HKICSS
Hong Kong International Conference on Social Sciences
ISBN 978-986-5654-00-9

IHTMM
International Hospitality, Tourism, Marketing & Management Conference

APCMB
Asia-Pacific Conference on Management and Business
ISBN 978-986-89844-0-0
Content

Welcome Message .................................................................................................................. 3
General Information for Participants ................................................................................... 4
International Committees ..................................................................................................... 6
  International Committee of Social Sciences ................................................................. 6
Special Thanks to Session Chairs ....................................................................................... 10
Conference Venue Information .......................................................................................... 11
Royal Plaza Hotel Floor Plan (6th Floor) ............................................................................. 12
Conference Schedule .......................................................................................................... 13
Tourism Panel Discussion ................................................................................................... 15
Oral Sessions ......................................................................................................................... 17
  Economics / Finance ......................................................................................................... 17
    APCMB-0001 .................................................................................................................. 18
    HKICSS-0034 ............................................................................................................... 20
    APCMB-0005 ............................................................................................................... 21
    HKICSS-0011 ............................................................................................................... 23
    HKICSS-0052 ............................................................................................................... 25
  Culture / Literature and Linguistics / Society / Hospitality / Tourism ............................. 35
    HKICSS-0015 ............................................................................................................... 37
    HKICSS-0041 ............................................................................................................... 44
    HKICSS-0049 ............................................................................................................... 46
    IHTMM-0003 ............................................................................................................... 47
    IHTMM-0005 ............................................................................................................... 49
    HKICSS-0062 ............................................................................................................... 53
  Management / Marketing ................................................................................................. 72
    HKICSS-0028 ............................................................................................................... 74
    HKICSS-0031 ............................................................................................................... 87
    HKICSS-0042 ............................................................................................................... 96
    IHTMM-0004 ............................................................................................................... 98
    HKICSS-0067 ............................................................................................................. 111
    HKICSS-0036 ............................................................................................................. 117
    HKICSS-0058 ............................................................................................................. 118
  Education ........................................................................................................................... 129
    HKICSS-0007 ............................................................................................................ 130
    HKICSS-0008 ............................................................................................................ 148
    HKICSS-0009 ............................................................................................................ 159
Dear scholars, academics and friends,

A warm welcome to you all.
On behalf of Higher Education Forum (HEF), it is my pleasure to greet and looking forward to meet you in Hong Kong in the conference in July 2017. This conference in Hong Kong not only provides a platform for researchers, academics and project managers to exchange and update academic knowledge but also an arena for international networking.

You may have noticed that the ecology of tourism has been changing over the last decade, especially with the advancement of technology. There are increasing online activities that are related to travel and tourism, no matter it is on budget airline, online hotel booking, shopping behaviour, consumption and cultural experience, just to name a few. The aforementioned are only a few issues that would make this conference fruitful and insightful and I am of certain that this conference will play the role of think tank, enables us to look at the issues in tourism from different perspectives.

Taking this opportunity, I sincerely hope you will enjoy the conference and have a wonderful trip in Hong Kong.

Yours faithfully,
Dr Ricky Ng
General Information for Participants

- **Registration**
The registration desk will be situated on the 6th floor at Royal Plaza Hotel during the following time:
08:30-15:30, Tuesday, July 4, 2017
08:30-11:00, Wednesday, July 5, 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.

- **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

A 60cm×160cm poster illustrates the research findings.

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<tr>
<td><img src="image1.png" alt="Poster Example" /></td>
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</table>

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
AI Faithrich C. Navarrete  University of Santo Tomas  Philippines
Alex Yao Tang  National Cheng Kung University  Taiwan
Alice H. Y. Hon  The Hong Kong Polytechnic University  Hong Kong
Amol Gore  United Arab Emirates University  UAE
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B. Suresh Lal  Kakatiya University  India
Badar Alam Iqbal  Aligarh Muslim University  India
Bayram Akarsu  Erciyes University  Turkey
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Chang Y. Lee  California State University, Chico  USA
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Cheol Park  Korea University  South Korea
Chib  Datta Meghe Institute of Management Studies  India
Ching-Yi Tien  I-Shou University  Taiwan
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Dharam Vir Mahajan  CCS university, Meerut  India
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E. Daniel Shim  Sacred Heart University  USA
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Emiko Tsuyuki  Chuo University  Japan
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Gajendra Singh  Satyawati College, University of Delhi  India
Halil Ibrahim Gurcan  Anadolu University  Turkey
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Jongkun Jun  Hankuk University of Foreign Studies  South Korea
Joseph Lau  The University of Hong Kong  Hong Kong
Joyce Zhou  Emporia State University  USA
Julia Wong  Family Justice Courts Singapore  Singapore
K. Prakash Vel  University of Wollongong  Dubai
Kaedsiri Jaroenwisan  Silpakorn University  Thailand
Kanokphon Chantarungpak  Srinakharinwirot University  Thailand
Karen Miranda Fernandez  Imus Institute  Philippines
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Kim Sangho  Ritsumeikan Asia Pacific University  Japan
Kim, Deok Man  Baekseok University  South Korea
Kimble Byrd  Rowan University  USA
Krishna Govender  AAA School of Advertising  South Africa
Kurt W. Ackermann  Hokusei Gakuen University  Japan
Lin, Hsiao-Tseng  Meijo University  Taiwan
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Linda Oshita</td>
<td>University of Hawaii</td>
<td>USA</td>
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<td>Linda Ross</td>
<td>Rowan University</td>
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<td>Maria Cristina M. De los</td>
<td>Kyungdong University-Global Campus</td>
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<td>The George Washington University</td>
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<td>Mehryar Nooriafshar</td>
<td>University of Southern Queensland</td>
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<td>Ramayah Thurasamy</td>
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<td>Reem Abed Almotaleb Abuiyada</td>
<td>Dhofar University</td>
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<td>Ricky Ng</td>
<td>Vocational Training Council</td>
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<td>Florida Agricultural &amp; Mechanical University</td>
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<td>Shaik. Feroz</td>
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<td>The Hong Kong Polytechnic University</td>
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Shujen Lee Chang  | Asia University  | Taiwan
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Soon SONG  | Wonkwang University  | South Korea
Suzanne Beasterfield  | Idaho State University  | USA
Szu-Wei (Chris) Chen  | I-Shou University  | Taiwan
T.S.Devaraja  | University of Mysore, Hemagangothri Campus  | India
Tan Khay Boon  | SIM Global Education  | Singapore
Theeraphab Phetmalaikul  | Srinakharinwirot University  | Thailand
Thoedsak Chomthosuwan  | Rangsit University  | Thailand
Vijayaletchumy Subramaniam  | Universitas Putra Malaysia  | Malaysia
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Yuki Yokohama  | Kanto Gakuin University  | Japan
Zabihollah Rezaee  | The University of Memphis  | USA
Zhou Xiao  | Fudan University  | China
**Special Thanks to Session Chairs**

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Kuo-Ying Wang</td>
<td>National Central University</td>
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<tr>
<td>Peter Hilsenrath</td>
<td>University of the Pacific</td>
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<td>G. Michael McGrath</td>
<td>Victoria University</td>
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<td>Lulu Sun</td>
<td>Embry-Riddle Aeronautical University</td>
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<td>Yang Gao</td>
<td>Dalian University of Technology</td>
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<td>Jyh-Shen Tsay</td>
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<td>Mohammad Noori</td>
<td>Southeast University and Cal Poly</td>
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Conference Venue Information

Royal Plaza Hotel
Hotel Address: 193 Prince Edward Road West, Kowloon, Hong Kong
TEL: 81-93-551-4111

Location
The Royal Plaza Hotel is centrally located in Hong Kong, within easy reach of international transport facilities. Situated in Mongkok in the heart of Kowloon, the hotel sits atop the MTR Station and is only 45 minutes by rail from China as well as the Hong Kong International Airport. The Hotel is directly linked to MOKO, one of the largest shopping centers in Hong Kong with over 200 shops. The Hotel is surrounded by numerous tourist attractions and entertainment venues that will fascinate even the most sophisticated visitors. For a unique Hong Kong experience in a dynamic location, choose to stay at the Royal Plaza Hotel.

Transportation
Expect the unexpected and experience this vibrant city in a dynamic location during your stay with Royal Plaza Hotel. Situated in the heart of Kowloon, the hotel boasts superb convenience at its doorstep, allowing you to get around town at unparalleled ease via major transportation means.

Hotel Shuttle Timeline

Due to unforeseen condition, the above schedule is subject to change without prior notice. Please be reminded to reserve seats in advance; all seats are provided on first-come-first-serve basis.
Royal Plaza Hotel Floor Plan (6th Floor)
## Conference Schedule

**Tuesday, July 4, 2017**

### Oral Presentation

**6F, Royal Plaza Hotel**

<table>
<thead>
<tr>
<th>Time</th>
<th>Schedule</th>
<th>Venue</th>
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<tbody>
<tr>
<td>08:30-15:30</td>
<td>Registration</td>
<td>Foyer Area</td>
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<tr>
<td>09:00-10:00</td>
<td>Economics / Finance</td>
<td>Grand Ballroom (II)</td>
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<tr>
<td>10:00-10:20</td>
<td>Tea Break &amp; Networking</td>
<td>Foyer Area</td>
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<tr>
<td>10:20-12:00</td>
<td><strong>Tourism Panel Discussion</strong></td>
<td>Grand Ballroom (I)</td>
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<td>Dr. Ricky Ng</td>
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<td>Vocational Training Council, Hong Kong</td>
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<td><strong>Panelists</strong></td>
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<td>Prof. Ivan Lai</td>
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<td>Caritas Institute of Higher Education, Hong Kong</td>
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<td>Prof. Anthony Wong</td>
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<td>City University of Macau, Macau</td>
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<td></td>
<td><strong>Topic:</strong> Motives to Travel: Millennials in Digital Age</td>
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<tr>
<td>12:00-13:00</td>
<td>Lunch Time</td>
<td>La Scala (2F)</td>
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<tr>
<td>13:00-14:30</td>
<td>Culture / Literature and Linguistics / Society / Hospitality / Tourism</td>
<td>Grand Ballroom (II)</td>
</tr>
<tr>
<td>14:30-14:50</td>
<td>Tea Break &amp; Networking</td>
<td>Foyer Area</td>
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<tr>
<td>14:50-16:20</td>
<td>Management / Marketing</td>
<td>Grand Ballroom (II)</td>
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### Tuesday, July 4, 2017

**Poster Presentation**

6F, Royal Plaza Hotel

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<tr>
<td>11:00-12:00</td>
<td><strong>Poster Sessions</strong></td>
<td>Grand Ballroom (III)</td>
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<td>Management / Management and Decision Science</td>
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### Wednesday, July 5, 2017

**Oral Presentation**

6F, Royal Plaza Hotel

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<tr>
<td>08:30-11:00</td>
<td>Registration</td>
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<tr>
<td>08:40-10:10</td>
<td>Education</td>
<td>Grand Ballroom (II)</td>
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<tr>
<td>10:10-10:30</td>
<td><strong>Tea Break &amp; Networking</strong></td>
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<tr>
<td>12:00-13:00</td>
<td>Lunch Time</td>
<td>La Scala (2F)</td>
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### Thursday, July 6, 2017

**Internal Meeting**
Tourism Panel Discussion

Grand Ballroom (I), 6th floor

10:20–12:00, Wednesday, July 4, 2017

**Topic: Motives to Travel: Millennials in Digital Age**

Panel Organizer
Dr. Ricky Ng
Vocational Training Council, Hong Kong

Panelist
Prof. Ivan Lai
Caritas Institute of Higher Education, Hong Kong

Panelist
Prof. Anthony Wong
City University of Macau, Macau

Abstract
People are living longer. In general, seniors have time, money, and health that enable them to travel more than younger adults do. So there was a huge of studies in the motives for seniors to travel over the last 10 years. However, millennials as the largest generation to date will become the largest tourist group to be served in coming years, so there is a need to study the motives for millennials to travel because their motives are closely related to their choice of a destination. On the other hand, Eastern and Western millennials may have significant differences in terms of their travel motives, so the government in different countries should understand the motives for both Eastern and Western millennials for developing appropriate strategies to support the tourism development. There is a common point for Eastern and Western millennials that they are growing up in the digital age, so they like to read user-generated contents on social media that include travel reviews. Those traveller-generated reviews highlight authentic experiences that
motivate millennials to take a break from city life and visit a destination. Furthermore, millennials like to refer to online sources when they are planning their vacations. This panel session will discuss (1) the motives for millennials to travel, (2) the effects of different motives on Eastern and Western millennials’ travel behaviours, and (3) how smart phones and social media influence millennials’ travel decisions.

**Brief Introduction of Dr. Ricky Ng**
Dr. Ricky, Yuk-Kwan Ng is the Head of the Centre for Learning and Teaching, Vocational Training Council (VTC), Hong Kong. With research interests in pedagogies in vocational and professional education and training (VPET), staff development in higher education institutions and organizational studies, he has published over 40 papers in Europe and Asia’s international conferences, journals and books. Dr Ng is also the Principal Investigator of a HK$21 million cross-institutional project funded by the Education Bureau of Hong Kong.

**Brief Introduction of Prof. Ivan Lai**
Dr. Ivan Ka-Wai Lai is a professor in the School of Business and Hospitality Management at the Caritas Institute of Higher Education, Hong Kong. He has published research papers in various journals such as Tourism Management, Journal of Sustainable Tourism, Journal of Hospitality and Tourism Research, Journal of Travel and Tourism Marketing, Cornell Hospitality Quarterly, Current Issues in Tourism, and International Journal of Hospitality Management. His current research focuses on research methods for hospitality and tourism studies.

**Brief Introduction of Prof. Anthony Wong**
Oral Sessions

Economics / Finance

Tuesday, July 4, 2017  09:00-10:00  Grand Ballroom (II)

Session Chair: Prof. Peter Hilsenrath

APCMB-0001
Corporate Practice of Medicine Institutions in the United States: Exploring Influence on Cost and Innovation
Peter Hilsenrath  |  University of the Pacific

HKICSS-0034
Countermeasures and Suggestions for Pushing Forward the Structural Reform of Supply-Side: An Analysis Framework Based on the AD-AS Extension Model
Qian Zhang  |  Dalian University of Technology

APCMB-0005
The Effects of Regulation on Cost Efficiency: Evidence from the Hong Kong Banking Industry
Agol Ho  |  The Open University of Hong Kong

HKICSS-0011
Stock Performance and Insider Trading in Completed and Canceled Private Placements
Kung-Chi Chen  |  Hubei University of Economics
Lee-Young Cheng  |  National Chung Cheng University
Ting-Wen Wu  |  National Chung Cheng University
Yan Zhao  |  City University of New York

HKICSS-0052
Profitability Analysis with the Use of Clean Planting Materials of Processing-type ‘Igorota’ Variety in Mt. Province, Philippines
Ines C. Gonzales  |  Benguet State University
Cynthia G. Kiswa  |  Benguet State University
Teresita D. Masangcay  |  Benguet State University
Corporate Practice of Medicine Institutions in the United States: Exploring Influence on Cost and Innovation

Peter Hilsenrath
Eberhardt School of Business, University of the Pacific, USA
E-mail: philsenrath@pacific.edu

1. Background, Research Goals and Objectives
Modern health economics is commonly traced to the late 1950’s and early 1960’s. Reuben Kessel, in a seminal article in the *Journal of Law and Economics*, argued that health sector institutions served providers much more than patients. His article was not entirely embraced and set off considerable debate about healthcare intuitions. One important response was an even more influential article by Nobel Prize winning Kenneth Arrow. He argued in the *American Economic Review* that healthcare institutions have much to do with information asymmetries and should be seen in this light. Not-for-profit hospitals and a general deference to physicians stem from asymmetry in information possessed by doctors compared to patients.

The issue of institutions and physician control in the United States was evaluated by the Committee on Costs of Medical Care in the 1920’s. It assessed and recommended institutions for the 20th century. Recommendation of the not-for-profit hospital with independent physicians was one outcome. Important antitrust decisions by the 1940s led to consolidation of physician control at the state level. Each state has its own variant of medical control and corporate constraint. This national framework provides a rich natural experiment on institutional dispensation and health sector performance.

There is little disagreement about the importance of efficiency in the health sector. Much of American labor productivity gains have been allocated to higher health benefit costs displacing what would otherwise have been wage increases. Continued cost increases in excess of GDP growth threaten a reduction in the non-health standard of living. Higher productivity, including use of disruptive new technology, holds much promise. But successful implementation depends on supportive institutional underpinnings including those associated with corporate practice of medicine law. Corporate practice of medicine law refers to limitations on corporate activity in medicine. Legislation is generally at the state level. A key question concerns the impact of more corporate flexibility on innovation and cost in health care. Variation in physician vs. corporate control will be explored to identify how innovation and cost is affected.

2. Research Design: Data and Study Methods
The study commences with a literature review. Some of this is historical in nature and helps to understand evolution of today’s institutions. Another important avenue of inquiry is review of analytical studies concerning corporate practice of medicine. Next, a taxonomy of existing practice from state to state will be developed. Then this will be employed in multivariate analysis to explore the impact of corporate practice of medicine governance.

Primary data on legal dispensation is available from individual states. Secondary data is available from interested organizations and the literature. Health sector performance data is available from the American Hospital Association (AHA). The AHA provides state-by-state data on costs as well as important innovation variable such as IT meaningful use achievement. Meaningful use, a term used to describe penetration of IT into the fabric of medical practice, was incentivized by legislation in 2009 and 2010. Multivariate analysis will use cost and price as dependent variables against a range of independent variables. The type of corporate organization in medicine will be one of these independent variables along with statewide cost structure, market structure, income, insurance and demographic variables. Another model will place innovation at center stage as a dependent variable. This will include level of meaningful use achievement and other technology variables analyzed against a similar range of dependent variables.

3. Expected Results and Contributions

It is hypothesized that greater flexibility with respect to corporate governance is associated with more innovation and lower costs when markets are competitive with respect to price. On the other hand, monopolistic competition marked by innovation, product differentiation and higher costs is also plausible particularly in markets where private third party insurance prevails.

The empirical research will serve as a vehicle for broader discussion of the evolution of healthcare institutions in the United States and the outlook for future development. Changing corporate practice of medicine law will be assessed for its potential to improve productivity and efficiency.

Presentation and a paper will result. The Academy of Health, Academy of Management and the International Health Economics Association annual meetings are appropriate venues for presentation. The paper will first be submitted to Health Affairs. Other potential journals include Health Services Research, The Journal of Health Politics, Policy and Law, Health Care Management Review and INQUIRY: The Journal of Health Care Organization, Provision, and Financing.

Keywords: Health care, governance, physician control, disruption, institutions
Countermeasures and Suggestions for Pushing Forward the Structural Reform of Supply-Side: An Analysis Framework Based on the AD-AS Extension Model

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1. Background
China's economic development is facing a structural problem at present, which becomes the restricting factor for sustainable and balanced development. Therefore it is inevitable to implement structural adjustment. To solve the problem of low-total factor productivity which caused by the structural contradiction of supply and demand, we should give attention to two or more things is supply-side and demand-side of the dynamic balance, instead of overemphasizing demand-side just like we did before.

Nowadays the theoretical research on China's structural reform of supply-side is rarely, what we do in this paper is to build a AD-AS extension model to make a theory analysis on the structural reform of supply-side.

2. Methods
We adopt the method of theoretical analysis in this paper. From the perspective of the AD-AS model, this paper put forward the concept of creative investment which is different from a general sense of investment, and then extend the AD-AS model to analyze the structural reform of supply-side.

3. Results
Based on the analysis of the AD-AS extension model, our countermeasures and suggestions are as follows: improve the proportion of creative investment in total investment, optimize the investment structure which can contribute to solve the structural contradictions and improve the total factor productivity.

Keywords: Structural Contradictions; structural reform of supply-side; creative investment; AD-AS model
The Effects of Regulation on Cost Efficiency: Evidence from the Hong Kong Banking Industry

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1. Background

The majority of research studies on the effects of financial deregulation have focused on the United States banking industry, which has distinct local markets for many products and is rather dispersed by world standards. It is important for research and policy purposes to see if these results carry over into other economies (Berger and Humphrey 1997). This paper attempts to enrich the existing literature by examining banking industry in a small economy, Hong Kong, in which banking market is more territory-wide in scope with much higher levels of concentration. In order to promote the social welfare, the Hong Kong government implemented a number of banking deregulations at the turn of the 21st century. The major changes in banking legislation included abolishing the interest rate caps, removing the branching restriction on foreign banks, and relaxing the market entry criteria to the local banking business. It is generally believed that the deregulation fosters competition among banks; however, its effects on cost efficiency of banks warrant further investigation.

2. Methods

To stipulate an empirical model for this study, this paper constructs a flexible transcendental logarithmic cost function for describing the banking operation in Hong Kong. The transcendental logarithmic cost function was widely used for banking studies - see, for example, Hughes and Mester (2011), Simper and Hall (2012) and Phan, Daly and Akhter (2016). Rather than using the traditional intermediation approach, this paper adopts a new approach called asset transformation approach to specify the essential outputs and inputs of commercial banks. Maximum likelihood estimates of the parameters of the model are computed using iterated Seemingly Unrelated Regression (SUR) subject to a number of constraints. Furthermore, a panel data of 20 banks for eighteen years is used to estimate a representative cost function for banking industry. Based on the estimated cost function, this paper can analyze changes in cost of banks as a result of the banking deregulation.

3. Results

First, it is found that banks had to tolerate a higher cost in the first few years after deregulation. Obviously, the deregulation has created an unfavorable input environment for the banks. Second,
the finding reflects the fact that banks pursue the business strategy of expanding fee-based financial services in order to reap a higher return on these activities, rather than concentrating on reducing operating cost by adjusting their input combinations or output combinations. Third, the deregulation did forced banks to pursue active technical progress and ended up with good result. Technical progress even enables banks to reduce their costs to below pre-deregulation level four years after the deregulation. The uprising of Internet banking in recent years is a good example of using new cost-saving technology by banks. Fourth, individual bank’s ability in adapting to changes in business environment depends on its operation size. The finding indicates that larger banks were less affected by the deregulation and they recovered at a faster rate. On the contrary, smaller banks were more affected by the deregulation and they recovered at a slower rate. Large banks are more capable of adapting to changes despite their sheer size and the more bureaucratic organization. On the other hand, small banks are not good at adapting to changes too as they do not have the financial strength to implement all kinds of IT projects.

In conclusion, amendment of banking regulation may bring forward both merits and demerits to the society. In order to make best use of the advantages and bypass the disadvantages, a society has to conduct a thorough cost-benefit analysis before it implements any change in banking regulation.

**Keywords:** Deregulation, Banking industry, Cost efficiency

4. **References**


Stock Performance and Insider Trading in Completed and Canceled Private Placements

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1. Background
In this study, we aim to provide further evidence on managerial motives for raising private equities by examining insider trading and stock performance of the completed and canceled private equity placements.

2. Methods
We explore the determinants of the decision to cancel or complete the previously announced private equity offering by using logit regression. We then investigate cancelation and completion announcement abnormal returns of private equity issuers. Cumulative abnormal return (CAR) is defined as the difference between the return from buying and holding the private offerings from buying and holding the value-weighted TWSE market index for the same period. We adopt CAR and BHAR to measure the three-year returns following the cancellation date for canceled placements and the initial offering date for completed placements.

