attached to the community and general hospitals had been introduced and implemented in terms of social and mental carefulness, the basic standard for the elderly mental promotion plus preventive measures, and the promotion & development for the people in the areas capable of bringing about proficiency in the elderly, and taking part in looking after them as well. Again, to develop the personnel potentialities to deal with the same was indispensable. (Department of Mental Health, 2016).

Therefore, the elderly mental health promotion is clearly a part of the process creating competence for determining factors in effecting one's physical and mental health resulting in good mentality. In addition, the ageing persons being encouraged to regularly participate in useful activities in society are of high satisfaction, proud of good reputations ,according to the theory of activities.(Decker,1980) As there are a good number of models presented by scholars for health promotion meant to improve the elderly, this researcher takes great interest in the ageing persons' health promotion and continues his studies on the elderly mental health promotion of the ideal community in Chiang Mai province to integrate theory with practice academically so as to find out a way to handle the elderly mental health from the archetypal or ideal community of the same. This would be helpful in developing and upgrading the local knowledge and wisdom to be capable of an extension for the same in other communities.

The Objectives of Research:

This study has the main objectives as follows:

- 1.To study and analyse the processes and activities of the elderly mental health promotion in the ideal community.

2.To integrate and utilize an appropriate way for mental health development as a model in the community of the elderly mental health promotion.

2. Methods

It is an applied research based mainly on quality cum field participation research so that data on the elderly mental health are met as they really are, and how far the elderly play a role in mental health promotion activities .What are the factors or conditions found in their participation as to the mental health problems are numbered. Researching into the factors concerned and relevant to activities in mental health promotion used for creating a model activity proper for the same is also worked out. Throughout the working process, chances were open for all elderly participants to discuss, implement plans and do whatever significant like evaluating all activities together. As such, it would bring about a sustainable mental health promotion, while finding ways for dealing with the elderly participation in caring their own mental health correctly.

The following are steps taken in the research procedure:

- Study of the contextual mental health in the elderly.
- Analyzing the process and forms of activities for the elderly participating in the mental health promotion, conditions of success ,limitations and obstacles, including the feedback therein.
- Synthesis of lessons and the body of knowledge arising from the ideal communities' mental health promotion activities, the formal activities for the elderly participating proper in the mental health promotion.
- To pass on and extend lessons and the body of knowledge to the public.
- Seeking ways to carry on the elderly participatory mental health promotion to other communities.

The Locality for Study:

The Donkaew area under the District Administration Organization ,Chiang Mai, selected as the ideal community form 24 idea communities' elderly in Chiang Mai.

People of Select Group:

The group of the elderly source of data was 20 in number as representatives of ageing people in a district administration organization in Chiang Mai. They provided with information, views and so on about activities done by the community mental health promotion. The method of “selected particularity” employed in accordance with the fixed qualifications, thatis, the elderly who had life longer than the average age expectation : 68 up for male and 75 up for female.(Kanchanachitra, 2007).

Information was also gained from those known in the community who were acquainted with the

elderly like community leaders, chairman of the elderly and mass media. Besides, respected persons in the elderly community such as the chairman of the community and even the public health volunteers confirmed whether the elderly health was good or not. Again, the elderly themselves admitted that they were willing to taking part in this research as observed during interviews ,while their good communication and conversation went along with their understanding at high level.

The Scope of Research:

- 1.The scope of subject matter covers activities of the mental development promotion, living in society together happily, narrowing a gap among ages, social aid and elderly potentiality development with laying stress on (a).health responsibility,(b).physical exercises,(c).nutritious food,(d).domestic and social activities participation,(e).stress management ,and (f).spiritual development.
- 2.The time taken for the studies was one year.

Instruments used for Collecting Data:

They consist of general survey of elderly traits forms, non-official forms of an interview on mental health, and interview forms deepening their ways of living long with good mental health according to the model of behavioural health in 6 aspects.

Data Analysis:

The first step was to index all data, tentative conclusion, removal of the unrelated data, and the concluding chapter was attempted through analyzing the subject matter.

The second step was a group discussion for taking views and reasonable summaries of the elderly being healthy and long living into consideration in terms of the changing social and cultural contexts.

3. Results

The results of the study were concluded that the processes and activities for the health promotion of the elderly participation in the Donkaew District Administration Organization had been conducted in cooperation with authorities, community and network. From the survey and inquiry about what they were in need, it was found that there were many things implemented here ,for example, funds for promoting careers, increasing knowledge, loans for making a living and house repair; the elderly and disabled rehabilitation centre set up at the nearby temple ,where physical therapy by means of local knowledge and wisdom was activated along with the volunteers visiting them 2 days per a week, who were ready to give advice on health care and persuade them to take part in exercise activities. And at this centre the recreation was also taken place in order to make them mentally healthy and cheerful.

Regarding the self-care and way of life for the elderly in accordance with the life pattern, it was composed of 6 aspects as follows : a)health responsibility, b)physical exercise, c)nutrition, d)human relationship, e)stress management, and f)spiritual development.

The results found as follows:

a. The health responsibility revealed

-Regarding mind and emotion, they accepted the principle of change in Buddhism as birth, old age, illness and death were natural facts of life. Then ,they went to the temple for making merit, listening to a sermon and practicing meditation so as to be mentally peaceful. And in another way round, they sought relaxation through seeing movies, listening to music and tree planting, even listening to others' opinions with broad-mind.

-Socially, they were able to adjust and make friends with their neighbours and the community they lived in. They usually participated in the community activities, while freely giving a hand to others whatever they could, especially the inferior. The environmental adjustment was also done to be suited for living.

-Spiritually, they were optimistic in outlook, mindful, ready to forgive for others' wrong-doing; in other words, to give more than to take; rather knowing the meaning of life, and delighted with others' success; reasonable decision making and well-informed persons.

-Physically, they take food with all groups sufficiently. If there is something wrong with the body, both local and modern treatments have been used. No drink, no smoking for them, astrying to catch up with what is going on in health news, and what is to nourish ones' health through the mass media. Brain-care is also taken

b. Physical exercise was divided into two, namely, the formal like aerobic dance, folk dance and walking slowly to and fro about the community; and the informal like housework such as floor dusting ,cleaning out and inside the house or walking to shop at the village market. Sometimes the massage at the particular spot of feet was used.

c. The nutrition consists of three aspects, that is, i.the principle of taking enough food with 3 meals a day, which are nutrient, not harmful to health. ii.kind of food: the morning meal is composed of rice gruel with vegetables; midday meal ,less rice with more vegetables or with one dish food plus meat without fat; and the evening meal is of steamed or boiled rice with vegetable soup. An attempt is made to reduce the evening meal step by step as well. It is interesting to note that all meals are prepared mostly by themselves and taken at the moment at that. iii.additional food: as there are a large number of extra food claimed to be good to the elderly health, they study well before taking any, or otherwise consult those knowledgeable

persons.

d. Human relationship : firstly they set themselves as a good example to the families to which they belong, then trying to meet friends occasionally ,and by means of experiences in the past ready to give advice. What is more, willing to pass on their knowledge to the young ones. They also spend the time for the public and religious activities ,while being the centre for relatives and children at home. After the retirement, they on certain occasions meet the former co-workers and the elderly nearby including the helpless for giving food and sweets .In short, they follow the Teaching called Brahmavihara (holy abidings) consisting of loving-kindness, compassion, sympathetic joy and equanimity.

e. Stress management : they turn to religion for listening to a sermon and practice meditation so that to make their minds calm down and mindful, all of which have been done systematically .This is helpful in leading life with no underestimation. But , afterall, enough sleep each day is needed.

f. Spiritual development: they are prone to look at things positively; do the present duty at best; no blind faith; not much attached to anything as they understand the nature of life; at the same time listening to others' views and honouring the people around, apart from setting daily ,forgiveness. Above all, they even claim to faithfully practice the teaching on the 7 ways to Enlightenment(Bojjhanga), namely, mindfulness, truth investigation, effort, zest, calmness, concentration and equanimity. Some other attitudes could be singled out such as being happy with doing something good to others, passing something good to the young ones, and taking delight in the success of the family members and others.

Moreover, three aspects have been worked out with something more ,that is to say, for physical health, basic massage and foot massage, and activities about observing and learning direct or indirect from the ideal elderly are brought in; for mental health , recitation of the Buddhist teachings, public mind and passing on local wisdom promoting activities by learned ageing people; and for social promotion activities , to sustainably promote the elderly community and network ,social network for mutual assistance, the safe and sound surrounding plus well-being development and also the role of the family in taking care of the elderly in a proper manner.

The Summary and Discussions :

From the study, it can draw a conclusion that the healthy ageing people play attention to their health responsibility by means of yearly physical check up, and meeting with doctors whenever something wrong with the body and mind. They often look after their health well through preventive measures with multi-medical. Chosen activity suitable for the body and age, taking nutrient food enough, and staying at ventilating place, along with brain caring as it vatally affects

their existence, all of the said accounts run in accordance with the discovery done by Surinkam (2001), who did research into the ways of life of the elderly healthy in Muangjee district, Amphurmuang, Lumpoon province, revealing that the majority of the elderly took rather good food, enjoyed physical exercise, participated in the village activities, kept always chanting and paying homage to the Buddha image, and living in good surroundings, all of which account for both physical and mental health. So, they kept enjoying life on a moment-by-moment basis, and then overcame stress, irritation, pungency and the like. The other way round was to find activity turned relaxation; to lead a way of life based on the middle path; and to do whatever made them feel good and mostly natural.

The stress in the elderly must be tackled differently from person to person as the stress in each varies individually. Some old persons attacked by stress from time to time can become possibly normal, but ,if seriously for a long time, it would be very hard on them both mentally and physically ,and the treatment is not easy at all. This also goes along well with the evidence in the work done by Puterman and Epel(2012), which shows that the stress in life would eventually lead to illness in the elderly ,in that the telomere attached to the end of DNA essentially affects the elderly cells causing illness. However, it is upto a number of factors involved such as a period of time and kind of stress attacking. In general, the elderly imbued with good health often follow the teachings and lead a Buddhist way of life. They believe in the law of action(karma) and regard some particular things as sacred, especially those living in the northern Thailand have a unique way of life , rituals and culture with a view that such a thing would bless them with happiness and nothing harmful to life. For example, making a merit in order to prolong life and a rite for getting rid of bad luck. Again, one more cause of stress is due to conflicts among the surrounding persons with whom the interaction is impossible to avoid. The elderly make use of the Buddhist teachings reduce the trouble so as to live a happy life.

For the spiritual development, it is found that the elderly often waste no time but pass their time with valuable things in life and are able to look back with satisfaction of success in leading a good life ; being positive in outlooks ,taking pride in themselves, active, caring for life, catching up with what is going on, and also setting up their aims in life ,while trying to complete a task they set for themselves. The elderly embrace Buddhist principle of life, the law of karma and respect for what is regarded as sacred. This is why they can develop their mind into a peaceful life. And this goes along with the research results worked out by Idler, McLaughlin and Kasl (2009) that reveals the role of religion in connection with the elderly in terms of security till the final part of life. The elderly are firmly engaged in religion, longing to meet old friends ,that all better their health and less depressed, hence their life is totally more colourful than the less religious group of the ageing people. It is reported further that the elderly knowing their strong health and feeling happy would mainly have taken part in religious activities with friends at the temple fairs regularly, and thus bring about their health adjustment accordingly. In addition,

Vongverapant(2015) suggested the ways for mental health promotion by means of religious activities as well.

Suggestions :

1. There should be the uses of the community resources and original funds such as those of the elderly club, the religious practice club, public health volunteers and home volunteers for the elderly to be activists dealing with more mental health than the service system of the public health.
2. The district hospital for mental health promotion on health service system should be in line with the community way and render support to the elderly self-care plus the activity stressing more on moving forward in the community.
3. The district administration organization be the hard core in arranging the environment proper for the elderly health and encouraging the activity relating to the elderly more to cover every aspect through integrating with plans in other sections so as to fix on a clear-cut role in each for creating the allied network in the elderly community in order to give birth to the holistic health care in the real sense of the term.

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ACMASS-0110

Social Support of First-Time Mother: An Exploratory Study of Indonesian Mothers

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1. Background/ Objectives and Goals

Ten to fifteen mothers worldwide develop postpartum depression following birth. Although studies indicated that there are many case in Indonesia woman, the prevalence still unknown. Thus, the prevention and intervention strategies are limited. Studies indicated that social support for mothers may reduce depression and facilitates a positive transition to motherhood. Some studies which explored the first-time mothers experience, indicated cultural unique features, such as baby-sitting arrangements and stressors from parents-in-law. These findings suggest the importance of assessing mothers' experience within its particular socio-cultural context. However, there are few studies on the subjective experience of first-time mothers, particularly involving Indonesian mothers. The social support of first-time mothers was explored in this study to investigate the needs of support and to identify the supportive factors from families, society and professional service in supporting them.

2. Methods

A qualitative study using online (skype) interview was conducted. Interpretative approach was considered as appropriate perspective. To be included in this study, women needed to be over the age of 18 years, originally from Indonesia and have given birth within Indonesia. The sample size was determined by the point of data saturation which means that the recruited process stop when the depth and breadth of information achieved. Five first-time mothers of age 18 years and above who have baby aged below six months, was selected using purposive sampling technique.

3. Expected Results/ Conclusion/ Contribution

Early finding suggested that there are five themes emerged from the thematic analysis: (1) Daily advice : related to taking care of the baby, coping with baby crying; (2) Breastfeeding issues : how to breastfeed, breastmilk knowledge; (3) Emotional support : receiving support and appraisal as a good mother, unconditional family support; (4) Cultural and myth : being forced to follow traditional postnatal practices thought to be irrational and irrelevant (5) Professional support: needing practical and reliable health advice, accessing free health care in Indonesia, which provide practical advice and support of breastfeeding and newborn care. Home visits and mothers' support group could facilitate mothers to feel and better supported in their postnatal experiences.

Keywords: first-time mothers, Indonesian mothers, postpartum depression, social support

Language, Linguistics & Literature

Wednesday, August 16, 2017 13:00-14:30 Room 1006

Session Chair: *Prof. Jorge H. Cubillos*

ISLLE-0032

Maximizing the Linguistic Impact of Study Abroad

Jorge H. Cubillos | *University of Delaware*

ISLLE-0039

Digital Storytelling: Construction, Discussion, and Production of TEFL Speaking on *VoiceThread*

Chia-Yi Li | *Southern Taiwan University of Science and Technology*

ISLLE-0027

Cross-Cultural Communication Patterns of Korean and Thai Communication

Inecita R. Cuevas | *Saint Michael's College of Laguna*

ISLLE-0010

Decoding the Equivocal Narrative Voice in “The Tale of Yingying”: Using Ritual Propriety and Political History as Keys

Mei Ah Tan | *Hang Seng Management College*

ISLLE-0024

The Position and the Location of Female Roles in Both “Ex Machina” and “The Dream Devourer”

Yi-Tso Chien | *Tam Kang University*

ISLLE-0032
Maximizing the Linguistic Impact of Study Abroad

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1. Background

The recent surge of interest in study abroad has allowed the profession to take a critical look at this crucial component of many college language programs, and to question the common assumption with regard to its automatic and inevitable benefits (Savicki, 2011; Engle & Engle, 2004). Today, there is growing consensus on the limitations of simple linguistic immersion (Klapper & Rees, 2012), and researchers are making progress in the identification of factors associated with measurable linguistic gain in study abroad settings (Hassall, 2015). As our understanding of the general benefits and limitations of study abroad grow, there is also rising interest (particularly in the US) in the identification of factors that lead to a successful transition from the intermediate to the advanced level of proficiency (the minimum linguistic threshold required for a number of professional credentials, including foreign language teaching certification). Recent investigations have explored the role of program features such as length of program, type of student housing, and the amount of content courses taught in the target language on proficiency gains abroad (Vande Bar, Connor-Linton & Paige, 2009). Unfortunately, not enough attention has been given yet, to the actual content and methodology of the language courses offered abroad. This study is an effort to address this gap, by comparing the proficiency outcomes of two different approaches to language study in study abroad settings: functional courses (those focused on the development of fluency and pronunciation through the recycling of familiar content), and structural courses (those focused on the analysis of advanced syntactic and morphological issues in the target language).

2. Methods

The proficiency level of students enrolled in two different high-intermediate Spanish language courses for North American students in Panama City (Panama) were measured and compared at the beginning and at the end of their foreign sojourn using a repeated measures research design. The instrument used was a commercially available, computer graded measure of speaking ability (the Versant Speaking Test). The total number of students was 61 (32 in a functional language course, and 29 in a grammar course), and the statistical analysis deployed was a repeated measures ANOVA. All students participated in the same extra-curricular activities, and therefore the most prominent difference between the learning environments for this investigation was the type of pedagogical approach deployed in each language course.

3. Results

After the five-week foreign study program in Panama, there was a significant difference in Spanish proficiency outcomes between the two language learning conditions analyzed in this investigation. Students in the functional language course performed consistently higher in the exit Versant test, and their level of proficiency improvement between the pre and post-test was statistically significant ($p=0.05$). On the other hand, the proficiency gain of students in the structural course was not only lower, but much more inconsistent (with many more cases of null or negative gain). Results of this investigation suggest that a functional language pedagogy may be better suited for the study abroad setting due to its ability to focus learners' attention on prominent aspects of linguistics proficiency (namely fluency, pronunciation and vocabulary development). By contrast, a focus on language structure (syntax, morphology, etc.) did not appear to lead to significant proficiency gains, and in fact, it resulted in many more instances of null or negative gain. The pedagogical and curricular implications of these findings are discussed, as well as recommendations for further research.

Keywords: study abroad, functional pedagogy, proficiency gain

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ISLLE-0039

Digital Storytelling: Construction, Discussion, and Production of TEFL Speaking on *VoiceThread*

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1. Background

This study aims at investigating TEFL speaking production and language development in digital storytelling tasks. *VoiceThread* is an interactive multimedia tool in learning, which increases learner participation and constructs responses through reflection by the implantation of technology to give comments on images and videos (Friedman, A. M., & Lee; Smith & Dobson, 2009). As a portfolio of audio recordings, posting 5-6 pictures over the duration of the course, *VoiceThread* allows students to record their comments online allows for a greater audience.

2. Methods

The participants were 28 TEFL students of learning English from a technology university in Taiwan. 14 students were intermediate-level learners; the other 14 learners of basic level. The scoring rubrics were composed of grammar and vocabulary, pronunciation, fluency, and content. The speaking skills were improved when they practiced their oral responses and presented the digital stories with the use of technology (Jianing, 2007; Koki, 1998; Meadow, 2003). The research also examines the learners' engagement in the discussion tasks.

3. Results

Results showed that lower proficiency TEFL participants performed significantly better in fluency and produced more vocabulary and longer sentences, while the counterparts of higher proficiency scored better in content and speech fluency. With empirical evidence, the implications with the use of *VoiceThread* for digital storytelling in the speaking classroom are: (1) to facilitate learner motivation; (2) to encourage autonomous learners producing more optimal output; (3) to build up hands-on experiences with technology to support constructivist teaching.

Keywords: multimedia aids, oral training, speaking production

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ISLLE-0027

Cross-Cultural Communication Patterns of Korean and Thai Communication

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1. Abstract

In the light of the ASEAN Integration, English shall remain to be a unifying factor to all the Southeast Asian people. The adoption of English is hailed by many as “ASEAN’s Best Policy”. The study aimed to identify the cross-cultural patterns of Korean and Thai communication and the impact of culture on direct and indirect communication as well as verbal aggressiveness and communication apprehensiveness of the selected Asian college students.

Both Koreans and Thais belong to the low argumentative group. Koreans and Thais use less direct and more indirect communication. Koreans and Thais are equally communicatively apprehensive and less verbally immediate. Koreans are more likely to display verbal aggressiveness than the Thais.

Culture impacts the communication patterns of both Koreans and Thais. Both Koreans and Thais observe their cultural norms when communicating with foreigners. They also consider a great deal of their cultural practices in terms of communication such as withdrawal from arguments, avoidance of conflict, emphasis on harmony and preference for pleasant and harmonious relationship.

Both Thailand and Korea have high context cultures. The overriding goal of the communication exchange is maintaining harmony and saving face.

Keywords: verbal aggressiveness, apprehension, communication, patterns

2. Background

Language reinforces cultural patterns through semantics, syntax, phonology, morphology and grammar. Our social lives become meaningful and active through the use of language. When it is used in the context of communication, then it is “bound up with culture in multiple and complex ways” [1]

Language expresses cultural reality. Members of a group or a social community do not only express experiences but also create experiences through language. Language semiotic”; *the relations between language and culture are complex, since the language expresses, embodies and*

symbolizes cultural reality [2}

Purpose of the Study

The study sought to cross-cultural patterns in Korean and Thai communication practices. It looked at the impact of culture on direct and indirect communication as well as communication apprehensiveness and verbal aggressiveness.

Research Questions: The study on cross-cultural communication patterns sought to answer the following questions:

1. What are the cross-communication patterns of Thai and Korean communication?
2. What is the impact of culture on direct and indirect communication, communication apprehensiveness and verbal aggressiveness?

3. Method

Subjects

Forty (40) Korean and fifteen (15) Thai third year college undergraduates were purposively selected as subjects for this study. The Koreans represented Namhae College in South Korea who were taking Language Studies in the Philippines and the Thais were from three universities Chulalongkorn University, Khonhaen University and Bangkok University.

All are aged 20 - 25 years old. All of them were currently pursuing their college degree in Korea and in Thailand when the study was conducted. Their courses include Education, Business Administration, Hotel and Restaurant Management, Ship-Building, Culinary, Information Technology and Tourism.

Data Collection

The students were asked to fill out the three self-report questionnaire instruments namely Personal Report of Intercultural Communication Apprehension (PRICA), Non-verbal Immediacy Scale-Observer Report (NIS-O) and the Verbal Aggressiveness Scale (VAS). They were asked to self-report their use of communication using response options ranging from 1 (almost never true) to 5 (almost always true). The ICAS, NIS, and VAS items consisted of Likert-type questions. Participants were asked to self-report their use of communication using response options ranging from 1 (almost, never true) to 5 (almost always true). The respondents were asked to rate their level of agreement on intercultural sensitivity with the five-point Likert scale.

4. Results

Table 1. Five-Point Likert Scale

This table shows the equivalent scores of the mean ratings and its corresponding agreement level.

Rating	Mean	Agreement Level
5	4.51-5.00	Very high
4	3.51-4.50	High
3	2.51-3.50	Not sure
2	1.51-2.50	Low
1	1.00-1.50	Very low

Then, all completed questionnaires were gathered and analyzed. The mean scores were used to analyze communication apprehension, non-verbal mediacy and verbal aggression. The researcher highlighted the top five responses of both the Korean and Thai students. The rest of the items had almost the same responses.

On Direct and Indirect Communication

Directness or indirectness can be culture-bound and may cause confusion and misunderstanding [3]. For some countries being indirect is a norm while for others, it could be a negative attribute. Tannen (1994) stated that direct communicators tend to say what they think. Their message is conveyed primarily by the words they use, and they depend on the literal interpretation of these words. The overall goal of communication is “getting or giving information”.

On the other hand, indirect communicators convey meaning not only through words but also by non-verbal behaviors such as when people pause, vary the tone of their voice or even be silent. These index to inferences, insinuations, understatements or shared understanding of the context of the communication. During communication exchange, the ultimate goals are to maintain a healthy and harmonious atmosphere at the same time and to save face thus veering away from the occurrences of conflict, tension and other uncomfortable situations.

Tannen (1994) pointed out that directness or indirectness can be culture-bound and may cause confusion and misunderstanding. For some countries being indirect is a norm while for others, it could be a negative attribute.

One style of indirect communication is illustrated by head nodding once or twice, showing a thumbs up sign, smiling and using the word “yes” to mean “no”. Furthermore, value is placed on the ability to read nonverbal cues in order to understand the genuine attitudes, opinions, and feelings of other people. Nonverbal communication includes silence and the timing of verbal exchanges, body posture and gestures, facial expression, and eye contact. Most Asians tend to use indirect communication in multi-racial classes knowing that the “owners of the language” are present in the class.

Although many people assume that all Americans are naturally direct communicators, there is considerable variation in styles associated with regional as well as cultural and family of origin

differences. Stereotypically, people from the East and West coasts tend to be direct, and those from the Midwest and South tend to be indirect. Tannen (1994) summarized the following attributes:

Direct Communication	Indirect Communication
Tell it like it is. The facts speak for themselves.	If you don't have anything nice to say, don't say anything. Tell someone what you think they want to hear.
It's okay to say no.	Avoid saying no; say "maybe" or "possibly," even if you mean "no."
The truth is more important than sparing someone's feelings. Don't beat around the bush.	If the truth might hurt, soften it.
Take communication at face value.	Handle communication to save face.
Time is money. Get to the point.	Small talk before business is important.
It's okay to disagree with your boss at a meeting.	Criticism of others, especially people with more authority, should be unspoken or careful and veiled.

On a study conducted comparing the rhetorical sensitivity of Thai and American and its implication to cross-cultural communication, Knutson (2002) concluded that the Thai people tend to avoid face-to-face interaction when confronting difficulty in conversation.

Given the strong emphasis of Thailand on social harmony and deferential behavior, the findings are not surprising at all. The rhetorical sensitivity of the Thais are directly proportional to their cultural values of caution, gratitude, responsiveness, care, contentment and interdependence. The results were in contrast with the American values of self-recognition.

In 1992, Chulalongkorn University had a study on the communication patterns of Thai students and found out that students' interaction potential and participation in conversations are motivated by their English fluency. They would hesitate to participate in intercultural functions and attend social functions if they knew that the attendees were dominated by English-speaking students.

Table 2. Non-Verbal Immediacy Scale Observer

The table displays the top five responses with regard to the tendency of the Koreans and the Thais to use direct or indirect communication when dealing with people.

Item	Mean Koreans	Mean Thais	Agreement
I look directly at people when talking to them.	4.20	4.00	High
I move closer to people when I talk to them.	4.11	3.90	High
I smile when I talk to them.	4.00	3.90	High
I gesture when I talk.	4.14	3.90	High
I have a relaxed body position when I talk to them.	3.20	3.11	Not sure
Average	3.93	3.76	

Korean and Thai students have almost have the same level of using direct and indirect communication with only a slight margin of 0.17. In Knutson' study in 2004, "Thai Cultural Values: Smiles and Sawasdee as Implications for Intercultural Communication Effectiveness", he found out that Thais preferred an emphasis on social harmony in their daily activities thus they would rather avoid asking questions that might disturb the prevailing harmony in a speech community.

Thais are more into non-verbal communication. They have less need to be explicit and rely less on words to convey meaning. They would rather avoid asking questions that might disturb the prevailing harmony in a speech community. In their classroom setting, Thais place great emphasis on communication behaviors designed to establish, enhance, and preserve compatibility and congeniality among all people including foreign teachers.

On the other hand, the Korean values of social harmony, group identity and self-control are reflected in their behavior in their ESL classes. They noted that "Korean-American children view teachers as authority figures who are to be respected and to be shown deference. This attitude is fostered early in young Korean children, and they are taught to listen to their teachers' instructions without question".

On Communication Apprehension

People who suffer from communication apprehension are troubled or anxious when they communicate with other individuals; some are really afraid to communicate with people. Researches show that the number of people experiencing such apprehension is quite significant occurring mostly among students.

Communication apprehension has been manifested across cultural lines. Fear of judgment and evaluation are two identified causes of apprehension. Being in a unique situation may also be a cause since an individual may feel uncomfortable in his or her surroundings and unable to articulate appropriately

It has been observed that through the years, individuals become more confident and

communication apprehension tends to be lessened before going to college. However, communication apprehension is an issue that can extend into adulthood.

Several studies focused on the role of communication apprehension as it operates in Thailand and the identification of cultural norms influencing the development of Thai communication behavior (Knutson, Hwang, & Vivatananukul, 1995). Results showed that due to communication apprehension, Thai would attempt to avoid confrontations and make the addressee feel that he or she is part of the community.

As a consequence of the Knutson, et al. (1995) study, conceptual adjustments were made and a different approach was employed to assess Thai communication behavior. The Willingness to Communicate (WTC) construct, a measurement of an individual's predisposition to communicate more or less in a variety of situations, was employed (McCroskey & Richmond, 1987).

The WTC seemed more complementary to Thai cultural values since it measures both context and receiver elements. As hypothesized, the Thai respondents displayed significantly less willingness to communicate than the U.S. Americans. Given the Thai emphasis on social harmony and the avoidance of conflict, this result was not unexpected. The results of this study pointed to a potentially valuable characteristic of intercultural communication competence.

McCroskey & Richmond, (1987) concluded that the relative reluctance to engage in communication can be attributed to a cautious concern for receivers in interpersonal communication episodes. The Thai preference for pleasant and harmonious interaction produces less willingness to initiate conversations, perhaps interpreted as a useful antecedent condition to effective intercultural communication encounters.

Another problem is related to lexicon - having a language with so many lexicons containing mind component in its letter is certainly related to the habitual practice of inferring mind from behavior among east Asian countries particularly Korean (McCroskey & Richmond, 1987).

Generally, communication apprehension the fear or the about oral communication. The reluctant party may resort to habitual communication avoidance or withdrawal. For students, they tend to remain quiet and non-participative for fear of being ridiculed or embarrassed. Most of the time, they tend to just listen and keep things to themselves.

In general, Korean college students experience communication anxiety in the class; the experience can be embarrassing and even devastating. To help students become verbal and fluent in a foreign language, the teacher should be sensitive to students' communication anxiety.

Ratana (2007) in her study, *An Investigation of Thai Students' English Language Problems and Their Learning Strategies* motivation is called communication apprehension – the fear or anxiety an individual experiences as a result of either real or anticipated communication with another person or persons. Some people experience communication apprehension whenever they communicate. But most people only get nervous about communicating in one or two contexts but not in others. This context apprehension about communicating in a particular situation could occur interpersonally or collectively.

Table 3. Intercultural Communication Apprehension

The table details the top five responses and the comparative mean scores of the Koreans and Thais with regard to their fear or anxiety about oral communication.

Item	Mean Koreans	Mean Thais	Agreement
Generally, I am comfortable interacting with a group of people from different cultures.	3.19	3.12	Not sure
I am calm and relaxed with interacting with a group of people who are from different cultures.	3.28	3.11	Not sure
I have no fear of speaking up in a conversation with a person from a different culture.	3.45	3.25	Not sure
I face the prospect of interacting with people from different cultures with confidence.	3.47	3.40	Not sure
Communicating with people from different cultures makes me feel comfortable.	3.38	3.40	Not sure
Average	3.35	3.25	

The mean for the Thais was 3.25 whereas the mean for the Koreans was 3.35. The Koreans displayed a slightly higher level of communication confidence, a difference of 0.10. Communication apprehension is a generalized anxiety or fear about oral communication. Typically, it gives rise to a consistent pattern of communication avoidance or withdrawal from situations where communication is likely to occur.

In general, Korean college students experience communication anxiety in the class; the experience can be embarrassing and even devastating. To help students become verbal and fluent in a foreign language, the teacher should be sensitive to students' communication anxiety. Koreans experience apprehension when they are talking with Americans, English and Australians. In general, they avoid conflict because they embrace Confucianism's value of shame avoidance and conformity.

Thai would attempt to avoid confrontations and make the addressee feel that he or she is part of the community. Thai culture emphasizes social harmony and the avoidance of conflict. So, their preference for pleasant and harmonious interaction produces less willingness to initiate

conversation. In general, Thais are consistent in their pattern of communication avoidance or withdrawal from situations where communication is likely to occur.

On Verbal Aggressiveness

The data revealed that both Koreans and Thais are not verbally aggressive at all. The mean for the Thais was 4.24 whereas the mean for the Koreans was 4.37. The Koreans displayed a slightly higher level of communication confidence, a difference of 0.13. Highly verbally aggressive people are willing to engage in argument, like to delve on controversial issues, present arguments and express disagreement while low argumentative dislike arguing, shy away from conflict, withdraw from arguments, and are reluctant to voice disagreement.

Table 4. Verbal Aggressiveness Scale

The table details top five responses of the Korean and Thai students on how they assert their position when dealing with difficult communication situations.

Item	Mean Koreans	Mean Thais	Agreement
I refuse to participate in arguments when they involve personal attacks.	4.20	4.18	High
When people criticize my shortcomings, I take it in good humour and do not try to get back at them.	4.50	4.22	High
When I dislike people greatly, I try not to show it in what I say or in how I say it.	4.35	4.30	High
I try to make people feel good even if their ideas are faulty.	4.55	4.40	High
When I try to influence people, I make great effort not to offend them.	4.29	4.11	High
Average	4.37	4.24	

Both Koreans and Thais belong to the low argumentative group. Speaking of Asian cultures, seem to be more permissive of direct verbal aggression compared with Western cultures.

The Thais' fondness for pleasant and harmonious interaction produces less willingness to argue. In Thailand, "quiet" is considered a virtue. As early as pre-school, Thai parents discourage children's verbal communication. Thai teachers seldom encourage students to express their opinions in class since the Thai worldview is firmly anchored in the harmony and smoothness of interpersonal relations.

On the other hand, Koreans have a high degree of uncertainty avoidance. Korean culture employs an indirect communication style and is reluctant to criticize or contradict the other speaker. Koreans value limited verbal exchange and just like the Thais, higher significance is

placed on silence.

Conclusion

Based on the results of the data, the following conclusions are deduced:

Both Koreans and Thais belong to the low argumentative group. Koreans and Thais use less direct and more indirect communication. Koreans and Thais are equally communicatively apprehensive and less verbally immediate. Koreans are more likely to display verbal aggressiveness than the Thais.

The study concludes that Thailand and Korea have high context cultures. They tend to be homogenous and collectivist. They carry within them highly developed and refined notions of how most interactions will unfold, of how they and the other person will behave in a particular situation. The overriding goal of the communication exchange is maintaining harmony and saving face.

Summary

Culture impacts the communication patterns of both Koreans and Thais. Both Koreans and Thais observe their cultural norms when communicating with foreigners. They also consider a great deal of their cultural practices in terms of communication such as withdrawal from arguments, avoidance of conflict, emphasis on harmony and preference for pleasant and harmonious relationship.

Based on the results of the data, the following conclusions are deduced: Both Koreans and Thais belong to the low argumentative group. Koreans and Thais use less direct and more indirect communication. Koreans and Thais are equally communicatively apprehensive and less verbally immediate. Koreans are more likely to display verbal aggressiveness than the Thais.

Both Korean and Thai college students at some point experience communication anxiety in the class; the experience can be embarrassing and even devastating. The study concludes that Thailand and Korea have high context cultures. They tend to be homogenous and collectivist. They carry within them highly developed and refined notions of how most interactions will unfold, of how they and the other person will behave in a particular situation.

As posited, people in high context cultures already know and understand each other quite well, they have evolved a more indirect style of communication. They have less need to be explicit and rely less on words to convey meaning especially on the literal meaning of the spoken word and more on non-verbal communication. The overriding goal of the communication exchange is maintaining harmony and saving face.

To help students become verbal and fluent in a foreign language, the teacher should be sensitive to students' communication anxiety. In the light of the ASEAN Integration, both Koreans and Thais manifested parallel cultural practices that most likely present in other ASEAN countries. Therefore, this could render to a predicted mutual cooperation and collaborative success.

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Decoding the Equivocal Narrative Voice in “The Tale of Yingying”: Using Ritual Propriety and Political History as Keys

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1. Background

Yuan Zhen’s 元稹 (779–831) influential tale “Yingying zhuan” 鶯鶯傳 (Tale of Yingying) was the prototype of the most famous Chinese play, *Xi xiang ji* 西廂記 (Romance of the Western Chamber) in the Yuan dynasty (1271–1368), and has long been known for its equivocal narrative voice. This paper examines the validity of the so-called equivocal narrative voice and provides a new interpretation of the writer's intent in the tale.

2. Methods

The conflict between the narrator and the story arises mainly from the characterization of the two protagonists, Zhang and his lover Yingying. According to the narrator, Zhang adhered to ritual proprieties; but his actions and speech suggest otherwise. The most prominent of these contradictions is his seduction of Yingying when he could have married her, his eventual desertion, and his self-justification. Yingying is pictured as an attractive, well-bred young lady. However, after her rendezvous with Zhang, she is condemned as an “enchanted beauty who could topple the state and ruin men” by Zhang and his contemporaries, including the writer, who was supposedly the narrator. Those who believe that the tale is autobiographical attribute the controversy to Yuan’s attempt to justify his real-life abandonment of his first love; others argue that Yuan composed the tale to mock the likes of Zhang and to sympathize with Yingying. This paper discards the common standpoint of comparing the writer’s love experiences with the plot; it also avoids value judgments based on modern standards. It adopts the method of narratology, focusing on the story and discourse, in particular the plot, narrative voices, focalization, narrative modes, and style. Additionally, it analyzes the historical, cultural, and literary background of the tale, and investigates the allusions to the Chinese classics that created the Confucian discourse on the essentiality of ritual proprieties, both in personal life and in governance. It will also draw evidence from Yuan’s political endeavors, personal education, and other compositions to support a new interpretation of the tale.

3. Results

This article argues that what we perceive as an equivocal narrative voice did not exist for readers of the Tang dynasty (618–907). The tale was composed with ritual proprieties and the political legacies concerning women in mind. From the cultural perspective, Yuan highlights the

essentiality of rites in regulating emotions. From the political perspective, he advises emperors against obsession with beauties, and reviews the disaster that could result. He extends his arguments from romantic relations to those of the emperor and his consorts, and ultimately to the governance of the state. The frequent resonances with the *Book of Rites* and the allusion to the *Zuo Commentary* on extraordinary beauties in the tale indicate his views.

Proceeding in a chronological order, with intentional narrative gaps, the story is told from the perspective of Zhang, who sees Yingying as a versatile and unpredictable young woman. The shift at the end, from the third person omniscient narrative to first person, was common practice at the time, when literati concocted tales of extraordinary events to demonstrate their historical, poetic, and argumentative skills for political advancement, often with a mixture of fabrication and reality presented with verisimilitude.

The narrator is thus the same as the character Yuan Zhen. He uses both mimesis and diegesis to characterize the two protagonists. A detailed analysis of the language discloses his criticism of Zhang. For example, Zhang's metaphorical depiction of himself as a fish drying up without Yingying is an allusion to *Zhuang Zi* and is intended as satire. Yingying is deliberately portrayed as a combination of well-bred lady and goddess; someone who is undeniably beautiful, and thus potentially dangerous to men. The moral, openly declared by the author at the end of the tale, is: "Most contemporaries praise Zhang for being good at mending mistakes. I have often referred to this in gatherings of friends, so that those who learned of it would not commit the same mistake as Zhang [transgression of ritual], and would not be deluded [by an extraordinary beauty] if they already had [violated rites]."

This paper disagrees with Wu Weibin's argument that Yuan was warning readers against the delusions caused by conventional attitudes about women; instead, it suggests that Yuan's comments should be taken at face value. The tale is presented as a regrettable love story, and it is in fact an educational piece on politics and self-cultivation in disguise.

Keywords: Yuan Zhen, "Tale of Yingying", narrative voice, ritual propriety, political history

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The Position and the Location of Female Roles in Both “Ex Machina” and “The Dream Devourer”

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Introduction

The Dream Devourer by Egoyen Zheng is recognized as a popular scientific fiction in modern times. There are intricate plots, roles, and relationships between human beings and humanoid robots in this novel. What the author intends to do is depict an epic for his world and society. The title of the novel hints at a rich imagination of the dreamland. Some critics even regard it as a psychoanalytic work due to the arrangement of citations of dream data and the interpretation parts from the author in the novel.

On the other hand, the content of the movie “Ex Machina” attempts to achieve a more ambitious and dangerous aspect of human nature. Alex Garland presents a ‘psychological thriller’ work for challenging current social and moral issues. The film discusses the “awareness” and “awaken” of a female-shaped robot and the new motif in modern society.

In this paper, I am going to compare the two works from the post-humanistic point of view with the emphasis of “post-humanism” on the devices of human body and man-made equipment. Android, as an embodiment of human, is recently changing its role from merely assisted tools to man’s companionship. According to Donna Haraway, “*A cyborg is a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction.*”(69) It described women as (already being) cyborg creatures, and (already) having cyborg perspectives.

Therefore, the discussions of (a) The position and location of female characters both human and Android cyborg in the hand of male S.F. writers while compare to the traditional ones. (b) The paradox between “human” and “de-human.” While the authority and power turns out to be the target of Android, the dilemma comes from the intention of “de-humanized” while the cyborgs learnt how to be acting just like human with great ambition and desire.

Literature Review

The first term of “post-humanism” was coined by Ihasb Hassan to imply the big changes of human form and the external representations in the coming of the techno-scientific revolution. Susan Dow and Colin Wright in their introduction: Towards a Psychoanalytic Reading of the

Post-human has pointed out:

Ihab Hassan used it to describe an era in which the human form –including human desire and all its external representations-maybe changing radically, and thus must be revisioned.”(p299)

And the attitude that Ihab Hassan persisted was pessimistic. He recognized that “In the wake of the techno-scientific revolution, humanism was transforming itself into “something we must helplessly call “post-humanism”. (p299)

The term “Post-humanism” foretelling a new age of the world of the human beings. Thus, a new definition of the post-human world thereby aroused.

Hayles defines her “post-human” from the historical and social aspects:

“I use the term to describe historical phenomenon...it was referring to twentieth-century developments in which an Enlightenment inheritance that emphasized autonomy, rationality, individuality was being systematically challenged and disassembled. (p321)

Ganard in his book *Ecocriticism* criticizes various arguments/ positions on representation and animal stereotypes.

In the second section, Ganard discusses at least five famous critics and their works. They are Steve Baker, Erica Fudge, Michael Shapiro, Donna Haraway and Jhan Hochman. The works Ganard discusses include Baker’s *Picturing the Beast* (1993), Fudge’s *Perceiving Animals* (2000), *Do Androids Dream of Electric Sheep?* by Philip K. Dick (1968), Haraway’s *Cyborg Manifesto* and Jhan Hochman’s *The Silence of the lamb: A Quiet Bestiary*. (*Interdisciplinary Studies in Literature and Environment* 1, no. 2 (Fall 1993): 57. 9.)

In “*Picturing the Beast*” (1993) Baker emphasizes the value of aesthetics texts. Ganard recognizes Baker’s contribution to a representation inquires is his applying of the critical term: “disnification” to represent a typical phenomenon in the world of images. He connects this to another term, “neoteny” Ganard further explains: “*Anthropomorphic animal narratives are generally denigrated as “childish”, thereby associating a dispassionate, even alienated perspective with maturity.*” (Greg, 2004:142) “Disnification, renders the animal stupid by rendering it visual” (qtd.in Ganard 1993:4) Examples of “neoteny” include using images of real pandas for the WWF logo are representing animal in ways that compare them to infant humans.

Erica Fudge questions the “insuperable line” between humans and animals/cyborgs. Fudge argues that humans become an animal/a cyborg when they attempt to prove the superiority of the humanity to his “animal/cyborg”.

She proposed up the moral states of animals/cyborg and critiques humans’ desire to dominate the

animals/cyborg. Through this desire is a very old one, Fudge attacks it as follows:

" People felt the need perpetually to reassert human dominance over, and separation from, the animal kingdom" but this need is "doomed to fail in a vicious circle of anxiety and sadism." (Fudge qtd.in Ganard142)

Thus, she questions people who enjoy torturing the animals. She focuses on bear baiting. Ganard summarizes this part of her argument:

"Fudge cites sixteenth-century critics of baiting, who deride the people who enjoyed it as being "bestial", thereby rhetorically undermining the very "humanity" it was supposed to reinforce." (Greg, 2004:142)

Fudge doesn't believe those people who bait the animals will be humanized. Fudge then concludes: *"There could be no "sport" in bear-baiting or fox hunting if the participants were insentient."* (qtd in Ganard142)

In spite of the main point that Fudge stressed is the relationship and reaction of human with animal, nevertheless, it is available to apply on the interaction between human beings and the cyborgs. The subjectivity and its subordinate or counterpart is recently a fresh and unavoidable issue.

Whilst Fudge works to reduce the boundary between humans and animals by looking at actual humans, Soper instead stresses out the human difference:the "negative anthropomorphism." He means we are tending to locate our weakness with the association of animals to legalize our sovereignty. Michael Shapiro, another major figure in a studies similar to Bater, approaches the questions or the human boundary by way of film. He analyzes to the post-human readers.

Philip K. Dick's "Do Androids Dream of Electric Sheep?" (1968), offers a new look, a further step in post-human study at the problem of "identity". As he implies, the cyborg is a natural outcome of the development of human society and civilization. The robot has now turned out to be the new successors of the human beings in both social and mental aspects. In the novel "self-identity" is manifest in a highly civilized machine, confusing the boundary between human and nonhuman identity. As Shapiro observes:*"Dick's novel explores the challenge posed to human identity not only by animals but also by cyborgs."* (qtd. In Ganard143)

The combining of cyborgs and humans together is, I think, the most creative method that Dick has adopted. Especially, the intriguing conflicts both from the aspects of humans and cyborgs have thus complicated and enriched the story. Humans are threatened to be robotized while the machine is getting lost in the eternal question of "who I am?" Therefore, the character of this novel, Rick Deckard, tries hard to recover his own empathetic humanity. Deckard's goal to retire

rogue androids (and desire to possess a live pet) reflects his need to distinguish himself from androids. “Yet, androids express is exactly the same respond when a Nexus-6 android, Rachael Rosen, who has the relationship with our main character exclaimed: *”we are not born; we don’t grow up; instead of dying from illness or old age we wear out like ants....I am not alive! (p146)”* (Greg, 2004:145) Greg thus admits that Dick’s androids *“combine biological and electro-mechanical elements.”* (Greg, 2004:145)]

Hayles therefore praised Dick’s writing skill and recognized him to be one that didn’t really fit in the reality of human world:”he had a profound vision of de-centering the human subject and letting something else emerge—probably, in my view, because he didn’t really believe in reality.” (p321) Here, the “reality” what Hayles pointed out is “what we take for reality has certain assumptions built into it that may turn out to be highly questionable.” (p321) Hayles believed that the world we get used to is not that normal or ordinary as what we thought and Dick’s able to discover this fact and subverted it in his way.

Aside from the repeated theme of struggling with the problem of “self-identity”, Dick’s novel goes further for defining the android from humans or reversely, human to android. Through the exchange of human limbs into robots and robotize the animals, the post- modernistic and post-humanistic novel has thus demonstrated a nearly future for the society.

Another film discussed by Sapiro is Ridley Scott’s film Blade Runner (1982). It is a film about “the pathos of the replicants’ struggle for life and identity”, Shapiro emphasized. He especially appreciates the delicate design of the opening scene in the movie. The motif of the eye is skillfully used to connect both vision as the “eye” and identity as the “I.” (Greg, 2004:145) In the end of the movie, Scott shows the impossible and effortless resistance to keep the boundary between human and cyborg.

Haraway approaches the concept and figure of the cyborg to a wide range of cultural texts as well as cultural phenomenon: such as in science fiction, modern medicine and high-technology warfare. In her work:” Cyborg Manifesto”, she highly praised the function of cyborgs and then promises a prosperous future with the assistance of cyborgs as long as we have set up our normality and responsibility. *Thus, whilst she demonstrates the “pleasure” in the confusion of boundaries, she nevertheless insists upon the need for “responsibility” in their construction.* (Ganard 146)

She positively reviews the science and technology as an opportunity and way of building up human and nonhuman beings’ welfare, She points at many merits what cyborgs may bring. With the help of cyborgs, the period of post-humanism will be a new world and profit our younger generation in many areas and fields of medicine, music, education and even in the area of

relationships. Ganard here points out the optimistic viewpoint of Haraway (and Andrew Ross) who regard the cyborg as a chance to break down the boundaries of gender and species. Although he doesn't approve of all of what Haraway proposes, he does support Haraway when he states: that "with the qualities of irreverence and keen sense of irony, cyborgs are quite incompatible with traditional pastoral, wilderness and apocalyptic tropes." (Greg, 2004:146) That means, the robots are not going to understand ours imply jokes or metaphors; they don't need to be "redeemed" for they never "fallen"; and even the notion of "dualistic model of technology versus nature" will no longer exist, for they have no history.

Moreover, Ganard is surprising to the neglect both of Haraway and Ross to the possible brutal reaction and violence of the cyborgs in the future. He reminded us that even the motif of justice discussed in the first Terminator film, readers or audiences shouldn't ignore the violent, exaggerated masculinity played by actor Arnold Schwarzenegger. He states: "*For Haraway and Ross, the cyborg represents an opportunity to flout the boundaries of gender and species, although as Ross points out, Arnold Schwarzenegger's cyborg incarnation in the first Terminator film offers scant grounds for optimism given his violent, exaggerated masculinity.*" (Ganard, 147)

In summary, some of the most important statements made by animal studies and posthumanist studies, Ganard points out at least four important points lies between ecocriticism and animal study and posthumanism: 1) nonhuman representation (esthetic text), 2) actual historical events, 3) cyborgs in literature and 4) cyborgs outside of literature films. *All of these reflect a sustained and sustaining interest in the subjectivity of the non-human, and in the problem of the troubled boundaries between the human and other creatures.* (Greg, 148)

The sublime threat to received notions of the self, nature and culture might force us to develop alternatives, to established ways of presenting and containing environmental crisis. (Greg, 149)

Summary of the Dream Devourer

The Dream Devourer is a novel of future. The background of time is set from 2150 to 2219, which is about 200 years later from now on. There are five main characters in this novel: **K**: a cyborg. **Eurydice**: K's lover, a human being. **Cassandra**: Eurydice's mother. **Godel**: double agent, human. His death awaken K's search for his own identity. **Eros**, an AV actress, falls in love with Godel, due to unknown factor of a disease like progeria and died in the end.

As a cyborg, k fabricated fake life experience background, achieved high academic qualifications and became the staff of government agencies. By chance, he turns out to be the chief director of The Technical Standard Bureau, working on biochemical testing methods. This is the test used for distinguishing mankind from the cyborg. In that time, people are hardly to know who is

cyborg and who is real human being due to the same appearance. Nevertheless, the color of blood may show the truth. Thus the goal of K's job is to achieve and success the test.

Nevertheless, his counterpart—the members of the cyborg liberation organization against his wish and destruct his result of the study. The construction of this cyborg liberation organization is due to the protection of the fair treatments and rights of the cyborg. Nevertheless, the leader and guilders of this liberation organization are mainly human beings. Therefore, it demonstrated out that the cyborg has no sustainable ability to have delicate feeling and to do carefully calculation.

At one time, K interrogates Godel, the double spy who works for the government and then turns out to be a betrayer offering the secret of Government to liberation organization. K begins to doubt his real identity for Godel leaking out the news. Being a cyborg who never thought he would be, K is embarrassed to know the truth of his identity --- not being an abandoned child but a cyborg instead. This has resolved all the mysterious of K's dreams. For the fragment contents of the dreams didn't reveal any childhood memory of K. In the meantime, he found out he didn't pass the blood test as well. Thus, he must face a crisis. For the human government would start a new test in the coming days. And the new test is proofed to be the most successful one—the third generation of the test. Here, the way by using a leech to suck the blood, the color of the blood will be revealed on the surface of the transparent body of the leech. Normally, human being's blood is scarlet while the blue one comes from the cyborg family. So he started to explore his personal life and the escape tours. He ran away from his job and hide in a small hotel to have the time to think over the whole story.

The story unfold in flashback, the writer narrates out K's present status first. The background of the time and space is second. The fate of the entire world is facing disintegration strengthen the nervous atmosphere. It maybe regarded as a result of K's plan of relocation of the leech. (Egoyan 2010:170). And then in chronological order, revealed the whole story of K occurred in the past. The narration of the story goes back and forward repeatedly mainly on the days among 2219/12/5-2219/12/9.

During his trip to the northern part of Taiwan, he met and fell in love with a girl, Eurydice, who is also an agent of the government of the different section. Eurydice shares her memory of her mother, Cassandra, with K. Cassandra, as we know later, in fact is one of the leaders of the liberation organization. She died by accidently when she operated a mission when Eurydice was small. Eurydice's father won't tell her about Cassandra's job. Eurydice even shows him a place, a small shop, where people may rent a space for storing their unwanted or unforgettable memory. Later on, K found out by accidentally, Eurydice keeps a diary of her dreams all about her encountering with K. This is recognized as a kind of betrayal action to the people at that time.

For people in the future, they are able to store, replicate and analyze the dream as a kind of proof to set up, leak out and even make up one's identity and destiny in the future. Moreover, the content of the dream may be used an indirect way to testify its makers. For the dreams of cyborgs' are quite different from the human beings. K then kidnapped Eurydice by drugs to control her reaction. When he finally found out a big secret that Eurydice knows who he really is long time before they met. He has big shock. The secret according to Eurydice doesn't support his doubts. They decide to find out the truth.

The contactor M is murdered miserably by unknown mysterious unit. K and Eurydice then inspect all the trivia in detail. They found out the erotic videos played by Eros, the actress of AV video. Through thoroughly examined the contents of the video, they found out the key clue of the hiding place of the liberation organization, a place where they could meet another contactor to know the truth. During the time, K suddenly remembered who Eros is. She is the girl who accompanied with Godel and later on died in a disease of progria.

In the end, when they successfully pass all the difficulties, they finally meet the real leader of liberation organization, Cassandra. Cassandra didn't die in the duty, but instead she planned this murder to farewell her past. Cassandra now is no longer shown up in a woman's appearance, but instead of a male Cassandra, a cyborg with the memory of Cassandra. He reveals all the secrets about K to them and this destroys the allusion and hope of K. Agent K then realized his been made up by female Cassandra. Cassandra has put her dreams into K's cyborg memory, in the last scene of the story, finds out that his blood turns out to be naked, colorless.

The plot of "Ex Machina"

Caleb Smith, an engineer in a famous big company is so lucky to win the prize offered by his boss—a one-week stay with his boss Nathan Bateman in his luxurious and isolated home. Aside from them, Kyoko is the only one maid who serves both Caleb and Nathan. According to Nathan, Kyoko doesn't speak English. The purpose for this vacation, according to Nathan is the test of the knowledge and reaction of Ava, a humanoid robot with artificial intelligence. Nathan would like Caleb to test and judge his android to see if Ava is genuinely capable of thought and consciousness.