3. Results
We find that abnormal insider trading plays an important role in a firm’s decision to complete or cancel the private equity placements. Management tends to complete the offering when the shares price is greatly depressed and cancel the offerings when issuing price is not attractive to outside investors. Firms that complete private placements show significantly better abnormal announcement returns and long-term stock performance than firms that cancel private placements. We further show that abnormal insider purchases are positively related to both announcement returns and long-term stock performance.

Keywords: Private equity placements; Insider trading; Long-run stock performance

4. References
The Northern Philippines Root Crops Research and Training Center based at Benguet State University had developed seven potato varieties namely; Montanosa, Dalisay, Igorota, Solibao, Ganza, Bengueta, and Gloria. With most varieties are high yielding and with resistance to late blight (*Phytophthora infestans*). Breeding lines of these potatoes were sourced from Centro Internationale de la Papa (CIP), Lima, Peru. Igorota variety also known as BSU PO3 is the only common variety being produced by the farmers. It has yellow flesh with round to oval tubers. It is high yielding and resistant to late blight. Hands on training was conducted to familiarise the farmers on the new technology with the use of clean planting materials and the introduction of new processing resistant variety. Proper soil and pest management was also discussed. Initial planting materials in the form of a stem cuttings or generation one seeds were dispersed to the farmers of Bauko and Besao Mt. Province. For the four month growing period the farmers were monitored on their farm management practices and proper recording, all inputs and output were recorded inorder to obtain the cost and benefits of the technology being introduced. Base on the profit analysis, potato farmers had increased their net profit by 50-93% with the use of clean planting materials of variety Igorota.

Keywords: Igorota, generation-one, stem cuttings, tubers, variety

1. Background

Potato (*Solanum tuberosum* L.), locally known as ‘patatas”, is a worldwide crop. It is being utilized as vegetable and considered as high value crop in the Philippines. It was originated in South America and was brought to the Philippines by the Spaniards in the 16th century. There are ten potato varieties that were National Seed Industry Council (NSIC) approved varieties, however ‘Granola’ and ‘Igorota’ are the most popularly cultivated. Igorota also known as BSU PO3 other called it as LBR (late blight resistant) is a processing type variety with yields of 25-35 tons per hectare, resistant to late blight. It was breed by NPRCRTC and breeding lines was sourced from CIP, Lima, Peru. It has a dry matter content of 21-30% and suitable for chips and fries. It has oval to round shape with yellow flesh with pinkish eye. In the Cordillera region, Benguet and Mt. Province are the region best suited for quality potatoes because of its cool weather condition and season with cold nights with temperatures ranging from 10-21°C. Other regions may produce potato but of poor quality and low yield.
Production in the Philippines eventually decreased in 2011 to 2014 with 124,671.18 m/t to 119,140.02 m/t due limited planting materials and low price. Cordillera Administrative Region had the highest production of 102,255.24 mt (85%) particularly in Benguet with 89,918 mt with yield of 17.38 tons/ha. In Mindanao the highest producer is in Davao (8.3%) with 9,633.77 metric tons with yields of 7.41 tons/ha. Under lowland production Cagayan had the highest with 448.25 m/t with yield of 7 t/ha. Decreased in production could be due to pest and diseases and low quality planting materials.

Potatoes is locally grown in higher elevations of Benguet and Mt Province with an elevation of 1,200 to 2,000 masl. They are usually being planted two times a year planted in February and harvested at May while second cropping starts November to April, however it could be planted the whole year round especially if they have irrigation facilities. Potatoes are being irrigated with the use of ‘sprinkler method. Production cost of potato ranged from 206,400 thousand pesos with a return of investment (ROI) of 74%. High cost includes cost of planting materials (30%) and chemicals with 26% of the production cost.

With the introduction of clean planting materials from tissue culture planlets, the production cost was significantly lowered. NPRCRTC and BPI-BNCRDC are producing potato stem cuttings from tissue culture and are being sold at minimal cost to the farmers at P1.00/cutting. Dispersals was high during the months of February until April. Thru the years the NPRCRTC could produce 700,000 cuttings in a year and these are being dispersed to our highland potato growers, in order to renew their planting material and these had improved their production with 30% on their income. At present, there are six potato seed producers (3 Buguias and 3 La Trinidad) who adapted potato seed production thru the use of potato stem cuttings and was trained by NPRCRTC experts. Inorder, to upscale farmers’ knowledge on use of clean planting materials this project was conducted.

2. Methods
The project areas were in Bauko and Besao, Mt. Province with total of twenty seven (27) beneficiaries; twenty three (23) from Bauko, and four (4) from Besao are involved in potato production. It started from August 2016 until March 2017. Inception meeting as well as orientation with the Local Government Unit was done in Amkaweng, Bauko, Mt Province. Profile of each farmer beneficiary was accomplished to have an initial background information regarding the farmer. Among the twenty seven (27) farmer beneficiaries six (6) are female and twenty one (21) males, however farming activities like planting, care and maintenance until harvesting are both shared by both female and male. But heavy works like digging, tractoring, hilling-up, spraying, hauling, driving are usually done by male either the father or the son. Other activities are done both by female and male.
There are twenty-seven (27) farmer-partners from Bauko and Besao Mt. Province that were clustered into ten (10). The clustering was according to the proximity of each farmer’s farm. Banao, Suquib, Besao, Mt. Province was fused in one clustered, while Bauko, Mt. Province has nine (9) clusters, as shown in Table 1.
During the orientation, the problems identified were lack of clean planting materials, limited knowledge on soil management, pest and disease incidence and no proper recording. In order to solve their problems, training was conducted on soil and pest management and proper recording. Soil samples were taken in all farms and were analysed for bacterial wilt incidence, and soil nutrient analysis. Proper recording of input and output in the farm was encouraged. Clean planting materials of a processing potato variety ‘Igorota’ of five hundred G1 tubers and six hundred stem cuttings were also given to the farmers to start as their initial source of clean seeds. Field visitation was done to monitor planting, hilling-up, care and maintenance, and harvesting to all farms of the twenty-seven (27) beneficiaries.
3. Results

<table>
<thead>
<tr>
<th>Clusters</th>
<th>Beneficiaries</th>
<th>Planting date</th>
<th>Number of cuttings/ G1 seed distributed</th>
<th>Contact Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jay G. Callisen</td>
<td>Oct 25, 2016</td>
<td>500 G1 seeds</td>
<td>09097110044</td>
</tr>
<tr>
<td>2</td>
<td>Julian Guiold</td>
<td>Oct 25, 2016</td>
<td>500 G1 seeds</td>
<td>09127721167</td>
</tr>
<tr>
<td>3</td>
<td>Dinah Cunning</td>
<td>Oct 25, 2016</td>
<td>500 G1 seeds</td>
<td>0918746904</td>
</tr>
<tr>
<td>4</td>
<td>Jone Dulag</td>
<td>Oct 25, 2016</td>
<td>500 G1 seeds</td>
<td>09465514469</td>
</tr>
<tr>
<td>5</td>
<td>Nelson Omaney</td>
<td>Oct 3, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09104498892</td>
</tr>
<tr>
<td>6</td>
<td>Wallie Awakan</td>
<td>Oct 3, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09466736920</td>
</tr>
<tr>
<td>7</td>
<td>Alfonse Ballo</td>
<td>Oct 3, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09300759122</td>
</tr>
<tr>
<td>8</td>
<td>Efren Lo-ogan</td>
<td>Oct 3, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09502102021</td>
</tr>
<tr>
<td>9</td>
<td>Pedro Lidasan</td>
<td>Oct 3, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09465229652</td>
</tr>
<tr>
<td>10</td>
<td>Crisanto Bateng-an</td>
<td>Oct 3, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09123674755</td>
</tr>
<tr>
<td>11</td>
<td>Vernon Kevin Magalong</td>
<td>Oct 3, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09502132713</td>
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<tr>
<td>12</td>
<td>Robert G. Pakipac</td>
<td>Sept 15, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09997341500</td>
</tr>
<tr>
<td>13</td>
<td>Paul Estoro</td>
<td>Sept 15, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>0909073376</td>
</tr>
<tr>
<td>14</td>
<td>Alex Acdang</td>
<td>Sept 15, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09487112966</td>
</tr>
<tr>
<td>15</td>
<td>Guillermo Caligtaan</td>
<td>Sept 15, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09995537313</td>
</tr>
<tr>
<td>16</td>
<td>Elena Cawayan</td>
<td>Oct 25, 2016</td>
<td>500 G1 seeds</td>
<td>0919495093</td>
</tr>
<tr>
<td>17</td>
<td>Henrietta Long-huan</td>
<td>Oct 25, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09079846489</td>
</tr>
<tr>
<td>18</td>
<td>Ben Padaco Jr.</td>
<td>Oct 10, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09106684929</td>
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<tr>
<td>19</td>
<td>Baldomero C. Dolipas Jr.</td>
<td>Oct 10, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09108118797</td>
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<tr>
<td>20</td>
<td>Pepito M. Saggapye</td>
<td>Oct 11, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09467660888</td>
</tr>
<tr>
<td>21</td>
<td>Melchor Cobcob</td>
<td>Oct 11, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09309982176</td>
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<tr>
<td>22</td>
<td>Alverno Angupa</td>
<td>Oct 15, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09392424720</td>
</tr>
<tr>
<td>23</td>
<td>Teresita Gaoken</td>
<td>Oct 15, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09108473955</td>
</tr>
<tr>
<td>24</td>
<td>Angie L. Cubalit</td>
<td>Oct 20, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09505111527</td>
</tr>
<tr>
<td>25</td>
<td>Basilio B. Ballo</td>
<td>Sept 30, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09072301318</td>
</tr>
<tr>
<td>26</td>
<td>Agnes Gaspar</td>
<td>Oct 12, 2016</td>
<td>500 G1 seeds &amp; 600 stem cuttings</td>
<td>09203431175</td>
</tr>
<tr>
<td>27</td>
<td>Edwin T. Mayos</td>
<td>Oct 15, 2016</td>
<td>300 G1 seeds &amp; 600 stem cuttings</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13,500 G1 seed tubers</td>
<td>9,900 stem cuttings</td>
<td></td>
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</table>
Table 3. Result of soil nutrient analysis, Analyzed by Bureau of Soils, Department of Agricultur - Cordillera Administrative Region, 2017

<table>
<thead>
<tr>
<th>Name of Farmer</th>
<th>PH</th>
<th>OM%</th>
<th>Olsen’s P, ppm</th>
<th>STK potassium</th>
</tr>
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<tbody>
<tr>
<td>Jay G. Callisen</td>
<td>5.60</td>
<td>3.2</td>
<td>67</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Julian Guilod</td>
<td>5.50</td>
<td>3.0</td>
<td>62</td>
<td>(sufficient)</td>
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<tr>
<td>Dinah Cunning</td>
<td>5.44</td>
<td>2.5</td>
<td>65</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Jone Dulaq</td>
<td>6.13</td>
<td>3.5</td>
<td>32</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Nelson Omany</td>
<td>6.98</td>
<td>2.5</td>
<td>68</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Wallie Awakan</td>
<td>6.08</td>
<td>10.0</td>
<td>54</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Alfonse Ballo</td>
<td>5.73</td>
<td>4.5</td>
<td>52</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Efren Lo-ogan</td>
<td>4.80</td>
<td>10.0</td>
<td>124</td>
<td>(sufficient)</td>
</tr>
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<td>Pedro Lidasan</td>
<td>5.34</td>
<td>2.0</td>
<td>18</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Crisanto Bateng-an</td>
<td>6.27</td>
<td>1.5</td>
<td>116</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Vernon Kevin Magalong</td>
<td>5.63</td>
<td>3.5</td>
<td>79</td>
<td>(sufficient)</td>
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<tr>
<td>Robert G. Pakipac</td>
<td>5.72</td>
<td>3.0</td>
<td>70</td>
<td>(sufficient)</td>
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<td>Paul Estoro</td>
<td>6.25</td>
<td>4.5</td>
<td>104</td>
<td>(sufficient)</td>
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<tr>
<td>Alex Acdang</td>
<td>5.03</td>
<td>4.5</td>
<td>165</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Guillermo Caligtaan</td>
<td>5.14</td>
<td>10</td>
<td>180</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Elena Cawayan</td>
<td>6.57</td>
<td>3.5</td>
<td>27</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Henrietta Long-buan</td>
<td>6.35</td>
<td>5.0</td>
<td>17</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Ben Padaco Sr.</td>
<td>5.34</td>
<td>10</td>
<td>25</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Baldomero C. Dolipas Jr.</td>
<td>5.45</td>
<td>3.5</td>
<td>68</td>
<td>(sufficient)</td>
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<tr>
<td>Pepito M. Sagpaey</td>
<td>5.59</td>
<td>1.0</td>
<td>2.0</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Melchor Cobcobo</td>
<td>5.60</td>
<td>4.5</td>
<td>27</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Alverino Angupa</td>
<td>5.94</td>
<td>4.5</td>
<td>63</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Teresita Gaoken</td>
<td>6.43</td>
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<td>Angie L. Cubalit</td>
<td>5.54</td>
<td>3.5</td>
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<td>(sufficient)</td>
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<tr>
<td>Basilio B. Ballo</td>
<td>6.29</td>
<td>5.0</td>
<td>116</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Agnes Gaspar</td>
<td>6.35</td>
<td>3.0</td>
<td>145</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Edwin T. Mayos</td>
<td>6.25</td>
<td>4.0</td>
<td>62</td>
<td>(sufficient)</td>
</tr>
<tr>
<td>Name of Farmer/Area</td>
<td>Location</td>
<td>Soil pH</td>
<td>Bacterial Population in colony forming units (cfu)</td>
<td>Remarks</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------</td>
<td>---------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>1. Vernon Kevin Magalong</td>
<td>Pacil, Bauko</td>
<td>5.9</td>
<td>$3.0 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>2. Nelson Umamey</td>
<td>Pacil, Bauko</td>
<td>6.0</td>
<td>$7.5 \times 10^4$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>3. Wally Awaken</td>
<td>Pacil, Bauko</td>
<td>4.6</td>
<td>$1.25 \times 10^3$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>4. Paul Estoro</td>
<td>Pacil, Bauko</td>
<td>5.8</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>5. Alex Acdang</td>
<td>Pacil, Bauko</td>
<td>5.0</td>
<td>$7.5 \times 10^4$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>6. Robert Pakipak</td>
<td>Pacil, Bauko</td>
<td>4.7</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>7. Vernon Kiven Magalong</td>
<td>Pacil, Bauko</td>
<td>5.7</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>8. Basilio Ballo</td>
<td>Pacil, Bauko</td>
<td>6.0</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>9. Crisanto Batengan</td>
<td>Pacil Bauko</td>
<td>5.9</td>
<td>$2.5 \times 10^4$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>10. Melchor Cobcobo</td>
<td>Lagawa, Bauko</td>
<td>5.1</td>
<td>$7.5 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>11. Pepito Sagnaey</td>
<td>Lagawa, Bauko</td>
<td>4.9</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>12. Basilio Ballo</td>
<td>Liwang, Bauko</td>
<td>5.8</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>13. Teresita Gaoken</td>
<td>Sadsadan, Bauko</td>
<td>5.7</td>
<td>$5.0 \times 10^2$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>14. Baldomero Dolipas</td>
<td>Lagawa, Bauko</td>
<td>4.7</td>
<td>$2.5 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>15. Ben Padaco</td>
<td>Lagawa, Bauko</td>
<td>4.5</td>
<td>$7.5 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>16. Edwin Mayos</td>
<td>Bebe, Bauko</td>
<td>5.7</td>
<td>$7.5 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>17. Agnes Gaspar, Lot1</td>
<td>Binuka, Bauko</td>
<td>6.0</td>
<td>$5.0 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>18. Agnes Gaspar, Lot2 (actual area)</td>
<td>Binuka, Bauko</td>
<td>6.1</td>
<td>$3.75 \times 10^4$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>19. Julius Ballo</td>
<td>Pacil, Bauko</td>
<td>5.1</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>20. Alex Acdang</td>
<td>Pacil, Bauko</td>
<td>5.6</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>21. Efren Loogan</td>
<td>Pacil, Bauko</td>
<td>4.6</td>
<td>$5.0 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>22. Walie Awaken</td>
<td>Pacil, Bauko</td>
<td>5.5</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>23. Nelson Omancy</td>
<td>Pacil, Bauko</td>
<td>6.6</td>
<td>$6.25 \times 10^4$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>24. Alfonso Ballo</td>
<td>Pacil, Bauko</td>
<td>6.8</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>25. Paul Estoro</td>
<td>Pacil, Bauko</td>
<td>5.0</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>26. Pedro Lidasan</td>
<td>Pacil, Bauko</td>
<td>4.6</td>
<td>$5.0 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>27. Basilio Ballo, Lot2 (actual area)</td>
<td>Liwang, Bauko</td>
<td>5.7</td>
<td>$7.5 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
<tr>
<td>28. Alexander Loogan</td>
<td>Pacil, Bauko</td>
<td>6.4</td>
<td>0</td>
<td>Uninfected, fit for seed production</td>
</tr>
<tr>
<td>29. Guillermo Caligtan</td>
<td>Pacil, Bauko</td>
<td>5.2</td>
<td>$1.0 \times 10^5$</td>
<td>Infected with bacterial wilt, unfit for seed production</td>
</tr>
</tbody>
</table>
Out of thirty (30) soil samples, only twelve (12) samples had zero bacterial wilt population detected in-vitro using the selective medium (Kelma’s medium). These sampled areas are highly recommended for potato seed production, while some other farms taken are unfit for seed production due to the presence of bacterial wilt population that can be aggravated by planting the host crop, potato.

Table 5. Return of investment before and after the technology intervention with the use of cle; planting material of processing-type variety Igorota

<table>
<thead>
<tr>
<th>Name of Farmer</th>
<th>Net Returns Before Intervention (NRBI)</th>
<th>Net Returns After Intervention (NRAI)</th>
<th>Percent (%) Increase in Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jay G. Callisen</td>
<td>10.62</td>
<td>62.70</td>
<td>83</td>
</tr>
<tr>
<td>Julian Guilo</td>
<td>30.00</td>
<td>69.74</td>
<td>56</td>
</tr>
<tr>
<td>Dinah Cunning</td>
<td>4.58</td>
<td>62.08</td>
<td>93</td>
</tr>
<tr>
<td>Jone Dulag</td>
<td>20.00</td>
<td>68.02</td>
<td>70</td>
</tr>
<tr>
<td>Nelson Omaney</td>
<td>33.40</td>
<td>71.04</td>
<td>53</td>
</tr>
<tr>
<td>Wallie Awakan</td>
<td>32.42</td>
<td>70.37</td>
<td>54</td>
</tr>
<tr>
<td>Alfonse Ballo</td>
<td>26.87</td>
<td>88.24</td>
<td>70</td>
</tr>
<tr>
<td>Efren Lo-ogan</td>
<td>16.70</td>
<td>62.36</td>
<td>74</td>
</tr>
<tr>
<td>Pedro Lidasan</td>
<td>26.52</td>
<td>71.25</td>
<td>63</td>
</tr>
<tr>
<td>Crisanto Bateng-an</td>
<td>8.89</td>
<td>65.11</td>
<td>87</td>
</tr>
<tr>
<td>Vernon Kevin Magalong</td>
<td>27.00</td>
<td>61.22</td>
<td>55</td>
</tr>
<tr>
<td>Robert G. Pakipac</td>
<td>30.89</td>
<td>68.98</td>
<td>55</td>
</tr>
<tr>
<td>Paul Estoro</td>
<td>30.89</td>
<td>68.98</td>
<td>55</td>
</tr>
<tr>
<td>Alex Acdang</td>
<td>27.86</td>
<td>61.22</td>
<td>55</td>
</tr>
<tr>
<td>Guillermo Caligtaan</td>
<td>19.54</td>
<td>67.68</td>
<td>71</td>
</tr>
<tr>
<td>Elena Cawayan</td>
<td>28.50</td>
<td>70.61</td>
<td>60</td>
</tr>
<tr>
<td>Henrietta Long-buan</td>
<td>26.90</td>
<td>70.50</td>
<td>62</td>
</tr>
<tr>
<td>Ben Padaco St.</td>
<td>21.11</td>
<td>58.17</td>
<td>63</td>
</tr>
<tr>
<td>Baldomero C. Dolipas Jr.</td>
<td>11.19</td>
<td>60.65</td>
<td>81</td>
</tr>
<tr>
<td>Pepito M. Sapaey</td>
<td>19.13</td>
<td>65.16</td>
<td>70</td>
</tr>
<tr>
<td>Melchor Cobcobo</td>
<td>22.50</td>
<td>69.41</td>
<td>68</td>
</tr>
<tr>
<td>Alverino Angupa</td>
<td>33.79</td>
<td>71.05</td>
<td>50</td>
</tr>
<tr>
<td>Teresita Gacken</td>
<td>18.44</td>
<td>65.15</td>
<td>72</td>
</tr>
<tr>
<td>Angie L. Cuballit</td>
<td>21.47</td>
<td>66.32</td>
<td>68</td>
</tr>
<tr>
<td>Basilio B. Ballo</td>
<td>27.50</td>
<td>71.81</td>
<td>61</td>
</tr>
<tr>
<td>Agnes Gaspar</td>
<td>10.62</td>
<td>62.70</td>
<td>83</td>
</tr>
<tr>
<td>Edwin T. Mayos</td>
<td>24.92</td>
<td>67.29</td>
<td>64</td>
</tr>
</tbody>
</table>

- Percentage increase is computed as NRAI-NRBI divided by NRAI X 100
Pictorials of techno demoplots, the technical team inspecting the performance of the technology being introduced with the used of clean planting materials, a processing type potato variety ‘Igorota’ and potato tubers produced from five hills of G1 seeds and stem cuttings as source of clean planting materials.

Based on the results it showed that most farmers had increased their income by 50-93% with the used of clean planting materials of potato variety ‘Igorota’. Result of soil samples analysed by a plant pathologist showed that twelve(12) farmer beneficiaries had zero bacterial wilt incidence and showed to be suitable for potato seed production. Based on the soil nutrient analysis, and was analyzed by a soil-chemist at the Bureau of Soils it showed that most soil samples are deficient in nitrogen but sufficient in phosphorous and pottasium.
4. References
Result of Bacterial wilt Analysis, (2016). Northern Philippines Root Crops Research and Training Center- Disease Clinic, Benguet State University, La Trinidad, Benguet-2601, Philippines.
Culture / Literature and Linguistics / Society / Hospitality / Tourism

Tuesday, July 4, 2017 13:00-14:30 Grand Ballroom (II)

Session Chair: Prof. G. Michael McGrath

**HKICSS-0015**
Guidelines to Promote Organic Agriculture to Food Security and Safety for Community
Apichart Jai-Aree | Kasetsart University
Prasong Tanpichai | Kasetsart University
Nirun Yingyoud | Kasetsart University

**HKICSS-0041**
Processing Strategies Used in Short-Term Memory by Readers Learning Chinese as a Second Language
Xiaoyang Zhou | Boston University

**HKICSS-0049**
Effects of Relaxation Technique, Aromatherapy and Sleep Hygiene Education Program on the Quality of Sleep among Selected Residents in Manila Boys Town Complex
Jeeno Jay Frani | De La Salle Health Sciences Institute

**IHTMM-0003**
Influences on College Students’ Career Decisions - A Case Study of Hospitality Management Students
Patrick C. Lee | California State Polytechnic University
Myong Jae Lee | California State Polytechnic University
IHTMM-0005
A Model of a Tourism Community and its Underlying Social Network
G. Michael McGrath | Victoria University
Elisabeth Wilson-Evered | Victoria University
Leonie Lockstone-Binney | William Angliss Institute
Madeline R. McWha | William Angliss Institute
Paul A. Whitelaw | William Angliss Institute
Faith Ong | William Angliss Institute

HKICSS-0062
A Study of Mohammed Arkoun’s Political Ethic
Muhammad Azhar | Universitas Muhammadiyah Yogyakarta
Abstract
This qualitative research purposed to study the knowledge about organic agriculture and present guidelines to promote organic agriculture to food security and safety for the community. The study focuses on organic vegetable agriculture and collected data by in-depth document analysis. The informants for the in-depth interview had been selected by the purposive sampling method; there are 3 groups who are 1) agricultural academicians and university professors 2) general and organic agriculturalists and 3) community leaders and representatives from the state and the private sectors, totaling 45 persons. The study includes the survey on agricultural cultivations, public discussion, and reflection of the research result to related units. Data analysis is to analyze the content.