While the stay of Nathan's home, Caleb found out that it is solid and full of security. Nobody can escape from this house, everything is under control. Caleb suspicious about this, nevertheless, he still agrees to sign out the confidential contact offered by Nathan.

To discovery the power of Ave, Caleb is surprised that her performing out the unsatisfied feeling of being confinement. The curious attitude responding to whatever Caleb does catches Caleb's attention. According to the demand of Nathan, Caleb will have to interact with Ava with an

identity of companion, not from the superior standpoint to check and examine Ava. Therefore, the responding of Ava will bring to a new question of the knowing herself as an android.

During their talk, Ava demonstrate a romantic interest in him and a desire to experience the world outside. Nathan kept monitoring their interaction and talk while Ava tries to win the private conversation with Caleb. What Ava can do is shutting down the surveillance system temporarily. This later helps them to have a real conversation. When Caleb get closer with Ava, he tends to treat her just like a real human. He revealed out the upgrade plan of Ava to her which means to kill the “consciousness” and “personality” of current Ava. The brutal behavior of Nathan had made Caleb tired of getting along with him. Thus, he decides to help Ava escaping from the place. When their plan has failed and Nathan has warned Caleb that Ava is pretending to fall in love with him, Caleb refused to believe him. During the struggle and fighting with Nathan, Ava is successful to kill Nathan by the aid of Kyoko who was destroyed by Nathan and later was found out an Android, as well.

Nathan activated the surveillance system before he dies. Ava is successfully to escape out from the house after she had re-equipment herself. Ava substitutes the damaged parts of her body in a closet that was piled up with abandoned android robots with their limbs, skin and other stuffs. Ava put on the artificial skin to take on the full appearance of a human woman. Then, she leaves Caleb trapped inside the house, ignoring his screams, and escape to the outside world in the helicopter meant to take Caleb home.

The position and location of female characters

This paper aims at discussing the female characters of both works. The title of “position and location” can be narrowly defined as the awareness of self-identity. From a post-humanistic point of view, “gender” should be the necessary issue that worthy to be focus on. Female characters are usually play not so crucial factor in scientific works whatever in fiction or film. The excessive technique and invention requirements and heroism are factors to win the public attention. The female characters may play key figures in every works as long as they have the issue to spread and convey. To infer every possibilities of humanoid android both in literature and scientific study is trendy in recent society. The position of hero and useful appliances are never fail while the subordinate female characters are often treated as vessel and neglected. Nevertheless, we may notice the reverse situation occurs to the recent works. Both eastern and western writers put their attention on their heroines. “The Dream Devour” and “Ex Machina” are good examples. There are two major issues should be paid attention to: (1) Identity VS Humanity (2) Gender discrimination VS patriarchy.

(1). Identity VS Humanity

Dona Haraway in her paper” A Cyborg Manifesto” announces a cyborg shock and phenomena

through the feminist's perspective. There are in total four female characters will be discussed in this paper: Eros, Cassandra, Kyoko and Ava. These significant roles of *The Dream Devourer* and *Ex Machina* represents enough to support Haraway's argument. Their stories are in accord with what Haraway has stressed: "The cyborg is a thoroughly political animal, committed to socialism and feminism." (Ganard 2004:146)

In the novel of *The Dream Devourer*, Cassandra and Eros are in a sharp contrast. Cassandra, a living human being, gave up her identity at last and turned out to be hybrid—a cyborg with human memory. When, in the same time, the cyborg AV actress, Eros, tries to sacrifice her life to protect her lover. In spite of the failure in the end and defeated by the natural disease of being a cyborg, Eros shows her great emotion and enthusiasm toward love and life. What Eros has performed is the value of humanity. Therefore, the researcher may quest an ultimate problem—which is the criteria to judge a real human being from a cyborg?

Ava, an android designed to imitate human beings and made a lot of evolution while she is eagerly to learn and to desire. Kyoko, the Japanese servant may possible doesn't know her truly identity—humanoid android, still reveals her own willing by helping Ava to against the cruelty and destruction. These traits are very humanized.

As Michael Shapiro in his paper analysis the works of Philip K. Dick's *Do Androids Dream of Electric sheep?* (1968) and pointed out that "Dick's novel explores the challenge posed to human identity not only by animals but also by cyborgs." (Ganard, 144) This confirms that android's express is exactly the same respond with human beings. Ganard examples this by demonstrating the painful self-consciousness of an android about her being:

"when a Nexus-6 android, Rachael Rosen, who has the relationship with our main character, Deckard exclaimed: "*we are not born; we don't grow up; instead of dying from illness or old age we wear out like ants....I am not alive! You're not going to bed with a woman. Don't be disappointed; Okay?*" (Ganard 2004:144-145) "

Ganard expresses this as "somewhat self-contradictory given that these androids combine biological and electro-mechanical elements." (Ganard 2004:145)

The struggling of a cyborg Nexus-6, Rachael Rosen, to accord with her identity, has by chance in accord with the same dilemma of Eros' position in the novel. Eros knows her identity clearly. Being a cyborg, she is not allowed to fall in love with a human being. Nevertheless, it did happen. They even planned a run away from their jobs and organizations. This is also in the same situation with Eurydice, another role of "*The dream devourer*" who fell in love K, a hybrid cyborg. A new mutant cyborg, a lonely one and thus arouse the maternity of Eurydice to him.

Comparing to the situation of Eros, on the contrary, the position of Cassandra is in a state of anti-humanity. Due to her ambition of her job, she chose to cut off all the relationships and emotions she once possessed and turned out to be a cyborg with memory of human. When K questions her about the origin of his birth, Cassandra's (now is male) reaction is cold and emotionless:

K: "Where is the real place of my birth?" C: "I don't know"

K: "You don't know?" almost loss his controlling "What do you mean?"

C: "I don't know the place where you have been born."

K answers angrily: "You don't know? You have made me up and then you told me you don't know where it is? How could that be?"

The male Cassandra shows his indifference and expressionless: "I really don't know, I forgot!"
(Egoyan 2010: 441)

According to the male Cassandra, his losses of the memory, identity and emotions are a result of protection action. The target of his protection job is agent K who has been confirmed as the only experimental subject. If K's status has been exposed, the plan will be ruined and brought with no hope to male Cassandra. Therefore, she decided to give up her identity and turns out to be a cyborg: "Thus why I have decided to do so" spoken by Cassandra whose voice now is not so smoothly: "To change an identity and then turned out to be another person. I wanted to be a person without any feeling and had a stone heart. I chose the death because it is the most decisive ending and the determinative isolation, the betrayer of a man's status." (Egoyan 2010:443)

We may recognize the faithful attitude Cassandra has toward her job, but still arguing the value and worth of her persistence. Both Cassandra stick to their goals (we may not confuse female Cassandra with male cyborg here).

In Ridley Scott's film, there is an emphasis "falling on the pathos of the replicant's struggle for life and identity. As Shapiro notices that the motif of the eye is skillfully used to connect both vision as the "eye" and identity as the "I." (Ganard 2004:145) The same motif appears in the beginning scene of *the Dream Devourer* when Eros was interviewed by an erotic video director. She gazes directly toward where the camera is. Her gazing and staring toward the camera has somehow turned to be a proof of being fearless. This reflects her self-identification of being a cyborg with strong recognition of "I" (eye).

Therefore, the desire and ambition turns out to be the key factor of self-awareness and self-understanding to our females roles.

(2). Gender discrimination VS patriarchy

Moreover, the encountering of these roles is also a representation of sexuality discrimination and patriarchal responding. The arrangement of the woman characters reveals the gender of the writer.

The arrangement of the male status of Cassandra cyborg, the occupation that Eros delightfully accepted for being an AV actress, the costume Kyoko and Ava are good examples.

The positive attitude of Eros toward being an AV actress creates double meanings in the fiction: to remind readers with the traits of non-human nature of cyborg and to catch the readers' attention in the very beginning of the story. The writer tries to draw the attention by depicting erotic scenes in detail. Later on, the arrangement of reversing status is sometimes not necessary. The same situation has taken place in the film of "Ex Machina." Kyoko, a faithful servant here is always dressed in Japanese style and speechless for not understanding the dominant language. The inferior situation creates her role similar to Eros. Her function here in the movie is only to please her master, Jonathan, both household labor and sexually service, as well. The design of Cassandra to give up or reverse her gender is again showing the important position of male in the novel. In spite of the emphasis of Male Cassandra on the perishing of memory and emotion, the deletion of woman traits on purpose, a reflection of chauvinistic point of view.

Even the worst, Eros being an actress of AV movie is belong to an inferior position in traditional Chinese society. Here, Egoyan treated his woman characters in a plain and ordinary attitude. Though, the functional value, the character of Eros here is to reveal and protect the secret identity of agent K. It surely doesn't necessary to depict a female role with tool function only. The arrangement of the revelation of the key clue during the erotic processes, demonstrated a potential patriarchal mood of Egoyan. In depicting Eva, though the scripter gave her more freely and power to control and to move. Eva is still confined by the limitation of being isolated and degraded design.

The rebellion of Eva and Eros can be viewed as a kind of awareness of "self-identity." Eros decides to run away with her human lover and Eva learnt the free from the new comer- Caleb who brought fresh knowledge and stimulate her intention to run away from the house. Both roles betrayed their original and identity but the pursuing for the new freedom are more humanized. Here, the different cultural background distinguishes both authors from the various ending of their female characters. Eros sacrificed to proof her humanity while Eva tries to escape by leaving alone Cables, her so-to-speak friend selfishly.

In spite of some defaults, both the novel of *The Dream Devourer* and the film of "Ex Machina" can still be regarded as successful depictions of cyborg. It is Badmington has found out that the goal and expectation of Haraway toward Cyborg phenomena are great and with a vision:

While the cyborg has its roots in patriarchy and humanism (the figure was developed during the 1960s as a means to conquer outer space), there is always the possibility that it could be rearticulated to a radical political agenda which would be celebrate multiplicity, unnatural connections, and permanent contradiction. Cyborg politics, from this latter perspective, is about

living with difference in a space free from humanism, where gender and essence are things of the past.
(Badmington 2004:148-149)

In the very beginning when scientific novels or cinema are discussing the robot or android, the power of destruction and cruelty are required elements. The fear of human to be controlled by the device they have made themselves is always a kind of existential subjects. When our device or invention tries to wake up and look for their own “right,” the new definition or eyesight of the post-human are needed. When the machine owns their sexuality as “machine” and “machina;” or goes further, when “machia” is entitled by “ex-,” what should we reconsider ours location and position?!

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Education (3)

Wednesday, August 16, 2017 13:00-14:30 Room 1007

Session Chair: *Prof. Tania Hossain*

ACMASS-0037

Limitations of the Policy of Nursing and Childcare Subsidy, and Its Negative Effect in Taiwan

Chia-Jou Liu | *Dong Hwa University*

Chunn-Ying Lin | *Dong Hwa University*

ACMASS-0085

Education Context and English Teaching and Learning in Bangladesh: An Overview

Tania Hossain | *Waseda University*

ACMASS-0105

Academic and Social Integration Experiences of Papuan Studying in University in Java

Cahya Wulandari | *University of Bristol*

Arief Nugraha | *University of Bristol*

Nanan Nuraini | *University of Bristol*

ACMASS-0118

An Action Research on the Flipped Learning in a Calculus Course

Chi-Tung Chang | *Feng Chia University*

Sui-Pi Chen | *Feng Chia University*

Jinn-Min Yang | *National Taichung University of Education*

Shih-Hsuan Wei | *National Taichung University of Education*

Limitations of the Policy of Nursing and Childcare Subsidy, and Its Negative Effect in Taiwan

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1. Background

In the policy of nursing and childcare subsidy, the promotion of educational fairness and social justice are the core objectives. Therefore, studies on the policy effects of nursing and childcare subsidy becomes an important issue in research field . With the changing times and environments, occupations, incomes, and the identity of the subjects in nursing and childcare subsidy in Taiwan might not refer to the characteristics of socially vulnerable groups; however, they are continuously benefited from higher subsidies. While studies might roughly examine and approve nursing and childcare subsidies, they underestimate these groups' potential for self-enhancement, which cannot promote educational fairness. In addition, those who are not qualified as socially vulnerable groups, but receive nursing and childcare subsidies, are questioned, criticized, and even humiliated by other people. In addition, without proper planning and related measures, people might overly depend on the policies of nursing and childcare subsidy. The previous statements illustrate the possible limitations and negative effects of the policy of nursing and childcare subsidy. While it is an extremely important issue, related research is lacking. It was necessary for this study to engage in further analysis and exploration.

2. Methods

Applying the qualitative case study approach, this research collects data from scholars, experts, parents, and teachers in Taiwan between March and April 2017 , and generalizes the empirical data according to multiple perspectives and positions, to result in identifying the possible problems of the policy of nursing and childcare subsidy. Interviews were conducted in Chinese; were guided by an interview guide with several open-ended questions. All of the interviews were audio-taped and most were video-recorded. Interviews were conducted in private; no one else was present besides the participant and the researcher. Participants were given the option of having audio-taped interviews, instead of videos, so that they could retain anonymity. They were also given the option of making sub-sections of their video interview anonymous.

3. Conclusion

According to the research findings, the implementation of the policies of nursing and childcare subsidy positively influences children's learning development; however, those who have benefited might overly depend on such welfare. In addition, regarding the design of the policies of nursing and childcare subsidy, the effect of political manipulation and the finances of local government reveal different dimensions, which might reinforce educational injustice. Finally, since preschool teachers in Taiwan possess high degrees of professional knowledge and competence, they are cautious about the confidentiality of personal information, such as their benefits and subsidy amounts. Moreover, in Taiwanese society, there are no significant classes or atmospheres of discrimination; hence, the phenomenon in which the benefited are degraded or criticized is insignificant.

Keywords: limitations, negative effect, nursing and childcare subsidy, qualitative interview

ACMASS-0085

Education Context and English Teaching and Learning in Bangladesh: An Overview

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1. Background/Objectives and Goals

Bangladesh has never had a consistent policy on language in schools. Sometimes English has been encouraged, sometimes it has been limited, and sometimes it has been forbidden. Nearly half of the population of Bangladesh lives below the poverty line and more than half of all citizens are illiterate. Although the Constitution of Bangladesh states that education should be free and compulsory for all children, in practice many children do not attend school, or do so for only a short time. Many people know the alphabet but cannot read books, and the vast majority of the population does not know standard Bengali. Within the context of severe social, economic, and educational problems, English remains a primary language of education and employment. This paper will focus on the inequitable education system in Bangladesh. The emphasis is on the difference between classes in rural and urban schools as well as between the Bengali medium and English medium schools.

2. Methods

The paper is organized into five main sections. The first section offers a brief glance at the social, religious, economic, and political context in Bangladesh. The second section provides an overview of the education system in Bangladesh, which includes a brief explanation of the history of education, a discussion of the role of government in modern education, and a description of the administration of education in the country. The third section presents information about English teaching and learning in public schools in Bangladesh, while the fourth gives insights into the challenges and difficulties students face when learning English. The last section focuses on the importance of learning English in Bangladesh. The research question was - (i) what are the differences between the classes observed in two urban and one rural school as well as English and Bengali-medium one?

To find the answer of the research questions four types of data are examined: (1) archives and documents, including newspapers and historical documents, (2) interviews with the key policy planners, (3) government census data, and (4) other government data from the Bangladesh Bureau of Statistics, Bangladesh Bureau of Educational Information and Statistics, and the Primary and Mass Education Division.

3. Conclusion/ Result

Based on the data examined in this article, several conclusions are reached. First, English is not regarded as a colonial burden, but rather most Bangladeshi people have a favorable attitude towards English, with instrumental motivation for learning English. Second, English education seems to create class divisions, with only the upper class benefiting from the present pro-English policy. In part due to easy access to English enjoyed by the Bangladeshi upper class, power and privilege remain largely inaccessible to the rural people of Bangladesh. Third, despite the fact that Bengali has played an important role in Bangladeshi nationalism, production of Bengali textbooks and other educational materials has nearly stopped, and English is widely seen as the preferred medium of instruction.

Results indicated that English is linked with the individual opportunity. English offers significant economic opportunity and privileges for its speakers. Given the obvious economic advantages middle-class families try to ensure that their children have access to English-medium instruction. Thus public pressure for English language teaching at an early age is widespread. However, for most children, English language proficiency is quite low because of the low level of teachers' English language proficiency and the low quality of English language education. Thus, the present policy continues to support advantages for groups having access to English education.

Education is a process of providing enlightenment and skills to a nation. It is not clear how these changes occur through education but evidence suggests that schooling and education can make major contributions to poverty reduction, gender equity, responsibility of citizenship and equality of life. On the other hand, some research has shown negative impact of education, as unequal school opportunities create discrimination based on wealth, gender, and socioeconomic role. In many developing countries equity in access to schooling remains an important challenge. Bangladesh also faces this challenge, as poor students have less chance of completing any given education cycle than more affluent ones. This paper has sought to familiarize the reader with key aspects pertaining to the education context and English teaching and learning in Bangladesh. The paper briefly introduced social, religious, economic, and political context of Bangladesh, followed by a general overview of the education system. It also discussed the teaching and learning of English in Bangladesh, highlighting the challenges students face when learning this language. Finally, the paper emphasized the importance of learning effective English for the country's development.

Keywords: Bangladesh, Education system, English teaching and learning

ACMASS-0105
**Academic and Social Integration Experiences of Papuan Studying in
University in Java**

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Abstract

1. Background

Papuan refers to an ethnic group living in the Province of Papua and West Papua (together called as Papua). This region is located in eastern Indonesia and is frequently stereotyped as less developed region due to the uneven economic growth between the west and the east Indonesia (Rees et al., 2013). Contrast in education quality between these two regions is also apparent (Mollet, 2007). These disadvantages and stereotype might be associated with discrimination cases that have been experienced by Papuans (Webster, 2002). To illustrate, Papuans who are studying in Java were also frequently clashed socially and captured largely in the mass media (CNN Indonesia, 2016). Study conducted by Boevington (2007) supported the notion that Papuans who are studying in universities in Java are often faced with obstacles when integrating both in social and academic environment. He found that the barriers they might face may hamper their academic performance. However, whether this experience are related with the stereotype addressed towards Papuan is not yet explored.

2. Methods

This research aims to investigate the experiences of Papuan students while integrating in the academic and social life in Javanese Universities. The present study attempts to inspect whether the stereotype addressed to Papuans affects the integration process and to what extent the stereotype hampers their social and academic life. Four Papuans (3 male, 1 female) who studied in Java Universities were interviewed using semi-structured interview. Participants were recruited through snowball sampling. Prior to the interview, participants were asked about ethnic identifications, duration of studying in Java, and whether they have previous experience in studying outside Papua before entering university. Only students who match the criteria; identified themselves as indigenous Papuan (dark skin colors, curly hair, born and raised in

Papua), have studied in Java at least six-months, and aged at least 18 years old will be interviewed. The interview has eleven core questions acquiring participants' experience related to the way they make friends in the university, and whether they faced barriers in integrating socially or academically. The interviews last for 20 to 60 minutes and the in-depth questions were developed based on participant's answers. The data were analyzed using thematic analysis.

3. Result and discussion

Two big themes emerge from the analysis, namely the positive experience and negative experience. The result shows that the stereotype might influence the way Javanese people treated Papuans in the very beginning of acquaintanceship. However as the interaction continues, integration process can be more evolving. All participants confirmed that they experience negative stereotype addressed towards themselves but to what extent those stereotype can develop into positive experience is affected by the following factors; a.) Personal trait (openness and internal motivation to blend with new people), b.) Being part of a social groups, and c.) Support from institutions. On the contrary, the negative experience were related to; a.) Personal trait (inferiority), b.) Language problems (Javanese students more likely speak using local language and also the use of English in academic setting), discriminative experiences (lack of access in housing and public facilities), and c.) Lack of support from institution (limited resources to provide inclusive academic climate). This finding is in line with Allport (1954) four optimal condition in contact theory. This optimal condition is critical to establish positive intergroup relation which will also enhance intergroup integration.

The finding of this research is important for education institution to facilitate the provision of positive academic environments for students of marginalized groups or ethnic minority. The result does not highlight ethnicity as the main barriers for Papuan social and academic integration, however quantitative study is recommended in the future to investigate to what extent is stereotype towards particular ethnic groups affect integration process as well as exploring other factors. Despite its short-coming, this initial research encourages institution support (university) to encourage integration through positive education climates. This finding opens opportunity for future research to explore what kind of policy and practice in educational setting could generates such climate.

Keywords: Papua, Javanese, academic life, social life, ethnic minority, education institutions, contact theory

ACMASS-0118

An Action Research on the Flipped Learning in a Calculus Course

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1. Background/ Objectives and Goals

The flipped learning/classroom has attracted a lot of attention in recent years. The main idea of the flipped learning is to flip the activities of “teachers teaching in classroom” and “students completing their assignments outside of classroom.” In other words, students watch instructional videos (at home) assigned or prerecorded by their teachers before the class so that students can solve higher-order problems, discuss critical thinking issues or cooperate with classmates in class. The purpose of the current study aimed to investigate the feasibility and effectiveness of the developed flipped learning module in a university Calculus curriculum.

2. Methods

This study investigated the performance of students in a Calculus curriculum of the college of engineering in a private university in Taiwan. The students in the class were divided into groups for cooperative learning. One topic in each semester was selected for a period of about three or four weeks. In the first semester, the teacher recorded the learning films before the class and uploaded to Youtube, then the students could learning asynchronously on Youtube through the internet, meanwhile some data related to the students' learning would be recorded and collected by the Youtube back-end system. In the classroom, the teacher administrated a quiz as a formative assessment of their online learning in the beginning of the class, and then a group, assigned before class, was responsible for solving the quiz and answering questions from the audience. After that, the online interactive response system (IRS), KAHOOT which is with four types of questions, is applied to practice questions of the learning material and students can answer these questions via smart phone or tablet PC. After answering a question, the students

could get scores based on the correctness and time they answered the question. KAHOOT can enhance motivation and interaction in learning. After class, the anonymous within-group and between-group assessments would be performed for students for understanding the efficiency of the team-work design and the contribution of each student in a group. A questionnaire survey was developed and employed to investigate the students' attitude toward the flipped learning. After the evaluation of the results of the first semester, the teacher revised the learning activities in the second semester. The differences of students' learning for the two semesters was explored.

3. Expected Results/ Conclusion/ Contribution

The results of this study showed that most students were able to watch the teaching videos before class, and they could make objective assessments on the performances of the groups or members by anonymity. In addition, students were highly interested in online interactive response system KAHOOT, and we found that the curriculum participation and learning motivation were effectively improved. Students were very satisfied with the online learning materials and classroom activities for the two semesters. The questionnaires used the 5-point Likert scale, and scores 5, 4, 3, 2, and 1 represent to strongly agree, agree, neutral, disagree and strongly disagree, respectively. The reliability coefficient Cronbach α were 0.9 and 0.98 for the first and second semesters, respectively. The average scores of the two semesters were with a high score of 4.31 and 4.28. More than 72% students thought that the revision of the class in the second semester became more vibrant and interesting than the first semester. Moreover, the students considered that the teacher's moderately guiding was important as well. In this study, a novel flipping learning module was proposed and the experiment results showed that the framework enhanced the students' learning in Calculus.

Keywords: flipped classroom, flipped learning, mathematics, Calculus

Poster Sessions (2)

Society / Psychology / Economics / Communication

Tuesday, August 15, 2017

14:00-15:00

Room 1004

ACMASS-0045

The Impact of Psychological Characteristics of Users by Game Structures and Parental Mediation on the Online Game Addiction of Adolescents

Sang Bai | *National Youth Policy Institute*

Eun-Hye Ko | *National Youth Policy Institute*

ACMASS-0053

Predictors of Job Retention among Paid Home Caregivers in Taiwan

Yu-Hsien Chen | *Tzu Chi University of Science and Technology*

Shu-Yi Huang | *Tzu Chi University*

Huei-Chuan Sung | *Tzu Chi University of Science and Technology*

ACMASS-0067

A Study on the Symbolism of Amphibia (Frog, Toad) in Sandtray Therapy

Soon Song | *Wonkwng University, Korea Sandtray Therapy Association*

ACMASS-0102

A Study on Case Analysis of Sandtray Therapy for Homeless Child

Kyung-Hee Kim | *Mokpo National University*

Ji Ah Oh | *Mokpo National University*

ACMASS-0122

The Case Study on the Art Therapy for Improving Self-Esteem and Ego-Resiliency, Emotional Stability of Sexual Violence Victim Child

Sugmin Lee | *Wonkwng University*

Soon Song | *Wonkwang University*

ACMASS-0024

Will China's Trade Restructuring Reduce CO₂ Emissions Embodied in International Exports?

Xu Tang | *China University of Petroleum(Beijing)*

Jianliang Wang | *China University of Petroleum(Beijing)*

Zhengwei Ma | *China University of Petroleum(Beijing)*

Lili Wu | *China University of Petroleum(Beijing)*

ACMASS-0123

Language Impairment in Chinese-Speaking AD Communication

Yi-Hsiu Lai | *National University of Kaohsiung*

ACMASS-0045

The Impact of Psychological Characteristics of Users by Game Structures and Parental Mediation on the Online Game Addiction of Adolescents

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Abstract

By employing a national survey of 2,994 Korean adolescents, this study examined the ways in which parental mediation types (i.e., restrictive mediation, active mediation, & co-using), youths' psychological characteristics by game structures (i.e., compulsive interaction with other game users, excessive obsession over rewards & reputation/acknowledgement from others) and emotional and behavioral characteristics (i.e., self-esteem & community spirit) influence online game addiction. It was found that adolescents spent 0.7 hours per day during weekdays on average and 1.24 hours per day during weekends playing computer online games, and 1.11 hours per day during weekdays on average and 1.54 hours per day during weekends playing mobile games, which indicated that adolescents played mobile games more than computer. Both fathers and mothers showed the highest level in the restrictive mediation type, followed by the active mediation type, and the co-using type. The game addiction proneness of adolescents was affected most by psychological characteristics of users by game structures. That is, when adolescents had an excessive obsession over rewards such as game items, and a higher desire to show off to others, they were more likely to be addicted to games. In addition, it was found that the higher self-esteem and community spirit of individuals, and the active mediation of parents reduced the game addiction proneness of adolescents, showing statistically significant differences.

Keywords: game, addiction, parental mediation, game structure, youth

1. Background/Objectives and Goals

This study examined the ways in which parental mediation types (i.e., restrictive mediation, active mediation, co-using), youths' psychological characteristics by game structures (i.e., compulsive interaction with other game users, excessive obsession over rewards & reputation/acknowledgement from others) and emotional and behavioral characteristics (i.e., self-esteem & community spirit) influence online game addiction. The data for this study came from a national survey (i.e., 2016 NYPI Study on Social Media & Youth Culture) of a total of

2,994 Korean adolescents, utilizing a stratified probability sample design in terms of region and school level based on the 2016 Statistical Yearbook of Education.