According to the research, knowledge status: the agriculturalists have the knowledge and skill in production process due to learning from their career and learning sources; moreover, they are interest and alert to agricultural products and consumption greatly but lack accurate information about organic agriculture in compliance with standard certification, including technology adaptation and modern methods in production process, they also deprive of knowledge about farming management system and marketing mechanism to support products. For guidelines to promote organic agriculture, to encourage participation of the development associations is able to firmly push the operation into community level. The association leaders are the people/agriculturalists, Department of Agriculture, every local administration, and the universities that provide agricultural courses. About the guidelines to promote organic agriculture, the supply chain of the productions include 4 aspects that are production factors, production and management, innovation and technology in production, and products and product management. It comes up in the form of building a network, research and development in connection with organic agricultural knowledge in local and commercial levels, development of safety standard certification in community level, development of organic village model, further research and development of labor-saving devices, and information and advice system.

Keywords: organic agriculture, food security, food safety
1. Introduction

Food security is the phenomenon that has been discussed widely as a new type of security problems in many countries and supportive measure towards the challenge for the survival of their populations, especially in underdeveloped countries, this problem has violently increased. This is due to the climate change, energy crisis, and decrease of crop production but more energy crops resulting in a high price of crop products and also inaccessibility of poor people (Nontakan Janon, 2014; Apichart Pongsrihadulchai and others, 2014, and Patteera Reunpitak, 2014). Food Security in Thailand: Status, Rural Poor Vulnerability, and Some Policy Options, the country has the problem of food accessibility, especially consumption for necessary energy and minerals, for example, the rice case, it is the main dish of approximately 67 million Thais, although there are surplus products, some households encounter poverty in food (Somporn Isvilanonda, 2014). Food accessibility still remains to be the problem of poor people in rural and urban cities. In the north, the northeastern, and the city areas, there are poor families who are the risk group that will receive the impact from high food price (United Nations Development Programme of Thailand, 2009).

Thailand is a country that has the capacity of food self-sufficiency and food availability; nonetheless, to conclude that Thailand has food security may be a little bit faster to do so. Due to FAO data, Thai population has been categorized in hunger group or undernourished people; moreover, factors of natural resource foundation tend to be severely deteriorated, resulting in the impact towards the agricultural sector and food security (Nontakan Janon, 2014). In addition, according to the statistics of Office of Agricultural Regulation, in the recent decades, Thailand tends to depend on chemical pesticides more while the inaccurate use of chemicals by the agriculturalists and overuse, without any policy and laws strictly regulated, these cause to the health problems of the agriculturalists and also toxic residue in their products, leading to the environmental problem and becoming the cause factors to the economic loss and negative country’s image (Sakhon Srimook, 2013).

From the aforementioned situation, Office of the National Economics and Social Development Board (2016) suggested that Thailand needs to consider alternative policy in the future, which the operation to build food security and safety must require all participation from every sector, including the capacity development of people. The policy must be promoted for the real practice and efficiently by encouraging every sector being conscious of the negative impact of using chemicals in the agriculture. The related units should advertise the accurate information of using the chemicals to agriculturalists, encourage the learning, and campaign them to follow the organic agricultural regulations and good agricultural practice (GAP), that conform to the research suggestion, the study of guidelines to develop human resources for agricultural careers by Sunti Srisuantang, Prasong Tanpichai, Apichart Jai-aree and others (2014) about the building.
of supportive and driving agricultural mechanism to develop agricultural entrepreneurs including learning management process adaptation under the unceasing support from many sectors.

In regards to the above suggestions, the research team saw the importance of constituting participation of the associations to promote organic agriculture to food security and safety for community in conformance with the string strategy of the agricultural sector, food and energy security, and strategy in national food management, including the increase of organic agriculture to the innovative food security city of the world. The purpose of this research was to study the known status in relation to organic agriculture and present the guidelines to promote organic agriculture to food security and safety for the community.

2. Methodology
This is a qualitative research, selecting in-depth interview, informal discussion, documents and evidence analysis, a survey of agricultural cultivations, focus group, and public forum. The samples had been selected by the purposive sampling method; there are 3 groups who are 1) agricultural academicians and university professors 2) general and organic agriculturalists and 3) community leaders and representatives from the state and the private sectors, totaling 45 persons.

The content analysis for the topic summary in accordance with data groups and relationship analysis among data groups, the validity and reliability testing of data and findings, the researcher applied Triangulation Technique for reference, connection, according to relationship to the data, and reflections from public discussion of related associations after the conclusion of primary findings.

3. Conclusion and Discussion
3.1 Knowledge Status about Organic Agriculture
The organic agricultural production of Thailand is the production system that stresses for household consumption and community and distributes in the domestic and foreign countries only in the production sector. Details are as follows:

1) Agriculturalists have high knowledge and ability in production process due to practice and learning from their works from generation to generation, learning sources, and training arranged by the state and private sectors such as Department of Agriculture, Kasetsart University, and Organic Farming Foundation.

2) Some agriculturalists learn to adapt the production method in order to reduce cost and to solve problems, for instance, bio-extract production and seed selection and collection.

3) Agriculturalists are very interested and alert in production and consumption of organic agriculture because they are aware of the importance of quality products, health problem, and environment. However, they deprive of good understanding about organic agriculture in accordance with academic theories for standard certification. Moreover, they need to learn about
the technological application and modern methods in the production process, farming system management, and marketing mechanism to support products.

4) Agriculturalists in several areas form groups and networks among their groups in order to exchange knowledge, experience, and production factors such as seeds.

5) Agriculturalists want to improve the organic standard certification by themselves, in the type of a group under the right academic supports from related units to distribute and build credibility to consumers in their communities.

3.2 Guidelines to Promote Organic Agriculture to Food Security and Safety for Community

Organic agricultural knowledge according to the academic standard is the knowledge that agriculturalists must understand clearly; therefore, they can follow correctly leading to food security and safety for themselves, their family, community, and the country. The main guidelines are to build participation of the development associations which is able to cause the driving into the community level constantly. The leader units are people/agriculturalists, Department of Agriculture, every local administration, and the universities that provide the agricultural course. Conforming to the study of Jai-aree (2016: 111-136) on Multi-party Participatory Process for Sustainable Environmental Management: A Case Study of Ban Pu-Tei Community Forest Management, Kanchanaburi Province, the promotion in every sector and society take the role in developing the community to the sustainable development, at the same time, the study of Srisuantaang, S., Pongpan T. and Aree P. (2011) on Development of Knowledge Network Model in the Rice Commodity Chain, Nakhon Pathom Province, the development association type leads to the sustainable development of rice production in the supply chain pattern. Moreover, the study of Surachai Raksachart (2002) on Food Security of Marginalized People: Consumption Patterns and Sources of Food of Selected Households in a
Karen Community, Western Thailand, to let people design the planning of food security by themselves results in better understanding in food security.

When we reviewed the supply chain of organic agricultural production, it can be summarized the guidelines to promote organic agriculture to food security and safety for the community as follows:

1) **Production Factors**
   - Promote and encourage the networks of production, possessing products, and marketing at every level to strengthen the old networks and the new ones for exchanging knowledge, experience, and especially production factors such as seeds, organic fertilizers, and environmental promotion for organic agricultural production.

2) **Production and Management**
   - Encourage researching and development of knowledge about the local organic agricultural production process for household and community consumption, including commercial organic products for distribution and exports for agriculturalist and those who interest.
   - Should study the development of safety standard certification pattern (production process and products) at the community level to certify agricultural products that people in the community consume.
   - Constitute a central organization to promote organic agriculture and develop the organic agricultural village model or learning centers in the community that cover all so farmers can access and study the real practices.
   - Improve the database, information system, advice system about planting, permission, and organic and toxic-free vegetables marketing to trainees and those who interest.

3) **Innovation and Production Technology**
   - Should do the further research and improve the labor-saving devices, farming tractor for example, under the collaboration with the production sector, focusing on the appropriateness and effective cultivating plots, safety, and environment.
   - Local administration should have the formal policy that supports organic agriculture and allocates budget to support labor-saving devices for farmers due to the high cost for some types.

4) **Products and Product Management**
   - Organize the green market to support and distribute agricultural products from farmers to consumers, arranged by the state unit and the private sector such as a university, district office, and department stores.
   - Promote to add more value and develop organic agricultural products through training about product possessing for simple consumption and beautiful package design.
• Should arrange activities via various media in order to enhance knowledge and good and accurate attitude towards organic agricultural products to general people.

The mentioned guidelines conforms to the Second issues of National Organic Strategic Plan from 2015-2021 of Office of Agriculture Economics, Ministry of Agriculture and Cooperatives (2015) which states 4 strategies: 1) knowledge and innovation management, 2) the production of organic agriculture and supply chains, 3) to strengthen the marketing and standards of Thailand’s organic agriculture and create confidence in Thai organic products, and 4) an integrated manner to develop Thailand’s organic agriculture. With these 4 strategies, they are in accordance with area-based education with research for the local and the strengthen of food security in the community, written by Sumeth Panjamlong and others (2011); the building of “knowledge” towards self-management in food of the community, development to sustainable agriculture, change of production areas, promotion of cooperative policy and networks of Thailand, these create the learning process and concrete relationship with solution for agricultural communities. The related persons in the processes involve with many several groups such as agriculturalists as the producers who are the researcher and target groups, the other related persons such as the state unit, the private development organization, and consumers.

4. References


Chinese is unique in that, unlike alphabetic languages in which script and speech relationships are logically associated and symbols represent phonemes, Chinese uses a writing system that is logographic in nature, and the Chinese characters represent lexical morphemes. So, people have been interested in the question of whether the reading of a logographic writing system requires different reading strategies.

For many years, the research and discussions of the different strategies used in Chinese have been mostly concerned with native Chinese speakers. Few studies have examined foreign language learner’s use of strategies for reading Chinese, and there are even fewer studies which examine and investigate beginning and advanced learning of Chinese as a second language in learners with different first language backgrounds.

This presentation is part of my case study that examined the strategies used by beginning and advanced learners of Chinese, as a second language, to recognize words in Chinese orthography.

Based on the radical feature of the Chinese characters and the errors made with respect to this feature, using Chinese American, Native Japanese and American of both beginning and advanced learners of Chinese as subjects (48), this study tried to find out what strategies in the short-term memory encoding process used by those learners in recall of Chinese characters.

The stimuli used in the experiment were designed on the basis of the analysis of the radical feature in Chinese characters. All Chinese characters could be divided into five groups:

<table>
<thead>
<tr>
<th>SHAPE (graphically similar)</th>
<th>SOUND (phonetically similar)</th>
<th>MEANING (semantically associated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1   yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>2   no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>3   no</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>4   yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>5   yes</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>
The analysis of the results of the experiment was based on the theory that the predominant processing strategy would reveal itself through the type of errors that subjects made on the test. The questions raised were: What processing strategy was used more dominantly in the short-term memory encoding processing among the different groups of subjects learning to read Chinese at beginning level and advanced level? Was it true that at the lower level (beginning level), the graphical strategy would be more dominant than phonologic and semantic strategies in the short-term memory encoding processing? If the graphical strategy was used more dominantly than the other two strategies in the short-term memory encoding process at the beginning level, would Japanese subjects (and Chinese American subjects) activate the graphical strategy much less and activate the phonologic strategy much more than non-Japanese subjects because of their different first language reading background?

The data of the experiments revealed that, at the character level, American subjects seemed to use a graphic strategy which supports the hypothesis that the graphic decoding will be more dominant than phonologic and semantic decoding by the readers of Chinese. The results also showed that tendency to use a phonologic strategy increased as American subjects became more efficient in reading Chinese.

Educational implication of this study is if non-native Chinese readers heavily rely on a visual processing strategy, in order to improve their reading skill, how can we help them to pay more appropriate attention to the visual character?

Keywords: abstract, linguistics, Chinese words recognition
HKICSS-0049

Effects of Relaxation Technique, Aromatherapy and Sleep Hygiene Education Program on the Quality of Sleep among Selected Residents in Manila Boys Town Complex

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E-mail:jejafra27@yahoo.com or jeenofrani143@gmail.com

Description of Presentation
The research study is a quasi-experimental design which uses relaxation techniques, aromatherapy and sleep hygiene education in causing an effect on sleep quality among selected residents in Manila boys town complex. Two groups of respondents were included, the experimental group and the control group. The statistical tool t-test was used to determine the significant difference between the means of the two group.

Abstract
This quasi-experimental research design is focused on the use of relaxation techniques, aromatherapy and sleep hygiene education (RAS) Intervention to the sleep quality of selected residents in Manila boy’s town complex.

Two groups of respondents were included in the research: the experimental group, where relaxation techniques, aromatherapy and sleep hygiene education (RAS) was used to impact the sleep quality of selected Manila boys town complex and the control group where said intervention was not used.

Findings showed that among the control group, the sleep quality of respondents were high before and after the RAS intervention. On the other hand, the treatment group showed high sleep quality before the introduction of the intervention and very high after the introduction of the intervention. Furthermore, there was a significant difference between the quality of sleep among selected residents in Manila Boys Town Complex before and after RAS Intervention between those who were exposed and not exposed to the interventions.

In conclusion, the relaxation technique, aromatherapy and sleep hygiene education program (RAS) interventions are effective non-pharmacologic bio-behavioral nursing interventions to improve quality of sleep among selected residents in Manila Boys Town Complex.

Keywords: Aromatherapy, relaxation techniques, sleep hygiene education, sleep quality
IHTMM-0003
Influences on College Students’ Career Decisions - A Case Study of Hospitality Management Students

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1. Background
Undergraduate hospitality management students interact with different people during their studies such as faculty members, career advisors, industry partners, and so on. Each of these people has the potential to influence the decision-making process of students and ultimately affect their career choices. Career advisors can raise students’ level of vocational identity (Chuang, Goh, Stout, & Dellmann-Jenkins, 2007) while faculty members can affect students’ career decisions through their teaching (Faitar & Faitar, 2013). Jordaan (2009) found that industry partners and alumni are highly influential in students’ career decision-making while numerous studies point to the significant influence of parents on students’ chosen career paths (e.g. Wong & Liu, 2010). In light of the fact that the majority of current students are Generation Y, an additional influence is information, friends/contacts and links on social media, such as Facebook and LinkedIn, which can impact how students view career choices. The Internet with its plethora of information and exhaustive search engines has become a fine-tuned web recruitment tool by providing easy access to useful career and recruitment information (Tan, Zhang, & Kankanhalli, 2014).

Numerous hospitality studies have examined factors influencing the career decisions of graduates such as working conditions (e.g., Chuang & Dellmann-Jenkins, 2010). However, few studies have explored which factors have the strongest influence on career decisions especially when factoring in social media as a major influence. Hence, the purpose of this research is to investigate the extent to which online and offline factors influence the career decisions of hospitality management students.

2. Methods
The sample of this study consists of hospitality management students currently enrolled in 4-year university programs in the United States. The measurement items were developed based on the existing literature about different factors influencing students’ career decision-making with 5-point Likert scale. Students’ demographic questions were included in an online questionnaire. Data are currently being collected from 5 hospitality management programs, geographically representing America’s East, Mid-West, West-Mountain, and West respectively. The collected
data will later be tested for reliability using Cronbach’s alpha. Descriptive statistics will then be utilized to rank the important referent group based on students’ demographic variables. Finally, multivariate analysis of variance (MANOVA) will be conducted to explore the relationship between students’ demographic variables and the influential level of each referent group for students’ career decisions.

3. Results

Data collection is currently underway; hence the results of data analysis have not yet been generated. The detailed outcomes and implications of the data analysis will be presented at the conference. In short, this study’s results will ultimately benefit schools/colleges/institutes of higher learning through the reconsideration of the resources of career services and the roles of each referent group.

Keywords: Career decision, influence, social media, hospitality management students

4. References


1. Background

This research study is a by-product of a wider study involving the development, implementation and validation of an automated teaching and learning (T&L) simulation game for use in an introductory Tourism and Hospitality (T&H) program. The game is designed to reinforce the T&L of sustainable tourism principles and its design and preliminary evaluation have been detailed by McGrath et al. (2015) and McGrath et al. (2017).

As part of the design and development of the game, it was necessary to specify a formal model (i.e. structured with sufficient rigor that it could be implemented in a computer system) of the tourism community. Unfortunately, despite the substantial body of research dealing with different aspects of the tourism community and its stakeholder groups, we could find no such model within the T&H literature. Thus, the focus in this particular research study is on the development and evaluation of a formal model of this type.

2. Methods

Since the focus of this study is on the design, implementation and evaluation of a computer artefact, a ‘design science’ (DS) research method (Gregor and Hevner, 2013) was considered to be appropriate. Hevner et al. (2004) proposed seven guidelines for conducting DS research. These are: i) that the research must produce an “artefact created to address a problem”; ii) the artefact should be relevant to the solution of a “heretofore unsolved and important business problem”; iii) its “utility, quality, and efficacy” must be rigorously evaluated; iv) the research should represent a verifiable contribution; v) rigor must be applied in both the development of the artefact and its evaluation; vi) the development of the artefact should be a search process that draws from existing theories and knowledge to come up with a solution to a defined problem; and, finally, vii) the research must be effectively communicated to appropriate audiences.

Pfeffers et al. (2007-08) reviewed much of the DS research and specified the process model presented in Figure 1 as a consensus of the better-known DSRMs proposed to that point in time. This represents the research design of our study and further detail is presented in the following section.
Given that stakeholders and conflicts between them are critical to DMO activity, it is imperative that we are as precise as possible in defining the concept of the tourism ‘community’ and its constituent stakeholder groups. In their SD simulation, Anctil and Le Blanc (2016) use three stakeholder groups: the central government, local government (representing most of the local community) and an indigenous (community) group. Bowen et al. (2016) though, nominate four groups: government, tourism entrepreneurs, the local community and non-government organisations (NGOs), but also observe (p.4) “---- that each stakeholder group is somewhat porous”. That is, stakeholder groups overlap and, given that parties may have different goals and views when wearing different hats, this overlap would appear to be extremely important. We contend we can substantially improve our understanding of this concept (stakeholders and stakeholder group overlaps) by utilising one or more of the conceptual modelling techniques commonly employed in information systems and software engineering projects and research. Specifically, we use the ‘entity-relationship’ (ER) modelling formalism of Chen (1976) and, more precisely, the ‘resources-events-agents’ (REA) variant of McCarthy (1982).

Our stakeholder model is presented in Figure 2. Parties\(^1\) are related to other parties in \(ppi\) (party-party involvement relationships) with one (and only one) \(ppi\) role associated with each relationship. Examples of these roles are \textit{employs}, \textit{works for} (the inverse of \textit{employs}) and \textit{subtype}, which is used to specify the breakdown of the community into its constituent stakeholder groups.

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\(^{1}\) We are, in fact, referring to entity (and relationship) types but shall not use the ‘type’ suffix for the sake of simplicity.
The major community (party) groupings we employ are community business owner/operators (cbos), community resident employees (cres) and community resident non-employed parties (crneps). All members of these agent groups have an annual income and a development attitude. Business owner/operators are predominately pro-development, non-employed residents are mildly anti-development and employees tend to swing more between the pro-and anti-development views than the other agent groups. All agents though, are sensitive to environmental and income shifts and this influences both their general development attitude and their attitudes to specific tactics.

If desired, an alternative breakdown of the community can be adopted. An advantage of the REA approach is that, because code is developed around abstracted ER types, no major programming amendments are required to accommodate significant domain changes of this type (Feldman & Miller, 1986). This greatly simplifies, and reduces the cost of, system maintenance.

This community stakeholders model is critical to the correctness, completeness and effectiveness of the wider DS research artefact in which it is embedded: the destination management T&L
game simulation introduced earlier. As indicated in Figure 1, the DS research process is evolutionary, with results from early iterations informing subsequent artefact development. An early version of our artefact was employed in a classroom setting in August 2016 and students appeared to react enthusiastically to its use and offered a number of very useful suggestions as to ways it could be improved. None of the changes we have decided to implement as enhancements (as a result of this feedback) required structural changes to our stakeholders model but we did need a more fine-grained decomposition of our party entity, necessitating underlying, relational table changes as indicated above. Full details of our initial evaluation can be found in McGrath et al. (2017).

Keywords: Tourism community model, teaching and learning (T&L), T&L simulations

4. References
A Study of Mohammed Arkoun’s Political Ethic

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Abstract
The writing of this paper was at least motivated by several reasons: first, Mohammed Arkoun is one of the postmodern/contemporary Moslem scholars (2st1 century) –after the era of Modernist Moslems such as Abduh and Ridha—who owns authority to re-establish the ‘submerged iceberg’ of the rich potential of Islamic thought. Second, in comparison with other scholars, Arkoun is a Moslem philosopher with ability to combine “Islamic authenticity” and the broad knowledge of contemporary social sciences. From within his academic visions he gave birth to the Applied Islamology. Third, Arkoun is a Moslem scholar who experienced a life among two traditions—since his childhood—Islam (Aljazair) and France (western) that definitely had great influence on his attempt at creating future Islamic study which aims to link many facets of both aforementioned civilizations, whereas at the same time many other Moslem philosophers—with few exceptions—would rather conflict the two instead.

This research employs a philosophical approach by borrowing from Jacques Derrida’s analysis method, Muhammad Sa’id al-‘Asmawy, Paul Ricoeur and Anthony Giddens. Several methodologies presented here include descriptive, historic, comparative and synthetical analysis methodologies. Meanwhile data gathering is based on library research, covering both the writings of Mohammed Arkoun himself and other writings by different people relevant to this study.

Keyword: Mohammed Arkoun, political ethic, theocentrism, humanism, contemporary moslem

A. Background of Study
Political field of study, like what Europe and U.S saw, has its own rising tide and decline. At the beginning, researches on politics was commonly attached to philosophical politics stemming directly from philosophy. Famous names such as Socrates, Plato, and Aristotle from ancient Greek were very famous here. At the next stage, political study is chronologically related; this hovers around the history of political thought from the beginning until present era. In this second context the commonly referred path covers from Ancient Greek, Rome, Christian, Middle Ages, the Renaissance era to modern times with its liberalism. This stage also involves political ideas like Marxism, Fascism, Existentialism, and various other schools of thought of present days. Works of Sabine, Wolin, Strauss and others can be of good help in studying this second context. Similarly, the third kind of approach called political-comparative study by Bluhm can also be helpful, for
example in dissecting the similarity between Aristotle’s and St. Thomas Aquinas’ ways of thinking to Maritan today. Also for instance, in effort to place St. Agustinus and other famous figures from the past until now into different groups, all this falls within comparative politics field of study.  

From since the beginning of 20th century, such political study that deeply orients itself toward history and philosophy has been considered unscientific and not in accordance with scientific principles. Debates around this matter happened around 1940-1950. At the onset, what became the central portion of politics was state affair.

In the next chapter, political study drags its attention toward behavioral approaches to politics. Names like Lee Cameron Mc. Donald, Naomi B. Lynn, Dahl, Herbert A. Simon, and many others are the masterminds of the behavioral politics. In the beginning they refused classical political theories, especially those concerned with the study of state. But like what Herbert A. Simon himself (one of the pioneers of behaviorism in the U.S) has bluntly expressed, behaviorism is a term that is awkward and somewhat misleading. He thinks it is apparent today that the entire flurry caused by Behaviorism has now abated. Therefore it is clear that what has happened was not a revolution, but a mere common development in the political field of study instead. Today political reasoning regains the spot and continues to shine in politics. The notable indication is the fact that state reassumes a central portion over many discourses in political study, after almost disappeared for quite some time.

Differing from western tradition of political thought, studies of Islamic politics mostly talks about contemporary events in Islamic world, but without presenting due diligence at reviewing many facets of political ideas that might provide certain, deep contribution to the rise of such happenings.

The failure of present literature on Islam and politics can mostly be attributable to a lack of adequacy within the discipline itself. Modern politics has received a narrow definition so as to lose its relevance with other aspects of human’s collective efforts. Modern politics is not adequate, since it does not properly consider fundamental-ethical matters.

The contributions and articulations of Islamic writers to the theories of Islamic politics are miserable. Because in general, those writings have more political-doctrinal color in there instead of the more theoretical, philosophical or political and ethical one. In discourse regarding relations

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3 See further in *Jurnal Ilmu Politik*, AIPI-LIPI and Gramedia (Jakarta: No.7/1990), p. ll.
4 Ibid., p. 12.
between politics and religion, said Islamic-political academicians narrate more about classical legal text from the middle centuries, or portray more about the original political structure of Islam considered holy in the history. These tendencies actually outline and synthesize crisis in the field of present Islamic thought.

Here what Mumtaz Ahmad has proposed, in his book *Masalah-masalah Teori Politik Islam*, is interesting: The use of past theories and assumptions which are not critical have the tendency to narrow down the problematic field considered pertinent to the articulation of coherent political and social ideas. What is needed is a total reassessment over all previous assumptions and conceptualizations of past political phenomena. The main reason is not because such thought is wrong in its basic formulation, but since it lags well behind the changes that happened over last two hundred years, and thus becomes unable to provide us with any relevant, realistic and practical problem solving to many issues not present in the era such thinking was formulated.⁵

Studies of thought or political ethics here doesn’t talk about behavior,⁶ but about vision on how human and power relate instead.⁷ Political ethics is closely linked to law and authority. Here when political ethics can be considered somewhat metaphysics and less than realistic, philosophers often tend to be ignorant. Nevertheless, those philosophers have done a good deal in criticizing the legitimating foundation of political power. In the view of ethics philosophers, any politician must act right, be responsible and argumentative in their political actions.⁸ Because at any rate, either the positive or negative state of social circumstance will very likely depends on political policy. It therefore becomes clear that in this context the function of political ethics is to criticize political legitimation in some rational, objective and argumentative manners.⁹ The main duty of political ethics is not to directly meddle in practical politics, but to help to ensure that ideological aspects can be practiced objectively. Such political ethics therefore serves as the orientating standard and normative guide for politicians to perform their duty with nobility.¹⁰

It is important to state that the rise of political philosophy started at the beginning of industrial era, after the collapse of traditional political structure. Besides, the advancement of science and technology has also accelerated social life which calls for more precise political decision. But at the point when states take more and more domination over people’s life, here politics and power require political ethics to keep up human dignity.¹¹

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⁹ *Ibid*, p.3.
¹¹ *Ibid*, p. 4. Political ethic is a moral philosophy on political dimension of human life (p. 8).
Political ethics demands all the claims to regulate society to be subject to basic moral principles.\textsuperscript{12} In such circumstance political ethics can function as a measure for ideological criticism.\textsuperscript{13} Or to be more precise: The contribution of political ethics to societal development lies in its sole commitment for endless search for truth, either cognitively or normatively, without caring much about whether the power that be thinks it is appropriate or not. The result of the search for truth, more importantly a truth that carries wide relevance to people’s life, by itself always deserves to be voiced.\textsuperscript{14}

The ethics is reflective or meta-real.\textsuperscript{15} According to Magnis Suseno, political ethics defines: what is the heart of justice, what the ethical base of authority is and how power must be maintained. Political ethics does not stand in antipathy against any ideology nor tries to become a certain methodology or norm, but providing a guidance to noble politics.\textsuperscript{16}

According to the background of political ethics above, methodologically, some reason why Arkoun’s political ethics is preferred by the author is because Arkoun, in comparison with other postmodern scholars can talk more epistemologically in his writing, especially around the perspective of Islamic political ethics in correlation with the necessary deconstruction of \textit{Islamic studies} on global scale, in which political ethics generally holds relevance. In addition of offering his concept of Applied Islamology, Arkoun elaborates on Islamic thought that is relevant to political ethics. And so for the context of the research, the author would like to present six themes that fall under Arkoun’s study and those are: authority and power; development and social changes; relation between religion and state; holy book society and pluralism; democracy and modernity; secular, secularization and secularism.

Reconceptualization efforts of Islamic thought especially those concerned with Islamic-political ethics still need serious attention from Moslem academicians. This could be more palpable if correlated with the present domination of thought lies outside the discipline of Islamic-political study, as seen in many reviews on \textit{tafsir, hadits, kalam} (theology), philosophy, \textit{fiqh} and \textit{tasawuf}.\textsuperscript{17} Studies of Islamic-political values are also severely demanded especially considering the modern development nowadays. But such studies would have to be more ethical-substantial instead normative, which may lead to the use \textit{white and black} logic in each of their step. Actually in
situation like this several notable Moslem scholars have risen to deploy more of their time for Islamic thought with ethical-substantial dimensions, and one of them is Mohammed Arkoun.

Mohammed Arkoun himself is a Moslem figure known for a deep effort at offering his conceptual visions via Applied Islamology paradigm that also influences his political ethics vision. In author’s opinion, there are three points that differentiate Arkoun from other Moslem scholars.

First, Mohammed Arkon is one of the postmodern/contemporary Moslem scholars (2st1 century) –after the era of Modernist Moslems such as Abduh and Ridha—who owns authority to reestablish the ‘submerged iceberg’ of the rich potential of Islamic thought. Arkoun’s authority has received global appreciation from the Islamic world together with names such Fazlur Rahman (Pakistan) with his Islam Neomodernism paradigm; Naquib al-Attas (Malaysia) and Ismail Raji al-Faruqi (Palestina) both known as the founding fathers of Islamization of Knowledge; Syed Hossein Nasr (Iran) with his Islamic spirituality and traditionalistic paradigm; Hassan Hanafi (Egypt) with “al-Yasar al-Islamy/Islamic Left”; Asghar Ali Engineer (India) with his liberating theology; Mahmoud Thaha and Abdullahi Ahmed an-Na’im (Sudan) with their “sharia deconstruction”; Nasr Hamid Abu Zayd (Egypt) with (critique on) Koranic textualism; Mohamed Abed Al-Jabiri (Marocco) with Arab-Islam reasoning criticism; Muhammad Syahrur (Syiria) known for the theory of nazarîyyat al-hudûd; Abdulkarim Soroush (Iran) with the theory of shrinking and blooming of Islam; and Nurcholish Madjid (Indonesia) with his “Islamic secularization”.

Second, in comparison with other scholars, Arkoun is a Moslem philosopher with ability to combine “Islamic authenticity” and the broad knowledge of contemporary social sciences. From within his academic visions he gave birth to the Applied Islamology. Third, Arkoun is a Moslem scholar who experienced a life among two traditions—since his childhood—Islam (Aljazair) and France (western) that definitely had great influence on his attempt at creating future Islamic study which aims to link many facets of both aforementioned civilizations, whereas at the same time many other Moslem philosophers—with few exceptions—would rather conflict the two instead. Meanwhile what becomes the essence of Mohammed Arkoun’s thought are the concept of Applied Islamology, deconstruction of Islamic thought’s logocentrism as well as the use of semiotics and contemporary social science in Islamic study.

Mohammed Arkoun was grown in a social situation with a tasawuf tradition, which is a popular African Sufism activity also known as marabout or murabit among the Berber people. Arkoun also experienced the period when France ruled Aljazair. From a socio-cultural perspective, Arkoun belongs to a society with strong oral tradition added with some French education background and this had caused him to be more immersed into linguistic traditions, which in later time colored his Islamic thought and paradigm.
In many of his writings, Arkoun criticizes Western Islamologists for too often perceiving the situation in Islamic world merely based on concrete textual study and at the same time ignoring what is called *masses of Moslems* or the social ideal of the Moslems (*l'imaginaire social*). Western Islamologists also have tendencies to equally treat many parts of Islamic world, while in the actuality there are massive differences to be found between nations. For instance, Egypt prefers to hold tight to their old tradition, while Iran is more loyal to Islamic tradition, and Turkey expresses more of their secular face.

Mohammed Arkoun is a Moslem philosopher who stands in a postmodernism and post-structuralism spectrum, since he himself admits to feel uncomfortable upon a placement among the modernist Moslems, and one whose thought often bears criticism against several notable modernist Moslems like Muhammad Abduh, Thaha Husein, etc. For example, Arkoun criticizes the political paradigm of Ali Abdul Raziq and Thaha Husein that try to demythologize the role of Prophet Muhammad in building the nation-state of Medina. Both the two scholar refuse to acknowledge Prophet’s political role, and portray him as a merely spiritual figure, not also as a political head of a nation. Conversely, Arkoun thinks that the Prophet in Medina existed as a messenger as well as a political figure. Regarding Arkoun’s vision on political ethics, in his work *Rethinking Islam* he clearly questions whether or not political studies and political practice among the Moslems have been lying on solid ground of ethical aspects or academic-political philosophy? Have the Moslem intellectuals been providing contribution in the form of critical and constructive reflections upon the course of any political regime or authority, where such regime employs more of political rather than academic logic in managing its administration?

Concerning transcendental religious discourse, Arkoun questions why many prominent religious figures often provided legitimation to many forms of abuse. In addition, he also stresses the importance of critically reviewing controlling attempts by single party nation-states post-independence era that put aside many dimensions fall under populist culture category and their relevance with public morality.

On this public morality, Arkoun casts extra attention and eventually gets prompted to recommend Moslems to learn many political-ethical literatures like the writings of Ibn Maskawaih (*Tahdzib al-Akhlāq*). In the other words, Arkoun stresses the importance to differentiate theoretical ethics perspectives and moral actions or concrete morality on individual basis. Such thinking imply that Moslems should be continuously aware and academically critical towards political ideologies residing behind slogans such as “the rise of Islam”, “the advancement of Islam”, or call to “return

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to the religion” like what many fundamentalists have vocally voiced lately, which sound political and apologetic.

In analyzing the forward going phenomenon of monopolistic state administration, Arkoun employs Jurgen Habermas’s criticism discourse as his analysis implements, for no other reason than to establish moral and religious political-social orders. And even though such western methodology that Arkoun tries to implement have received many negative prejudice from Moslem theologists, Arkoun nevertheless insists that in order to strengthen faith any rationalization path over religious doctrines like this one can be taken.

In accordance with Prof. Fazlur Rahman’s view, Arkoun also emphasizes the value of culture and intellectualism beside many material-financial aspects in the establishment of developmental political orders. To Arkoun—and also Rahman—effort for advancing intellectualism is more fundamental than mere material-physical works, since the development of social orders of any nation which is not based on a strong foundation of ethics and spirituality as well as worthy intellectualism would only cause any development to last just in a brief period of time.

The broad knowledge of Arkoun’s ethics and spirituality through his theory called Applied Islamology also means to bring forward the concept of authority and power. In Arkoun’s mind, authority concept is more charismatic-theological and has Makkiyyah color and implicates the birth of unforced consciousness and obedience. On the other hand the concept of power is more rationalistic and systemic as the attributes of Madaniyyah visions which implicates and paves the way for powerful coercion over the people. These ideas are related to Prophet’s roles as a leader of the people both in the Makkiyyah era and during the Madaniyyah era. In modern political expressions, this can be translated as the existence of informal and formal leader in a social community or a state.

In another discourse, in ethic-spiritualistic manner Mohammed Arkoun’s thought cannot coexist with many symbols and feudal designations such as bay'ah, khaliṣfah fi al-ardh (ruler orientation), amīr, sulthān, al-mu'tashim billāh, al-mutawakkil billāh or al-hādi billāh as much as with other forms of cultism. According to Arkoun, many of above power terms born out of the power’s manipulation over the social construction of the society (post the death of the Prophet and his friends). In ethical-political term, Arkoun expresses his disagreement against people or Moslems who give no resistance to status-quo, and that they are supposed to always be the loyal opposition, critical but at the same time constructive. Arkoun also warns the power—along with their bureaucrats—to not carelessly throw many political issues around just for the sake of status quo.

20 Compare this with Fazlur Rahman, Islamic Methodology in History (Karachi: Central Institute of Islamic Research, 1965), p. 5.
Those are several preliminary pictures of Mohammed Arkoun’s political ethics that in author’s opinion are considered unique and interesting to study.21

Among other uniqueness of Arkoun’s political ethics is his emphasis on academic political study in favor of plain historic-chronological study. Arkoun accentuates how vital it is for a government to run on academic logic instead of sheer political logic. He also disparages religious scholars who appear before their public only to legitimate power that is clearly off the correct path. Arkoun criticizes the visions of many fundamentalists who hide behind slogans like the rise of Islam. Also mentioned is the importance of national development that rests on the solid base of cultural power and intellectualism, not only oriented toward physical-material progress. Arkoun differentiates concepts of authority and power, besides expressing his disagreement against feudalistic-Islamic titles, where power often manipulates such religious symbols or speak on behalf of God for their own political interests.

B. Formulation of the Problems
To study the abovementioned problems deeper, these following questions need to be formulated: (1) what becomes the foundation of Mohammed Arkoun’s thought in its critique on the state of classical Islamic-political ethics? (2) What is the substance of Mohammed Arkoun’s thought on Islamic-political ethics? (3) What are the field’s borders of Arkoun’s political ethics? (4) What are the significance, relevance and implications of Mohammed Arkoun’s political ethics on the development effort of contemporary Islamic-political ethics, as well as its practical contribution for Indonesian context?

C. Aim and Benefit of the Research
This research aims to: (1) trace, understand and give formulation to the basic foundation of Mohammed Arkoun’s thought in advancing criticism on classical Islamic-political ethics studies. (2) The next point is to explicate the main substance of Mohammed Arkoun’s political ethics. (3) The succeeding goal is to discover the limiting border of Mohammed Arkoun’s political ethics. (4) The last aim is to explain the significance, relevance, and the implications of Mohammed Arkoun’s political ethics in effort to nourish contemporary Islamic ethics and its practical contribution for the development of Islamic politics in Indonesia.

D. Literature Review
After reviewing many previous literatures, it becomes evident that much had been dedicated to research the thought of Mohammed Arkoun, but not each and every of them have something to do with what becomes the central focus of this research. Studies that cover Mohammed Arkoun

generally encompass four facets as follows: (1) researches on philosophical-epistemological fundamental of Arkoun’s ideas, including interdisciplinary approaches both pertaining social sciences and semiotics in Islamic field of study; (2) researches on religion and humanism; (3) researches on Koranic study (4) researches on modernity and democracy.

First, researches on philosophical-epistemological fundamental and interdisciplinary approach both pertaining social sciences and semiotics within the scope of Islamic study. Such attempts can be seen, for instance, in the research by Prof. Leonard Binder in where he concludes that Arkoun is one of liberal figures who believe in structuralism.22

The same goes for Dr. Mohammad Nasir Tamara in “Mohammed Arkoun dan Islamologi Terapan”, stating that the weak point of classical Islamology is the lack of intellectual reflection and methodology. Besides, this practically limits the scope of research to theological ideas, philosophy and law. Further, Nasir Tamara expresses that to fulfill this void; “Applied Islamology” is needed, as a scientific multidisciplinary practice, and with aim to create suitable circumstances for the liberation of Islamic thought from many old orders and misleading mythologies. Other than this, Applied Islamology still assumes many tasks that must be quickly accomplished. In reality though, there are serious inadequacy of tools and materials. Thus an international cooperation by many experts, in order to attain the lofty goal of Islamology is obligatory. Hence, Nasir continues, all research works in various forms like the making of catalog, lexicon, text book, and reprinting of classical materials that are critically reviewed by researchers become vital. In relevance to the development of thought in the West, epistemologically, and in opposing direction of the Islamic world, there is a constant questioning about the positive or negative impacts of all intellectual experiences such nominalism, subject’s sovereignty that looks real in cogito and Reform, the birth of spiritual-secular authority (XVIII-XIX century), applied rationalism, positivism and all its excess, dialectic materialism, historicity and all its excess, relativity, and else. 23

Research with similar attitude can be seen in the writing of M. Amin Abdullah, “Mohammed Arkoun: Perintis Penerapan Teori Ilmu-Ilmu Sosial Era Post-Positivis dalam Studi Pemikiran Keislaman”, 24 in where Amin states that Mohammed Arkoun has entered the last developmental

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phase of social science theories related to Islamic Studies.

The first phase is philological-orientalist, focusing on textual study as what commonly done by classical-orientalist researchers. The second phase is functionalist-modern, which is a form of Islamic research through the use of social-sciences approach. Meanwhile in the third phase, Arkoun has successfully employed hermeneutic-interpretative approach. And different from the positivistic second phase, in the third phase Arkoun already embraces post-positivism region in Islamic field of study. According to Amin Abdullah, in the third approach, society is no longer treated like “machine”, but as a system of meaning, in where lie elements of knowledge, experience and public feeling open for academic research.

Second, researches on religion and humanism. Malki Ahmad Nasir’s research, “Dekonstruksi Arkoun terhadap Makna Ahl al-Kitab”, mentions where Arkoun can finally see that the forms of orthodoxy has coagulated in the finely interlacing history of Islamic civilization, which in turn has influenced many thoughts in the realms of education, social matters, law, ethics and philosophy, and tend to be textual. According to the criticism, Malki says Arkoun tries to perform deconstruction over the meaning of ahl al-Kitâb, with intention of providing liberation from strong current of Moslems’ ideologizing and mythologizing paradigm, which in Arkoun’s own opinions is exclusive, old school and fragmentarily. But according to Malki, Arkoun’s criticism on the interpretation of ahl al-Kitâbis was influenced more by Arkoun’s own personal experience about other holy books, especially the Bible that he subsequently applied in his Koranic researches. 25

Meanwhile Ruslani’s paper, Masyarakat Kitab dan Dialog Antara Agama: Studi Atas Pemikiran Mohammed Arkoun, states that the words of God, in Arkoun’s perspective, must be understood through many methodological approaches, especially using hermeneutic methodology, semiotics, and linguistics. Historically and anthropologically, God’s words can be differentiated into three layers. First, words as the transcendent will of God. Second, words as seen in the history of the prophet. Third, words as written in the holy book. The third type of words of God we can still see and read, and therefore in viewing the layer– what Arkoun has described as official closed canons – it must also be understood from the historic setting when the words appear. This vision has a significant implication in Arkoun’s own thought about the concept of ahl al-kitâb and inter-religion dialogs.26

Third, researches on Koranic study. Dissertation by Dr. Abdul Kabir Hussain Solihu, Historicist Approach to the Qur’an, speaks about Fazlur Rahman’s hermeneutics and Mohammed Arkoun. In

his research, Abdul Kabir finds that the main attention or aim of Arkoun’s research is not clear: is his research falls under the category of Koranic study or under a methodological study? There is no more doubt that Arkoun cares about methodological aspects, yet his readers would be easily lost between analytical reading, criticism and textual interpretation, or a book on methodology. It is not difficult to see, Abdul Kabir continues, that Arkoun does not study methodology for the Holy Koran’s sake, but he learns the Koran for methodological interest. When that method is developed in the West, he won’t be satisfied until it is proven to be fit for implementation in learning the legacy of Islam. Actually Arkoun is truly aware that multidisciplinary sciences and methodology, especially semiotics, are still within their infant development and that no specific formulation is proven to be conclusive. Still, he builds his literature around all that.27

Fourth, researches on modernity, democracy and other. Some which is relevant with modernity theme can be seen in the thesis written by Suadi Sa’ad (Postgraduate study of IAIN Syarif Hidayatullah, Jakarta). The thesis is entitled “Islam Menghadapi Tantangan Kemodernan, Pandangan Mohammed Arkoun,” (1995). Said writing has a focus more on how Islam and modernity relates. In that work several modernity issues are mentioned including secularism, politics, social issues, intellectualism problems and development.

Other than these, there are several different writings focused on Akoun’s thought which involves various fields of research like what found in Johan Meuleman (ed.), Tradisi, Kemodernan dan Metamodernisme, Memperbincangkan Pemikiran Mohammed Arkoun.28 In this book Johan Meuleman edited several notable writings of some authors dedicated to Mohammed Arkoun’s ideas. This book presents for instance Arkoun’s Islamic criticism reasoning; Arkoun and the tradition of hermeneutics; contribution and the limiting borders of semiotics in religion study; Arkoun’s method in reading the Koran; Islam and modernity; Islam and postmodernism as well as several critical notes on Arkoun’s works. Also in this book relation between Islam and politics—an interrelationship research—that is how in actuality Arkoun’s Islamic vision correlates with politics, get a mention. The author here however would try to delve deeper about the political ethics of Mohammed Arkoun that mostly still lies beyond the depth of other researchers’

28Published by LKiS Yogyakarta, 1996. To discover how far the influence of Arkoun’s vision on Indonesian Moslem scholars, can be found in, Malik Ahmad Nasir, “Indonesian Scholars’ Reception of Arkoun’s Thought”, Khazanah, Vol.I No.6/July-December 2004, p. 1175-1223.
discoveries.

E. Theoretical Frame

Before elaborating on various ideas of political ethics, it is necessary to first clarify what ethics truly means. Dagobert D. Runes in his work *Dictionary of Philosophy* explains that concept of ethics is identical with *moral philosophy* that is a study or a discipline focusing its attention on the valuation side of agreement and disagreement. This concept of ethics, Dagobert continues, can also touch on a judgment over true or false, good and bad. Study on ethics like that can be two-pronged. *First*, study of ethics that leans towards analysis or psychological or sociological explanation on what and why we express our agreement or disagreement to what we do. *Second*, about attitude and behavior shown in the very agreement and the disagreement. It could be related to technical guide—and more so than just an explanation—to how ideal or standard form of action or personality can be imagined. Among experts of philosophical ethics, there is a tendency to combine the both orientations above. 29

In another perspective, the conceptual understanding of ethics itself can have three different meanings. *First*, ethics as a way of life like religious ethics. *Second*, ethics as a bundle of rules (*moral code*) like behavioral ethics, professional ethics and so on. *Third*, ethics as analysis covering ways of life and moral codes. The third form of ethics commonly classified as a branch of Philosophy also known as Metaethics. 30 Seen from above definitions, generally the concepts of ethics can be divided into two parts namely ethics as practical guidance and ethics as a critical study about morality. In the writing of this dissertation the author would like to stress the second understanding of ethics, particularly in relation with critical study on morality or Islamic-political ethics.