2. Research Methods

Research subjects

This study was conducted among elementary and middle school students in 7 regions who were sampled in proportion to the number of schools and students by regions and school levels based on the 2016 Statistical Yearbook of Education. One-to-one interviews were conducted from January to February in 2017, and 3,217 students responded to the interviews. Excluding those who answered that they did not have any experience of playing games on computers or smartphones, a total of 2,994 students were analyzed in this study. In terms of demographic characteristics, male students accounted for 52.6% (1,575 persons), and female students, 47.4% (1,419 persons). Meanwhile, the number of middle school students was 1,546, accounting for 51.6% of the total.

Key factors

Game addiction proneness: To measure the game addiction proneness of the sampled students, 21 questions of the Maladaptive Game Use Scale (MGUS) in the Comprehensive Scale for assessing Game behavior (CSG) developed by the Korea Creative Content Agency (2010) were utilized. The purpose of the MGUS is to measure maladaptive symptoms caused by game behaviors, and the scale is divided into 7 sub-factors (tolerance, withdrawal, excessive time consumption, impaired control over games, compulsive use, ignorance of daily life, and playing games despite side effects). Each sub-factor was composed of 3 questions, and answers were measured using a 4-point Likert scale (0=strongly disagree~3=strongly agree). In this study, the average of all the answers of 21 questions was calculated, meaning that the higher the average, the higher the proneness to maladaptive game use. The internal consistency of the scale was Cronbach's $\alpha = .954$.

Psychological characteristics of users by game structures: The Ministry of Gender Equality and Family has conducted the evaluation of online games for the Online Game Shut-down System biennially (2012, 2014 and 2016), and 7 questions used for the evaluation were utilized in this study to measure the psychological characteristics of users by game structures. They were in turn divided into 3 sub-groups as follows: 2 questions on compulsive interaction (i.e., Users interact with other gamers by assigning roles to increase the level and ability of game characters, and they should stay online for a long time without any break to perform quests together with other gamers.); 3 questions on excessive obsession over rewards such as game items (i.e., Users should stay online not to lose game items, and instead to gain more items that are needed to play games, or more game money or cyber money that can be changed into cash. The longer they play games, the higher chance they have to get items or better items during item event times.); and 2

questions on acknowledgement and reputation from others (i.e., Users want to gain game items or level up in order to be recognized by others. They gain attention by showing off their scores, records and game IDs.) Each question was measured using a 4-point scale (0=strongly disagree~3=strongly agree). The psychological characteristics of users by game structures were calculated as average rates. The internal consistency of the scale of compulsive interaction was Cronbach's $\alpha = .792$, that of the scale of excessive obsession over rewards, Cronbach's $\alpha = .735$, and that of the scale of acknowledgement and reputation from others, Cronbach's $\alpha = .750$.

Parents' role as mediators: Parents' role as mediators on their children's game use was measured by applying the results of earlier studies that suggested 3 parental mediation types on media use (ex: Clark, 2011; Nathanson, 1999; Nikken & Jansz, 2006) to game use. The types of parental mediation were assessed with a total of 10 questions, and based on the results of factor analysis, they were divided into active mediation¹, restrictive mediation², and co-using³. A 4-point Likert scale (0=strongly disagree~3=strongly agree) was used to measure the mediation types of the fathers and mothers of the sampled students separately, and the values were added up and calculated as average rates. The internal consistency of the scale of active mediation was Cronbach's $\alpha = .709$, that of the scale of restrictive mediation, Cronbach's $\alpha = .742$, and that of the scale of co-using, Cronbach's $\alpha = .838$.

Personality characteristics of adolescents: Self-esteem and community spirit: The personality characteristics of game users were measured with the questions used to assess the self-esteem and community spirit of adolescents in the Test of the Emotional and Behavioral Characteristics of Students conducted by the Ministry of Education (2016) annually. Self-esteem and community spirit were assessed with 4 questions respectively, and measured with a 4-point Likert scale (0=strongly disagree~3=strongly agree). The internal consistency of the scale of self-esteem was Cronbach's $\alpha = .851$, and that of the scale of community spirit, Cronbach's $\alpha = .778$.

Statistical analysis

This study conducted descriptive statistics analysis and multiple regression analysis using SPSS 20.0 to identify the types of game use of adolescents and parents' role as mediators, and to verify the impact of psychological characteristics of users on the game addiction of adolescents by the demographic and personality characteristics, the types of parental mediation, and game structures.

¹ My parents explain violent or harmful games to me. They decide what games I can't play usually and supervise me so as not to play the games. They tell me what games are instructive.

² When my parents see me playing games, they make me stop playing. They usually check how long I play games. They decide how many hours I can play games a day.

³ My parents usually play games with me together. They often search information about games. They play games quite often. They frequently have a conversation with me about games.

3. Results/Conclusion

Adolescents' average hours of playing games per day

It was found that adolescents spent 0.7 hours per day during weekdays on average and 1.24 hours per day during weekends playing computer online games, and 1.11 hours per day during weekdays on average and 1.54 hours per day during weekends playing mobile games⁴, which indicated that adolescents played mobile games more than computer online games (Figure 1). The maximum average hours of playing mobile games per day during weekdays were 1.36 hours, longer than that of playing computer online games (1.26 hours), but that of playing computer online games per day during weekends (2.22 hours) was longer than that of playing mobile games (1.83 hours).

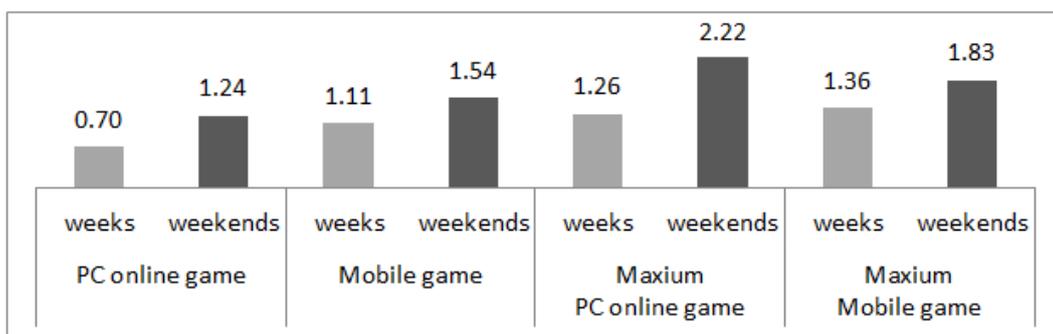


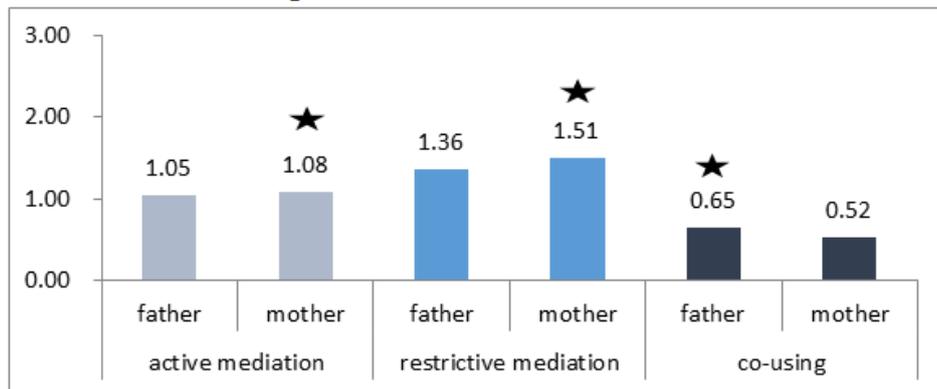
Fig. 1: Average hours of playing games per day

Parents' role as mediators on game use

Figure 2 shows the analysis results of the mediation types of the fathers and mothers of students on game use. The level of the restrictive mediation of mothers (limiting the time and hours of playing games, or restraining children from playing games) was higher than that of fathers, but the level of the co-hosting type of fathers (enjoying games, collecting information about games, or sharing it with children) was higher than that of mothers. There was no significant difference between mothers and fathers in the level of active mediation (explaining violent or harmful games or introducing instructive games). Both fathers and mothers showed the highest level in the restrictive mediation type, followed by the active mediation type, and the co-using type.

⁴ Playing games on smartphones or tablet PCs

Fig. 2: Parents' role as mediators



Analysis results of the predictable factors of game addiction proneness

Table 1 shows the results of multiple regression analysis conducted by inserting predictable factors including demographic characteristics, personality characteristics of individuals, psychological characteristics of users by game structures and parents' role as mediators in order to identify the factors that affect the game addiction proneness of adolescents.

First, it was found that the influence of gender, among demographic characteristics, was the highest, and in particular male students were more prone to game addiction than female students ($\beta=-0.106$, $p<.001$). The lower their academic performance ($\beta=-0.072$, $p<.001$), or the lower the economic status of their families ($\beta=-0.059$, $p<.001$), or the younger they were ($\beta=-0.042$, $p<.01$), the higher their game addiction proneness. These results were statistically significant.

Table 1: Predictable factors of the game addiction proneness of adolescents

Predictable Factors		B(S.E)	Exp(β)
	(Constants)	0.678	
Demographic characteristics	Gender (Male=0)	-0.108 (.016)	-0.106***
	School year	-0.013 (.005)	-0.042**
	Academic performance	-0.059 (.012)	-0.072***
	Economic status	-0.048 (.012)	-0.059***
Personality characteristics of individuals	Self-esteem	-0.054 (.013)	-0.075***
	Community spirit	-0.079 (.015)	-0.101***
Psychological characteristics of users by game structures	Compulsive interaction	0.067 (.013)	0.113***
	Obsession over rewards	0.184 (.017)	0.260***
	Acknowledgement from others	.125 (.013)	.212***
Parents' role as mediators	Active mediation	-0.014 (.006)	-0.043*
	Restrictive mediation	0.023 (.006)	0.067**
	Co-using	0.028 (.007)	0.061***
R ²		.399	
Adjusted R ²		.396	
F		159.085***	
Durbin-Watson		1.891	

*p<.05, **p<.01, ***p<.001

Second, in terms of personality characteristics of individuals, both self-esteem ($\beta=-0.075$, $p<.001$) and community spirit ($\beta=-0.101$, $p<.001$) had a statistically significant impact on the game addiction proneness of adolescents, which meant the higher their community spirit and self-esteem, the lower their game addiction proneness.

Third, the higher their obsession over rewards such as game items ($\beta=0.260$, $p<.001$), or the higher their desire to be acknowledged by others through games ($\beta=0.212$, $p<.001$), the higher their game addiction proneness. Those who compulsively interacted with others more showed a higher game addiction proneness ($\beta=0.113$, $p<.001$).

Last, when parents showed active mediation on children's game use ($\beta=-0.043$, $p<.05$), their children showed a lower game addiction proneness. However, when parents were either the restrictive mediation type (i.e., as watching and controlling children's game use) ($\beta=0.067$, $p<.01$), or the co-using type (i.e., playing games themselves, or together with their children) ($\beta=0.061$, $p<.001$), their children showed a higher game addiction proneness.

To sum up, it was found that the game addiction proneness of adolescents was affected most by psychological characteristics of users by game structures. That is, when adolescents had an

excessive obsession over rewards such as game items, and a higher desire to show off to others, they were more likely to be addicted to games. Compulsive interaction (being conscious of other gamers) also had an impact on the game addiction proneness of adolescents, but its influence was lower than that of the other two factors. In addition, it was found that the higher self-esteem and community spirit of individuals, and the active mediation of parents reduced the game addiction proneness of adolescents, showing statistically significant differences. However, parents' behaviors, such as controlling children's game use or playing games themselves in front of their children, caused the reverse effect of increasing the game addiction proneness of adolescents.

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ACMASS-0053

Predictors of Job Retention among Paid Home Caregivers in Taiwan

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1. Background/ Objectives and Goals

Ageing in place is a long-term care principle for many countries in this era and providing high quality of home care thus becomes vital for helping disabled people staying in the community as long as possible. In Taiwan, improving the shortage of home caregiver is a challenge as only 10% of caregivers would choose to provide care services in private houses after finishing their training program and the job retention rate is also low. Predicting factors related to paid home caregivers' job retention are important to be understood. The purpose of this research is to investigate the correlation between paid home caregivers' job retention, working stress and job burnout in Eastern Taiwan. The research site was focused in Eastern Taiwan because the long-term care services are inferior and the percentages of ageing population and aboriginal people are higher than those in other areas.

2. Methods

A cross-sectional correlation research was designed and three instruments were used to collect data: Working Stress Scale, Job Burnout Scale and the Job Retention Scale. The research result was conducted from 214 paid home caregivers in Taitung and Hualien counties. Data analyses were done by using IBM SPSS Statistics software.

3. Expected Results/ Conclusion/ Contribution

The results showed that about 96.7% of the sample was female and the average age was 48.27 ± 8.760 . The average total working years of participants was 84.39 ± 60.797 months. The average score of paid home caregivers' working stress was 91.522 ± 21.60 . It meant participants of this research were working with a high degree of working stress. Moreover, working stress and job burnout were negatively correlated with job retention. Job burnout was found as a predicting factor for paid home caregivers' job retention in Eastern Taiwan. The results implicate the needs for further investigation, educational interventions and policy considerations.

Providing suitable educational opportunities and creating a friendly working atmosphere for paid home caregivers are important for improving their job retention rate.

Keywords: Home caregiver, Long-term care, Job retention, Job burnout

ACMASS-0067

A Study on the Symbolism of Amphibia (Frog, Toad) in Sandtray Therapy

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1. Background and goals

This study reviewed on the symbolism of amphibia in sandtray therapy. Symbolism in sandtray therapy are the important factors for diagnosing clients and connect with the therapeutic process. Symbols which are expressed in sandtray are the objective messages that reveal the dynamic processes between consciousness and unconsciousness. Jung interprets that symbols are the dynamic interaction between consciousness and unconsciousness and involve not only the individual unconsciousness, but the collective archetype.

Sandtray therapy is ‘World Play’ or ‘World Technique’ (Lowenfeld, M.,1979). The Client represents the scene to overcome him(her)self psychological problems, conflicts and desires in sandtray to make use figures(persons, animals, plants, houses, trees, flowers, amphibia, insects, transports, things etc. in nature & environment) and materials(sand, water). He(she) projectively express psychological problems(emotions, desires, thoughts and suppressed self-consciousness, individual or collective unconsciousness) to make use figures and then overcome them.

He(She) reveal his(her) inmost heart and express the inexpressible things in sandtray. Unconscious psychological problems come up to surface of consciousness in sandtray. The objective messages in sandtray is more sufficient than realize of consciousness. It is more emphasized client’s expressions in sandtray therapy on the other hand sandplay therapy regarded as important client’s experiences(Kim & Lee, 2005).

Symbolic meanings are situated in human being’s archetype of collective unconsciousness. Human beings represent their whole heart and soul in the sandtray to make use figures and materials. The origin of symbolic meanings were their cultures, myths, folklores(Soon Song, 2015).

The research goals were investigated to symbolic meanings of amphibia(frog, toad) in cultures, myths, folklores and how to symbolize psychological problems in sandtray.

2. Methods

So this study preferentially was summarized symbolic meanings of amphibia(frog, toad) to read

the literatures and then was looked over the symbolism of amphibia(frog, toad) in the subject's sandtray.

3. Expected Results

The results were; Firstly, I found that Frog or Toad were with related Hero mythology. Secondly, I found that the symbolic meanings of amphibia(frog, toad) were positive and negative meanings. The positive meanings for examples the God of water, return of favor, the symbols of divinity and godhood, vital power, revival, the Goddess of Fortune were common with Frog and Toad and function of prediction, ritual for rain, protector were with Frog, the soul of moon, god of fortune, the soul of self-reform, wisdom, deliver an immortal of Taoism were with Toad. The negative meanings were a man of short insight, undutifulness, outward appearance with Frog, the objects of dislike, cursed man common with Frog and Toad and she devil, vice, unfaithful, avarice with Toad.

Thirdly, the symbolism of amphibia(frog, toad) in sandtray therapeutic cases were suppressed child's self-consciousness(frog), weakness protector(Toad), anxiety of spiritless(Toad) or suppression (frog), look for, desire of be loved (Frog) etc..

Exactly, subject's psychological mechanism was represented positive or negative in the sandtray to make of amphibia(frog, toad) figures. But this study limited to generalize a small number of cases.

Keywords: symbolism, amphibia(frog, toad), sandtray therapy.

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ACMASS-0102

A Study on Case Analysis of Sandtray Therapy for Homeless Child

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1. Background/ Objectives and Goals

This study tried to understand conscientizing process of unconsciousness by case analysis of sandtray therapy which apperared in sandtray cases of homeless child.

Subjects of inquiry for this is as follows: What has been changed through the sandtray therapy process?

2. Methods

Participants of this study are 10-year-old male child who had ever been homeless. The Sandtray therapy process was based on the six steps of Boik and Goodwin's (2000) 'Creat World', 'Experience and Rearrange', 'Heal', 'Take phpto', 'Transference', 'disassemble'. Sandtray therapy for the participants were proceeded 52 times for June, 2014 to August, 2015; and the therapies which lasted 50 minutes each time were proceeded once a week.

This study, with point of view of phenomenology, trided to observe and describe works in sandtray therapy 'as it is'. During the process of sandtray therapies, a researcher conducted direct observation and in-depth interview about exptriencing sandtray therapy. According to changes of contents and topic shown during the process of sandtray therapies, this study analyzed contents of sandtray therapy by classifying the process into early stage, the medium stage, and the late stage. To enhance objectivity of symbolic icon which a participant choose and analysis of examples, a researcher of this study jointly collected data with two experts on sandtray therapy and a educational analyst on sandtray therapy. In this process, opinions of the experts on sandtray therapy and a supervisor were included into the study.

3. Expected Results/ Conclusion/ Contribution

Major results of this study are as follows:

First, the child participating in the study properly expressed the psychological discomfort or tension caused by the experience of the homeless life and negative emotions that are hard to express in the real world through the sandtray therapy. According to sandtray therapy of the

targets of this study, chaos and confusion like not being goal-oriented and able to adapting to reality emerged because of unbalance of ego at the early stage. Instinctive aspects and uncomfortable mind on surroundings appeared as ‘monster’ and scenes of accidents also appeared. Sometimes participants express his problematic situation through describing animals preying on one another. In the middle stage, ambivalent emotions, which were caused by wants to control and lead oneself and confusion over oneself that are not controlled, were expressed in the topic of accidents. After conflicts in unconscious world appeared in consciousness, talent to distinguish good from evil was formed; and the topic of fighting was changing from a fight between the strong and the weak to a fight between good and evil. With expressing instinctive aspects which resided inner side of a child as strong and powerful animals, fights between human and animal, or between animal and animal were often directed. And death for rebirth appeared; and positive change that the participants got to be aware of people who could ask for help when one is in trouble was shown. Through sense of trials and practices, power and dynamics that can control one’s body and emotion also emerged. At the late stage of sandtray therapy, although struggle of opposing poles had continued; topic of contents had been moderated to cooperatable game and transformation and metamorphosis emerged. Solving the challenges the child must overcome through the work of reconstructing, conscientizing and transforming their unconscious inner side in the sandtray therapy process, he showed a new direction in life and efforts to adapt to everyday life. Second, the sandtray therapy process of the homeless child could be seen as a struggle for establishing their own existence and controlling himself. The participating child repeatedly developed the progress of unconscious regression and consciousness in sandtray therapy process of unconscious regression and consciousness in sandtray therapy process and showed the desire to grow and the desire to regress through the antagonistic struggle. It could be interpreted as achievement of conscientizing process of unconsciousness and growth of self-control. This meant that consciousness and unconsciousness can be activated dynamically and repeatedly to form a clear image of the child.

The significance of this study is as follows:

This study is significance in that it helped understand the process of mental change of child by suggesting the conscious process of unconsciousness through the case analysis of the sandtray.

Keywords: sandtray therapy, Homeless child, conscientizing process of unconsciousness

ACMASS-0122

The Case Study on the Art Therapy for Improving Self-Esteem and Ego-Resiliency, Emotional Stability of Sexual Violence Victim Child

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Abstract

1. Objectives and Goals

A case was a 15 - year - old woman who was diagnosed with intellectual disability in junior high school second grader. She suffered sexual violence against adult men and was asked to treat art to restore psychology after 4 weeks. She remembered flashback, nightmare, trauma, had experienced symptoms of the same posttraumatic stress disorder. This study was to examine how Art Therapy affected improving Self-Esteem and Ego-Resiliency, Emotional Stability of Victimized of Sexual Violence child. The subject was the middle school student girl, second grades at I city.

2. Methods

Treatment focused on the recovery of her being safe, good for yourself, you can give a positive impression to restart life. She was suffered from sexual assault she was lack of self-confidence and suffered difficulty in daily life. Individual Art Therapy was performed once a week for 60 minutes and for 12 periods. Self-Esteem (Rosenberg, 1965), Ego-Resiliency (Klohnann, 1996), and Emotional Stability scale (Hantaiyoung, 1998) were performed to verify the effectiveness of the program.

3. Expected Results

The results obtained after Art Therapy were as follows. First, The Self-Esteem score improved to post-test 35 points from pre-test 16points. Secondly, The Ego-Resiliency score improved to post-test 133points from pre-test 63 points. The Emotional Stability score changed to a post-ex-post 96 score with a score of 110 as a positive effect. Fourth, the research subjects in the whole process of Art Therapy were formed intimacy with the researchers. The research subjects were able to heal painful scars while expressing inner feelings in a stable psychological state. Through the creative activities, she became confident and had positive thoughts about his future, positively affecting Self-Esteem and Ego-Resiliency, and Emotional Stability. Therefore, It was found that Art Therapy was effective in improving the Self-Esteem, Ego-Resiliency and Emotional Stability to the victims of sexual violence.

Keywords: Art Therapy, Sexual violence victim child, Self-Esteem, Ego-Resiliency, Emotional

Stability

ACMASS-0024

Will China's Trade Restructuring Reduce CO₂ Emissions Embodied in International Exports?

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China's CO₂ emission export embodied in international trade has recently attracted more attention and raises questions on the liability and responsibility for Chinese-produced environmental costs. Given that embodied emissions exports and imports are normal phenomenon during international trade, the key question focuses on China's reduction of embodied emissions exports via trade restructuring. The present study addressed the question "will trade restructuring reduce China's embodied CO₂ emissions exports".

The trade restructuring optimization model combined with the input-output analysis and multi-objective programming was established in this study to analyze China's maximum volume of embodied emissions reduction within the bearable costs, particularly economic loss and unemployment. The main objective of the trade-restructuring optimization model is the minimization of net embodied CO₂ emissions exports. The model simultaneously accomplishes the objectives of GDP and unemployment loss minimization after trade restructuring. The decision variables are the volume of exports and imports in each sector and are the focus of trade restructuring.

The research results suggest that trade-off costs on economic loss and unemployment is very high for China to reduce embodied emissions exports given that the export-oriented sectors in China are embodied CO₂ emission-intensive and are located in nearly the same sectors as the labor-intensive and high added-value exports. The reducing rates of embodied CO₂ emissions net exports are only 3.26% under the reasonable scenario. It is difficult for China to reduce embodied CO₂ emissions exports by relying only on trade restructuring. A previous policy

suggestion on the adjustment China's import-export structure has limited effects on the reduction of embodied emission exports. Employment is the principal constraint for embodied CO₂ emissions exports reductions and has not shown significant reductions even with unemployment constraint modifications. However, recent improvements in the industrial and energy consumption structures have gradually changed increasing trend of China's embodied CO₂ emission exports given that the country's trade structure originated from its economy and industry structure. Continuous improvement on the Chinese economic and industrial structures show long-term sustainable development that can further reduce CO₂ emissions and be beneficial for both China and the world.

Keywords: Embodied emissions; economic development; international trade; input-output analysis; trade-off analysis

ACMASS-0123

Language Impairment in Chinese-Speaking AD Communication

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1. Background

The present study examined the characteristics of language impairment found in the communication of Chinese speakers with Alzheimer's disease (AD). During the past decades, AD persons have been characterized both by multiple cognitive deficits and by impaired language usage in context. Gradually, their communicative ability deteriorates over the course of the disease. Hence, it is of great importance to discuss their specific discourse performance in their communication.

2. Methods

Twenty healthy seniors of Mandarin Chinese and twenty seniors of Mandarin Chinese with AD (Alzheimer's disease) in Taiwan participated in the current study. Each participant was asked to describe the Cookie Theft picture (Goodglass & Kaplan, 1983), which has been widely adopted with speakers of different nationalities. Participants' oral productions were individually tape-recorded. Recording was stopped after thirty second of silence. Discourse performance was examined from two perspectives: discourse-building features and discourse-impairing features. The former contribute to the continuation of conversation, while the latter hinder the communicative purpose of conversation.

3. Results

Participants' oral productions were compared and discussed to examine dementia effects on their discourse features. Results demonstrate that more discourse-impairing features, but fewer discourse-building ones, are found in the AD communication. A reverse pattern occurs in the healthy senior communication. Finally, implications and suggestions for further research are offered. Findings in the current study not only help to characterize the nature of language impairment in Chinese-speaking seniors with AD, but also highlight constructive directions for future clinical applications.

Keywords: Alzheimer's disease, Mandarin Chinese, dementia effects, discourse features

Poster Sessions (3)

Education / Management

Tuesday, August 15, 2017

15:30-16:30

Room 1004

ACMASS-0033

A Study on Nel Noddings's Caring Theory and Martin Buber's Thought: How Can a Teacher Respond to Unexpressed Needs of Children?

Yoshika Hoshikawa | *Kobe University*

ACMASS-0052

Job Characteristics, Job Satisfaction, and Job Involvement for Preschool Educators in Taiwan: Compared with Other Occupations

Hsin-Yu Chang | *National Dong Hwa University*

Chunn-Ying Lin | *National Dong Hwa University*

ACMASS-0059

Teaching Materials Development and Educational Practice of Intellectual Property Education in Teacher Training Course

Shigeki Ahama | *Yamaguchi University*

ACMASS-0065

Reflection on Engagement with Mental Health Clients of Undergraduate Nursing Students

Yat Kwan Alan Tsang | *The Open University of Hong Kong*

ACMASS-0074

The Influential Mechanism of Job Achievement and Turnover Intention in Taiwan: A Comparison among Preschool Teachers and Other Occupations

Chieh-Fang Chuang | *Dong Hwa University*

Chunn-Ying Lin | *Dong Hwa University*

Cheng-Hung Chen | *Dong Hwa University*

ACMASS-0076

A Novel Approach to Grouping Students in STEAM Program for Improving Social Competence

Pei-Chi Hu | *Institute for Information Industry*

Yu-Chun Cheng | *Institute for Information Industry*

Chia-Chun Lin | *Institute for Information Industry*

Chia-Heng Chen | *Institute for Information Industry*

John Liao | *Institute for Information Industry*

ACMASS-0077

Study on Relationship between Intellectual Property Learning and Learning Consciousness - Using the Method of Weighing Text Analysis -

Shihori Ahama | *Yamaguchi Prefectural University*

Shigeki Ahama | *University Yamaguchi University*

ACMASS-0083

Effects of Combined Exercise on Posture and Static Balance on Persons with Physical Disabilities

Jin Hyung Shin | *Silla University*

Kang Ho Bae | *Silla University*

Bom Jin Lee | *Silla University*

Jeong Ok Yang | *Silla University*

Joong Sook Lee | *Silla University*

In Woo Lee | *YES I CAN Development Center*

ACMASS-0113

Can Art Programs Help Enhance Development in Older Adults?

Chiharu Yasuzato | *Kobe University*

ACMASS-0117

Effects of Circuit Training on Functional Fitness and Postures in the Elderly

Kangho Bae | *Silla University*

Bom Jin Lee | *Silla University*

Jeong Ok Yang | *Silla University*

Joong Sook Lee | *Silla University*

Jin Hyung Shin | *Silla University*

Young Jin Woo | *Silla University*

ACMASS-0025

Formation of the Concept of “Yoko-eno-hattatsu ” in the 1950–60s: Focused on the Practice of Oumi Gakuen, Azami Ryou and Biwako Gakuen

Akari Unai | *Kobe University*

ACMASS-0005

A Study on Sports Tourists’ Souvenir Purchase Behavior and Preference

Chia-Ming Chang | *National Chiayi University*

Hsiu-Chin Huang | *Tatung Institute of Technology*

Tsung-Liang Lin | *Tatung Institute of Technology*

ACMASS-0015

Does Brand Love Really a Mediator to Bridge Community Members’ Brand Purchase Intentions? From the Brand Passion and Trust Perspectives

Li-Chun Hsu | *National Taitung University*

ACMASS-0050

Understanding the Knowledge Sharing Behavioral Intention: An Integration of Self-Regulation and Social Cognitive Theory

Nai-Chang Cheng | *Da Yeh University*

Shang En Yu | *Ming Chuan University*

ACMASS-0064

Building Social Support from Children’s Mental Health Communities on Social Network Sites

Chiahui Yen | *Ming Chuan University*

ACMASS-0066

A Goal Rebound Hypothesis: Sequential Friends Endorsement in Social Media

Yu-Jen Chen | *Lingnan University*

Suntong Qi | *The Chinese University of Hong Kong*

ACMASS-0072

An Empirical Study on Experiential Marketing and Customer Loyalty

Shun-Hsing Chen | *Oriental Institute of Technology*

Ying-Tung Lin | *Oriental Institute of Technology*

ACMASS-0133

How Does Cognitive Dissonance Influence Sunk Cost Effect?

Cheng Kuo-Chih | *National Changhua University of Education*

ACMASS-0033

A Study on Nel Noddings's Caring Theory and Martin Buber's Thought: How Can a Teacher Respond to Unexpressed Needs of Children?

Yoshika Hoshikawa

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1. Background/ Objectives and Goals

1-1. Background

Recently in Japan, teachers have been faced with children who, all of a sudden, refuse to go to school or even commit acts of crime, though many previously seemed like 'good students.' The question is why? Perhaps because children can't properly express their needs, or perhaps even realize what their needs are. To solve this problem, it would be effective if teachers could receive each child's need and respond to it, especially when it is not expressed or even realized through language.

Nel Noddings (1929-), a well-known scholar in the field of caring and education, says that she has been greatly influenced by Martin Buber (1878-1965). In her work, we find many points in common in the care-relation of her theory and the 'I-Thou' relation of Buber's thought. Her theory of care offers some important hints which may lead teachers to be able to respond to the unexpressed needs, the inner voice of children.

However, in her most famous work, *Caring: A Feminine Approach to Ethics and Moral Education* (University of California Press, 1984), we see a teacher who doesn't seem to respond to the students' unexpressed needs. It is important for us to understand why this teacher fails to respond to the unexpressed needs, and why Noddings allows the teacher to do so in the face of her theory. To find the rationale behind this paradox, I compare Noddings's writings with Buber's "I and Thou" and "Education."

1-2. Research goal

The goal of this study is to consider how teachers can respond to the unexpressed needs or the inner voice of children.

1-3. Objectives

I will show that the caring theory of Nel Noddings follows Buber's thought closely, but with some important differences. Subsequently, I hope to prove that Noddings's theory has this paradox because of her misunderstanding of Buber's 'I-it' relation, as opposed to the 'I-Thou' relation.

2. Methods

First, I focus on Noddings's description of a teacher's care for students. Next, I compare Noddings's theory of the care-relation between teachers and their students with Buber's thoughts on 'education,' which is based on the 'I-Thou' relation. Finally, I consider the 'I-it' relation in Buber's writing and compare it with Noddings's description of the 'I-it' relation.

3. Expected Results/ Conclusion/ Contribution

It seems to me that the reason why the teacher in Noddings's description appears to fail to respond to the children's unexpressed needs, is that the teacher has an "influence" on the children before "inclusion"; receiving the children's motives or intentions. The purpose of "influence" on children is to make them comply with the teacher's aims. Noddings says that children usually won't follow their teacher when the teacher forces them directly to obey their instructions or interferes in their activities, and it is effective, in educating children, to "influence" them by acting 'as though they did not.'

Buber, on the other hand, says that a teacher should "include" the children and feel children's needs before giving "influence" on them. Buber says that a teacher must select "the effective world," which the children need, by feeling their needs, and says that a teacher must give "hidden influence" on children by acting 'as though they did not,' when presenting this selection to the children.

One of the causes of difference between a teacher in Noddings's writing and Buber's writing is Noddings's misunderstanding about the "I-it" relation. Noddings says that "Buber places great value on feelings, telling us that they bring us messages" and "this 'inner' set of messages contains many of the revelations." However, Buber says that "the separated I of feelings (is) an uneasily fluttering soul-bird." This means that feelings belong to "I-it" and are only enjoyed by one who lives in "I-it." Moreover, Buber says that "revelations" are only received in "I-Thou" relations. Considering Buber's careful descriptions, I would say that Noddings's regard of the 'I-it' relation is incorrect.

In conclusion, teachers can respond to the unexpressed needs of children by caring not as "I-it" but as "I-Thou." Teachers should care not with their feelings but with the children's needs at heart, which are known only in the "I-Thou" relation.

Keywords: unexpressed needs / care-relation / I-Thou / I-it / influence / inclusion

ACMASS-0052

Job Characteristics, Job Satisfaction, and Job Involvement for Preschool Educators in Taiwan: Compared with Other Occupations

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Abstract

1. Background/ Objectives and Goals

Due to the policy for the integration of kindergartens and nursery schools, classes in Taiwanese kindergartens have been staffed with both preschool teachers and educare givers. They share similar job content and yet are treated differently at salary, performance evaluation, and employment benefits. The specific consequence that this policy gives rise to on the job satisfaction and job involvement of preschool educators, is worth studying. Common sense seems to indicate its importance, but we lack empirical support. In light of this concerns, the main purpose of this study is to develop a influential model and used job characteristics as mediating variables to analyze how occupation variables affect an individual's job characteristics, subjective job satisfaction, and job involvement as well as compared the characteristics of such job situations between preschool educators and other occupations workers. The current study concludes with implications for theory, research, and practice.

2. Methods

By using the job characteristics as the mediating variable of the job satisfaction and job involvement of preschool educators, the aim of this study is to find out how satisfied the educators feel about their job and the connection between job satisfaction and work effort. The method to carry out this study was using a survey, which included questions and statements to which the participants were expected to respond anonymously. Via questionnaires, this study conducted a sampling investigation of citizens throughout Taiwan in 2016. The number of valid samples was approximately 2,112. The analysis used the Spss statistical software package. First, descriptive statistics were computed. Second, a series of hierarchical regression analysis was used with different groups of predictors and refers to path analysis to examine the influential relationship among different occupation workers, job satisfaction, job involvement, and several mediators in the analytical model.

3. Results/ Conclusion

The result showed that:

1. The job satisfaction of preschool teachers is above other kinds of occupation, and so are their work effort. The job satisfaction of educare givers is evidently lower than that of preschool teachers and other occupations. The job characteristics of preschool teachers are superior to those of educare givers. For example, preschool teachers have a better salary, job values, self-reliance, and are more professional than educare givers. Consequently, the job satisfaction of the former is higher than the latter.

2. The devotion to the job is equal between preschool teachers and educare givers and is above other kinds of occupation. The difference in job characteristics and satisfaction between these two shows no impact.

Keywords: Educare giver, Job involvement, Job satisfaction, Preschool teacher

ACMASS-0059

Teaching Materials Development and Educational Practice of Intellectual Property Education in Teacher Training Course

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Abstract

In order to implement intellectual property in school education in Japan, we developed curriculum and teaching materials on intellectual property education in teacher training course.

In this research, I tried developing curriculum by treating problem solving learning. And, I tried the development of teaching materials to cherish the creative education.

Students in the teacher training course learned not only by listening to lectures but also by active learning. And, they were able to utilize the knowledge in practical training.

Keywords: Teacher training course, Intellectual property education, Teaching material development, Educational practice

1. Background

As knowledge-based society globalizes, intellectual property education is becoming a focus in Japan. Universities are expanding education about patents, copyrights, etc., while they simultaneously also engage in education to foster creativity.

In the "Intellectual Property Promotion Plan 2016" by the Japanese government, it is recommended to set up opportunities to learn intellectual property among primary schools and junior high schools.

In higher secondary schools, intellectual property education is conducted in the course of learning industries, agriculture, and economics. And at elementary and junior high school, problem solving learning etc. are done.

Also, investigative research has begun about introducing intellectual property education in elementary school. Up to now, school education has tackled creative education in a great number of ways, but there has been little development of curriculums or teaching tools concerning patents, etc. In order to have intellectual property education permeate school education, it seems necessary to train and develop teachers in charge of educational guidance, to develop good

quality teaching materials, and to implement these in education.

Therefore, in this research, the departments who train teachers in elementary schools, junior high schools, and high schools developed teaching materials for the sake of appropriately performing intellectual property education, and tried actually teaching it.

2. Curriculum development of intellectual property education

Intellectual property education at primary schools and junior high schools in Japan is to be taught in technology education, art education and music education. However, what is actually written in textbooks is limited to technology education and the like. Therefore, in order to promote intellectual property education in school education, improvement of intellectual property education in teacher training and teacher training is required.

In order to perform education about intellectual property through the educational departments that train schoolteachers, we must start by developing curriculums and teaching materials. In this research, we aimed to hold courses about intellectual property, not only creating an understanding of laws and systems, but also teaching the proper use of written works, cultivating a respectful attitude toward others' inventions and works, and cultivating creative abilities.

Therefore, we decided to develop from information ethics learning to creativity learning and to implement active learning. The conceptual diagram is shown in Fig1.

In the actual implementation of the curriculum, classes in the first school year were held to teach the laws and systems of intellectual property, and teachers took classes about methods of using intellectual property and developing creativity.

The outline of the syllabus shown in Table 1.

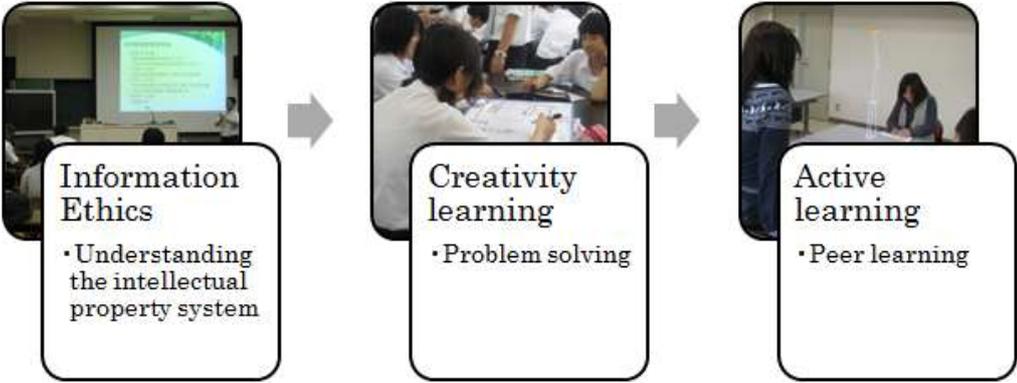


Fig. 1: Conceptual diagram

Table 1: Syllabus(Basic Intellectual Property)

Basic Intellectual Property	
■ Aim of the course	The main aims of this course are to study intellectual property and to deepen knowledge and understanding
■ Course Prerequisites	There are no particular prerequisites for this course.
■ The contents of this course	1: Introduction: What is Intellectual property 2: Copyright System1 3: Copyright System2 4: Fair use of copyrighted material1 5: Fair use of copyrighted material2 6: Industrial property rights system1 7: Industrial property rights system2 8: History of invention(world) 9: History of invention(Japan) 10: Thinking of devising1 11: Thinking of devising2 12: Workshop of ideas1 13: Workshop of ideas2 14: Workshop of ideas3 15: Workshop of ideas4
■ Grading	will be based on attendance, reports, and assessment of performance in the classroom

3. Development of teaching materials for intellectual property education

In order to give educational guidance about intellectual property, it is necessary to organize knowledge about systematic intellectual property. To that end, in this research, we aimed to have students understand intellectual property while learning to use it in a relevant way, become aware of nearby intellectual property, and have an attitude of devising and creating. We show examples of teaching materials actually developed in this study(Table 2).

Table 2: Examples of teaching materials

Intellectual property system	Learning of law, history of invention Ex) Learning of laws by learning textbooks and learning of laws by watching video teaching materials (Fig 2.)
Use of appropriate works	Quoting workshop Ex) Exercise to quote Internet sentences to create a report
Intellectual property in life	Search for patents applied to stationery etc. Ex) Search for patents related to the manufacture of mechanical pencils and erasers (Fig.3,4)
Creativity	Problem solving learning Ex) Workshop to hold ping pongs as high as possible in a piece of paper

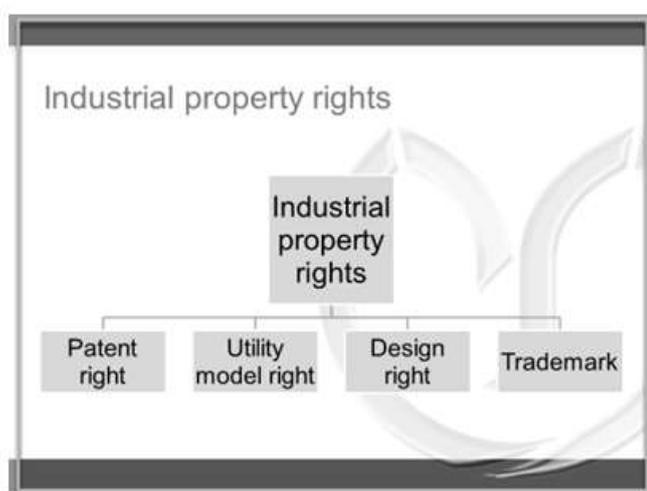


Fig. 2: Teaching material(Intellectual property system)

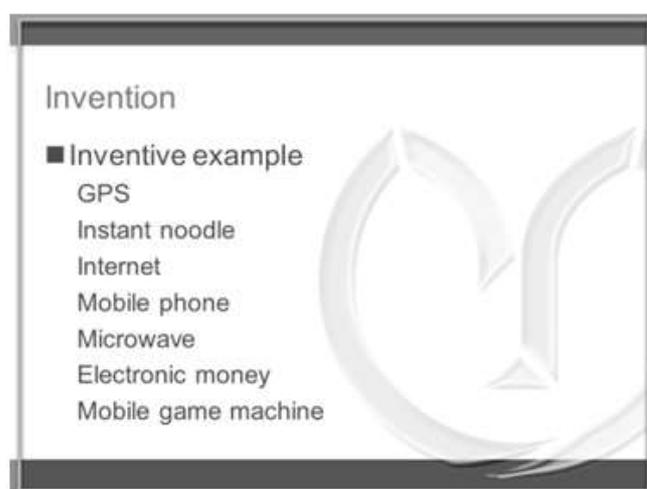


Fig. 3: Teaching material(Intellectual property in life)

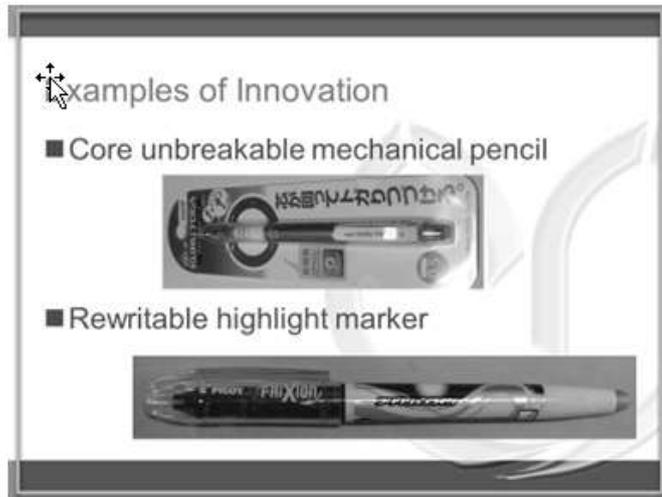


Fig. 4: Teaching material(Intellectual property in life2)

4. Educational practice of intellectual property education

The actual education performed with teaching materials developed through this research was given to students in an instructor cultivation course. They then used the knowledge they gained to teach junior high school students. Classes where students learned about copyrights were based in examples of the definitions of written works. In classes to acquire creativity, students also learned about problem solving. The state of the lecture at the university is shown in the fig.5~6. And the state of the lesson at elementary school is shown in Fig.7, the state of the lesson at junior high school is shown in Fig.8



Fig. 5: State of the lecture(university) 1



Fig. 6: State of the lecture(university)2



Fig. 7: State of the Class(elementary school)



Fig. 8: State of the Class(junior high school)

Students in the teacher training course received a lecture on intellectual property at the university and were able to deepen knowledge on intellectual property more by teaching at elementary school and junior high school.

5. Conclusions

In this research, we tried developing curriculum and teaching material to implement intellectual property education. And, it was carried out development of teaching materials in the following key points.

- Intellectual property system
- Use of appropriate works
- Intellectual property in life
- Creativity

The findings of this study, although carried out the intellectual property education in school, found a problem in the learning evaluation and teacher training.

6. References

Intellectual Property Promotion Plan 2016

http://www.kantei.go.jp/jp/singi/titeki2/kettei/chizaikeikaku20160509_e.pdf

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ACMASS-0065

Reflection on Engagement with Mental Health Clients of Undergraduate Nursing Students

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1. Background

Therapeutic relationship is the foundation of mental health nursing to help clients adjust and adapt to problems arising from mental disorders and challenges of human development. Mental health nurses need to engage the clients to establish the relationship. Undergraduate nursing students develop and advance the skills of engaging the clients during their clinical placement in different natures of mental health settings during their training. The aim of the study was to explore the experience of undergraduate nursing students to engage the mental health clients during their first clinical placement.

2. Methods

This was a qualitative approach of study to allow an in-depth understanding on how the novice nursing students engage their clients. Purposive sample was used to recruit 14 year-one undergraduate nursing student who attended their first clinical placement in a mental health rehabilitation day centre. Using Gibbs model of reflective cycle (Gibbs, 1988), the participants wrote journals to reflect their experiences to build relationship with the clients during the 3-week clinical placement. Gibbs model of reflective cycle is a 6-stage of reflection composing of (1) description of what had happened during the process of engaging the clients; (2) feelings of what they were thinking during the process; (3) evaluation of the good and bad experiences during the engagement; (4) analysis to reflect on the experiences; (5) conclusion on how to improve engagement skills; and (6) action plan on what to do in next encounter with clients. The reflective journals were analysed by content analysis with three procedural steps, including coding, grouping of descriptive codes into sub-themes and drawing themes from sub-themes.

3. Conclusion

Three themes emerged after data analysis. Being incompetent was the negative feelings and reactions of the participants after their attempts to engage the clients failed. The clients either refused to communicate with the participants or refused to disclose their problems. Keep trying was about the participants to appraise the rationales of failure and sought ways to improve their interpersonal skills and getting to know the characteristics of clients that they wanted to engage. Sense of achievement was the participants adopted interpersonal skills specific to the clients with desirable outcomes. The findings revealed that engagement with mental health clients was a

dynamic process. Undergraduate nursing students experienced knowledge-practice gap during the process of engagement with the clients. Guidance and supervision of the clinical mentors were vital to facilitate these novice nursing students to develop and polish their skills of engagement with client with different mental health and developmental problems.

Keywords: engagement; therapeutic relationship; novice mental health nursing students;

4. Reference

Gibbs, G. (1988). *Learning by Doing: A Guide to Teaching and Learning Methods*. Oxford: Further Education Unit, Oxford Polytechnic.

ACMASS-0074

The Influential Mechanism of Job Achievement and Turnover Intention in Taiwan: A Comparison among Preschool Teachers and Other Occupations

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1. Background

For organizational and school development, the importance of facilitating job achievement and diminishing turnover for members that benefits organizational development and management cannot be over emphasized but few studies in the educational field have conducted in-depth discussion. In Taiwan, studies on this issue have been rare, in particular, for ~~those~~ at the comparison among different occupation workers. Furthermore, the preschool stage, as enlightened education, exerts a huge influence on the psychological and physical development and social adjustment of individuals at later stages. It then indicates the necessity of studies on the influential mechanism and the difference in job achievement and turnover intention among preschool teachers and other different occupation workers. Based on related research, this study developed an influential model and used job characteristics as mediating variables to analyze how occupation variables affect an individual's job achievement, turnover intention and compared preschool teachers and workers in other occupations by job characteristics. The results of this study will promote understanding of preschool teachers' levels of job achievement and turnover intention compared with other workers and propose suitable suggestions/references to relevant educational policy, practices and other studies.

2. Methods

By self-designed questionnaire, this study conducted a sampling survey on the present work situations of preschool teachers and other occupation workers in Taiwan. From the perspectives of educational level, income, and job characteristics (such as job variety, job identity, job significance, job autonomy, job fatigue and job feedback), this study explored preschool teachers'

job achievement and turnover intention, and compares them with those of other occupation workers . Researchers first sent out questionnaires to sampled workers in 2016, and consequently a total of 2126 copies were returned. The present study used SPSS 16.0 statistical software to analyze and test the theoretical model and the hypotheses. The significant level of statistical test was.05.

First, descriptive statistics was used to describe the individual demographic and background variables, distribution of participants as well as the overall status of job achievement, turnover intention, and several mediators (such as educational level, income, and job characteristics) . Second, a series of hierarchical regression analysis was used with different groups of predictors and refers to path analysis to examine the influential relationship among different occupation workers , job achievement, turnover intention, and several mediators. According to Baron and Kenny (1986) , in the path analysis of this study, the mediational mechanism needs to meet the following conditions: (1) individual's occupations and job characteristics must affect job achievement; (2) individual's occupations and job characteristics must affect turnover intention; (3) job achievement must affect turnover intention; and (4) if above conditions hold ture, the effect of occupations, job characteristics and job achievement on turnover intention must be less in the analysis equation. This study analyzed and explained relevant data according to the above principles.

3. Results/ Conclusion

The results showed that preschool teachers had lowerer levels of job achievement and higher turnover intention than workers with different occupations. A further path analysis suggested that many variables associated with job characteristics had positive significant effects (ex. job identity, job significance, and job feedback) and negative effects (ex. job fatigue) on worker's job achievement. Additionally, job fatigue aslo had negative effect on turnover intention through mediation of job achievement. Due to disadvantage in several job characteristics, preachool teachers exhibited realtvely lower levels of job achievement than most workers with different occupations. Their higher turnover intention was a result of their lower job achievent and disadvantage of job characteristics. Finally, based on the research findings, suggestions were proposed as a reference for the policy, practices and further researches.

Keywords: job achievement, job characteristics, preschool teacher, turnover intention, occupations

ACMASS-0076

A Novel Approach to Grouping Students in STEAM Program for Improving Social Competence

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1. Objectives

Knowledge Is Power Program (KIPP), America's largest network of charter schools, indicates that success of students depends on their academic performance and personal character. Their pedagogy emphasizes fostering seven character strengths including zest, grit, optimism, self-control, social intelligence, gratitude, and curiosity. Most of these strengths are improved by self-practice. However, as an integration of other strengths, social intelligence is highly related to social competence, which is an ability for people to cooperate with others in daily life. Therefore, how to group students based on their characteristics and behavior in order to build up a cooperation model is a challenging issue. This paper presents an innovative and easily accessible grouping method applying subjective questionnaires and objective brainwaves. This method is adopted to a STEAM program, which is designed as a practice of social competence, and is evaluated by the improvement of the in-class performance.

2. Methods

2.1 Multi-age homeschooling classroom

Our subjects are 10 homeschooling students, who may suffer from a lack of socialization than those in formal education school. These students range from 10 to 16 years old and include various levels of character strengths evaluated by the report cards provided by KIPP. To note that, by observing the artistic creations from these students, we found that some students depicted their experience about bullying and ostracism during previous formal education. Hence, it is essential to re-build their confidence and to re-connect them to social network.

2.2 Pre-class assessment

The purpose of the pre-class assessment is to provide teachers a brief understanding about students, and in the meantime, students can also know themselves comprehensively. Before attending the STEAM program, students were asked to complete the learning style questionnaire (LSQ) (Kolb, 1984; Silver, Strong & Perini, 1997). Brainwaves measured by electroencephalogram (EEG) can provide an objective assessment for the status of people, such as emotion, concentration, and pain (Hu, 2014). For conventional EEG devices used in brain-computer interface (BCI), the use of conductive gels between sensors and the head is

necessary to acquire the signals. Therefore, it is difficult for EEG to be applied to students in class. This project adopts wireless BCI devices with comfortable dry electrodes to make the experiment more portable and flexible. The students went through a set of EEG experiments requiring concentration. The EEG signals were analyzing by statistical model to obtain the characteristics of the students. Along with the LSQ, we can classify the students into multiple groups according to social diversity for their further learning procedure in the program.

2.3 STEAM program

The development of technology provides an insight for learning process (Jonassen & Land, 2012). The curriculum used in this project is STEAM program which stands science, technology, engineering, arts and mathematics. Among these five fields, we suggest that technology plays an important role in STEAM program because our current environment is surrounding by various digital devices. Therefore, to increase the learning motivation of students, we design a robot-making program, in which students can explore their imagination to make their own robots. During hand-on curriculum, not only the field of technology but other aforementioned fields were also involved in the learning process. When extending the STEAM program for social competence, students conducted a survey about interested robots, and shared the case with their partners and teachers. During the presentation, students raised their own thoughts for further discussion with their partners in the following hand-on course. Based on guidelines and example codes provided by teachers, students can accomplish their codes for making their robot for each group. Once accomplished, they can present their robots by live-streaming through the Internet with other students in formal education school. In this way, they can receive comments and construct their confidence for leaning. During the course, teachers observed and recorded the learning procedure of each student by the KIPP character report cards.

3. Expected Results

By using the proposed methods, we expect to find an optimized grouping strategy to increase the learning efficiency and efficacy of the students. The group is determined by both LSQ as well as EEG and will undergo a STEAM program to make a robot. The records in KIPP report are used as an evaluation of the improvement of learning achievement for each group. Through the successive practice and peer-cooperation, we suggest that the social competence of students can be progressively improved

4. Acknowledgements

We would like to thank the Industrial Development Bureau, Ministry of Economic Affairs, Taiwan for the funding and their support of this project. This research was supported by the Integrated and International Intelligent Learning Industry Program.