As a conceptual framework to understand above ethics models, here the author would like to present several explanations on political ethics under the realm of Islamic thought as the baseline to approach Arkoun’s political ideas. Several concepts of said Islamic political ethics can be written as follows.

In the field of Islamic thought at least three streams of political ethics can be found: idealistic-formalistic, realistic-pragmatic and integrative. The first stream of political ethics argues that Islam is like a super market, self-contained and complete. According to this school of thought, to develop Islamic-political system the basic idea must be purely rooted from within the Islam itself. The Moslems are not supposed to look outward. This stream is backed by the majority of

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Moslem’s Brotherhood’s intellectuals, Abul A’la Al Maududi and Muhammad Rasyid Ridha.\footnote{Amien Rais, 

Meanwhile the second school holds the argument that Islam is like other religions, arguing that religious rites fully depend on God’s orders, while politics fully depends on people’s will. Like what expressed by Ali Abdurraziq, Prophet Mohammad lived in the history only as a ritual leader, not as a state’s leader (unlike what to the contrary believed by the first school of thought). Some of notable figures of this realistic-pragmatic stream are, besides Ali Abdurraziq himself, is Thaha Husein (ex-Egypt’s minister of education).\footnote{Ali Abd. Raziq, _al-Islãm wa  Ushũl al-Hukm_ (Kairo: Mathba’ah Misra Syirkah Musahamah Mishriyyah, 1925), p. 14.} As a matter of fact this ideology has many followers in Moslems’ countries.

Next, the third school of thought is the integrative, which thinks that while it isn’t true there is a certain political system in Islam, at the same time states that it isn’t true Islam is fully devoid of politics. This people believe in Islam there are formulated political ethics that can be utilized as motivation to assemble a state’s political system. This third stream is supported by Husein Haikal, and the Neomodernism Islamic figure like Fazlur Rahman.\footnote{Fazlur Rahman, _Major Themes of the Qur’an_ (Chicago: Bibliotheca Islamica, 1980), p. 62. This Haikal’s political vision has also been written as a dissertation by Musdah Mulia, _Negara Islam, Pemikiran Politik Husain Haikal_ (Jakarta: Paramadina, 2001).} As it seems, many Moslem scholars in Indonesia tend to agree with the third perspective. Based on above Islamic-political ethics point of views, a question thus can be raised: between the three, which political ethics can get the most acception of the Moslems? What would such political system mean, especially in relevance to Islamic thought?

A political system is a conception containing questions like: what is the source of state’ authority and sovereignty? God, king or the people? Next, who will take the charge of the state? What is the baseline of and how leadership must be elected and maintained? Last, to whom such power must be accountable, and how the accountability would be?

Normatively, in the Koran there is no regulating written system and order on how a political election for power should be held, only principles of justice and consensus. In the hadith of Prophet, what requires accountability is the “leading of the people”, not accountability “before” the people (’an raʿiyyatihĩ, instead of amãma raʿiyyatihĩ).

Talking about unanimity, in the history of Islam it is evident that Prophet Mohammad loved to convene with his friends. The Prophet however, did not make a certain pattern in managing such
convention, or in the other words, there was not yet a strictly developed procedural-institutional ways of convening. In our democratic system one known term is “according to the most votes”. Yet in the era of Prophet it wasn’t always the case that a convention ended with the most votes ruling. Further, in several circumstances the Prophet sometimes took decisions against his best friends.

As an illustration, after the Badar war, there were 70 infidel prisoners caught by the Moslems, among them were Abbas the uncle of the Prophet, and Aqil, a relative of Saidina Ali. The Prophet experienced a trouble due to the presence of his own uncle and cousin, and asked for his friends’ advice. Abubakar had the idea that the 70 prisoners be liberated for ransom. Meanwhile, Umar advised all of them to be executed. Finally, the Prophet decided on the liberation of the prisoners for ransom. The same goes for the case of Abdullah bin Ubay (a great hypocrite) whose corpse received *shalat* from the Prophet, done under strong censure from many of his friend especially Umar bin Khattab. Many other cases ended the similar way.

It is a fact that when Mohammad died, he left no legacy of political system. This had caused deferral of his burial until a political succession took place successfully. Factually and historically, it is even clearer there are differences in the patterns of the four following *khalifah* elections. Abu Bakar rose as a *khalifah* after receiving Umar’s pledge of loyalty followed by the mass. Meanwhile Umar, he became *khalifah* due to a beforehand plot by Abu Bakar through limited convention among two of his closest friends namely Usman bin Affan and Abdurrahman bin Auf. *Khalifah* Usman himself was elected by a council-like assembly composed of six prominent friends of the Prophet, including the son of Umar bin Khattab named Ibnu Umar. Coincidentally, six of them belonged to the Quraisy tribe, so there was no other rep. The election of Ali bin Abi Thalib was also different from *khalifah* Usman. According to the facts abovementioned, in principles Islam can be said to allow any form of authority or power (government) in whatever form it takes, so long as it can keep without leaving the values and principles of unanimity, justice and unity.

In the perspective of contemporary Islamic studies and its relevance to political ethics, M. Sa’id al-‘Asymawy34 proposes the theory of *authentic fundamentalism* and *political fundamentalism*. Methodologically, authentic fundamentalism lies between the people of idealistic-fundamentalist politics and people of pragmatic/liberal Islam or the rationalism-pragmatism one. This authentic fundamentalism employs more of *critical approach* and remains within the frame of spiritual humanism.35 In a neutral and moderate manner, al-‘Asymawy argues for the importance of active participatory and constructive aspects of human being in politics, while at the same time refusing

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34 Al-‘Asymawi, an Egyptian contemporary scholar who often talked about law. Al-‘Asymawy often opposed people who commit *politicizing Islam*, since al-‘Asymawy was categorized as inclusive Moslem philosopher. See, Carolyn Fluehr-Lobban (ed.), *Against Islamic Extremism* (USA: University Press of Florida, 1998), p. ix.

politicization of religion that he believes to be manipulative and provocative. \(^{36}\)

Difference in al-‘Asymawy’s political vision can be categorized as in-between Islamic political thinking which is more universal—which differs from particular Islam—where the more universal Islam can be said to hold tighter to its fundamental and permanent, long term Islamic virtues, instead of clinging to short term political interest, which tend to exploit religion for individual or communal interest like particular Islam does. Here al-‘Asymawy introduces his Islamic humanism perspective, \(^{37}\) although it can’t be avoided that many would think this *Islamic humanism* perspective is a direct influence of Europe’s renaissance, actually it can be found in the tradition of Islamic *Sufism*, while also exists in Christian and Jewish traditions alike. \(^{38}\) In al-‘Asymawy’s view, Islamic humanism is believed to be certainly different from *secular humanism*, which tend to be anti-religion. And to al-‘Asymawy, Islamic humanism combines human power by reasoning and universal-religious spirituality, where the concept of unity of God as well as unity of mankind lie. \(^{39}\)

Understanding his vision, Al-‘Asymawy seems to be deeply motivated to build a new Islamic-political vision in Moslems’ world especially in the Middle East, a vision which could sit on the base of Islamic humanism. Further, to al-‘Asymawy Islamic humanism’s political visions is not only limited to Moslems only but can also be accommodating to many human needs across different faiths. \(^{40}\) Here it is evident that al-‘Asymawy is trying to define some ethical and moral code that can work for all men without discrimination. This essentially differs from many Moslem extreme politicians who think that the words of God given through Prophet are exclusively sent to Moslems. \(^{41}\) What al-‘Asymawy has proposed looks very similar to what Arkoun has stated before on inclusive *masyarakat kitab* instead of exclusive *ahl kitab*, as what the author would like to elaborate on further later.

According to review on the three schools of thought above, and based on the main frame of al-‘Asymawi’ political ethics, it is apparent there is some dialectics in the realm of Islamic-political ethics that can be summarized into two developing shapes with one has *theocentrism* pattern and the other with *humanism*.

Based on the previous analysis it is evident that new Islamic political ethics cannot be possibly built on the old methodological foundation of Islamic studies, but must be supported by a new methodological base of Islamic studies. The sociological implication in Indonesia, and in the

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\(^{37}\) Ibid., p. ix, 4.

\(^{38}\) Ibid., p. 4-5.

\(^{39}\) Ibid., p. 5.

\(^{40}\) Ibid., p. 5-6.

\(^{41}\) Ibid.
attempt to develop new knowledge on contemporary Islamic studies especially the one related to the advancement of political studies, the author would use the term *postmodernist Islamic study* in the new *Islamic studies* field, and *Theo-humanistic political ethics* for field of political studies.

F. Research’s Methodology

The writing of the paper on Mohammed Arkoun’s political ethics pertains to the meaning and position as well as the implication of his view on Islamic studies and the transforming contemporary thought of Islamic politics. This research is a part of intellectual study that fall under cultural research category. The research employs a philosophical approach. The methodologies in use are descriptive, historical, and analytic-synthetic methodologies.

The research uses a rational thinking method. By rational it employs discourse analysis method as proposed by Jacques Derrida with his deconstruction method. This method is applied through critical or deconstruction effort over invisible orders of a given text. Such deconstruction is closely related to things ‘unthought-of’ and ‘unthinkable’. This Derrida’s method is useful to figure out ideological and mythological masks hiding below in the realm of Islamic-political ethics study.

The philosophical analysis is enriched with Muhammad Sa’id al-‘Asymawy’s take on authentic fundamentalism which he thinks differs from political fundamentalism. If authentic fundamentalism tends to relies on universal and transcendental virtues of prophecy, political fundamentalism tends to relies on the more particular and historical Islamic political discourse, which generally speaking has already derailed from the originality and universality of Islam.

In analyzing many dimensions of Arkoun’s political ethics, the author would like to include Paul Ricoeur’s perspective on discourse and action relevant to autonomy of text that implies autonomy of action and responsibility. The same goes for the distinction between individual ethics and social or institutional ethics.

According to Ricoeur, social reality or history would at least have four characters. *First, fixation of action*, which means a reality – either social or historic – will only serve as purposeful scientific object, as long as it has already structured or fixed in – a discursive – writing. *Second, the autonomization of action*, meaning our social action has objective significance. Here it also means that our action can sometime no longer relates to our intention, just as text’s meaning would no

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42 Further review on Derrida’s deconstructive method can be found in this dissertation p. 64. See also *Basis, No.11-12, Year 54*, November-December 2005 and No.11-12, year 56, November-December 2007.
43 Carolyn Fluehr-Lobban (ed.), Against Islamic Exterimism, p. 5 and 17. Deeper review can be read in p. 97 & 125 in this dissertation.
longer depend on its author’s psychological intensity. This is what Ricoeur calls *decontextualization*. There is a distinction or a gap between the doer and his deeds. For instance, a political leader is not judged by the purpose of his policy but more by how effectively it can reach said end.\(^{47}\) Third, *relevance and importance*, which is the separation from original context of action. Here it means that a text doesn’t need to be understood based on either its *asbab an-nuzul* (*relevance*) or the value (*importance*) of action during the context in where said text was brought to existence. Or in other words, a deed can mean another if placed in different context in time. Fourth, *meaningful action*, meaning a text in essence is very open to various new interpretations (*human action as “open” work*). Here it should be understood that text would no longer be tied to the former audience during the dialogical process of verbal language. An action is no more signified by its eyewitness only. Any action thus becomes forever open to new interpreters of various eras. This is what Ricoeur means by *recontextualization*.\(^{48}\)

In the writing of this dissertation, the author would also include some from Anthony Giddens in discussing the theory of structuration.\(^{49}\) Giddens’ sociological concept lies between two poles, the structuralism-positivistic, which emphasizes structure but underrates *human agency*; and the voluntarism-interpretative which emphasis agent more so than the structure. Here Giddens proposes his theory of structuration which implies a symbiotic relation between agent and structure (*generation of systems of interaction through duality of structure*).\(^{50}\) In Giddens’ perspective, there are three dominant dimensions of structuration in society and those are: meaning system, domination and legitimation. The domination of a power is very determined by available facilities such economy, politics, social factors, culture and ideology. Meanwhile legitimation is very dependent on norms of law, religion and tradition. And so the interrelation effect of power domination and abuse of normative legitimation can results in structural felony.\(^{51}\)

To complete the theoretical lenses of the research, here the author would also use some of René Girard’s mimetic perspective like how Arkoun has addressed through the theory of *la surenchère mimétique*. Girard’s perspective that Arkoun subsequently adopts is also useful to discover how far Islamic factions commit their claims of holiness around their own political views.

Meanwhile descriptive thinking methodology is achieved through collecting relevant data on Mohammed Arkoun’s thought; those data are then deconstructed, explained and described minutely. On data collection, documentation method is preferred by the author; both including

\(^{48}\) Ibid.  
primary and secondary data treated as documents, read and understood as such the necessary parts relevant to the formulation of the problem can be selected accordingly. Various data taken are based on library research. This means that the sources of the data are available as written texts concerning the topic of discussion. Even though on this study the focus is on political ethics of Mohammed Arkoun, to enlarge the knowledge base in this research some comparative study against many literatures related to Islamic political thought and other relevant works are also presented.

**Bibliography**


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Management / Marketing

Tuesday, July 4, 2017  14:50-16:20  Grand Ballroom (II)

Session Chair: Prof. Yang Gao

HKICSS-0028
The Practices Research of Dynamic Transformation of Enterprise in Digital Era—The Perspective of Change Champion
Man-Chun Lien | National Sun Yat-Sen University
Yu-Ping Wang | National Sun Yat-Sen University

HKICSS-0031
The Relationship between Participation and Satisfaction for Online Career Community - A Case of LinkedIn
Tsuang Kuo | National Sun Yat-Sen University
Chih Ta Chen | National Sun Yat-Sen University
Chih-Ching Chen | National Sun Yat-Sen University

HKICSS-0042
The Influence of Entrepreneurial Learning on the Integration-Oriented of Opportunity and Resource and Entrepreneurial Performance
Yang Gao | Dalian University of Technology

IHTMM-0004
The Consumption Value of Realizing Genuine Self: Consumer Need for Authenticity
Yu-Yi Ma | Aletheia University
Shuling Liao | Yuan Ze University

HKICSS-0067
The Conceptual Model of the Acceptance of Self-Service Ordering Systems for Restaurants
Ting Yang | Macau University of Science and Technology
Qingmin Mok | Guangdong Information Engineering Institute
Ivan Ka-Wai Lai | Caritas Institute of Higher Education
HKICSS-0036
The Spatial and Temporal Diffusion of House Prices in South Korea
Xingqun Xue | Dalian University of Technology
Yang Gao | Dalian University of Technology

HKICSS-0058
Taiwan Weather and Stock Returns
Robin | Universitas Internasional Batam, Indonesia
The Practices Research of Dynamic Transformation of Enterprise in Digital Era - The Perspective of Change Champion

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Abstract

The global digital era has led to the acceleration of environmental changes; consequently, enterprises are obligated to undertake transformation activities. The environmental changes faced by enterprises are mainly attributable to Internet technology, access to unlimited information, ecosystem changes, changing consumer demand, efficiency processes, automation, millennials, and accessible product information. Many companies face these changes and may repeat past strategies or modes of operation to cope with them. However, businesses cannot always face the same situation. We must determine whether past strategies are sufficient and appropriate for long-term businesses. This study used dynamic capability as its main theoretical framework and explored how organizations can achieve organizational transformation through their dynamic abilities and related key champions in the digital age. We selected three Chinese companies for a case study to examine their real-life practices in this context. And we used interview to invest. We found that when enterprises face environmental changes, “champions of change” may emerge from each level of the enterprise, including business leaders and frontline staff. They will be based on market demand, customer needs, and staff needs to initiate changes in behavior and integrate organizational resources and advantages to develop new capacities or businesses to meet the challenges of environmental change. The main contribution of this paper is that it offers empirical evidence, and the results may serve as a reference for enterprise operations.

Keyword: global digital era, organizational transformation, dynamic capability, champions of change

1. Introduction

Enterprises face the impact of the era of globalization, the environment changes faster and faster. In order to be able to cope with changes in the industrial environment, many enterprises have to carry out transformation activities. Change is one of the norms of business survival, is the inevitable process for all enterprises (Drucker, 2007). The environmental changes faced by enterprises are mainly attributable to Internet technology, access to unlimited information, ecosystem changes, changing consumer demand, efficiency processes, automation, millennials, and accessible product information. Many companies face these changes and may repeat past
strategies or modes of operation to cope with them. However, businesses cannot always face the same situation. We must determine whether past strategies are sufficient and appropriate for long-term businesses.

Many companies realize that for long-term and sustainable management, in addition to the development of the corresponding business plan, and the enterprise must become more active, sensitive, and master the opportunities brought about by environmental change and development. Teece et al., (1997) proposed the term "enterprise dynamic capability" to define how enterprises can integrate, construct and reconstruct internal and external capabilities to respond to changes in the business environment. Environmental change may bring new opportunities or threats for the business. So, dynamic capabilities include enterprise innovation that is beneficial to customers but not good for competitors, adapting changes and creating change (Teece et al., 2016). On the other hand, the business consists of "people", all things need to be carried out by the people. The first-line staff, managers, and even leaders who come into contact with customers are likely to start changing behavior. And then through the relevant corporate culture, organizational structure, leadership and other support, will bring the organization to update the strategy and structure, and then generate a new business model or organizational structure.

To sum up, in order to promote the transformation of the event, the continuous change of the enterprise must have the dynamic capabilities, as well as important key driving people. This study used dynamic capability as its main theoretical framework and explored how organizations can achieve organizational transformation through their dynamic abilities and related key champions in the digital age. We selected three Chinese companies for a case study to examine their real-life practices in this context. And we used interview to invest. The main contribution of this paper is that it offers empirical evidence, and the results may serve as a reference for enterprise operations.

2. Literature Review
2.1 Dynamic Capabilities of Organization
Enterprises may face many risks and uncertain things which may be known or unknown in their business processes. In order to deal with these possible problems, companies must always maintain the sensitivity for the changes of environment. Many successful companies are not difficult to find common features, that is, at any time to maintain the dynamic adjustment. For example, early IBM was the production of office equipment manufacturers. It becomes a multinational company of the professional advisory services and technology through continuous change and reorganization. However, there are many companies used to the old way of doing business, lack of awareness of the crisis, because of the organization is not willing to change inert, and ultimately lead to organizational failure. For enterprises, it is important to keep the dynamic capabilities. Companies must explore how to reorganize and integrate their resources in
a dynamic environment to adapt to market and technological changes.

Teece et al., (1997) divides dynamic capabilities into three main clusters:
1. Sensing: enterprises identifies, develops, and jointly develop and evaluate technical opportunities and threats related to customer needs, that is, to explore the unknown future;
2. Seizing: mobilize resources to meet the needs and opportunities, and get value from it;
3. Transforming: achieve continuous update.

In the face of changes in the market environment, companies must identify and assess any opportunities or threats through internal and external environmental changes based on observation and awareness. Then the organization leader or senior manager will organize the resources, ability, or technology to effectively adjust, seize the opportunity to resolve the threat, and to overcome the possible organizational inertia and path dependence, and thus make the organization renewal. The existing capabilities of the organization may exist in existing organizational practices, structures and processes, or through new routines to learn new routines and form the basis for the long-term competitive advantage of shaping companies (Winter, 2003; Zott, 2003). At some critical moment, the CEO and the senior management team can perceive a key development or trend and guide the enterprise forward, which is the vital dynamic capability of the enterprise (Teece, Peteraf, & Leih, 2016). More specifically, the organization's existing capabilities reflect the competitiveness of enterprises in the current environment. The challenge for high-level leaders is to nurture and improve these capabilities and to reconfigure these assets and integrate and apply them effectively during contextual transformation (O'Reilly & Tushman, 2008).

2.2 Change Champion
For all organizations, they need to evolve over time and take a long time to change their structures and processes. A good change champion, however, he/she can create more value for enterprises by their creative thinking and entrepreneurial spirit.

Organizational change is a necessary process for enterprise change. In order to maintain global market competitiveness, companies continually change their mission, strategy, goals, culture, processes, systems, practices, technology, and even the core values of the business (Warrick, 2009). Organizational champion is an invaluable tool for transforming through the use of innovative leadership models (Thompson, 2009). In the organization, champions are spontaneous and informal to promote innovation and change others actively and enthusiastically. They make things that are helpful to the organization, which goes far beyond their job demands. This reflects the individual's commitment to the character, rather than emphasizing the profession or qualification (Locock et al., 2001; Howell & Shea, 2001; Mantere, 2005; Howell & Higgins, 1990). One of the main roles of champions is to influence and promote others to change. They
combine professional groups to build teams with passion and commitment by innovation, and develop informal networks to support them through a commitment. Most importantly, they will be innovative as an added value, passed to the members of the organization, and to participate and encourage others to do the same thing. In this process, champions play the role as a boundary spanner between high-level managers and other organizational members (Maidique, 1980; Pettigrew et al., 1992; Carlile, 2002).

According to the relevant data, it has been shown that more than 70% organizations cannot achieve organizational change and even make things worse (Burke, 2008, Miller, 2002), why are there so many changes failed? Mainly lack of understanding of how successful management changes, especially high-level managers or leaders, as well as through the layers of managers and members of the organization to participate in change efforts. Usually initiate change may be the visionary leader, outstanding managers or the outstanding performance of employees. Champions usually have a clear vision to be able to demonstrate their understand ability to adapt new organizational goals, and to perceive and collect messages to help identify, understand, transform into new elements into the employee's self-concept (Pratt, Rockman & Kaufman, 2006). In other words, it is useless if only the champion understands the direction. Businesses must let the members of the organization have a shared mental model to maintain the balance of elasticity required by both parties. The two sides will share the educational, professional and cultural background through the process of socialization. Warrick (2009) argued that the way to improve the success of organizational change is through organizational development change champions, especially at the top. Change champions can exist at any level in the organization, which can become change champions with initiating, asthma, and implement. Organizations can develop change champions at all levels, encourage them to support and participate in the need for change, and help others to participate in change process.

To sum up, when the organization needs to change, the organization advocates must be very understanding of the mode of operation, strategic objectives and development direction. They play an important role for leadership and cross-boundary spanner to control the entire process of change. Champions have the abilities of high risk of commitment, innovation, and influence to achieve organizational goals. They can be seen as the unique human capital in the organization.

2.3 Change Management
Organizational development is an improvement in organizational strategy to help organizations respond, adapt, adjust, and enable them to successfully manage change. When companies face a turbulent environment, their culture, processes and structures can improve organizational efficiency. In other words, organizational development can make the organization be an organic structure, in which all elements, such as people, technology, processes, structures can be coordinated with each other to actively manage and resolve changes in the environment (French, Bell, & Zawacki, 2005).
Change is one of the norms of business survival, is the inevitable process of the enterprise (Drucker, 2007). Change can be divided into continuous change and destructive changes. In the process of change, high-level managers must lead the staff involved, otherwise the change plan may fail. Thistle & Molinaro (2016) takes British Columbia Insurance Company (ICBC) as an example to discuss how to drive organizational transformation through strong leadership. They use a leadership contract to show that when an organization needs to transition, HR leaders need faith and determination to make a cautious decision to clarify why the organization's primary obligations. Most leaders only like to do a good leader, but the role of the request sometimes have to make unpopular decisions, give direct feedback, and within the organization to establish a strong network of relationships. Whelan-Berry & Somerville (2010) pointed out that the five key steps in the process of organizational change were to develop a clear and compelling vision, to shift the vision of change to the group and individual level, to take change and maintain change, and the institutionalization of the change. These steps cover the process of change at the organization, group, and individual level. At the organizational level, change leaders know how to drive change; at the group level, the drivers of these changes must be reassigned to each department, team, and location in the organization that are relevant to these levels of change; at the individual level, individual employees must change their values, attitudes and behavior in order to make the change successful. Whelan-Berry & Somerville (2010) divides the drivers of change into seven categories, namely, an accepted vision of change, leadership-related action, change-related communication, employee involvement in change-related activities, change-related training, alignment of human resources practice, as well as alignment of structure and control process.

It can be seen that a successful business transformation, we must integrate all the business people, things, and items. When environmental change bring the opportunities and threats, driven by change advocates, and the organization's related high-level leadership, structure and system support, full participation process, and ultimately to promote the successful transformation of the organization. And maintain the organizational culture is the way of change, in order to quickly change and compete in the industrial environment to survive and sustainable development.

3. Research Method

This research is mainly based on the enterprise management practice in the digital age to discuss the change champions how to use the organization dynamic ability, carry on the related organization transformation activity. Therefore, the study selected three companies operating in China as the main case study object, and through qualitative interviews to sum up the relevant key content. The basic introduction of the three companies is as follows:

Company J
Operating more than 20 years of land-based enterprises, it’s the current Chinese mainland's leading consumer electronics manufacturers. Mainly through technology upgrades and user-friendly products to provide excellent life solutions, and committed to creating an intelligent, smoke-free, and open kitchen by innovation.

Company F
Set up more than 40 years, it’s the land in the convenience of the retail system, service base throughout Japan, Taiwan, Thailand, Indonesia, Vietnam, the Philippines, the United States and other places. As of the end of 2014, in the mainland has more than 2,300 stores. Business flagship to create new value, to provide high-quality goods and services, to impress the customer’s heart; and joined partners, manufacturers, employees grow together; to comply with local laws and regulations, as the community trust the target business, to promote "people-oriented" corporate culture.

Company A
Enterprises attached to the well-known Chinese e-commerce group, the use of its data, business case, the accumulation of global business intelligence, open, cooperative, build, create a way to create an influential business knowledge platform. Founded in 2007, the company launched a number of commercial services products and data maps, providing a large number of data messages for economic research reports.

4. Empirical Analysis
This section explores what problems are encountered in the three business cases in the course of the business, who is found by the question, who makes the response, and the management of the organization.

4.1 Company J
Operating part
Reason: the enterprise found that the industrial environment by the IOT, and gradually change the business model.

Response:
1. To establish a business orientation and upgrade the smart kitchen to provide customers more convenient life;
2. Establish a national distribution network and combined with online to offline marketing.

Impact: business model from the traditional into a network type and the network has become the basic business environment elements. Finally, electricity business accounted for 40% of business operations.
**Marketing part**

Causes: the traditional influence of the television as a marketing force, gradually affected by the impact of digital devices, consumer attention to smart phones, flat and other devices, coupled with the traditional purchase of television hot period of high marketing costs.

Response:

1. Use the communication software (APP) to establish a friend communication circle with the consumer and forward the product message, and cause the hot topic. Marketing spread of more than 100 million and to replace the past advertising costs cannot achieve the effect.
2. Connect WIFI and product and a comprehensive intelligence to record the user frequency and understanding of user habits. And use product characteristics to analysis as a reference for future product design.
3. After bought products, customer can have a relationship with sales by Wechat. At the same time, according to the number of product, company can understand where location did user buy products, user information, where is the nearest maintenance location to build the relationship between users and enterprise network.

Impact: Establish a network of relationships between users and businesses, link all data to cloud services, understand user needs and habits, and serve as a reference for future product design.

**Innovation part**

Causes: enterprise knows good products can achieve consumer upgrade which needs good designs and ideas to meet the need. And the strength of the enterprise is R & D, design and brand marketing, so they should play their own strengths.

Response:

1. Many motor accessories are manufactured in Taiwan and are accompanied by product consultants from Taiwan.
2. Set a creative theater and provide employees with the inspiration of the product design, which different from the traditional manufacturing business model. Through the simulation of specific scenes and discuss specific topics, product managers and R & D personnel spontaneous composition of the discussion group, at the same time invited the Taiwan designers to share, to discuss and stimulate creativity.

Impact: Create a shared corporate culture and through cross-cultural exchange platform to stimulate employee creativity. At the same time through continuous communication with the outside world to share, then design more suitable for the country's products. Enterprises
established a network of relationships with the outside world finally.

Summary
The leader of the enterprise plays the role of change champion and leading enterprises from the traditional manufacturing enterprises transformed into an innovative R & D enterprise. At present, due to the impact of several waves, many companies have transformed into a digital enterprise. However, enterprises will face many problems and challenges in the transition, which may greatly affect the organization's original structure and mode of operation. Company J used incremental change which support with outside network through creative theater let employees can more in-depth understanding of customer needs, and then design innovative products.

4.2 Company F
Operating part
Causes: leader understands company should focus on the main targets from the mainland 1.3 billion people and must break down the real consumer groups. According to the consumer's habits, enterprise established a multi-dimensional business platform (eco-circle).

Response:
1. Cooperate with other enterprises to adopt common brand management mode. The establishment of a common platform, rather than a single brand, and invited stores stationed to maintain the operation of the ecosystem to create a win-win concept.
2. The establishment of data military room to combine with relevant information departments and collect consumer information. To their own business as information portal to form the formation of data business and understand the consumer behavior. The future can also provide these data to the relevant needs of people (business), to achieve the effectiveness of data realization.

Impact:
1. Use business intelligence to establish a digital, accurate management.
2. Establish a network of corporate relations to break the original boundaries and reorganize the internal structure of the organization. To carry out the distribution and expansion of centralized network and cross-border cooperation activities.
3. Predict consumer trends from the data as a reference source for business development.

Management part
Causes: Leader is passionate on his work and think only passion can make the organization continually improve and enhance, then through their own influence to convey the idea to the staff. Managers think about how to use keen observation to increase the efficiency of management processes and reduce costs.
Response:
1. Leaders personally lead cadres and other enterprises to visit and learn. And the results used in enterprise management, improve the KPI to achieve, the independent business unit, the profit center profit and loss responsibility sharing system, and the legalization of business into a platform for business, so that employees can own the boss, to change the effectiveness of the organization.
2. To understand the staff ideas and goals, in the process of achieving the goal of what is lacking, how to help employees achieve their goals, so to develop the relevant career planning, such as staff after a year of manager training, become store manager, four years after the opening of other branches, six years after the fixed earn 50 to 100 million yuan income, ten years after the cause can be passed to the children, the store performance of the store responsible for the staff themselves as a boss.

Impact:
1. Organizational performance improvement.
2. Understand the needs of staff to establish a sound talent system and career planning.
3. To establish incentive and sharing mechanism this is direct and effective, so that employees feel more.
4. Organizational budget and employee motivation is linked; all high-level cadres must understand the staff ideas, and integration into the management system. Through the system and system design, so that all members can continue to learn and perfect, the establishment of incentives to share the corporate culture.

Summary
The leader of the enterprise play the role of change champion here, from the details of life found that the industry has been affected by the digital era. In addition to understanding the changes in the external environment, early response to the corresponding response, while the internal staff to maintain a good interaction between the staff to understand the needs and needs, combined with senior management to develop the relevant supporting system. Through the establishment of corporate culture and gradual reform, the traditional retail industry can transfer a digital enterprise to predict the future development trend.

4.3 Company A
Operating part
Causes: Leaders use the market for keenness, insight, forward-looking vision and past growth experience to position the organization. In order to provide a more convenient operating platform for enterprises, how to use the Internet to solve the current and future problems (China will face health and medical problems in the future), how to find out the
shortcomings of the current market can play opportunities.

Response:
1. With their own influence to lead the staff to today's position, to see tomorrow and the day after tomorrow's positioning, to study the current things and to see five years after ten years of social change.
2. To develop a variety of business with $4 + 2$ business segments (electricity, finance, cloud computing, logistics + health, entertainment).
3. Corresponding to the current rural medical diagnosis of layered medical diagnosis system, the C2B applied to rural medical. Use remote hospitals and remote video to enable city doctors to serve rural residents.
4. Committed to rural electricity business, and strive to achieve rural urbanization, to find the next consumer market.
5. In the B2B, to understand the VR and virtual reality is the key technology, so the acquisition of several related businesses.
6. To carry out industry alliance, including the core equipment and related application technology, and manufacturers to develop electricity business applications.
7. Organizational structure for the inverted pyramid-type structure, because the front-line staff (small two) interaction with consumers the most clear market trends, if the small two that the program is feasible, the authority to the grassroots hands, fully authorized.
8. Encourage employees to start their own business, if the staff ideas and feasible, the enterprise will give support.

Impact:
1. To promote the development of China's e-commerce, to lay the leadership of the concept and direction, the use of data to assess and predict future consumer trends and organizational development direction, to become an innovative enterprise.
2. To break the original industry operating mode, re-construction of industrial ecology; at the same time as the amount of data and use increased, the original use of IBM equipment has been unable to supply the rapid growth of enterprises, so decided to develop their own IT systems to improve efficiency.
3. Emphasize the importance of business scenarios, and maintain a good interaction with the outside world, each functional group at the same time with internal and external experts, through continuous adjustment and change, evolved to quickly adapt to the environment, to meet customer and market needs of the organizational structure. Its structure is not the use of traditional bureaucratic management system, but the business sector and the cause of the main structure.
4. Cross-border organizations to understand their own advantages and disadvantages with other enterprises, but also with the outside world to open the company's data authority, to
continue to adjust, with a high degree of dynamic adjustment.

Management part
Causes: Leaders stress that personnel training is the foundation of everything.

Response:
1. Fully authorized at the same time, companies will still be some of the principles and direction, such as the annual KPI development, so that employees assess their assessment method is more suitable, the standard; and their choice of assessment, because in addition to the supervisor, the staff Will also work with colleagues in other departments, these partners may be more than the head of the staff more understanding of the work of the situation.
2. The assessment is classified as the top 30%, 60% in line with expectations, the last 10% of the staff to assess whether the appropriate position, may consider changing positions or departments to try, not directly dismissed.
3. The establishment of e-learning platform, there will be engineers exchange of technical forums, each training course will be invited to the HR department and placed on the platform, business two sharing business experience, HR will send a letter every day to tell his staff Learning time and learning rankings, related college leadership, communication skills, corporate vision strategy courses, industry experts exchange and sharing lectures will be in this learning platform.

Impact:
1. The enterprise strategy content clearly corresponds to the business department, the institutions of high autonomy, rather than the whole company to take the same set of talent management system, this organization can be more resilient and coping ability.
2. Perfect e learning platform, to the staff a lot of independent learning space, enhance the motivation of the staff learning.

Summary
The leaders of the enterprise from the enterprise before the establishment of the Internet to predict the importance of the future industry, many companies have not yet found the impact of the number before the establishment of enterprises and related business development. In the course of business, "entrepreneurship" and "innovation" become enterprise-specific corporate culture, and shape the corresponding organizational structure. So in recent years, when many companies have a number of transformations, the company can maintain a high degree of flexibility, continued in the industry shiny fever, as the industry's benchmarking enterprises. On the other hand, the business unit of the unit is also a change advocate of the enterprise, because of its first line, very understanding of the development of consumer markets and opportunities, by the full authority of the enterprise, through the relevant corporate culture and organizational
system Support, so that enterprises can lead others, the first to find development opportunities.

5. Conclusion
This study explores how organizational change advocates change the opportunities for organizational transformation through organizational structure and processes, in a way that is being explored in a practical way. According to the interview contents of the three case objects, companies have found that the industry has entered the digital age, many traditional practices must adapt to changes and make changes. From the case of the company's approach can be found, the leaders of the company as the organizers of organizational change, whether it is traditional industries or electricity industry, all enterprises have begun to import a variety of digital platforms, internal and external transformation, such as employee e Learning platform, all the personnel training and learning into digital way; data platform to provide enterprise consumption data, the future of new product forecasts for reference sources. On the other hand, in addition to the leaders of the organization who have the identity of the advocates of change, many front-line employees also have the role of change advocates, through the environment changes from the perceived opportunities, combined with corporate structure, systems and resources, Of the business scope. In the process of change, change advocates must have a forward-looking vision, the use of organizational advantages, led the company all the staff, together with the strategic development goals.

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The Relationship between Participation and Satisfaction for Online Career Community - A Case of LinkedIn

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Abstract
Mole, Mulcahy, O’Donnell, and Gupta (1999) argued that the virtual community is centered on "sense of belonging among members." Also, virtual community sites have shown a rapid growth (Krasnova, Spiekermann, Koroleva, & Hildebrand, 2010). If we apply this perspective to customer satisfaction, the customer's loyalty can be raised by increasing customer satisfaction (Hyun, 2010). However, the real loyalty is embedded in the community where the network exists (Oliver, 1999). Nonetheless, few studies have adopted motives and relationship quality as the starting point. Utz (2016) found that users of LinkedIn have higher informational benefits than other community sites. Therefore, we proposed combining the community features of LinkedIn with those of the job bank websites in hope of using the resources of a virtual community site to increase user online participation, thereby enhancing customer satisfaction.

The objectives of our study are what factors influence the satisfaction of online community users who use the community-service site. 152 effective questionnaires were obtained by using convenience sampling method. We explore the influential factors on customer satisfaction, including information motivation, social integration motive, social enhancement motive, entertainment motive, knowledge sharing, relationship quality, customer satisfaction, online brand community participation.

The result of this study shows that:
1. Relationship quality has a significant positive effect on online brand community participation.
2. Online brand community participation has a positive effect on customer satisfaction.

Keywords: Brand Community Participation, Human Community Website, LinkedIn, Customer Satisfaction, Relationship Quality.

1. Background
Virtual community sites have shown a rapid growth (Krasnova, H., Spiekermann, S., Koroleva, K., and Hildebrand, T., 2010). Also, social media make virtual community easier to extend social networks (Utz, 2016). The popularity of social networking sites involves supporting online
interactions to get the services (Liang & Turban, 2011). Burt (1992) pointed that benefits of information have three forms: referrals, timing, and access”. But the past literature have focused on the benefits that use facebook.

However, Social commerce is a form of online and offline environments(C. Wang & Zhang, 2012). Utz (2016) found that users of LinkedIn have higher informational benefits than other community sites. Therefore, we proposed combining the community features of LinkedIn with those of the Job Bank website in the hope of using the resources of a virtual community site to increase user online participation, thereby enhancing customer satisfaction.

2. Literature Review

2.1 Information Motivation
Information motivation refers to the fact that consumers are involved in receiving and sharing information when conducting information activities (Dholakia, Bagozzi, & Pearo, 2004). By asking questions and reading articles from other members, consumers learn about brand and consumer information. Members can share with each other who lack information. During this period, members would discuss their activities in an interactive manner, collect and generate a lot of information and ideas. Because the interaction would continue in the online brand community, members read the community articles and collect information that will be stored in the community and become a valuable database. Members can participate in the online brand community in addition to access and share information, also solve their own problems. For example, if a question is posted on the community website before a product or service is purchased, the community member would provide a suggested method to help solve the problem. So there are two characteristics of information motivation to be noted:

1. The higher information motivation is, there will be more search and information content online brand community used.
2. The higher information motivation is, there will be more potential members to take the initiative to participate in community activities.

2.2 Community Integration Motivation
Community integration motivation refers to the need for members to interact with other members of the community to receive support and friendship (Dholakia et al., 2004). It involves the interaction between members of the community to obtain resources. McKenna and Bargh (1999) suggest that individuals interacting with members of the virtual community with the purpose of participating in virtual societies are to find people who are like-minded and seek social support.

2.3 Community Strengthening Motivation
Community strengthening motivation is defined as the value of support and friendship in order to strengthen the individual social status within the community's contribution (Dholakia et al.,
When participation motives are strengthened, they may take the initiative to refer to the community's strengths and spread the positive image of the community in the process of mutual communication, thereby increasing the possibility of word of mouth (Higie, Feick, & Price, 1987). Members of the community who are highly engaged tend to be interested in searching for information and responding to the needs of other community members. Based on the willingness to provide advice on others (Higie et al., 1987), community motivation can be enhanced to make members more willing to make suggestions for improvement in the community, such as filling out a satisfaction questionnaire or responding to a community administrator.

2.4 Entertainment Motivation
Entertainment has been identified as a significant factor in participating in the virtual community (Dholakia et al., 2004). In conducting a virtual community survey, results found that members of a community will participate only when they enjoyed community activities (Wasko & Faraj, 2000). In addition, Zhao and Lu (2012) defined the degree of entertainment that individuals perceive through interaction with other people on community websites.

2.5 Willingness to Share Information
Knowledge sharing is a communication. When members learn knowledge from others, they share knowledge of others (Hendriks, 1999). Even if they do not know each other, the interactive users on the Internet are happy to share and contribute their own experiences and information (Y. Wang & Fesenmaier, 2004). Bock, Zmud, Kim, and Lee (2005) define the willingness to share information, which is the user's willingness to share information to others on the community website.

2.6 Relationship Quality
Relationship quality includes satisfaction, trust and commitment that can reduce uncertainty and anticipate expectations of future interaction (Crosby, Evans, & Cowles, 1990). Because of the intangible and special nature of the service, customers often feel high uncertainty when accepting services, especially when faced with unfamiliar and complex services, the uncertainty will be higher. Good relationship quality can reduce uncertainty and anticipate expectations of future interaction (Crosby et al., 1990). Garbarino and Johnson (1999) pointed out that in order to reduce the uncertainty, customer trust training is even more important. If the members feel the relationship between each other, the quality would be higher and it will help improve their satisfaction. Besides, mutual trust can reduce uncertainty and enhance future commitment to continuous interaction. So increasing the frequency and time of visiting the website can increase user satisfaction.

3. Research Framework
This study is based on Madupu and Cooley (2010), Bock et al. (2005), Crosby et al. (1990) and
Garbarino and Johnson (1999), proposes the research structure (Figure 1) and conducts empirical investigation.

Based on a literature review, this study conceptualizes the relationships as Fig.1

![Diagram showing relationships between motivations and participation]

3.1 Research Hypotheses
According to the abovementioned research framework, the following hypothesis is put forward:

H1 : Information Motivation has a positive impact on online brand communities.
H2 : Community Integration motivation has a positive impact on online brand community participation.
H3 : Community strengthening motivation has a positive impact on online community brand participation
H4 : Entertainment motivation has a positive impact on online brand community participation
H5 : Information sharing intention has a positive impact on online brand community participation.
H6 : Relationship quality has a positive impact on online brand community participation.
H7 : Online brand community participation has a positive impact on customer satisfaction.

4. Data Analysis

4.1 Research Setting and Participants
This study was conducted using the My Survey, Google Online Questionnaire and Paper Questionnaire as the main collection methods and posted in the PTT network questionnaire and online brand community website for people to fill in the questionnaires. The response rate of online questionnaire and the direct issue of the paper questionnaire was 100%. There was no incompleted questionnaires during the survey.
The questionnaire was sent on March 1, 2015 and completed on April 20, 2015. A total of 152 copies of the questionnaire were collected. Table 4-1 shows the sample details of this study:

<table>
<thead>
<tr>
<th>Table 1. Respondent characteristics</th>
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<td>The frequency of viewing community sites</td>
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4.2 Analyses
Correlations, means, and standard deviations of the variables elicited from the analysis result are shown in Table 2, which indicates that every variable is positively correlated with the others.
The hypotheses afore-stated were examined respectively, in which independent variables and dependent variables were analyzed with a regression analysis. The results are shown in Table 3:

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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Information motivation</td>
<td>3.68</td>
<td>0.553</td>
<td>1</td>
<td></td>
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<td></td>
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<tr>
<td>2. Community integration motivation</td>
<td>3.66</td>
<td>0.578</td>
<td>.663**</td>
<td>1</td>
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<td></td>
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<tr>
<td>3. Community strengthening motivation</td>
<td>3.71</td>
<td>0.617</td>
<td>.663**</td>
<td>.659**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Entertainment motivation</td>
<td>3.31</td>
<td>0.686</td>
<td>.491**</td>
<td>.482**</td>
<td>.421**</td>
<td>1</td>
<td></td>
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<tr>
<td>5. Information sharing intention</td>
<td>3.51</td>
<td>0.659</td>
<td>.616**</td>
<td>.652**</td>
<td>.622**</td>
<td>.457***</td>
<td>1</td>
</tr>
<tr>
<td>6. Relationship quality</td>
<td>3.53</td>
<td>0.571</td>
<td>.684**</td>
<td>.621**</td>
<td>.673**</td>
<td>.640**</td>
<td>.698**</td>
</tr>
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</table>

N=152, **p<0.01

5. Discussion

5.1 Conclusion

Analysis of six factors, online brand participation and customer satisfaction as dependent variable by multiple regression, the "relationship quality" factor achieved significant level and the others did not. The "relationship quality" was divided into three parts: "satisfaction", "trust" and "commitment". In "satisfaction", the user is most satisfied with the real-name community members provided by the community website. This factor is because LinkedIn is a job website and also has interactive services for members, just like Facebook community. For head hunting companies and job seekers, real-name procedure eases their concerns. That is why they continue to use the web service.

In “commitment”, the users trust and commitment to LinkedIn to the same degree as facebook. Users use the community sites to participate in the community, get information, and get along with others. This shows that community sites need to provide multi-parties interactive services,
which increases the number of users to use the services and increase the number of members. "Relationship quality" emphasizes satisfaction, trust and commitment, and LinkedIn members pay most attentions to these three parts. Real name membership is an important way of service, and interaction frequency and intimacy would also affect the effectiveness of job seeking and head hunting processes.

The test found that online brand participation had a positive impact on customer satisfaction. Bagozzi and Dholakia (2006) mentioned that giving the positive experience to users in the community which will lead the users to remain loyalty to the community. From the multiple regression analysis, "online community participation" has an explanatory power of 36.3% to customer satisfaction. The frequency of users using online communities and the interaction model among members can predict the customer satisfaction. In other words, it is necessary to strengthen community interaction and provide more diversified services.

5.2 Managerial Implications
Based on the findings and conclusions, the following management implications and recommendations are proposed:

5.2.1 To Increase Interaction and Trust by Relationship Quality, and Thus Improve the Successful Opportunities of Agency.
Online service quality is often perceived highly uncertainty, especially in complicated, unfamiliar or considering for long time products and services. Therefore, it is recommended that the human resource community website must have a mandatory real-name authentication which would increase the trust. Through the trust and increasing the network of relationship and interaction, it achieves immediate, sharing and trust within community website, and thus improve the successful opportunities of agency.

5.2.2 The Development of the Community
Need to understand the motivation of potential users, attract more people to join through the topic or word of mouth packaging and other marketing methods and encourage the interaction between members by activities or rewarding.

5.2.3 Strengthen Community Interaction and Provide More Diverse Services
Same as facebook, community-style human resource bank website can instantly share personal information and news, encourage members to reply to job seeking and head hunting articles, cause the head hunting companies' attentions, interest members with resonance and identity and increase reputation and trust of profession.