Keywords: social competence, grouping, STEAM program, brainwave

ACMASS-0077

Study on Relationship between Intellectual Property Learning and Learning Consciousness

- Using the Method of Weighing Text Analysis –

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Abstract

Intellectual property education is implemented in each country in order to support each national policy. However, there are few practical studies that take into consideration the learning awareness of learning. In this research, we attempted to analyze the transformation of the consciousness of learners through learning related to intellectual property based on qualitative analysis. As a result, through studying about intellectual property, it was suggested attitudes to understand learning contents with parties' consciousness. Furthermore, at the beginning of learning, we recognized intellectual property as law and right, but at the end of learning, attitude to understand intellectual property as one of everyday life was seen. However, on learning intellectual property also learning difficulties were seen. From this, it is necessary to develop teaching materials that can continuously have interests of interest.

Keywords: Intellectual Property Learning, Learning Consciousness, Weighing Text Analysis , Text Mining

2. Background

With the globalization of businesses and corporations, there is an increasing awareness of intellectual property in business. In this social context, some advanced countries are teaching intellectual property in their schools, and are incorporating intellectual property in their business education, creativity education, and many other aspects. However, studies on the theory and effectiveness of learning intellectual property are limited, and it is important to test the effectiveness and results of learning, the need for intellectual property education, the continuity of learning, and the teaching materials' ordering, system, and selection. In this study, the learner's thoughts on intellectual property education conducted in the first year of higher education—a career preparation stage—was investigated from a quantitative approach.

3. Methods

2.1 Analysis method

To solve the impact of the leaning contents about intellectual property to the career of learners and the industry of leaners, I have done the research in target of university students. I have done research on the item of making, creative and motivate for intellectual property in the class before and after class about intellectual property in the target of freshmen. The target is 2000 freshmen students in national universities. The search period is April to June 2013. The data for research is analyzed quantitatively by SPSS 23.0. Also, to solve the learning motivation, the text mining as quantitative analysis has done. KHCoder is used for the text mining.

Weighed text analysis was carried out for the free description obtained by the targeted question. According to Higuchi, one of the Dictionary-based approaches and the Correlational approach has been adopted as a method of quantitatively analyzing textual data in metric text analysis.

The Dictionary-based approach is a method of classifying words and documents according to coding standards created by analysts. This advantage allows you to freely manipulate the analyst's theory and problem awareness and freely focus on various aspects of data. However, subjective coding rules and standards may only be created and used. On the other hand, the Correlational approach is an approach to classify words and documents by multivariate analysis. This advantage can eliminate the theory and problem awareness held by the analyst and can summarize and present the data. However, automatic segmentation and summarization of words is limited, and it is difficult to freely manipulate and pursue theory and problem awareness.

Higuchi (Higuchi 2013) and others have proposed and integrated KHCoder as a system suitable for categorization of Japanese textual data after proposing to integrate the two approaches in a manner complementing each other. In this research, we analyze learner's description data using this statistical software. KHCoder eliminates "manual work" that can be arbitrary in choosing a vocabulary, summarizes and presents the entire data by multivariate analysis, and opens the coding rule. Therefore, it enables both freedom and objectivity in manipulation. Even in this research, we will attempt to capture the features of each question while ensuring objectivity by expressing and disclosing the details of the operation and summarizing and presenting the data by multivariate analysis.

For the subject of analysis in this research, the answered sentences were examined and analyzed for each question. After the text of the descriptive data of the resulting sentence from the investigation, to apply the morphological analysis by means of a metering text analysis, it was carried out a study and discussion from the extracted keyword. The targeted statistics are shown in Table 1.

Table 1: Description of the samples

	1 st Lesson	End of Lesson
--	------------------------	---------------

Total number of extracted words(use)		3,586(1,285)	14,965(5,725)
Different number of words	Extraction	587	1,262
	Use	429	999
	Sentence	139	499
	Paragraph	83	119

2.2 Analysis data and educational practice

In order to grasp the learning situation of the learner and questions and doubts about the lesson, we set up a time of about 10 minutes at the end of each lesson and conducted a report to reflect on learning. The report compares the intellectual property of the learner with "what you already knew", "B. what you did not understand in this lesson" and "C. what you want to know about intellectual property in general" Respectively. In addition to the content dealt with in the lesson, the student made a reply describing the idea of intellectual property that the learner feels in his daily life.

This study was conducted with the small report as the survey form and analyzed. The survey was "Science and Technology and Society (Intellectual Property Introduction for First Year Education)" and 122 students (number of registered students). The period of the survey was seven lessons offered in April - June 2013.

This class is positioned as the first annual education (liberal arts education) and emphasizes not only basic knowledge about intellectual property (copyright and industrial property rights) but also practical contents. In order to deepen mastery of knowledge, learners themselves decided to proceed classes while filling in print teaching materials. In the lesson, we also picked up familiar examples of learners and set up opportunities to think about how to deal with them. In industrial property rights, we dealt with patents, design rights and trademark rights, and explained the search and utilization of intellectual property strategy and patent information of companies and others.

The learning objectives of this lesson are shown below.

- 1) Understanding the overall picture of intellectual property,
- 2) To formulate initial intellectual property correspondence ability on the theme of familiar case such as knowledge of intellectual property required at the time of report and paper preparation,
- 3) To realize the value of intellectual property in social activities

4. Results

In this research, in order to elucidate the learner 's consciousness in intellectual property education in the first annual education, we analyzed the description for learning. Weighed text analysis was used for analysis method.

3.1 Vocabulary extraction

We conducted morphological analysis on texts obtained by free description. To further improve accuracy, unknown words were excluded. Table 2 shows the results of the extracted frequency vocabulary.

As a result, the extracted vocabulary at the time of the first lesson and the last lesson greatly increased. This suggested that the interest in the intellectual property increased through learning. From the extracted vocabulary, from the first lesson (table 2), "vocabulary", "intellectual", "work", "patent", etc. which are vocabulary related to intellectual property rights were seen. From this, it was suggested that they understand intellectual property as rights. Also, in the final class (table 3), in addition to the vocabulary related to the right, "thinking" "knowing" "myself" "understanding" etc was seen. From this, it was suggested that they had consciousness of the parties through classes. The vocabulary related to "myself" was found higher in class at the last round compared to that at the time of class, so it became clear that understanding of the lesson contents was carried out with the consciousness of the parties.

Furthermore, a description related to concrete rights was seen from the last lesson (table 3). From this, it became clear that intellectual property as knowledge was also acquired.

Table 2: Highly expressing vocabulary (1st Lesson)

抽出語	出現回数	抽出語	出現回数	抽出語	出現回数
知る	59	簡単	3	期限	2
財産	48	関わる	3	起こる	2
知的	41	関連	3	疑問	2
思う	36	機関	3	強い	2
著作	25	技術	3	系統	2
権利	22	教える	3	現代	2
特許	22	今後	3	効果	2
商品	21	産業	3	講義	2
授業	15	使う	3	高校	2
学ぶ	14	使用	3	国際	2
他	12	取れる	3	今	2
自分	11	手	3	最近	2
詳しい	11	商標	3	作品	2
聞く	10	少し	3	始まる	2
興味	9	色々	3	思いつく	2
場合	9	新案	3	事例	2
アイデア	8	深い	3	持つ	2
気	8	身	3	時間	2
守る	8	人	3	実用	2
内容	7	前	3	種類	2
たくさん	6	知的	3	書く	2
デザイン	6	着ける	3	紹介	2
感じる	6	中国	3	色々	2
作る	6	得る	3	触れる	2
社会	6	番組	3	食品	2
申請	6	必要	3	深める	2
知識	6	付ける	3	世の中	2
問題	6	物	3	生活	2
機能	5	分かる	3	説明	2
今日	5	保護	3	全く	2
取る	5	いつ	2	多く	2
出来る	5	いろいろ	2	大丈夫	2
侵害	5	お金	2	中身	2
身近	5	それぞれ	2	程度	2
調べる	5	アップル	2	適用	2
発生	5	アニメ	2	認める	2
理解	5	トミー	2	売る	2
意匠	4	ネーミング	2	発想	2
基準	4	マジック	2	販売	2
言葉	4	メリット	2	番号	2
細かい	4	意味	2	分類	2
出る	4	違い	2	便利	2
初めて	4	違反	2	勉強	2
登録	4	育成	2	漫画	2
面白い	4	一番	2	様々	2
すべて	3	引用	2	利用	2
アンケート	3	音楽	2	裏側	2
タカラ	3	科学	2	話	2
ユニーク	3	開発	2	ある程度	1
一つ	3	期間	2	お菓子	1

Table 3: Highly expressing vocabulary (End of Lesson)

抽出語	出現回数	抽出語	出現回数	抽出語	出現回数
思う	223	大変	16	物	9
授業	115	教師	14	毎回	9
知る	112	特に	14	楽しい	8
権利	107	保護	14	活かす	8
著作	94	スライド	13	頑張る	8
自分	90	受講	13	具体	8
財産	89	書く	13	事例	8
知的	80	付ける	13	色々	8
理解	68	良い	13	他人	8
学ぶ	65	感じる	12	注意	8
内容	58	機会	12	判断	8
講義	57	見る	12	必ず	8
分かる	51	最初	12	必要	8
特許	49	作る	12	すべて	7
難しい	46	事	12	レポート	7
出来る	45	実際	12	意識	7
受ける	41	習う	12	違法	7
今	40	初めて	12	一つ	7
知識	38	情報	12	引用	7
多い	35	生きる	12	産業	7
社会	34	多く	12	子ども	7
意匠	28	シート	11	自身	7
考える	28	ダウン	11	重要	7
たくさん	27	ロード	11	触れる	7
侵害	27	学べる	11	新しい	7
勉強	27	関係	11	身の回り	7
聞く	26	時間	11	生徒	7
今回	25	商品	11	普段	7
少し	24	大学	11	ある程度	6
高校	23	部分	11	それぞれ	6
将来	22	利用	11	意見	6
身近	22	ワーク	10	違う	6
技術	20	関わる	10	改めて	6
例	20	教育	10	細かい	6
言葉	19	今後	10	実用	6
詳しい	19	持つ	10	取る	6
人	19	出る	10	手	6
覚える	18	知れる	10	場面	6
興味	18	本当に	10	新案	6
商標	18	テスト	9	身	6
説明	18	意味	9	先生	6
問題	18	違い	9	中学	6
様々	18	驚く	9	調べる	6
科学	17	使う	9	頭	6
学習	17	守る	9	日常	6
気	17	前	9	非常	6
教員	17	全く	9	忘れる	6
深い	17	大切	9	面白い	6
生活	17	得る	9	絡む	6
教える	16	発明	9	話	6

3.2 Co-occurrence network

As a next step, co - occurrence network analysis was tried based on the description data of the

sentences obtained from the survey. In a co-occurrence network, words are linked with words that are similar in terms of appearance patterns, that is, words and words that can draw a network connecting lines with strong co-occurrence degrees with lines. Depending on the degree of relationship and the number of times described in the sentences, the relationships between the vocabulary expressed and grouped are larger for words with more occurrences, and are drawn with thicker lines as the degree of co-occurrence is stronger be able to. For this time, we focus only on distance and placement to confirm the relationship between vocabulary. Regarding the strength of the cooccurrence relation, for all combinations of the words to be analyzed, the Jaccard coefficient representing the similarity between sets was calculated. A network was drawn using a line for a similarity / co-occurrence relation with appearance pattern obtained by setting the Jaccard coefficient value to 0.2 or more. In consideration of these conditions, the vocabulary was adjusted so as to correspond to less than the top 5% of frequent vocabulary among the number of vocabulary expressions in all class lessons in order to compare and examine the relation between vocabulary.

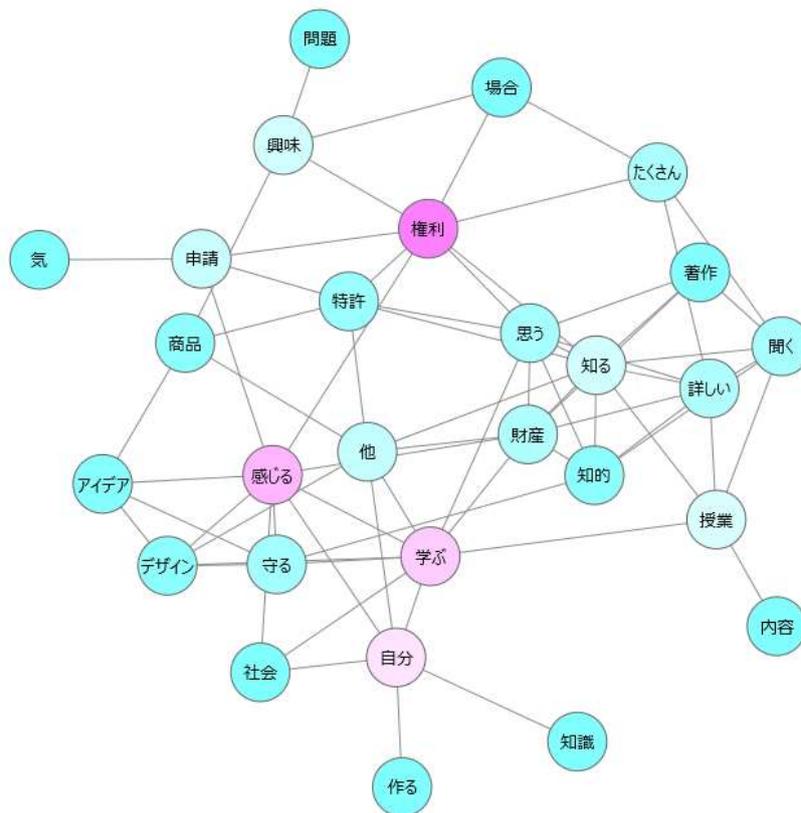


Fig. 1: Co-occurrence network (1st Lesson)

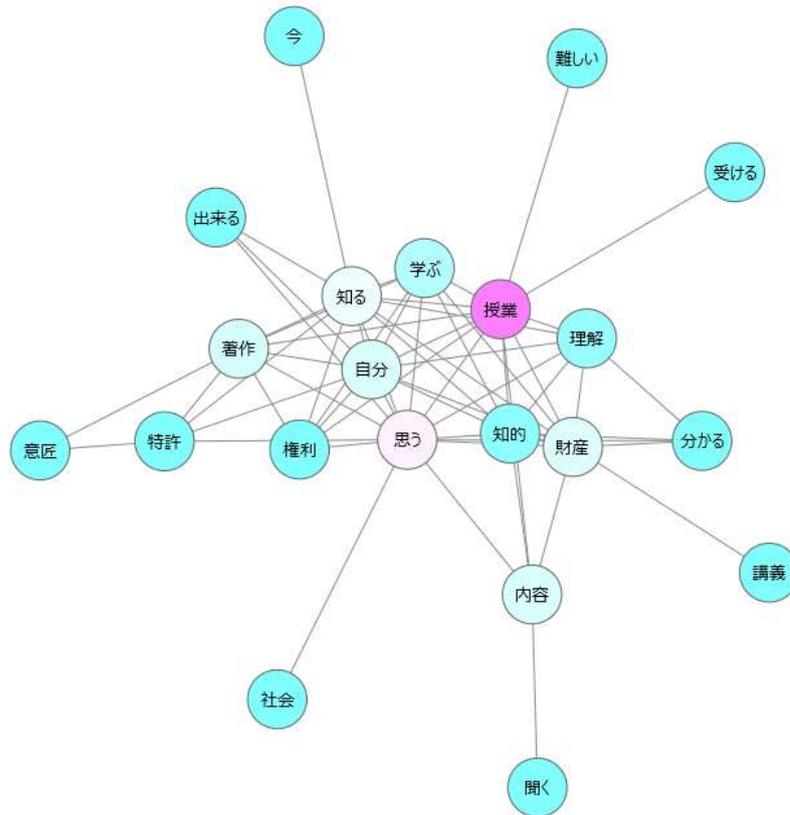


Fig. 2: Co-occurrence network (End of Lesson)

As a result, in the first lesson, vocabulary such as "thinking", "patent", "interest" was seen centered on "right". From this, it was suggested that the intellectual property was recognized as a right and participation in learning was attituded.

However, in the co-occurrence network obtained in the last lesson class, the vocabulary related to the evaluation of the lessons such as "understanding" "myself" "learning" etc. was expressed centered on "class". From this, it was suggested that through classes, the parties were conscious of intellectual property, the understanding and motivation to learn were improved.

Also, although the first lesson was focused on "right", in the final lesson, since "classes" were the focus, it was decided that from the intellectual property which is positioned as "right", as a place of learning It turned out to be transforming into intellectual property.

At the time of the last lesson, vocabularies such as "difficult" and "many" showing learning difficulties were presented to the co-occurrence work. From this, we were able to confirm one side that felt the difficulty of learning content.

5. Consideration

In this research, attempts were made to elucidate changes in learners' consciousness in intellectual property learning based on qualitative analysis. Quantitatively we used metric text analysis for analysis. What I wanted to analyze was "I would like to know about intellectual property in general". This is because the question was judged to be optimal for measuring learner

motivation and needs.

As a result, it was suggested that learners are trained to understand intellectual property with parties' consciousness through learning. In addition, at the beginning of learning we recognized intellectual property as "rights", but attitudes toward understanding intellectual property closely through learning were seen. However, on the other hand, 'learning difficulties' were seen in learning intellectual property. From this, it will be expected to develop learning materials and build learning environments to enhance learning in the future and continue interests of interest.

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ACMASS-0083

Effects of Combined Exercise on Posture and Static Balance on Persons with Physical Disabilities

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1. Background/ Objectives and Goals

Provided with the importance of rehabilitation, the purpose of this study was to investigate the effects of combined exercise on body posture and static balance in persons with physical disabilities.

2. Methods

Eight men with physical disabilities were recruited from a local disability sport center in K Metropolitan city in Korea, as the participants of this study. All participated in a 24-week combined exercise program (80 min. & twice a week) was developed and implemented in this study. In measuring the Body Mass Index(BMI), the X-Scan Plus II (Accunic, Co., Korea) was used. Also, the Gaitview AFA-50 (alFOOTs Co., Korea) was used to measure the static balance. The participants were asked to take off their shoes and stand on the Gaitview. The movement of the center of pressure in eye-open was measured (20 seconds/times). The Stance width was determined by the shoulder width of each participant. The participants were also asked to fix their gaze to 15° degrees below to minimize the measurement error during the eye-open. For the

body alignment, a whole body posture analysis system (Shisei Innovation System PA 200, Japan) was used. These measuring devices analyzed non-alignment of body and the gradient angle of neck-pelvis, the difference in height of the shoulder-pelvis, asymmetry rate, and rotation of limbs.

3. Expected Results/ Conclusion/ Contribution

There were statistically significant differences in the total length and sway velocity. Results also revealed that the mean values of all the variables in the participants were smaller than before participating in the combined exercise program. However, no significant differences existed in forehead, back of the head, shoulders, cervical vertebrae, ASIS, PSIS although the mean values were decreased in all variables.

This study showed that a combined exercise program has potential to positively influence persons with physical disabilities on their body posture, as well as static balance. It could be overcome unused muscles and to improve the function of the affected side of one's body by causing positive changes in the area of the cerebral cortex. Therefore, it can be concluded that combined exercise with sufficient duration was expected to have a positive effect on correcting postural balance in persons with physical disabilities.

Keywords: Combined Exercise, Physical Disabilities, Body Alignment, Static Balance

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ACMASS-0113

Can Art Programs Help Enhance Development in Older Adults?

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Background and Objectives

The aim of this study is to collect qualitative data that shows the relationship between the activity of learning art and developmental change among older adults. The research shows that creativity increases even though cognitive ability declines in later life. Art has the potential to give a feeling of fulfillment for older adults. Creativity is not the only benefit, art activities have been shown to have a positive impact on illness and aging in developmental studies on both physical and mental health. G. Kohen, for example, developed a theory of 4 stages based on “inner climate” caused by formational changes in the brain. J. Fisher, divided older adulthood into 5 developmental stages and described major changes, transitions and the establishment of new goals and activities.

Based on previous literature and research results, I analyze the collected qualitative data and see if activity of learning art enhances development in older adults.

Methods

In 2016, I interviewed 8 Japanese adults, aged from 65-73 who had attended art classes for more than 6 years. The classes were held in private art schools or community programs for seniors in Hyogo Prefecture, Japan.

The research method was semi-structured interview style. None of the interview questions were about the art curriculum or the instructors directly. Instead, the interviewees were asked to tell stories about why they started learning art and why they kept doing it.

I analyzed the interview data by using the qualitative research method, the “Modified Grounded Theory”, designed by Kinoshita which is a modified version of the “Grounded Theory” by Glaser and Strauss for better use by practitioners.

Findings and Results

First, I analyzed the data qualitatively based on Fisher’s developmental theory, to see what stage students were in based on their life course events. The results found five in stage 3, which refers to “revised lifestyle”, one in stage 2, “early transition”, and the remaining two in stage 4 “later transition”.

Second, the student’s consciousness and actions described in the interview data were analyzed based on Kohen’s developmental framework. Here, I found that they were all in the same stage, “liberation”. Kohen explained that stages were effected by age, life course events, such as death of spouse, end of financial support for children, and using special social support. Physical condition such as contraction of a serious disease or losing body movement function would also affect the stages people were found in.

The first finding, was that the all students were in different stages in Fisher’s theory based on life course changes. The second finding, was that all the students were in the same stage in Kohen’s theory. The disparity between these two findings on developmental change in the same group of people, caused me to take another look at the key word “liberation” in the interview stories. As a result, I found 3 different phases in the “liberation” stage as shown below.

3 rd phase	Independent	Sense of individuality, engagement and self-direction in life
2 nd phase	Liberation	Free in life, thought and society
1 st phase	Stability	Financial, physical and mental support Awareness of finitude

Fig.1 3 phases of developmental transition found in Kohen’s “liberation”

The phases seem to follow one after the other. Each phase has its own requirements which convey a psychological condition, which were also revealed by this study.

3 rd phase	Social bonding, positive divergent thinking Expectations and hopes (“I still have something to gain or could do better than before”).
2 nd phase	Freedom and release from social obligation. Quest for new experiences.
1 st phase	Acceptance of end of life. Physical and mental health. Financial help and social welfare.

Fig.2 Suggested requirements to advance from each phase

The above findings imply that the 3rd phase defines some significant aspects of successful aging. This means that when the students experience the 3rd phase, they have achieved successful aging. Since they show progress from one phase to another by participating art activities, art programs for older adults in the community have the potential to contribute to the enhancement of development and successful aging. However, these qualitative research findings are still tentative, more qualitative research combined with empirical research with a larger number of subjects

should be conducted in the future.

Keywords: art program, developmental change, older adults, liberation

ACMASS-0117

Effects of Circuit Training on Functional Fitness and Postures in the Elderly

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1. Background/ Objectives and Goals

The purpose of this study was to investigate the positive effects of circuit training on the physical function (SFT) and posture in the elderly. In relation to functional fitness, we investigated effects of circuit training on upper and lower body strength, aerobic endurance, upper and lower body flexibility and dynamic balance. Regarding posture, the parts of head, shoulders, waist, knees and the whole posture was investigated.

2. Methods

The subjects of the study were 21 elderly who attending the Senior Academy in S University. After selection of 21 people in the experimental group by the sampling method (n=10) and control group (n=11) were selected in this study.

The experimental group was conducted 8 weeks throughout the 20 minutes of aerobic exercise, strength training cycle, trunk stabilization exercise, control group did not have any restrictions. In this study, we used the Shisei innovation system in order to measure posture(head, shoulders, waist, knees and the whole posture) of the elderly, and measured physical functions by using

SFT test(Chair stand, Arm Curl, Chair Sit-and-Reach, Back Scratch, 2.4m Up & Go and 6-minute Walk).

3. Expected Results/ Conclusion/ Contribution

The results of this study indicated that statically significant differences in Chair stand, Arm Curl, Back Scratch, 2.4m Up & Go and 6-minute Walk in the experimental group. Also, it showed a significant improvement in knee stance after the circuit training.

It was concluded that circuit training has positive effects on the functional fitness and correcting posture in the elderly.

Keywords: Functional fitness, Circuit Training, Posture, SFT, Elderly

ACMASS-0025

Formation of the Concept of “Yoko-eno-hattatsu ” in the 1950–60s: Focused on the Practice of Oumi Gakuen, Azami Ryou and Biwako Gakuen

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1. Background/ Objectives and Goals

The concept of “Yoko-eno-hattatsu” is Japanese original ideas. It had created through practice and research at Oumi Gakuen (welfare facility for mental disabled children in Shiga Japan), Azami Ryou (welfare facility for mental disabled girls and women in Shiga Japan) and Biwako Gakuen (welfare facility for severe disabilities in Shiga Japan) in 1950-60s. It means qualitative development of people with severe disabilities. Before this concept was created, people with severe disabilities have not seemed to develop. But when we change our eyes not only to step up the phase of development but also qualitative development by the concept of “Yoko-eno-hattatsu”, we have become to capture their development.

There are many methods or index to catch the development of people with severe disabilities, however “Yoko-eno-hattatsu” is a quite unique concept in catching the fullness of life or personal fulfillment. In this study, I clarify the process to be formed the concept of “Yoko-eno-hattatsu ” in the 1950–60s in Japan.

2. Methods

To achieve this objective, I analyzed the historical materials of Oumi Gakuen, Azami Ryou, and Biwako Gakuen. And I also analyzed the literary work of leaders of Oumi Gakuen and Biwako Gakuen (such as Kazuo Itoga-the first principal of Omi Gakuen, Hidehiko Okazaki-the first principal of Biwako Gakuen, Masato Tanaka-the foreperson of research room of Omi Gakuen). Then I described the process to create the concept of “Yoko-eno-hattatsu” through practice and research at Oumi Gakuen , Azami Ryou, Biwako Gakuen.

3. Conclusion

The concept of “Yoko-eno-hattatsu” has been created through mainly three periods as follow. 1: 【Groundbreaking years】 The practice of the group named “Suginoko-gumi”(the group for severe disabled children) at Omi Gakuen and the practice of mentally disabled girls at Azami Ryou in 1953-1960. 2: 【Nurturing years】 The practice under the new education system at Omi Gakuen in 1961-1963. 3: 【Verification years】The practice for the most severe disabled children at Biwako Gakuen in 1963-1966.

Through these practice , Itoga , Okazaki and Tanaka have come face-to-face with children's hearts and established a sympathetic relationship. They have found even the children had severe disabilities, they express their own emotion or will. And they pointed that if we established a sympathetic relationship with people even they have severe disabilities, we might catch their qualitative development what you call "Yoko-eno-hattatsu".

It is also found that through creating the concept of "Yoko-eno-hattatsu", Itga, Okazaki and Tanaka had to change their value of the development itself, because the concept of the "development" has only meant stepping up the phase and determined "what the children can do". Itoga, Okazaki, and Tanaka had to fight for awareness of "Yoko-eno-hattatsu" in 1960s . Their efforts to create "Yoko-eno-hattatsu" lead to evolve the education for severe disabilities these days in Japan.

Keywords: "Yoko-eno-hattatsu", qualitative development, people with severe disabilities, the practice at welfare facilities

ACMASS-0005

A Study on Sports Tourists' Souvenir Purchase Behavior and Preference

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Abstract

In recent years, it has been popular to hold a variety of sports events. The purpose of this study is to investigate sports tourists' souvenir purchase behavior and preference in Taiwan. This study enrolled the participants of sports events in Chiayi County/City as the research subjects, and used convenience sampling to conduct a questionnaire survey where 317 questionnaires were returned. According to the data analysis on sports tourists' souvenir purchase behavior in Taiwan, this study found that approximately 60% of participants would purchase souvenirs and the purposes of purchasing souvenirs were mainly to send them as gifts and for personal use. Most of the participants spent less than a half day on purchasing souvenirs, the mean amount of money spent on each purchase of souvenirs was NTD 1076.29, and the mean number of souvenirs purchased each time was 2.94 souvenirs. According to the analysis on souvenir purchase behavioral preference, this study found that the highest proportion of souvenirs purchased was local specialties, and the lowest proportion of those purchased was labels.

Keywords: Sports Events, Souvenir Consumption, Local Specialties

1. Introduction

1.1 Research Motives

Tourism and leisure activities are widely accepted as the no-chimney industries with the highest development potential in the 21st century, as well as the issues and activities aggressively promoted by governments and private enterprises in various countries around the world. Besides, the daily life of people in Taiwan is almost inseparable from leisure and tourism. Considering people's growing needs for leisure, tourism, health, and sports, the government and private operators have aggressively promoted sports and tourism in recent years, and sports events have

particularly been the focus of tourism industry development (Chiu & Lee, 2006; Cheng, 2008).

Hinch and Higham (2001) indicated that the definition of sports tourism is: consumers participating in sports-based tourism activities outside their place of residence within limited time. The features of sports as noted herein are as follows: competitions with specific rules and physical skills, as well as the nature of fun and joy (Hwang & Wu, 2005). Nogawa, Yamaguchi and Hagi (1996) indicated that sports tourists can be divided into 3 types: (1) event participants: participants who participate in a well-planned sports event mainly with a main purpose to go travelling, and sports events can be divided into competitive and non-competitive events; (2) event spectators: the main purpose of tourists is to watch a sport event; (3) sports lovers: participants participating in sports tourism due to their own interest. Liu (2002) indicated that during tourism, tourists usually will purchase products or souvenirs with local features. For example, Huang, Lin, Chang and Chen (2017) investigated sports tourists' behavioral model of purchasing souvenirs, and found that 63.2% of sports tourists would purchase souvenirs. Most of them purchased souvenirs for personal use and to send them as gifts (46%). Yang (1999) indicated that tourists' purchase of souvenirs is not only to obtain material satisfaction, but also to create a beautiful memory of tourism.

Therefore, the places where sports events are held should strengthen the promotion of features of souvenirs to increase the visibility of souvenirs to consumers (Chang, Huang, Lin, & Lu, 2015). In addition, holding a large-scale well-organized event will attract actual participants belonging to sports tourists, as well as spectators encouraging athletes and watching the event. Therefore, holding large-scale events can attract a large crowd of people and create many consumer behaviors. For example, all of the sports tourists participating in the University and College Games in 2002 (not including the locals) spent an average of NTD 1355.41 per day, and the total amount of consumption within the 5-day event was approximately NTD 17 million. As a result, sports tourists' consumer behavior is a market worthy of attention and development (Liu & Yeh, 2002). Therefore, the purpose of this study is to investigate sports tourists' souvenir purchase behavior and preference in Taiwan, in order to provide the research results as reference for units holding sports events to develop souvenirs and create a higher local economic effectiveness.

2. Methods

2.1. Research Subjects

This study enrolled participants in sports events in Chiayi County/City as the research subjects, and used convenience sampling to ask people about whether they had participated in any sports events or large-scale sports activities at entrances of parks, swimming pools, sports clubs, and department store. Those whose answer was "Yes" were invited to complete the questionnaires, with a total of 317 valid questionnaires returned. According to the analysis on the basic information of participants, there were 170 male subjects (53.6%), and 147 female subjects

(46.4%). The age of 34 subjects was under 20 years old (10.7%), that of 129 subjects was 21-30 years old (40.7%), that of 88 subjects was 31-40 years old (27.8%), that of 58 subjects was 41-50 years old (18.3%), and that of 8 subjects was over 51 years old (2.5%). For marital status, 112 subjects were married (35.3%), 200 subjects were unmarried (63.1%), and 5 subjects were divorced or widowed (1.6%). For educational background, the educational background of 6 subjects was junior high school and under (1.9%), that of 44 subjects was (vocational) senior high school (13.92%), that of 228 subjects was university (71.9%), and that of 39 subjects was graduate school and above (12.3%). For monthly income, the monthly income of 111 subjects was NTD 20,000 and less (35.0%), that of 139 subjects was NTD 20,001-50,000 (43.8%), that of 48 subjects was NTD 50,001-80,000 (15.1%), and that of 19 subjects was NTD 80,001 and above (6.0%) (Please see Table 1).

Table 1 Descriptive Stabilities of Participants' Basic Information

Variables	Groups	Number of Times	Percentage
Gender	Male	170	53.6
	Female	147	46.4
Age	Below 20 years old	34	10.7
	21-30 years old	129	40.7
	31-40 years old	88	27.8
	41-50 years old	58	18.3
	Above 51 years old	8	2.5
Marital status	Married	112	35.3
	Unmarried	200	63.1
	Divorced or widowed	5	1.6
Educational level	Below (including) junior high school	6	1.9
	Senior high school and vocational school	44	13.9
	University	228	71.9
	Graduate school and above	39	12.3
Monthly income	NTD 20,000 and below	111	35.0
	NTD 20,001-50,000	139	43.8
	NTD 50,001-80,000	48	15.1
	80,001 NTD and above	19	6.0

2.2 Research Tools

This study referred to the studies by Hang, Lin, Chang and Chen (2017), Chang, Huang, Lin, and Lu (2015), Liu and Yeh, (2002), Gordon et al. (1986), and designed a total of 15 items concerning basic information of sports tourism, behavior of participating in sports tourism, souvenir purchase behavior, and the type of souvenirs preferred to purchase.

2.3 Data Analysis

After the questionnaires were returned, this study excluded invalid questionnaires, and used SPSS 21.0 for software archiving and data analysis. The analysis methods included descriptive statistics, chi-square analysis, and multiple-answer questions analysis.

3. Results

3.1. Analysis on Participants' Behavior of Participating in Sports Tourism

For the analysis on participants' behavior of participating in sports tourism, the types of sports in which the participants participated are as shown in Table 2. The chi-square test $\chi^2=129.57$ ($p<.05$) reached a statistical significance, suggesting that most of the participants participated in other sports and ball sports, and less of them participated in martial art sports. For the method of participating in sports events or activities, the chi-square test $\chi^2=48.73$ ($p<.05$) reached a statistical significance, suggesting that most of the participants actually participated in sports events, and less of them watched the game aside and encouraged the athletes. For the events or large-scale sports activities in which the participants frequently participated, the chi-square test $\chi^2=159.03$ ($p<.05$) reached a statistical significance, suggesting that most of the participants participated in running activities, and less of them participated in swimming activities. For the analysis on the number of times of sports events or large-scale sports activities in which the participants participated in the past year, 37 of them participated in them for 0 times (11.7%), 1 of them participated in them for 16 times (0.3%; the highest), and the mean number of times was 2.79 times ($SD=2.76$).

3.2 Analysis on Participants' Souvenir Purchase Behavior

According to the analysis on participants' souvenir purchase behavior, whether the participants would purchase souvenirs is shown in Table 3. The chi-square test $\chi^2=10.98$ ($p<.05$) reached a statistical significance, suggesting that most of the participants would purchase souvenirs (59.3%). For the purposes of purchasing souvenirs, the chi-square test $\chi^2=10.98$ ($p<.05$) reached a statistical significance, suggesting that most of the participants purchased souvenirs to send them as gifts and for personal use (64.4%), and least of them purchased them to send them as gifts only (8.5%). For the time arranged for purchasing souvenirs, the chi-square test $\chi^2=240.51$ ($p<.05$) reached a statistical significance, suggesting that most of the participants spent less than a half day on purchasing souvenirs (53.3%), and least of them spent more than a day on purchasing souvenirs (0.9%). For the mean amount of money spent on each purchase of souvenirs, 15 of them spent NTD 0 (4.7%), 2 of them spent the highest amount of money, NTD 35000 (0.6%), and the mean was NTD 1076.29 ($SD=2975.03$). For the mean number of souvenirs purchased each time, 17 of them purchased 0 souvenir (5.4%), 7 of them purchased the highest number of souvenirs, 10 souvenirs (2.2%), and the mean was 2.94 souvenirs ($SD=2.02$).

Table 2 Analysis on Participants' Behavior of Participating in Sports Tourism

Variables	Groups	N	%	χ^2
Type of sports in which the participants usually participated	Ball sports	76	24.0	129.57**
	Water activities	35	11.0	
	Martial art	7	2.2	
	Dancing	20	6.3	
	Track and field	40	12.6	
	Biking	42	13.2	
	Others	97	30.6	
Method of participating in sports games or activities	Participating in games	159	50.2	48.73**
	Watching the games aside and encouraging athletes	58	18.3	
	Both	100	31.5	
Events or large-scale sports activities in which the participants frequently participated	Running	170	53.6	159.03**
	Swimming	24	7.6	
	Biking	43	13.6	
	Others	80	25.2	

*p<.05 **p<.01

Table 3 Analysis on Participants' Souvenir Purchase Behavioral Preference and Purchase Behavior

Variables	Groups	N	%	χ^2
Whether the participants would purchase souvenirs	No	129	40.7	10.98**
	Yes	188	59.3	
Purposes of purchasing souvenirs	Sending them as gifts	27	8.5	153.74**
	For personal use	86	27.1	
	Both	204	64.4	
Time arranged to spend on purchasing souvenirs	Less than a half day	169	53.3	240.51**
	Half day	123	38.8	
	One day	22	6.9	
	More than one day	3	0.9	

*p<.05 **p<.01

3.3 Analysis on Types of Souvenirs Most Preferred by the Participants (Multiple-answer Questions)

For the analysis on participants' souvenir purchase behavioral preference, the results of the multiple-answer questions analysis showed that 612 times totally of 5 types of souvenirs were completed by 317 participants. The order of the proportion was: 224 times of local specialties (36.6%; the highest), 82 times of labels (13.43%; the lowest), as shown in Table 4.

Table 4 Analysis on Participants' Souvenir Purchase Behavioral Preference

Variables	Reaction Value		Percentage of Observed Values	
	Types	Number		Percentage
Type of souvenirs most preferred by participants	Images	119	19.4%	37.8%
	Landscape content	90	14.7%	28.6%
	Symbols	97	15.8%	30.8%
	Labels	82	13.4%	26.0%
	local specialties	224	36.6%	71.1%
	Total	612	100.0%	

4. Conclusion and Suggestions

4.1 Conclusion

Sports tourists in Taiwan usually participated in ball sports, and less frequently participated in martial art. For the method of participating in sports tourism activities, most of them actually participated in the events, and less of them watched the game aside and encouraged athletes. For the events or large-scale sports activities in which the participants frequently participated, most of the participants participated in running events, and less of them participated in swimming events. The mean number of times of participation in sports events or large-scale sports activities in the past year was 2.79 times.

According to the analysis on sports tourists' souvenir purchase behavior in Taiwan, approximately 60% of participants would purchase souvenirs, and the purposes of purchasing souvenirs were mainly to send them as gifts and for personal use. Most of the participants spent less than a half day on purchasing souvenirs, and the mean amount of money spent on each purchase of souvenirs was NTD 1076.29. The mean number of souvenirs purchased each time was 2.94 souvenirs. For the analysis on souvenir purchase behavioral preference, this study found that the proportion of local specialties was the highest, and that of labels was the lowest.

4.2 Suggestions

According to the research results, this study proposed the following suggestions: 1) sports tourists mainly purchased souvenirs to send them as gifts and for personal use. During the purchase of products, sports tourists would take into account the feasibility and appearance. Therefore, operators should design souvenirs with local culture and features. For example, mountainous areas holding sports events are advised to use the totems designed by the indigenous people or local residents as the packaging feature. Moreover, the packaging design should conform to the concept of green and reusable resources to enable products to achieve effective use and reduce environmental damages. 2) Sports tourists mainly preferred local

specialties during the purchase of souvenirs. Local specialties refer to products combined with local ingredients for manufacture, such as Suncake, Pineapple Cake, Alishan High Mountain Tea. It is advised to use advertisement, network, and cooperation with TV stations to promote local specialties and increase visibility. In recent years, most of the tourists will search information online to understand famous local specialties. Therefore, online promotion is also very important.

3) In recent years, many county and city governments in Taiwan have used voting activities to choose top 10 local souvenirs to enable souvenirs with local features to win the recognition of the public with high quality and attract sports tourists to choose to purchase them as gifts for friends and family.

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ACMASS-0015

Does Brand Love Really a Mediator to Bridge Community Members' Brand Purchase Intentions? From the Brand Passion and Trust Perspectives

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1. Background/ Objectives and Goals

The effect of the Internet and social media on consumer behavior has recently begun to exceed the effect of traditional marketing strategies. Therefore, numerous enterprises have begun to use social media to communicate with brand users, and social media has become the optimal tool for brand marketing. This study developed an integrated model to determine the effect of brand love on community members' brand purchase intentions from brand trust and passion perspectives. The purposes of this study were thus as follows: (a) to determine the individual effect of brand trust and passion on brand love; (b) to explore the individual effect of brand trust, passion, and love on brand purchase intentions; and (c) to investigate the mediation roles of brand love.

2. Methods

The research targets in the present study were consumers who had purchased products from the cosmetic brands in Taiwan and had been a member of a related official Facebook fan page for half year. Overall, 322 valid samples were collected in this study. We employed structural equation modeling to examine our model. 5 hypotheses were supported and excellent model fits to the data were obtained.

3. Expected Results/ Conclusion/ Contribution

In this study, we identified two crucial paths: brand trust → brand love → brand purchase intentions; and brand passion → brand love → brand purchase intentions. A customer–brand relationship based on these two paths can be a successful and long-term relationship. Moreover, this study revealed that brand love all had mediating effects.

Finally, from a management perspective, a unique brand spirit and characteristic can affect brand trust, and brand passion is crucial for strengthening the relationship between community members and brand manufacturers. Community managers must thus understand how to maintain such relationships. Brand love played a critical role in our research model, but these qualities cannot be formed overnight. Therefore, how brand manufacturers can strengthen the relationship between community members and their brands is an urgent issue.

Keywords: Facebook fan page, brand trust, brand love, brand passion, brand purchase intentions.

ACMASS-0050

Understanding the Knowledge Sharing Behavioral Intention: An Integration of Self-Regulation and Social Cognitive Theory

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1. Background

This research aimed to investigate how social cognition affects individual knowledge sharing behavioral intention, by applying self-regulation theory to understand how the relevant factors affect such behavior.

We examine how goal-oriented environment factors affect the knowledge sharing intention through their effects on self-regulation mechanisms.

This study is concerned with the role of personal factors and environment influences in individual behavior.

In this study, we take the organizational environment as an exogenous factor and personal cognition as an endogenous factor to affect knowledge sharing intention. To this end, two complementary social theories are applied in this study: social cognitive theory and self-regulation mechanisms.

2. Methods

In order to validate the measurement model, this paper assessed content validity, convergent validity and discriminant validity. The research model and hypothesized relationships were empirically tested using the structural equation modeling (SEM) approach.

We examined the data with correlation, and regression analyses. Confirmatory factor analysis (CFA) was applied to test the adequacy of the measurement model with AMOS 16. A total of 230 IT workers from 10 organizations were valid responses in this research, giving a response rate of about 76%.

Finally, this study develop the posited relationships and hypotheses about knowledge sharing self-efficacy, knowledge sharing intention, self-efficacy and goal-oriented organizational climate.

3. Conclusion

This study has the following implications for individuals hoping to encourage knowledge sharing practices within their organizations. First, this study finds that goal-oriented organizational climate significantly influences goal-setting and knowledge sharing self-efficacy, but it cannot increase the ability of individual self-regulation. In addition, this study confirms that goals motivate people to exert the necessary efforts to meet task demands. By setting specific goals, managers will be able to work with employees to assist them in learning effective methods to achieve their targets.

Second, this study finds that goal-setting is an antecedent of personal social cognition. Third, this result also confirms that individual self-regulation is important predictors of the behavioral intentions. In other words, knowledge sharing behavioral intention would achieve through high self-regulation. Third, Organizational climate is likely to have positive benefits and compatible beliefs about promoting knowledge sharing. Finally, Goals offer an important means to promote the use of self-regulation strategies, as well as for individuals to develop skills and beliefs in their own achievements.

Keywords: knowledge sharing, social cognitive theory, self-regulation, self-efficacy, organizational climate

ACMASS-0064

Building Social Support from Children's Mental Health Communities on Social Network Sites

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1. Background/ Objectives and Goals

The aims of this paper are to understand the effects of social support and the factors influence member's participation intention in online support groups of social network services/sites. Online health support group is the most common community to facilitate users' ability to interact with peers facing similar health problems and as a result better meet their immediate needs for social support. Online support groups of SNS allow members to communicate over the Internet by exchanging messages with like-minded individuals who have the same health condition and have been through similar experiences, in order to support one another and exchange social support, information and advice. While people use online support group for a wide range of needs, obtaining mental health support is one of the key benefits of engagement in online support group. According to World Health Organization (WHO), it is nearly 1 in 5 children experience a mental disorder that severe enough to seriously affect their daily functioning at home, school or within the community.

Social support can be defined as functions performed for a distressed individual by significant others, and the provision of social support can be conceptualized as support providers' active participation in receivers' stress management efforts. We divide research framework into three phases. We adopt support activities as antecedents of coping strategy dimension, in turn, s coping strategy dimension facilitate psychological outcomes. This study proposes that informational support and tangible support have a positive effect on member's self-efficacy, while esteem support, emotional support, and companionship influence self-esteem. Self-efficacy has impact on member's subjective well-being and knowledge sharing intention. Self-esteem decreases stress and self-stigma, in turn, can facilitate member's participation intention in mental health community.

2. Methods

The survey was conducted at online support groups for parents of children with mental disorder, including Attention-deficit/hyperactivity disorder and Autism spectrum disorder.

3. Expected Results/ Conclusion/ Contribution

The result of this study will understand members' participation intention in a support group. The

findings will also provide useful guideline for health professionals to realize how to use appropriate strategies to support parents and caregivers.

Keywords: Social network services/sites (SNS), Online support group, Virtual community, Social support, Children's mental health, Self-efficacy, Self-esteem, Subjective well-being, Knowledge sharing, Stress, Self-stigma, Participation intention

ACMASS-0066

A Goal Rebound Hypothesis: Sequential Friends Endorsement in Social Media

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Abstract

Consumers are frequently exposed to repeated product information from various sources. Sometimes, the information is sent by the company, while sometimes an endorsed message is posted by friends on a social network. Not surprisingly, a friend-endorsed message tends to be more persuasive since it's perceived as more credible. However, literature typically focuses on a single message transmission and does not pay much attention to investigate the effectiveness of social endorsement in a sequential and repeated exposure context. For example, will social endorsement be more effective during initial exposure or during subsequent exposure?

In this study, we study the role of social endorsement appearing at different stages in a context of sequential information exposure. We propose and test a goal rebound hypothesis in two studies. Goal-rebounding occurs when an individual encounters two conflicting goals and the pursuit of focal goal will temporarily inhibit the desirability of the secondary goal, which will rebound to be more desired after the achievement of the focal goal (Kopetz et al. 2012).

We suggest that consumers will have two conflicting goals when facing a sponsored advertisement in their social network. First, an advertisement on social network tends to be targeted by inferring and assessing consumer's interests revealed in the social network, the preference by her connected friends, or consumer's recent online searching behavior. The sponsored advertisement, regardless of the presence of social endorsement, is expected to be more relevant and interest a consumer. Therefore, we consider this as a first goal-learning goal. A learning goal is a common goal for consumers on the Internet when they are seeking for information (Hennig-Thurau et al. 2004). On the other hand, the decision of whether taking action in response to technology (e.g., a unfamiliar brand website) may be associated with certain risk. In fact, Mick and Fournier (1989) suggested that consumers try to reduce perceived risk before acquiring technology. We consider such a desirability to reduce risk for responding to a new technology as risk reduction goal.

While a learning goal pulls consumers to respond favorably, the presence of risk reduction goal should put them away from taking risky action. In other words, the two goals are competing and conflict. We expect the risk reduction goal to be the focal goal for consumers who have little or no experience visiting the website sponsored in the advertisement. Importantly, We suggest that people will inhibit the pursuit of secondary goal (i.e., learning goal) and pursue the focal goal when it is made salient. However, when consumers see a socially endorsed advertisement later, the risk reduction goal will be attained and the initially inhibited learning goal will become even more desirable (Kopetz et al. 2012).

We tested our hypothesis by designing experiments. Study 1 shows a basic social endorsement effect on brand interest. Study 2 demonstrate that a social endorsed advertisement is more effective when presented in the later stage than in the initial stage. We do expect to conduct a few more studies in the future to closely examine our goal rebounding hypothesis. Below the two completed studies.

Study 1 was a 2 (social endorsement presence vs. absence) x 2 (website familiarity: high vs. low) between-subject design. We manipulated the first factor, social endorsement, by presenting the free coupon ad with or without friend's endorsement cues. We added a second factor, website familiarity, to ensure robustness of our findings. Specifically, we used two different websites to ensure external validity: a well-known site Groupon and a less-known site Seize the Deal, where a free \$10 Amazon coupon was given their websites. To claim the coupon, participants need to connect their Facebook account to the company's Facebook fan page. We predicted that the advertisement endorsed socially will result in higher behavioral intention, which is our main dependent measure. As predicted, we found a positive social endorsement effect on message-congruent behavioral intention for both high familiar ($M_{\text{presence}} = 4.73$ vs. $M_{\text{absence}} = 3.98$; $t(97) = -1.87$, $p < .05$) and low familiar brand ($M_{\text{presence}} = 4.25$ vs. $M_{\text{absence}} = 3.41$; $t(98) = -1.65$, $p < .05$).

Study 2 used two experimental conditions, social endorsement present only at initial information stage or at the subsequent stage, to test our goal rebounding hypothesis. Participants were presented a donation advertisement two times. The two advertisements were only slightly different in the wordings, but a friend endorsement cue was presented either in the first or second advertisement. We measured willingness to click the advertisement after participants viewed the two advertisements. Consistent with our goal rebounding hypothesis, participants reported higher willingness when when exposed to social endorsement in the subsequent stage than in the initial stage ($M_{\text{subsequent}} = 2.74$ vs. $M_{\text{initial}} = 1.98$, $t(78) = -2.19$, $p < .05$).

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ACMASS-0072

An Empirical Study on Experiential Marketing and Customer Loyalty

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Abstract

As industrial sightseeing becomes even more popular among general public these days, Industrial Development Bureau, Ministry of Economic Affairs has been actively assisting traditional factories in transforming into sightseeing factories with product manufacturing function, historical & cultural significance, and sightseeing & recreational value ever since 2003. Tourism factories have been considered as tourist attractions which would exert direct impacts on tourism industry and tourist behavior in the days to come. Since traditional marketing strategies can no longer meet modern customer demands, experiential marketing has become a new option for the business owners. Under experiential marketing from Taiwan Nougat Creativity Museum, this study is mainly designed to assess visitors' satisfaction and loyalty towards the brand after they visit the tourism factory.

Keywords: experiential marketing, tourism factory, customer loyalty

1. Introduction

1.1 Research background

Due to the change in the industrial structure, traditional factories have gradually declined and have been replaced by tourist factories with the focus on experiential marketing. Today, tourist factories combine art and culture, education, and tourism in order to promote features, history, and creativity of the local industry. As tourist factories have become a new trend of tourism, traditional industries gradually transformed themselves into tourist factories to offer consumers integrated experience in manufacturing, culture and service. Since 2003, Ministry of Economic Affairs of Taiwan has implemented the project to encourage traditional industries to transform into tourist factories. Over the past 10 years, 128 manufacturers have successfully transformed themselves into tourist factories and created a lot of derivative income.

1.2 Research purpose

According to the background and motivation mentioned above, the purpose of the research is to understand the development of tourist factories in Taiwan, visitors' satisfaction with experiential marketing of tourist factories, and customer loyalty. The purpose of the research is described as follows:

- 1 To understand the operation and current status of tourist factories.
- 2 To understand visitors' satisfaction with experiential marketing of tourist factories.
- 3 To understand customer loyalty to experiential marketing of tourist factories.
- 4 To understand the relationship between experiential marketing and customer loyalty.

2. Literature review

2.1 Tourism factory

Food manufacturers have gradually transformed themselves into tourist factories to offer consumers integrated experience in manufacturing, culture and service. Since 2003, Ministry of Economic Affairs of Taiwan has implemented the project to encourage traditional industries to transform into tourist factories. Over the past 10 years, 128 manufacturers have successfully transformed themselves into tourist factories and created a lot of derivative income. According to the statistics, the number of tourists reached 5 million in 2010, which created income of 1.4 billion; in 2012, the number of tourists reached 10 million, which created income of 2 billion. This shows that tourist factories in Taiwan are popular and worth visiting. Today, the scale of tourist factories becomes expanded. Tourist factories in the category of food are the most popular among consumers, which account for 60% of total tourist factories.

2.2 Evaluation dimension of experiential marketing

Pine and Gilmore (1998) believed that an abundant, attractive and intriguing experience contains four experiential forms: entertainment, educational, escapist, and esthetic; Schmitt (1999) proposed the experience module: sense, feel, think, act and relate, and captured the required dimensions based on the type of industry; Holbrook (2000) pointed out that more and more consumers loved to use products adventurously and happily, which means that customer experience has become the main trend. Holbrook (2000) divided consumer experience into fantasies, feeling, and fun (3Fs). According to the research conducted by past scholars, Schmitt (1999)'s experience module (sense, feel, think, act and relate) covers the dimensions proposed by most of the scholars.

2.3 Evaluation of customer loyalty

Customer loyalty is generally considered a personal attitude and repurchase. The most direct measurement is repurchase. However, some research shows that loyalty and repurchase have proved to be unequal with the development of marketing research; in other words, a loyal customer will repurchase products or service of a company, while a customer who repurchases products or service of a company is not necessarily loyal to the company.

Jones and Sasser (1995) measured customer loyalty in the following three ways:

1. Intent to Repurchase

To explore a customer’s intent to repurchase a certain product or service in the future.

2. Primary Behavior

To measure customer loyalty using actual transactions between the company and the customer. The analysis is conducted based on the latest purchase, including the time, frequency, and quantity of the purchase.

3. Secondary Behavior

Secondary behavior refers to whether a customer intends to introduce or recommend such product or service publicly in order to attract new customers.