6. Limitation of this Study
6.1 Sampling
Citing the literature Madupu and Cooley (2010) the H1, H2, H3 is not reaching significant, mainly because LinkedIn currently has fewer users in Taiwan and less well-known. Most of the information obtained from users who were never using LinkedIn. Therefore, this study was to enhance the LinkedIn community brand impression through the introduction of LinkedIn and understand the potential users’ views to LinkedIn website by the questionnaire. For future researchers, if LinkedIn members in Taiwan continue to increase, the sample of the questionnaire will be based on the use of LinkedIn members, and the results may be different. This article provides early research and can be given to prospective researchers.

6.2 Research Variables
In this study, the prerequisites, online community participation and customer satisfaction were measured by "Madupu and Cooley (2010), Bock et al. (2005), Crosby et al. (1990) and Garbarino and Johnson (1999)”. Due to the large number of facets, the research framework and research methods only included some important variables. The narrower scope also limits the completeness of the results of this study. The demographic variables only included gender, age, education, occupation, monthly income, usage of community website experience, browse frequency and usage of LinkedIn experience, frequency and whether or not ever heard of LinkedIn etc. Other relevant variables, such as the usage of traditional human resource companies experience are not included in the study. The scope of the study is not broad enough which limits the completeness of the findings.

6.3 Research Methods
This study used the questionnaire survey to collect information and it was difficult to control the attitude and cautiousness when they were filled. People may be unable to fill in the information content that is consistent with the situation due to emotion, current situation, and preconceived subjective cognition. In addition, the study based on questions from Madupu and Cooley (2010), Bock et al. (2005), Crosby et al. (1990) and Garbarino and Johnson (1999) and that cannot take into account the different theoretical models, structural and scale to conduct a comprehensive comparative study, therefore, the conclusions of the study may also be biased.

References


The Influence of Entrepreneurial Learning on the Integration-Oriented of Opportunity and Resource and Entrepreneurial Performance

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Abstract
In the context of the transitional economy, the uncertainty of the institution and niche market thrusts enterprises into diversified strategic orientation. In the field of entrepreneurial research, however, opportunity-oriented and resource-oriented are used scholarly as independent variables to explore their relationships with entrepreneurial performance. Research with such key conceptual feature can hardly solve the special problems of transitional economy due to the limitation of boundary conditions, and neglects the integration effects between opportunity orientation and resource orientation, as well, which makes enterprise performance maximization is also difficult to capture. Additionally, based on the theory of institution and learning, the contribution of opportunity orientation and resource orientation to performance will be different due to levels of entrepreneurial learning when the environment is in a state of transitional.

Therefore, there is a leverage complementary effect between the theoretical opportunity-oriented and resource-oriented. So, the paper first integrate the opportunity-oriented and resource-oriented, excavates its relationship with entrepreneurial performance as well. Then we validate the effect of learning style of exploration and exploitation on the integration-oriented of opportunity and resource and entrepreneurial performance.

Using 255 primary data gathered from entrepreneurial firms operating in China, the findings confirm that the integration of opportunity and resource prominently augments entrepreneurial performance, which indicates that complementary effect exists between opportunity orientation and resource orientation, and that the entrepreneurial performance can be improved by opportunity and resource integration. Additionally, the exploratory and the exploitative positively moderate the relationship between the integration of opportunity and resource and entrepreneurial performance, which demonstrates that entrepreneurial firms with high level of entrepreneurial learning can maximize the performance under the guidance of opportunity and resource integration.

The conclusion is of great impetus to enrich and expand the dualistic theory of entrepreneurship and theoretic strategic orientation. It provides the necessary theoretical guidance for new enterprises to coordinate and integrate different strategic directions and carry out effective
entrepreneurial learning activities in the context of transitional economy.

Keywords: opportunity orientation; resource orientation; integration-oriented; entrepreneurial learning; entrepreneurial performance
The Consumption Value of Realizing Genuine Self: Consumer Need for Authenticity

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Abstract
This study suggests that consumers purchase authentic product to satisfy their need for authenticity in addition to products’ properties of authenticity that they prefer in order to achieve their personal ultimate value. This exploratory study intends to explore the role of consumer need for authenticity in the consumption decision making process and the reasons behind the consumer pursuit of authentic products’ symbolic meanings. After 24 in-depth one on one interviews, the results provide a solid support for the perspective that consumer need for authenticity is a consumption domain value, and that consumers with different degrees of this need are motivated by different reasons, seek various values and products' authentic properties.

Keywords: authenticity, consumer need for authenticity, consumption value, true self, ideal self

1. Background
An increasing number of consumers have begun to look for the ideal authentic product (Lewis and Bridger, 2000), especially when they consider their possessions an extension of self identity (Kleine, Kleine II and Allen, 1995). Actually, consumers have long been seeking to satisfy the need for authenticity (Zavestoski, 2002); this desire has made its way into today’s world and embedded in a wide array of consumption categories (Grayson and Martinec, 2004). To understand this phenomenon, scholars have conducted studies on the impact of authenticity on consumer behavior, ex, authenticity is the one of key factors to reflect the products’ local characteristics (Dion, D., Sitz, L. & Rémy, É. 2012; Grayson and Martinec, 2004; Hede and Thyne, 2010; Munoz, Wood & Soloman, 2006; Kuznesof, Tregear & Moxey, 1997), the key element to reflect the products’ originality (Beverland, Farrelly and Quester, 2010; Williams, 2006; Newman and Bloom, 2012), a standard to qualify truth, a person’s genuinely (Price, Arnould and Deibler, 1995; Winsted, 1999).

From the standpoint of business owners, in order to fulfill customer need for authenticity, they have begun to position their brands catering to this need. For instance, luxury wineries would create a set of stories associated with their brand heritage in order to sell the products at a premium (Beverland, 2005, 2006).
Many researchers have studied the impact of authenticity on consumer preference and decision making in various fields, as well as how consumers recognize the definition of authenticity. The results have enriched the understanding towards authenticity, but the question on the motives behind consumer’s seeking for authenticity has yet to be answered.

1.1 Satisfying the Need for Self-Actualization through Consumption
In the post-modern society, consumption is not simply an economic activity (Liao and Ma, 2008). In addition to the satisfaction of functional benefits, consumers hope to possess the symbolic meanings embedded in the product or its brand (Zavestoski, 2002) and now place a higher priority on the embedded values of authentic products and services that reflect originality, locality, and truth (Lewis and Bridger, 2000; Liao and Ma, 2008). Making purchase of an authentic product or a product with the properties of authenticity in the mind of consumers is considered a protest against hypocrisy and untruth in the post-modern world (Firat and Venkatesh, 1995; Rose and Wood, 2005).

The pervasive role of value has a profound impact on all aspects of human life (Rokeach, 1973), and individuals are influenced by the relatively important values and are willing to surpass provisional objectives in order to achieve the end-state of ideal living (Burgess, 1992). There are more and more consumers in general consider that authenticity is more important than other consumption values (Lewis & Bridge, 2000) and guides their purchase decision and behavior.

Based on Gecas’s (1986, 1991) perspective, Zavestoski (2002) has divided the need for self-actualization within Maslow’s hierarchy of needs into efficacy and authenticity. To achieve self-actualization consumers would have to fulfill efficacy and the need for authenticity through buying products with authentic properties to satisfy their need for product authenticity in order to express who they are, and eventually achieve self-actualization (Liao & Ma, 2008). To satisfy the need, consumers would assess the properties of the product carefully, and thus consumer need for authenticity could be perceived as a consumption value that influence the purchase decision of consumers under specific conditions.

1.2 Properties of Authentic Product
When making a purchase consumers determine whether the product possesses the properties of authenticity based on if the product contains either indexical or iconic features (Grayson and Martinec, 2004). An object is categorized as indexical authenticity when it is perceived to be original or genuine, or when the behavior of an individual matches his true self. In contrast, iconicity refers to an object that possesses a certain symbol that give people a sense of similarity to the genuine ones.
Furthermore, some consumers determine the authenticity of a product based on if the product possesses traditional qualities, such as a product manufactured in the country of origin, the cuisine cooked according to traditional recipes, or a specialty of an area (Kuznesof et al., 1997).

Most of consumers who strive to fulfill their need for authenticity exhibit three propensities of consumption, deliberate consumption, loyalty to authenticity, and a dislike for imitation (Liao and Ma, 2008), which because of their discontent with the over-commercialized society, as they seek for truth and oppose hypocrisy.

Due to consumers’ preferences for the authentic properties of product, marketing specialists exploit the relationship between the product and its history, including its country of origin, the manufacturing techniques of traditional methods, or an extension of the traditional style to give consumers a perception of intrinsic authenticity (Beverland, 2006).

The consumers who value the need for authenticity prefer products with authentic properties as a pursuit of truth and trust as opposed to hypocrisy. Therefore, this study suggests that consumers purchase authentic products because the properties of authenticity serve as an instrument that fulfills their need for authenticity to allows consumers to express their characteristic in order to achieve their ultimate values. The studies in the past have provided profound insights into the authentic properties of product, this study intends to explore the role of consumer need for authenticity in the consumption decision making process, the symbolic characteristics of an authentic product consumer pursuit, and the reasons behind the consumer pursuit of those symbolic meanings.

2. Methods

This exploratory study focuses on the discussion of the relationship between the properties of an authentic product in the mind of consumers and the reason why they seek for consumer need for authenticity. Most of studies in realizing authenticity preferred interviews for acquiring efficient consumers’ opinions (Beverland, 2005, 2006, 2010; Grayson and Martinec, 2004; Lewis and Bridger, 2000; Liao and Ma, 2008). Therefore, this study collects the feedback from respondents primarily through interviews.

Consumer need for authenticity has an extensive impact on modern consumers. Scholars find that it difficult to distinguish consumers who emphasize on authenticity and prefer authentic products based on age, race, occupation, income, or other variables (Lewis and Bridger, 2000; Liao and Ma, 2008). In order to establish a theoretical foundation for the concept, this study has interviewed respondents in different demographic groups with various backgrounds (Beverland, et al., 2010). This study emphasizes primarily on the discussion of and discusses the relationship between the properties of an authentic product and consumption motives and value of consumers.
who seek the need for authenticity, and thus those without this need are not in consideration of the interview (Table 1).

The study takes the approach of in-depth one on one interview so that the interviewer would have enough time to interact with the respondents, capture their perspective on consumption, and observe their postures and facial expression during the interview (Strauss & Corbin, 1990).

<table>
<thead>
<tr>
<th>Participant</th>
<th>Sex</th>
<th>Age</th>
<th>Occupation</th>
<th>Degree of NFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-F01</td>
<td>F</td>
<td>26 ~ 30</td>
<td>Tour Guide</td>
<td>Higher</td>
</tr>
<tr>
<td>P-F02</td>
<td>F</td>
<td>51 ~ 55</td>
<td>Housewife</td>
<td>Higher</td>
</tr>
<tr>
<td>P-F03</td>
<td>F</td>
<td>41 ~ 45</td>
<td>Professional in Manufacturing Industry</td>
<td>Higher</td>
</tr>
<tr>
<td>P-F04</td>
<td>F</td>
<td>26 ~ 30</td>
<td>Marketing Specialist(Consumer Product)</td>
<td>Lower</td>
</tr>
<tr>
<td>P-M05</td>
<td>M</td>
<td>26 ~ 30</td>
<td>Marketing Specialist of Health Product</td>
<td>Highest</td>
</tr>
<tr>
<td>P-M06</td>
<td>M</td>
<td>31 ~ 35</td>
<td>Computer Engineering Researcher</td>
<td>Lower</td>
</tr>
<tr>
<td>P-F07</td>
<td>F</td>
<td>41 ~ 45</td>
<td>Housewife</td>
<td>Lower</td>
</tr>
<tr>
<td>P-F08</td>
<td>F</td>
<td>26 ~ 30</td>
<td>Advertising Account Executive</td>
<td>Higher</td>
</tr>
<tr>
<td>P-F09</td>
<td>F</td>
<td>20 ~ 25</td>
<td>Doctor of Traditional Chinese Medicine</td>
<td>Higher</td>
</tr>
<tr>
<td>P-M10</td>
<td>M</td>
<td>26 ~ 30</td>
<td>Student (Design Major)</td>
<td>Higher</td>
</tr>
<tr>
<td>P-F11</td>
<td>F</td>
<td>20 ~ 25</td>
<td>Model</td>
<td>Higher</td>
</tr>
<tr>
<td>P-F12</td>
<td>F</td>
<td>31 ~ 35</td>
<td>HR Consultant</td>
<td>Highest</td>
</tr>
<tr>
<td>P-F13</td>
<td>F</td>
<td>36 ~ 40</td>
<td>Music Instructor</td>
<td>Higher</td>
</tr>
<tr>
<td>P-M14</td>
<td>M</td>
<td>41 ~ 45</td>
<td>Pharmaceutical PR Specialist</td>
<td>Higher</td>
</tr>
<tr>
<td>P-F15</td>
<td>F</td>
<td>46 ~ 50</td>
<td>Administrative Personnel (Church)</td>
<td>Lower</td>
</tr>
<tr>
<td>P-F16</td>
<td>F</td>
<td>36 ~ 40</td>
<td>IT Marketing Specialist</td>
<td>Highest</td>
</tr>
<tr>
<td>P-M17</td>
<td>M</td>
<td>31 ~ 35</td>
<td>Financial Adviser</td>
<td>Lower</td>
</tr>
<tr>
<td>P-F18</td>
<td>F</td>
<td>26 ~ 30</td>
<td>College Secretary</td>
<td>Highest</td>
</tr>
<tr>
<td>P-M19</td>
<td>M</td>
<td>31 ~ 35</td>
<td>PhD Candidate (Management)</td>
<td>Lower</td>
</tr>
<tr>
<td>P-F20</td>
<td>F</td>
<td>31 ~ 35</td>
<td>Teacher (Art)</td>
<td>Highest</td>
</tr>
<tr>
<td>P-F21</td>
<td>F</td>
<td>31 ~ 35</td>
<td>IT Procurement</td>
<td>Higher</td>
</tr>
<tr>
<td>P-F22</td>
<td>F</td>
<td>36 ~ 40</td>
<td>Professional in Service Industry</td>
<td>Highest</td>
</tr>
<tr>
<td>P-M23</td>
<td>M</td>
<td>36 ~ 40</td>
<td>IT Staff</td>
<td>Highest</td>
</tr>
<tr>
<td>P-F24</td>
<td>F</td>
<td>26 ~ 30</td>
<td>Administrative Personnel</td>
<td>Higher</td>
</tr>
</tbody>
</table>

Note:
1. highest degree of need for authenticity: require properties of authentic product in all products for daily use.
2. higher degree of need for authenticity: properties of authentic product associated with personal interests and hobbies, high level of commitment, long-term usage.
3. lower degree of need for authenticity: require the properties of authentic product only under specific conditions or for special purposes.

Prior to the interview all respondents would be asked to fill out an open questionnaire to have a perspective on their understanding in the meaning of authenticity and their attitude towards consuming authentic product. Then researchers conduct interviews with every respondent based on their answers along with questions in past studies (Lewis and Bridgers, 2000; Beverland, 2005,2006; Beverland, et al., 2010; Grayson and Martinec, 2004; Gecas, 1986, 1991; Liao and Ma, 2008).
Each interview takes approximately one hour to one hour and forty minutes, all the interviews have been recorded with the consent of the respondents. Towards the end of the interviews, every respondent fills out a closed questionnaire that collects the general personal information of each respondent.

After each interview the interviewer compiles a transcript based on the open questionnaire and the recorded files, categorizes respondents based on their attitudes toward purchasing authentic products and divide them into different degrees of need for authenticity. The interviewer then processes the content based on grounded theory to interpret the thoughts of respondents without any predetermined sorting framework (Mile & Huberman, 1994; Strauss & Corbin, 1998). At last, the findings would be plugged into the case of each respondent to examine whether they match in every dimension and result positive external validity (Eisenhardt, 1989).

3. Results
Depending on the difference in the preference of consumer need for authenticity (NFA) to respondents, the properties of authentic product they value, their consumption value and motives vary slightly. The respondents who value the authentic properties of a product in every aspect of life and personal interests are mostly motivated by personal consumption motives for satisfaction of emotional and knowledge value; while those who purchase authentic products only under special conditions do so mainly for the sake functional and situational value.

3.1 The Difference in the Degrees of Consumer Need for Authenticity and Consumption Motives
Consumers who have the highest or higher degree of NFA are generally motivated by psychological incentives; these incentives motivate them to acquire a high spiritual value, personal relevance, and the actualization of ideal-self and true-self rather than an expression of individualism alone. This category of consumers seeks to satisfy their NFA hope to achieve emotional and spiritual fulfillment from the product. They would pay a high price for originality or a rare experience as opposed to buying mass produced products to sustain living at an affordable price. Consumers like these kind of products because that these products didn’t make only for commercial purpose.

One other reason that motivates consumers to seek for authenticity is because of the satisfaction acquired from consumption related to personal interests and hobbies which are valuable to them. They take the product seriously as it touches upon their memory in the past with rich emotions involved or exhibition of their identifications. This experience goes beyond their perceptions in the materialistic world, ultimately creating a sanctified image and meaning as a religious pursuit (Belk, Wallendorf & Sherry, 1989). Consumers also seek for a sense of trust in consumption as they attach a high value to the product relevant their interests, hoping this value to be sustainable.
Authenticity implies ethic, origin, and reality (Boyle, 2003; Liao and Ma, 2008), and thus enhances the special value and sacredness of a product to consumers (Grayson and Martinec, 2004; Williams, 2006), which explains why consumers seek to satisfy the need for authenticity.

At last, consumers seek to satisfy NFA in the hope of a sophisticated life style rather than the blind conformity to the fashion trend or the crowd. These people downplay the selection of the products that match their preference while making a connection with their individual characteristics or ideal life style. In the process of self development, consumers establish belief systems, personality and interest. They fully recognize their self identity and thoughts, their role in the society, and ideal life style (Arnould and Price, 2000; Onkvisit and Shaw, 1987; Sirgy, 1982) and consumption is a way to achieve happiness, self-actualization and maintain self-concept. These consumers are loyal to their characters and thoughts and connect these to their ideal individual characters and lifestyle to achieve self-actualization.

The consumer group with lower degree of NFA seeks to satisfy the need only under special conditions such as the need for work, gifting or high-price products because they associate the term authenticity with attributes that are reliable, trustworthy and of high quality. To avoid suffering a loss in consumption, they require NFA be satisfied. Buying souvenirs on a trip reflects this belief, because they attach the meanings of originality and locality with the souvenirs that they purchase (Beverland, 2005; Beverlan et al., 2010; Kuznesof et al., 1997; Williams, 2006). Interestingly, they consider those who prefer authentic products boasters that try to create an image of sophisticated taste or out of the ordinary.

3.2 The Difference in the Degrees of Consumer Need for Authenticity and Consumption Value
Consumers with highest and higher degree of NFA prefer the satisfaction of possessing functional value, emotional value, and knowledge value; whereas their counterparts with lower degree of NFA seek to acquire functional value and situational value. Modern consumers believe that consumption ought to satisfy functional value (Lewis and Bridger, 2000), and thus consumers would desire a satisfaction in functional value even though the levels of satisfaction of their NFA may vary. In addition to the aforementioned functional value, the consumption values to which respondents attach importance vary depending on their degrees of NFA. Those with highest and higher degree of needs emphasize the emotional and knowledge value; while the ones with lower degree of needs focus on situational value.

From the perspective of the respondents who highly value consumer NFA, one of the properties of authenticity is the spiritual insistence that involves the commitment to maintaining the heritage (Beverland, 2005, 2006; Liao and Ma, 2008), showing that a bond has developed between satisfying consumer NFA and traditional culture or original creative. This bond makes
them believe that satisfying this need would give them a sense of perpetual constancy in the rapidly changing world (Arnould and Price, 2000). Consumers' motives behind seeking the need for authenticity is an attempt to reflect individual characteristics such as personal values, self concept, and the role they play in the society as well as the personal interests and hobbies with sacred meanings attached. This shows that this group of respondents expects to discover the permanent values associated with personal characteristics, meaning for existence, and interests in the pursuit of this need. This phenomenon appears when the respondents have a higher propensity for the personal need for authenticity, because they seek to acquire emotional value from satisfying this need.

The other consumption value sought by respondents with highest and higher NFA is the knowledge value. This group of consumers determines whether their individual NFA has been satisfied by evaluating the satisfaction level of the authentic characteristics that they value (Brown and Patterson, 2000). They actively search and analyze the information in their areas of interest and enhance personal knowledge to determine whether personal NFA has been satisfied. Nevertheless, respondents consider marketing campaigns and the testimony of industry experts a commercial activity that delivers manipulative messages (Wasserman, 2002), and will therefore place hardly any trust in these messages and may even resist against its hypocritical appeal (Firat and Venkatesh, 1995; Rose and Wood, 2005).

Consumers with lower degree of NFA only seek to satisfy this need mostly due to conditional factors such as the need in work, gifting, high unit price, or souvenir purchases. This behavior allows them to achieve satisfaction in utility effect under specific conditions and build a connection with the place of production in order to acquire situational social value (Sheth, Newman and Gross, 1991).

3.3 The Difference in the Degrees of Consumer Need for Authenticity and the Properties of Authentic Products

The respondents who value the satisfaction of consumer need for authenticity differ from those with lower degree of need not only in their consumption value, but the product properties on which they emphasize and select also differ when they evaluate the level of product authenticity. These consumers tend to stress on the product properties relevant to themselves, including the differences in perception, a symbol of ideal-self, a connection to true-self, and other non-unique benefits.

Although these respondents consider the functional value that comes along with consumption, they also examine the products based on other objective conditions. For example, price is often used for measuring whether the cost paid for the product assures product authenticity, and product materials are inspected to ascertain if the product functions properly. They also look at
objective standards such as the adherence to the traditional manufacturing techniques, non-mass production, high quality with minimal defects, or other unique characteristics (Beverland, 2005; Lewis and Bridger, 2000; Liao and Ma, 2008) as a way to recognize the authenticity of product and acquire cognition value. They believe that an authentic product ought to maintain its founding principle and unique style that distinguish it from others as it creates a sense of timelessness and does not change with the fashion trend. When consumers make purchase of such a product, they could experience it as it was first released.

Other product properties of self relevance include a symbol of ideal self and a connection to true-self. Products with high personal involvement may help exhibit the quality of life or personality that the consumers aspire. The degree of need for product property is influenced by the level of personal income. Respondents indicated that they would not make the consumption beyond their purchasing power to satisfy consumer need for authenticity; instead, they would gradually change their consumption behavior and purchase authentic products to satisfy their need for authenticity and actualize ideal-self as their purchasing power increases (Landon, 1974). These consumers would not purchase the authentic product which they want but unaffordable until their purchasing power be improved.

This consumption value leads the respondents to select products that possess properties relevant to true-self. These characteristics could be special symbols that entice personal emotions and have sacred, irreplaceable value, or brand image that reflects personal characteristics, living style, and interests. For example, a T-shirt made of 100% cotton perfectly matches the personality of the respondent that exhibits wild and free character, and thus making the purchase gives him a feeling of dream fulfillment. Most respondents agree that the feeling takes place when they seek to satisfy the need for authenticity. This group of respondents chooses the products with self-relevance instead of the ones produced massively primarily because authentic products have a high degree of relevance to personal characteristics and interests. The products reflect their personalities and ideas, and create a link with their ideal characteristics and styles, essentially becoming a revelation of their ideology and helping them to find self-existence in the rapidly changing world (Arnould and Price, 2000).