3. Research method

3.1 Research framework

The research structure, based on the research purposes and the findings derived from the reference articles, was composed of population variables, experiential marketing variables and customer loyalty variables as follows in Figure 1:

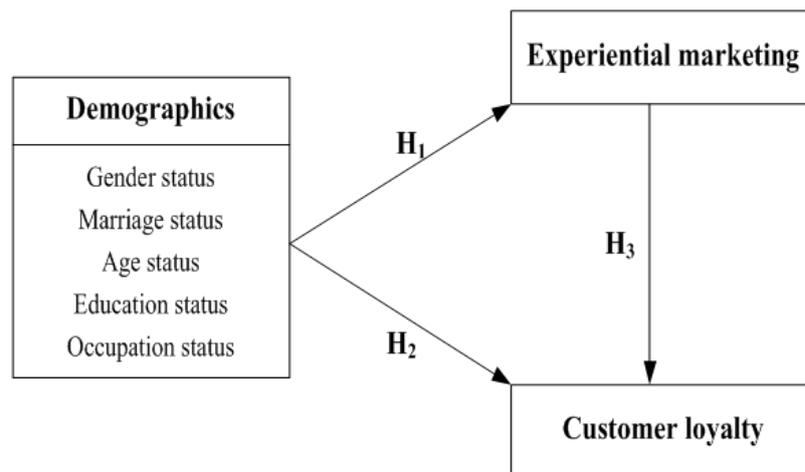


Figure 1: Research framework

3.2 Research hypothesis

Three hypotheses proposed in the research are verified as follows:

H1: Demographic data has significant differences in experiential marketing.

H2: Demographic data has significant differences in customer loyalty.

H3: Experiential marketing is correlated with customer loyalty.

3.3 Questionnaire design

The questionnaire is adopted as the research method and divided into three parts: The first part is to measure customers’ satisfaction with experiential marketing of the tourist factory. The questions are designed based on the experiential marketing scale designed by Schmitt (1999) and Huang, et al., (2005) and measured by strongly disagree (1 points), disagree (2 points), neither

agree nor disagree (3 points), agree (4 points), and strongly agree (5 point) based on Likert Five-Point Scale. The total number of the questions is 19. The second part is to measure customers' loyalty to the tourist factory. The questions are designed based on the customer loyalty scale proposed by Huang, et al., (2005) and measured by strongly disagree (1 points), disagree (2 points), neither agree nor disagree (3 points), agree (4 points), and strongly agree (5 point) based on Likert Five-Point Scale. The total number of the questions is 3. The third part is about the demographic information, including gender, marriage status, age, education, and occupation.

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ACMASS-0133

How Does Cognitive Dissonance Influence Sunk Cost Effect?

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Abstract

Regarding the sunk cost effects, previous research has unveiled a preposterous behavior where people seemingly have limited rationality. Researchers have also tried to find an appropriate interpretation for such contradictory phenomenon. The purpose of this study is to figure out such contradiction by exploring how people suffer sunk cost fallacies and the effect of cognitive dissonance. The study conducts an experimental questionnaire survey on managers of firms listed in Taiwan Stock Exchange (TSE) and Over-The-Counter (OTC). The empirical results show that cognitive dissonance does not mediate the relationship between sunk costs and willingness of continuity; however, cognitive dissonance plays a moderating role and when its magnitude is high, the level of sunk costs has increasing impacts on willingness of continuity. The results demonstrate that cognitive dissonance is independent to both sunk cost and willingness of continuity and provide another perspective for exploring the theory of sunk cost effect. Finally, suggestions for management and future research are provided.

Keywords: Cognitive Bias, Cognitive Dissonance, Sunk Cost Effect

1. Introduction

Over the past half century, research of suck cost effects has focused on exploration of probable contributory factors and how sunk cost effects influence decision-makers' willingness to continue a project. Factors including self-justification (Brockner, 1992), framing effects (Sharp & Salter, 1997), risk perception (Keil et al., 2000; Yang, Cheng, & Ni, 2009), escalation of commitment (Gunia, Sivanathan, & Galinsky, 2009), mental accounting (Soman, 2001), disposition effect (Kelly, 2004), anticipated regret (Kwak & Park, 2012), tendency to keep doors open (Shin & Ariely, 2008), personal responsibility (Staw & Fox, 1977), agency theory (Sharp & Salter, 1997), and completion effect (Mahaney & Lederer, 1999) have been identified to uncover the inherent nature of persistently burning money, time, or efforts.

Cognitive dissonance is a kind of cognitive bias. Such dissonance may lead to memory errors, inaccurate judgments, and faulty logic (Evans, Barston, & Pollard, 1983). Simon, Houghton and Aquino (2000) pointed out that certain types of cognitive bias have direct impacts on the risk perceptions of entrepreneurs and influence the way they cope with risks lurking in their decisions. There is growing interest in whether and how sunk cost affects investment behavior (Cunha &

Caldieraro, 2010). Yet, since cognitive dissonance is a kind of mental state, it's hard to observe, book or track (Cunha & Caldieraro, 2009). Thus, let alone to study the influence of cognitive dissonance on the underlying relationship between sunk costs and willingness of continuing investment.

When determining a course of action, decision-makers do know - one of the most important notions in accounting - sunk costs are historical costs and are independent of decision making (Hongren, Foster, & Datar, 2009). However, what they actually behave is against what they think. Such conflicts produce a feeling of discomfort and will cause one to change his/her attitudes, beliefs or behaviors so as to lessen or eliminate the uncomfortable feeling. Since the existence of dissonance, being psychologically uncomfortable will motivate people to try to reduce the dissonance and achieve consonance (Festinger, 1957). In the discussion of the relationship between cognitive dissonance and sunk cost effects, this study will consider both the mediation effect and moderation effect views. On the one hand, cognitive dissonance acts as a mediating variable, and it is assumed that decision maker's inconsistent cognition is caused by invested sunk costs, which in turn, influence the decision maker's decision to continue or discontinue the investment. On the other hand, cognitive dissonance is used as a moderating variable. Psychologically, the degree of cognitive dissonance is independent of sunk costs and is not correlated with either input costs nor willingness of continuity. The results of the study confirm cognitive dissonance has a moderating effect on the sunk cost effects without mediating effect. Based on the results, this study offers management recommendations for enterprise.

2. Literature Review and Hypothesis Development

2.1 Sunk Cost Effects

The sunk cost effect was defined as the tendency to continue with an endeavor after a prior investment of money, time or efforts (Arkes & Blumer, 1985). Sunk costs, which can be regarded as stimuli, provide a strong impetus to continue the investment project. In microeconomics, a rational individual facing a resource allocation problem will consider his or her preferences and limited resources to make an ideal choice among multiple alternatives. However, in reality, decision-makers are often affected by the amount of sunk costs, especially when their investment project gets into an unfavorable situation. Considering the substantial cash payout, they cannot stop or withdraw the ongoing project but only keep the project going for fear of instantly seeing the sunk costs turning into an immediate loss (Coleman, 2010). That is, individuals continue to follow a specific course of action to prevent their prior investments from being wasted.

2.2 Cognitive Dissonance

Cognitive dissonance, a cognitive bias leading decision-makers to misinterpret information, refers to a situation involving conflicting attitudes, beliefs or behaviors (Festinger, 1957). If the paradoxical sensation coexists between attitudes and behavior, decision-makers would be in an

uneasy and anxious mental condition, which may force them to try desperately to find an explanation for the discordance. When there is a feeling of inconsistency, decision-makers will naturally be prompt to seek resolutions to rule out the mental anguish, usually by struggling to find a way to change one or both cognitions to make them more consonant with one another (McElrath, 2004). Thus, things that originally seem nonsense or ridiculous would turn out to be reasonable. This phenomenon might be thought of as an individual trapped in a conflict between behavior and belief often performing a self-justification process to rationalize his or her previous actions or to psychologically protect himself or herself against a perceived error in behavior (Olsen, 2008).

2.3 Mediating Effect of Cognitive Dissonance

In a review of literature addressing sunk cost effects, Cunha and Caldieraro (2009: 105) stated that “through an effort-justification mechanism, people account for the amount of behavioral resources invested when selecting an alternative, in which case they may fall prey to purely behavioral sunk-cost effects”. Karlsson, Juliusson, Grankvist and Gärling (2002) argued that people fail to ignore prior investments mainly due to a greater motivation to minimize losses than to maximize gains. For this kind of the value-induced motivation, they would be motivated to compromise their self-interest in order to avoid a greater loss (Arkes, 1996). However, when decision-makers are entrapped in the sunk cost fallacy, although they are clearly aware that they should not continue to invest in the nonperforming or failing project, they behaviorally and constantly act otherwise. Thus sunk costs bring cognitive dissonance, and the higher the fear for loss resulting from immediate dropping-out, the larger the cognitive dissonance would emerge.

Once a decision is made, for reducing dissonance, subsequent preferences will be revealed along with an increase in the attractiveness of the chosen alternative and a decrease on the attractiveness of the rejected alternatives (Cunha & Caldieraro, 2009; Chen, Li, & Wang, 2011). Although individuals and organizations may hold strong norms for rational and goal-directed behavior, their actions generally fall far short of these ideals (Staw, McKechnie, & Puffer, 1983). Hence, people with cognitive dissonance may continue investing in an attempt to achieve success and demonstrate that their previous decisions are not poor ones. Based on this rationale, in the case of being stuck in the fallacy of sunk costs much deeper, since the level of the thrown sunk costs is increasingly higher, decision-makers with a sense of increasing dissonance will frantically seek to justify what have been done, thus expressing stronger willingness to continue the investment project. That is, decision-makers’ cognitive dissonance may be aroused by the sunk costs and then lead to the willingness of continuing the investment. Thus, cognitive dissonance plays a pivotal and intermediary role between sunk costs and willingness to continue investment. The mediating effect of cognitive dissonance is hypothesized as below:

HYPOTHESIS 1: Cognitive dissonance has mediating effects on the relationship between sunk costs and willingness to continue investment project.

2.4. Moderating Effect of Cognitive Dissonance

Decision-makers make inconsistent decisions as cognitive dissonance wobbles their rationality (Oxoby, 2003). This view holds that cognitive dissonance is caused by individual factors such as personality traits. In this case, cognitive dissonance is independent of sunk costs and may interfere the relationship between sunk costs and willingness to continue investment. When the decision-makers have high cognitive dissonance, in order to reduce the risk of high input capital waste and disgrace caused by investment failure, they will be willing to continue the investment, forcing illusive cognition to justify consciously unacceptable and conflictive behaviors or attitudes (Alfnes, Yue, & Jensen, 2010). However, when the cognitive dissonance is low, they will deal the past input costs with a rational attitude, thus the impact of sunk costs on willingness to continue investment may become uncertain. Hence, it is possible that cognitive dissonance has a moderation effect on the relationship between sunk costs and willingnesses to continue investment. When the magnitude of cognitive dissonance is considerably high, decision-makers are likely to be stuck in the sunk cost fallacy, and the level of sunk costs will pose a positive and large influence on their willingness to invest continuously; but when the magnitude is low, decision-makers may jump out of the cycle of the sunk cost phenomenon (Staw & Ross, 1987), and the relationship among the three variables becomes vague. Accordingly, the moderating effect of cognitive dissonance is hypothesized as bellow:

HYPOTHESIS 2: When the magnitude of cognitive dissonance is high, the relationship between sunk costs and willingness to continue investment project is more positive.

3. Research Methodology

3.1 Participants and Study Design

A total of 170 managers from Taiwan Stock Exchange (TSE) and Over-The-Counter (OTC) listed companies (including such industries as electronic communication, transportation, manufacturing and service, etc.) were invited to participate in this study. These subjects were given a narrative case adapting from Cheng (2014) and required to fill out a questionnaire consisting of three sections (see Appendix). In the experimental study, subjects were randomly assigned to one of four scenarios, each representing a different level of sunk costs (from 15%, 40%, 65% to 90%) and asked to read the scenario and choose the level of willingness to continue a constantly bleeding red ink investment project. The total budget and the time to completion are fixed for all four scenarios. After deletion of invalid responses, the valid sample is composed of 128 responses, resulting in a valid response rate of 75%. The numbers of valid responses from the four sunk cost groups are 33, 31, 34, and 30, respectively. The average work duration of the subjects is 11.6 years, and the average duration of service in the current position is 5.5 years.

3.2. Measures

3.2.1 *Sunk costs*

The sunk costs were set as a manipulated variable. The decision-making case was adapted from Cheng (2014) and four different scenarios with varied levels of sunk costs were developed (15%, 40%, 65%, and 90%). Subjects were randomly assigned to one of the four scenarios.

3.2.2 *Cognitive dissonance*

Cognitive dissonance can only be measured indirectly (McElrath, 2004). Woodruff (1987) pointed that cognitive dissonance can result in changed behavior and suggested using a questionnaire to gather data for research. Hence, this study adopted the emotional part of the measurement scale developed by Sweeney, Hausknecht and Soutar (2000) as a means of measuring cognitive dissonance. There are fifteen questions designed to be rated using seven points Likert scale. The magnitude of cognitive dissonance was measured by total score of the fifteen emotional response questions. A higher score indicates a higher level of cognitive dissonance. The Cronbach's alpha was 0.87 in this study.

3.2.3 *Willingnesses to continue the investment project*

Subjects were required to read and evaluate the scenario related to sunk cost effects and decide their willingness to continue the investment project. Their willingness to continue was measured using a scale ranging from 0% to 100%, with a 10% interval (where 0% indicates "definitely would not continue" and 100% denotes "definitely would continue").

In this study, the manipulation of the four different levels of sunk costs was tested by the degree of subject's willingness to continue the investment project. The result showed that the four sunk cost levels have significantly difference ($F = 6.73, p < .001$). Descriptive statistics and correlation coefficients of variables are presented in Table 1 and Table 2, respectively.

Variable	Range of theoretical score	Minimum	Maximum	Average	Standard deviation	Median
SUNK	15-90	15	90	51.67	27.84	40.0
DISSONANCE	15-105	22	67	42.67	9.61	41.5
WILLINGNESS	0-100	0	100	39.56	23.93	40.0

Note. SUNK: sunk costs; DISSONANCE: cognitive dissonance; WILLINGNESS: willingness to continue the investment project.

	Coefficient	p
DISSONANCE / SUNK	0.11	.16
WILLINGNESS / SUNK	0.40	.00***
WILLINGNESS / DISSONANCE	0.09	.21

Note. *** $p < .001$.

4. Empirical Results

4.1. Analysis of Mediation Effect

To test whether sunk costs (SUNK) affects willingnesses to continue the investment project (WILLINGNESS) indirectly under the mediation of cognitive dissonance (DISSONANCE), the study calculates the path coefficients using the following structural equations:

$$Dissonance = \gamma_{11}SUNK + \xi_1 \quad (I)$$

$$Willingness = \gamma_{21}SUNK + \beta_{21}Dissonance + \xi_2 \quad (II)$$

The variable “*DISSONANCE*” functions as a mediator when it meets the following requirements (Baron & Kenny, 1986): (1) variations in *SUNK* significantly account for variations in the presumed mediator *DISSONANCE*, that is, γ_{11} is significant in equation (I), (2) variations in *DISSONANCE* significantly account for variations in *WILLINGNESS*, that is, β_{21} is significant in equation (II), (3) When conditions (1) and (2) are controlled, γ_{21} in equation (II) is less than correlation coefficient between *SUNK* and *WILLINGNESS* as in Table 2. The results are shown in Table 3, path coefficients of γ_{11} and β_{21} are not significant. In addition, γ_{21} is not less than the correlation coefficient of two variables. Hence, these results do not meet requirements for cognitive dissonance to be a mediator. That is, cognitive dissonance has not mediating effects on the relationship between sunk costs and willingness to continue investment project. Therefore, Hypothesis 1 is rejected.

Path		Path coefficient	Estimate (standardized total effect)	z	p
(Dependent variable)	(Independent variable)				
DISSONANCE	← SUNK	γ_{11}	0.11	1.00	.16
WILLINGNESS	← SUNK	γ_{21}	0.40	4.10	.00***
WILLINGNESS	← DISSONANCE	β_{21}	0.04	0.45	.65

Note. *** $p < .001$.

4.2 Analysis of Moderation Effect

The moderation effect implies that the causal relation between independent variable and dependent variable changes as a function of the moderating variable (Baron & Kenny, 1986). That is, using DISSONANCE as the moderator, this study examined whether SUNK has much more influence on WILLINGNESS when the magnitude of DISSONANCE is high. To identify whether cognitive dissonance has a moderation effect, we use the hierarchical regression analysis and set two regression equations as follows:

$$Willingness = \beta_0 + \beta_1 SUNK + \beta_2 Dissonance + \varepsilon_1 \quad (III)$$

$$Willingness = \beta_0 + \beta_1 SUNK + \beta_2 Dissonance + \beta_3 SUNK * Dissonance + \varepsilon_2 \quad (IV)$$

To confirm cognitive dissonance having moderation effect, the coefficient of the product item ($SUNK * Dissonance$) in equation (IV) (i.e., β_3) must be significant, and the coefficient of $SUNK$ (i.e., β_1) substantially decreases comparing equation (III) and equation (IV) (Baron & Kenny, 1986). In addition, we divided the prototype samples ($N = 128$) by median value of cognitive dissonance into high and low groups, each consisting 64 subjects, and compared the two groups to identify whether the relationships between sunk costs and willingness to continue is more positive if cognitive dissonance is high.

Table 4 shows the results of the hierarchical regression analysis. The coefficient of interaction term in Panel A is significant ($\beta_3 = 0.17, p < .1$). In addition, comparing the coefficient of $SUNK$ in equations (III) and (IV), it goes from a strong ($\beta_1 = 0.35, p < .001$) to a weak ($\beta_1 = 0.19, p < .05$) relation. The two results satisfied the requirements of cognitive dissonance as a moderating variable. Thus, cognitive dissonance has a moderating effect on the relationship between sunk costs and willingness to continue investment. Panel B and Panel C in Table 4 present the results of analysis with high and low cognitive dissonance groups. No matter the degree of cognitive dissonance, the relationship between $SUNK$ and $WILLINGNESS$ is significant in both high and low dissonance groups, however, the variance in willingness explained is greater in the high dissonance group ($F = 12.02, p < .001$) than it is in the low dissonance group ($F = 5.26, p < .01$). The results also reveal that decision-makers with high cognitive dissonance cause larger sunk cost effects ($\beta_1 = 0.43$) than low cognitive dissonance ($\beta_1 = 0.29$). When faced with low dissonance, decision-makers may choose to continue investment under the influence of other factors, not limited to cognitive dissonance. Results shed light on the fact that when the magnitude of cognitive dissonance is high, the relationship between sunk costs and willingness to continue investment project is more positive. Hence, Hypothesis 2 is supported.

Table 4. Results of hierarchical regression analysis					
	Coefficient	Estimate	S.E.	t	p
Panel A: Prototype (N= 128)					
Equation (III)					
Intercept	β_0	19.58	3.17	1.78	.11
SUNK	β_1	0.35	0.08	4.41	.00***
DISSONANCE	β_2	0.10	0.04	1.43	.24
$R^2 = 0.12; F = 14.82; p = .00***$					
Equation (IV)					
Intercept	β_0	16.61	4.91	1.76	.13
SUNK	β_1	0.19	0.06	2.41	.02*
DISSONANCE	β_2	0.07	0.03	1.24	.29
SUNK* DISSONANCE	β_3	0.17	0.05	1.81	.07†
$R^2 = 0.16; F = 17.17; p = .00***$					
$\Delta R^2 = 0.04, F \text{ for } \Delta R^2 = 5.12**$					
Panel B: High dissonance (N= 64)					
Intercept	β_0	19.68	6.50	2.03	.04*
SUNK	β_1	0.43	0.15	4.47	.00***
$R^2 = 0.11; F = 12.02; p = .00***$					
Panel C: Low dissonance (N= 64)					
Intercept	β_0	24.20	7.65	1.16	.41
SUNK	β_1	0.29	0.11	2.72	.00**
$R^2 = 0.08; F = 5.26; p = .00**$					
<i>Note.</i> Dependent variable: WILLINGNESS; ***p < .001, **p < .01, *p < .05, †p < .1.					

Figure 1 illustrates the relationship between sunk costs and willingness to continue investment in high and low cognitive dissonance groups. In which, the slope of the linear relation of the two variables is steeper in the high dissonance group, as compared to the low dissonance group. In addition, the willingness of continuity is greater in case of high level of sunk costs and high cognitive dissonance, depicting the sunk cost effect is much more apparent when cognitive dissonance is high.

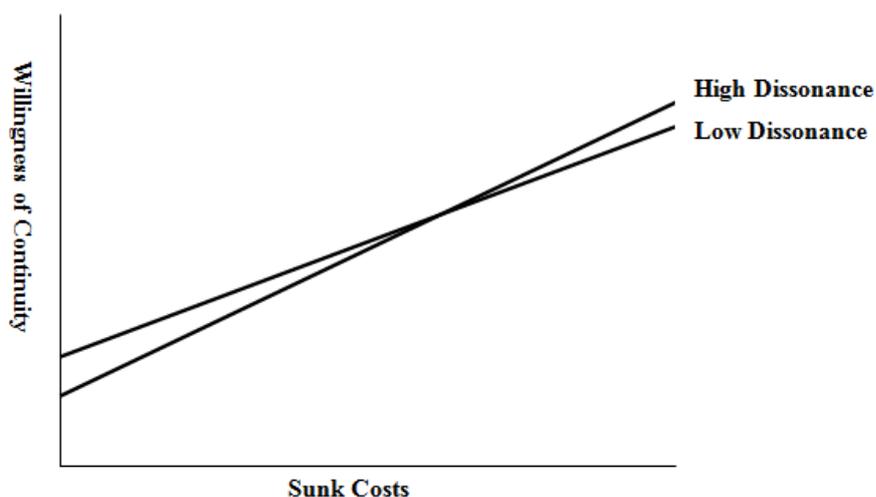


Figure 1. Sunk cost effects under in high/low dissonance

5. Conclusions

A number of findings are obtained in this study. First, the causal relationship between sunk costs and willingness to continue investment is significantly positive, confirming the existence of irrational sunk cost effects, not as mentioned in financial theory which suggests that sunk costs are irrelevant to decision-making. Second, cognitive dissonance is not qualified to function as a mediator and has no mediating effect on the relationship between sunk costs and willingness of continuity. Cognitive dissonance may stem from a number of factors, such as personality (Cheng, 2014) and culture (Weber & Hsee, 1998). But sunk costs have little influence on decision-makers' cognitive dissonance. And third, the empirical result shows that cognitive dissonance is qualified to be the moderator and the consideration of sunk costs and the magnitude of cognitive dissonance has significantly interactive effect on decision-makers' willingness to continue the investment project. In particular, when cognitive dissonance is high, the sunk costs have greater influence on their willingness, providing a sound ground for confirming the sunk cost effects.

Based on results of the study, we put forward some management recommendations. When the current investment project is likely to suffer losses and facing the problem of continuing investment, the study found that decision makers are often affected by sunk costs and tend to continue investment. Especially, when the decision maker has high cognitive dissonance, this irrational behavior is more obvious. In order to avoid the individual cognitive bias to deep the negative impact of the sunk cost effects, this study suggests that enterprises should build an early warning and prevention system, such as investment stop-loss mechanism, forcing decision-makers to terminate inefficient investment cases and avoiding greater losses. In addition, a major investment collective decision-making system is set to avoid personal factors to influence investment decisions.

Nevertheless, this study has some defects that need to be improved and readers should note. This study is based on data collected from managers of TSE- and OTC-listed companies using a questionnaire. However, responses to the questionnaire scenarios may not be entirely consistent with responses in real decision-making context. In addition, because each manager was required to answer all the items in the questionnaire, common method variance (CMV) could exist and influence our results. However, since we efficiently manipulated the experimental scenarios, the effect of CMV can be minimized. The cognitive dissonance is a psychological variable, it cannot be accurately measured. Baron and Kenny (1986: 1177) noted that "the occurrence of measurement error in the mediator tends to cause underestimation of the effect of the mediator and overestimation of the effect of the independent variable on the dependent variable when all coefficients are positive". Finally, the sample size of the empirical study after deletion of ineffective responses is not large enough. This may affect the robustness and persuasiveness of the empirical results. For future research, we suggest other social psychological factors such as

overconfidence or commitment escalation as the third variable to enrich the research issue of sunk costs effect.

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Appendix: Experimental Questionnaire

Please read the following sections carefully. Check an appropriate answer for each question based on your personal judgment and provide your personal information in the final section.

Section I: Decision-making scenario (one of four versions of the same scenario)

You are the manager of an investment planning department of an international semiconductor manufacturing company. So far, since initiation of the investment project, you have already spent 65 million dollars of the budgeted 100 million dollars. The development of the investment project is 65 percent completed and will require an estimated 6-8 months for completion. Another firm, one of the competitors in the same industry, has just launched and commenced marketing a similar product, which is reported to feature much more functionality and greater ease of use than your design. Now, you are faced with the decision of whether to continue with the investment project.

Instruction:

In your role as the manager of the investment project, please choose one of the following percentages that best represents your willingness to continue the investment project.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Section II:

Specify how you felt after you made the decision in the above scenario. Rate each question using numbers from 1 to 7, whereby **1** suggests that you **strongly disagree** with the statement, while **7** signifies a **strong agreement** with the statement.

		1	2	3	4	5	6	7
1.	I was in despair.	<input type="checkbox"/>						
2.	I resented it.	<input type="checkbox"/>						
3.	I felt disappointed with myself.	<input type="checkbox"/>						
4.	I felt scared.	<input type="checkbox"/>						
5.	I felt hollow.	<input type="checkbox"/>						
6.	I felt angry.	<input type="checkbox"/>						
7.	I felt uneasy.	<input type="checkbox"/>						
8.	I felt I'd let myself down.	<input type="checkbox"/>						
9.	I felt annoyed.	<input type="checkbox"/>						
10.	I felt frustrated.	<input type="checkbox"/>						
11.	I was in pain.	<input type="checkbox"/>						
12.	I felt depressed.	<input type="checkbox"/>						
13.	I felt furious with myself.	<input type="checkbox"/>						
14.	I felt sick.	<input type="checkbox"/>						
15.	I was in agony.	<input type="checkbox"/>						

Section III: Personal information

1. What is the degree to which you are familiar with the above-described scenario?	1 2 3 4 5 6 7 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (1 = no familiarity; 4 = neutral; 7 = fully familiar)
2. Your education degree:	<input type="checkbox"/> College <input type="checkbox"/> University <input type="checkbox"/> Graduate <input type="checkbox"/> Other _____
3. Associated industry of your company:	<input type="checkbox"/> Electronic communication <input type="checkbox"/> Transportation <input type="checkbox"/> Manufacturing <input type="checkbox"/> Service <input type="checkbox"/> Other _____
4. The name of the division you manage:	<input type="checkbox"/> Accounting <input type="checkbox"/> Finance <input type="checkbox"/> Production <input type="checkbox"/> Marketing <input type="checkbox"/> Purchasing <input type="checkbox"/> Administrative <input type="checkbox"/> R&D <input type="checkbox"/> Other _____
5. For how long have you been in this position?	_____ Years.
6. Total duration of your work experience:	_____ Years.
7. The degree of clarity of questions and description and understandability of this questionnaire:	1 2 3 4 5 6 7 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> (1 = without understandability; 4 = neutral; 7 = fully understandable)