The incentives of buying authentic products is an attempt that consumers disassociating themselves from the massively produced products with no individual characteristics, rather than differentiating oneself from the social norms and maintaining self-dignity. Consumers would purchase a product that exhibits self-relevance even if it has an established reputation due to word-of-mouth. In contrast, consumers with lower degree of need for authenticity value product benefits, quality, world-of-mouth, and price. In the mind of these consumers, an authentic product is the first of its kind with objective standards for evaluation. These standards include, but not limit to, trademark and brand, certifications by specific organizations, high quality with
minimal defects, and fabrics made of natural materials. Consumers with lower degree of need for authenticity also expect the product utility to meet their expectations when they make purchase of an authentic product either for work or gifting. These consumers would pay the premium for an authentic product when having conditional needs because of its superior quality and utility.

3.4 Discussions

The findings in this study help to understand the impact of consumer need for authenticity on consumption decisions. First, if consumers have different degrees of NFA, their consumption incentives and targets would also diverge from one another. The higher the degree of the need, the greater the propensity that consumers would seek for elements associated with self expression and personal cognitive value, and insist on selecting the products that embody individual characters in order to acquire emotional value. To satisfy this need, consumers would select products that endow sacred meanings or those that are relevant to their personalities, personal interests and thoughts when making consumption decisions. This made them find the fulfillment of happiness and dream accomplishment (Campbell, 1987). In conclusion, consumer need for authenticity has become a consumption value and a pivotal point (Rokeach, 1973) that guides the thought patterns, attitude, and the context of consumer decisions (Burgess, 1992; Hoyer, 2001; Rokeach, 1973).

Secondly, satisfying consumer NFA has reduced the gap between true-self and ideal-self. Those with high degree of the need understand their own personalities, preference, and desired pleasure, and continuously seek for ways to realize their true aspirations. In the post-modern society, individuals often demonstrate different characters under various conditions, and this leads them to eagerly seek for the product that matches the characters representing their true-self (Arnould and Price, 2000). In the past, consumers aspire to actualize oneself and believe that the material products introduced by manufacturers could bring them happiness and help realize their dreams. After consuming the products, they realize that materiality could not bring desired pleasure and lead to either vanished dreams or indulgence in pleasure (Campbell, 1987; Zavestoski, 2002). For those who have high level of NFA, however, on one hand they seek for true and ideal self; on the other hand, they take word-of-mouth into consideration (Lewis and Bridger, 2000) while assessing the authentic traits of the product using their professional expertise to make sure that the content matches their expectations. As ideality no longer exists in dreams and can actually be realized, one now has the ability to manifest his characters and achieve his goals with the help of an authentic product, eventually achieving self-actualization. They would perceive that they are real and living in a true environment rather than an artificial commercial environment (Wasserman, 2002).

Thirdly, regardless of the level of satisfaction of consumer NFA, consumers intend to acquire functional value including quality, manufacturing techniques, and positive user experience from
consumption. Those with higher level of NFA, however, also value highly of emotional value and knowledge value even in their routine consumption. When consumers have their fundamental needs satisfied in the modern economic environment, they no longer consider the utilitarian effect of product; instead, they place a higher regard on what they want and allow themselves to explore and find the product or experience that makes them happier, more satisfied, and more valuable (Lewis and Bridger, 2000). They demonstrate individualism through the purchase of authentic products that can be distinguished from standardized products. According to Maslow's theory of hierarchy of needs, after satisfying physiological needs, consumers are innately motivated to seek for the higher degree of needs (Maslow, 1987), they associate the characters of authentic products with themselves to satisfy their NFA and achieve the ultimate value - the need for self-actualization (Olson and Reynold, 1983).

At last, this study suggests that the meaning of consumer NFA is a state of mental satisfaction consumer seeks for originality and stylistic consistency to reflect the irreplaceable individual characters and true self actualization. Due to the influence of this consumption value, consumers with NFA prefer products that exhibit originality, sacredness, heritage, and stylistic consistency, and the mitigation of commercial incentives within product attributes (Beverland, 2005, 2006; Liao and Ma, 2008). Every individual has his own unique characters irreplaceable by others, and thus owning the products that possess attributes of personal uniqueness grants him self-recognition and exhibits his characters to others (Gecas, 1986, 1991; Zavestoski, 2002).

As more consumers seek to satisfy NFA, companies ought to enhance the appeal of their products by designing a marketing campaign catering to this need even if the product prices are higher than those of the competitors (Lewis and Bridger, 2000; Liao and Ma, 2008). For example, companies could emphasize on the originality and stylistic consistency of product when introducing product characteristics and stress individualism, such as personal styles, ideal living, and the value of self-existence when positioning the brand. Consumers seeking NFA resist the hypocritical appeal of commercial activities (Firat and Venkatesh, 1995; Rose and Wood, 2005) because they believe that most marketing campaigns are manipulative Consumers are confident in their knowledge of the product, and thus they hardly rely on the information generated from marketing communication; instead, they refer to word-of-mouth and make their own judgment. Companies could use open ending advertising that contain product information only or blogs to attract potential customers through word-of-mouth, and eventually mitigating consumer's concern with respect to company's commercial motives.

This study provides a discussion on the motives behind consumer NFA and the consumption value as well as product properties that are of importance to consumers. Nevertheless, academia has yet to develop a questionnaire that allows for evaluating consumer NFA, and thus the relationship between the different degrees of need, consumption incentives, consumption value
and authentic products properties require further validation. There are also other questions that remain to be answered, including how authentic product properties satisfy different consumption values? Does each consumption value and authentic product properties have equal weight in consumption decision making process? These topics require further studies in order provide additional insight for scholars and practitioners.

4. References


The Conceptual Model of the Acceptance of Self-Service Ordering Systems for Restaurants

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Abstract

With the rapid development of information technology, more and more restaurants use the self-service technologies (SST) for solving the shortage problem of human resources in the restaurant industry. The self-service ordering systems not only can be more efficient for diners to select foods but also help dinners to manage the orders. Then, the development of self-service ordering systems can improve the level of customer service and greatly increase customer satisfaction with catering services. Therefore, the objective of this study is to develop a research model that can explore the factors that may significantly explain the acceptance of self-service ordering systems for restaurants based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model. This model also consists of the antecedent factors that may directly influence the factors of self-service ordering systems for restaurants. This study contributes a research model for researchers to further conduct their SST research that can make several suggestions to the restaurants and SST service providers.

Keywords: self-service technology, self-service ordering systems, restaurant industry, UTAUT

1. Introduction

The emergence of information technology is dramatically and profoundly changing the nature of services. In recent years, many restaurants have introduced a self-service ordering system to link the internal and external service processes in a restaurant. At the same time, self-service ordering systems also brought many benefits to the restaurants, such as enhancing efficiency, reducing service errors, and cutting the labor costs. However, the adoption of self-service ordering systems for restaurants is slower than expected and a lot of restaurants in China still have not used self-service ordering systems. The self-service ordering systems for restaurants in China have not yet popular. One possible reason may be that consumers are a lack of acceptance in self-service ordering systems. Therefore, there is a need to study the factors that influence user acceptance of the self-service ordering systems for restaurants in China.

This study is based principally on the Unified Theory of Acceptance and Use of Technology
(UTAUT) model to design a research model for identifying the factors that may influence user acceptance of self-service ordering systems for restaurants. Other than the factors in UTAUT model, since using the self-service ordering systems to order the foods can reduce the service errors from waiters and more convenient for diners to order the foods, therefore, “accuracy” and “speed” are added as potential factors that may influence diners to use the self-service ordering systems. Meanwhile, two new constructs “system using experience” and “system quality” are added as antecedent factors to the research model in this research.

2. Research Background

2.1 Unified Theory of Acceptance and Use of Technology

There are many acceptance models aimed for explaining user intentions to use information systems and further the usage behaviour such as TRA (Ajzen & Fishbein, 1980), TPB (Ajzen, 1985), TAM/TAM2 (Davis, 1989), Motivational Model (MM), Model of PC Utilization (MPCU), Diffusion of Innovation Model (DOI) (Rogers, 2003), and Social Cognitive Theory (SCT). These theories attempt to predict and explain a wide range of user behaviours. Venkatesh, Morris, Davis, & Davis (2003) created a unified model based on the conceptual across the above eight models—the UTAUT model. In the UTAUT model, it has four key constructs which include performance expectancy, effort expectancy, social influence, facilitating conditions that are direct determinants of user behaviour. It also has four moderators which are gender, age, experience, and voluntariness of use.

Performance Expectancy is defined as the degree to which an individual believes that using the system will help him or her to gain benefits or enhance job performance (Venkatesh, Morris, Davis, & Davis, 2003). In case diners expect that using self-service ordering systems can help him or her to effectively order the food, he or she will use the systems.

H1: “Performance expectancy” has a positive influence on the behavioural intention toward using self-service ordering systems.

Effort Expectancy is defined as the degree of ease to which an individual believes in the association with the use of the system (Venkatesh, Morris, Davis, & Davis, 2003). If diners find it difficult to use self-service ordering systems, he or she may not be willing to use the systems. Therefore, diners may use the self-service ordering systems when they feel the systems are easy to use.

H2: “Effort expectancy” has a positive influence on the behavioural intention toward using self-service ordering systems.

Social influence is defined as the degree to which an individual perceives that important others
believe he or she should use the new system (Venkatesh, Morris, Davis, & Davis, 2003). Diners may like to use self-service ordering systems when he or she observes that many of his or her friends are using self-service ordering systems. So, social pressure may lead to a higher intention for diners toward using the self-service ordering systems.

H3: “Social influence” has a positive influence on the behavioural intention toward using self-service ordering systems.

Facilitating conditions are defined as the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system (Venkatesh, Morris, Davis, & Davis, 2003). So, restaurants need to provide relevant technical support to diners when they are using self-service ordering systems.

H4: “Facilitating conditions” have a positive influence on the behavioural intention toward using self-service ordering systems.

2.2 Accuracy
The self-service ordering systems can present clearer information for avoiding mistakes caused by traditional handwriting ordering. The content of information should make people easy to understand, so that information can be expressed more complete and clearer (Lee & Kozar, 2005). Therefore, the accuracy of the information provided by the self-service ordering systems is very important and useful for consumers (Law, Leung & Buhalis, 2009). Diners may expect that the use of self-service ordering systems can avoid some errors caused by waiters’ poor handwriting. Furthermore, diners can accurately order the foods in the menu screen of the systems.

H5: “Accuracy” has a positive influence on the behavioural intention toward using self-service ordering systems.

2.3 Speed
For the restaurants, the main purpose for using self-service technologies is to enhance their operations efficiency and/or reduce their personnel costs. However, from the consumers’ perspective, diners expect that they do not need to wait for food ordering service from waiters especially in the peak hours. In this study, speed is defined as the time it takes to complete a food order (Robertson, Mcdonald, Leckie, & Mcquilken, 2016). The service speed is an important evaluative criterion for consumers considering adopting of SST (Dabholkar, 1996). Therefore, diners may consider using the self-service ordering systems for saving time.

H6: “Speed” has a positive influence on the behavioural intention toward using self-service ordering systems.
self-service ordering systems.

2.4 System using Experience
In this study, system using experience means that consumers have the previously experience of using some similar systems before using self-service ordering systems, then it is possible to make them more effective, easier, faster, and more accurate to finish an order. Morosan and Jeong (2006) pointed out that this experience is a stage of the formation of knowledge, and thus affect consumers’ attitudes and decision-making behavior. In this study, a system using experience is defined as the experience that consumers have previously used in similar systems. This experience can drive them more quickly, accurately, and effectively to use similar systems later. So, when diners have the experience of using some similar systems before using self-service ordering systems, then it is possible to make them more effective, easier, faster, and more accurate to finish an order.

H7: System using experience has a positive influence on the factors (performance expectancy, effort expectancy, social influence, facilitating conditions, accuracy, and speed) that influence user behavioural intention toward using self-service ordering systems.

2.5 System Quality
In the context of self-service technologies, there is a tendency in the service industry to provide services to consumers by means of self-service machines instead of service providers, such as information kiosk, ATM, online banking as well as the self-service ordering systems for restaurants mentioned in this study. General a human service often refers to the face-to-face contact between people. For the SST, a technical service refers to the contact between the people and the machine or the people and the technology, in the whole process of contact people are face with fixed machine equipment or system software. Hence, consumers in the use of self-service ordering system need to fully consider the contact may encounter problems of system quality. In this study, system quality is defined as the consumers’ overall evaluation of service expectation and service perception of system quality. Thus, when consumers use self-service ordering systems, its system quality meets or exceeds the consumers’ expectations, then it is possible to make them more effective, easier, faster, and more accurate to complete an order.

H8: System quality has a positive influence on the factors that influence user behavioural intention toward using self-service ordering systems.

3. Research Model
The aim of this study is to develop a research model that can explore the factors (performance
expectancy, effort expectancy, social influence, facilitating conditions, accuracy, and speed) that may significantly explain the acceptance of self-service ordering systems for restaurants. Furthermore, this study also attempts to explore the antecedent factors that may directly influence above factors. The proposed research model is developed as shown in Figure 1.

![Structural Model](image)

**Fig. 1: Structural Model**

### 4. Conclusions

The proposed research model can be used to explore the factors that may significantly explain the acceptance of self-service ordering systems for restaurants. This model also includes the antecedent factors that may directly influence the factors of self-service ordering systems for restaurants. This study contributes a research model for researchers to further conduct their SST research that can make several suggestions to the restaurants and SST service providers.

### 5. References


This paper provides analysis results of the spatial and temporal diffusion of shocks in a dynamic system in Korean house market. We use monthly real apartment price index within Korea at the level of regions to illustrate its use. Adjustment to shocks involves both a region specific and a spatial effect. Shocks to a dominant region - Seoul - are propagated contemporaneously and spatially to other regions. They in turn impact on other regions with delay. A test result for cointegration of regional house prices shows that only some regions' house prices cointegrate with Seoul house prices. But generalized impulse responses show that the positive shock to Seoul house prices spills over to other regions gradually raising prices across the country. The decay along the geographical dimension seems to be slower as compared to the decay along the time dimension.

Keywords: House Prices, Spatial Diffusion, Temporal Diffusion
Abstract
I studied the impact of weather on stock returns. Using data from CWB and TEJ, I show that temperature and humidity are significantly and cloudy is insignificant on stock returns in Taiwan stock exchange and firm size do not have a relationship with stock returns. Overall, the result of temperature and humidity are supporting the hypothesis.

Keywords: weather, stock returns, behavior finance

1. Background
Recently, there are many of finance studied, including the human psychology effect. Human psychology can be affected by the weather. The assumptions is people become highly emotional when the temperature is higher and high humidity and cloudy days makes people feel drowsy. The weather is relevant on investors’ mood and could be making rational decisions and judgments. Limited information cause rational factor. In financial theory, rationality is a normally movements follow in the market and investors are not easy to think rationally because investor behavior is effected of subjectivity, mood, environment, and other factors. Based on Cao and Wei (2005) and Chang, Nieh, Yang, and Yang (2006) temperature influence investors’ mood and cause investor decision.

The behavioral finance argued that stock returns relevant on weather factors. Hirshleifer and Shumway (2003), Yuan et al., (2001), and Saundra (1993) argued that weather impact on stock returns. However, still many disagreements about how the weather might effect on stock returns such as Goetzmann and Zhu (2005), Tufan and hamarat (2003), and Wang, Lin, and Lin (2012). Recently, many researchers have integrated the psychological into finance theory to overcome of traditional finance. Sewell (2011) the definition of behavioral finance is “the study of the influence of psychology on the behavior of financial practitioners and the subsequent effect on market”. Behavioral finance is the combination of behavioral theory and financial theory that afford explained why and how breaking down the traditional finance assumption. Generally, behavioral finance defines the human decision-making behavior in financial markets.

Persinger (1975) studied mood reports and the weather matrix, and then found lower moods related to fewer sunshine hours and higher relative humidity and otherwise. Denissen, Butalid,
Penke, and Van Aken (2008) showed temperature, wind power, and sunlight is a negative effect on mood. The sunlight makes human body tiredness. Kamstra, Kramer, and Levi (2003) also presented seasonal affective disorder (SAD) affect the seasons that only have smaller hours in the day. Forgas and Bower (1987) also presented positive mood effects on clear decisions and judgments. Howarth and Hoffman (1984) discovered that temperature, humidity, and the sunshine had the greatest effect on human mood. Rising temperatures make human become more emotional. High humidity makes human feel drowsy. Furthermore, human feel high emotional or feel intemperate when the temperature above 29°C (Bell, Greene, Fisher, and Baum, 2003).

Han (2009) the temperature in psychology theory assumes that lower temperature will raise the risk-taking behavior. The level of temperature is a causal relationship between investor sentiment and stock returns. The maximum value of humidity is 100%. In Taiwan, the average humidity is between 70% - 80%.

Hirshleifer and Shumway (2003) investigated the relation between sunny weather and index returns. They suggest the sunny weather affecting good mood to the reaction the news and good mood affecting investor confidence that stock returns will grow up, but there is no effect on rainy or snowy weather. Saunder (2003) studied the effects of cloudy weather on the stock price. He found the negative relationship and market anomaly, including the small firms, January, and weekend effects. Loughran and Schultz (2004) studied the impact of weather on stock returns. They suggest that stock returns are lower when the weather is cloudy. Cao and Wei (2005) discovered temperature anomaly on index returns. They found the negative correlation and suggest the investor behavior become aggressive to risk taking when the temperature is low and become apathetic when the temperature is high. Based on the evidence, change of the temperature effect on mood and mood effect on investor behavior. Chang, Nieh, Yang, and Yang (2006) studied stock returns and they found temperature and cloud cover are negative significant effect on stock returns because both of them also impact on human moods and investor decision-making. Yoon and Kang (2009) determined the weather impact on returns, and found before the crisis the low temperatures have a positive impact on returns and high cloudy and humidity have a negative impact on returns. After the financial crisis in 1997, the weather becomes insignificant on returns since the using online trading system. Kang, Jiang, Lee, and Yoon (2010) suggest the weather is the effect on return and volatility and weather conditions affect investor decision-making behavior. Mirza, Asghar, e Kausar, and Mushtaq (2012) investigated the market returns anomaly and found the negative effect of temperature on market returns.

Goetzmann and Zhu (2005) studied the weather effects on investor decision-making. Used five major cities in the U.S. and six year periods data analysis. They found there is no difference between sunny days or rainy day’s effects on investor trading. Furthermore, the behavior of market maker is related to buy and sell during cloudy days, even Pardo and Valor (2003) found
there is no impact of weather on the stock price. Tufan and Hamarat (2003) suggests investor who lives in the stock exchange city or other cities, there are no effects on the local weather where the stock exchange is located. Wang, Lin, and Lin (2012) investigated that sunshine weather can affect investor moods and avoid making an investment decision when bad mood.

Based on the previous research by Goetzmann and Zhu (2005) found that the weather has no difference effect in five major United States (US) cities. My first hypothesis is that weather influence on stock returns in three major Taiwan cities. Zhou and Yi (2013) found that the weather influences on stock returns of large firms. My second hypothesis is that weather influence on stock returns of the large stock.

2. Methods
In this study, the daily data for temperatures, humidity, and cloudy are from the Central Weather Bureau of Taiwan (CWB) and www.weatherbase.com especially from Taipei city, Taoyuan city and Tainan city 1 January 2016 – 15 June 2016. The returns data is from Taiwan Economic Journal (TEJ) with the same periods as the weather data. The sample subject is Taiwan 50 stocks. Following Yoon and Kang (2008) methods, returns stock calculated as $r_t = \ln (P_t / P_{t-1})$, where $P_t$ and $P_{t-1}$ are the stock price on day $t$ and $t-1$, respectively.

Based on the characteristics of panel data regression, there is three tests that could be used: (1) F Test (Chow Test); (2) Hausman Test; and (3) Lagrange Multiplier (LM) Test.

(1) F Test (Chow Test)
$H_0$: Common Effect Model
$H_1$: Fixed Effect Model
Was used to compare which model is fit between Common Effect (CE) and Fixed Effect (FE) model. The Common Effect (CE) model if the probability is $> 0.05$ or the Fixed Effect (FE) model if the probability is $< 0.05$. Based on the result in table 1 (panel A), the probability is $> 0.05$. It means we can’t reject $H_0$ hypothesis and the Common Effect (CE) model is better than Fixed Effect (FE).

(2) Hausman Test
$H_0$: Random Effect Model
$H_1$: Fixed Effect Model
Was used to compare which model is fit between Fixed Effect (FE) and Random Effect (RE) model. The Random Effect (RE) model if the probability if the probability is $> 0.05$ or the Fixed Effect (FE) if the probability is $< 0.05$. Based on the result in table 1 (panel B), the probability is $> 0.05$. It means we can’t reject $H_0$ hypothesis and the Random Effect (RE) model is better than Fixed Effect (FE).
(3) Lagrange Multiplier (LM) Test

\( H_0 \): Common Effect Model  
\( H_1 \): Random Effect Model

3. Results

3.1 Formula and Equation

In this sample, the following equations are presented as illustration.

\[
\text{LM} = \frac{nT}{2(T-1)} \left( \frac{\sum e^{-2}}{\sum e^2} - 1 \right) ^2
\]

Where:
- \( n \) = total stock  
- \( T \) = total period  
- \( \sum e^{-2} \) = total average residual square  
- \( \sum e^2 \) = total residual square

Based on those several tests (Chow Test, Hausman Test, and Lagrange Multiplier Test), the best model for this panel data is Common Effect Model. The regression equation:

\[
\text{Stock Return}_{it} = f(\alpha_0 \text{Temperature}_{it} + \alpha_0 \text{Humidity}_{it} + \alpha_0 \text{Cloudy}_{it} + \alpha_0 \text{Return}_{t-1, it} + \alpha_0 \text{Volatility}_{it} + \alpha_0 \text{Monday}_{it} + \alpha_0 \text{TradingVolume}_{it}),
\]

3.2 Figures and Tables

I compare which model is fit between Common Effect (CE) and Random Effect (RE) model. The Common Effect (CE) model if LM < Chi-squared or the Random Effect (RE) model if LM > Chi-squared. Based on the result in table 1 (panel C), the LM < Chi-squared. It means we can’t reject \( H_0 \) hypothesis and the Common Effect (CE) model is better than Random Effect (RE).
In table 2, the total observation is 4,900 data from 1 January 2016 until 15 June 2016. As the Taiwan’s 50 stocks for analysis. The average stock return on Taiwan’s 50 stocks is 8.65% with standard deviation 1.73%. Compare three cities in Taiwan, we can find that Tainan has a higher temperature than other cities, Taoyuan has higher humidity than other cities, and Taipei has higher cloudy than other cities. It means each city has a different weather condition.
In Table 3, all of the correlation coefficients is lower than 0.8. It means each independent variable do not have a strong relationship. In Taipei city, the relationship between temperature and humidity, return (t-1), volatility and trading volume are negative. It means when the temperature is higher, the humidity will be lower and effect on investor mood of trading stock and impact on volatility and trading volume. The relationship between temperature and cloudy and Monday effect are positive. It means when the temperature is higher, the cloudy hours become longer and the first day of a week on investor behavior that within one week the stock will bullish. In Taoyuan city, the relationship between temperature and cloudy are positive and has a negative relationship with other variables. Difference with Tainan city, the relationship between temperature and humidity, cloudy, and Monday effect are positive and have a negative relationship to return (t-1), volatility, and trading volume.
In Table 4, I test the effect of weather on stock returns with few control variables, such as stock market variables and Monday effect. The results show in Table 3 that temperature is a significant negative with stock returns in Taipei and Tainan cities, but not significant in Taoyuan city. One might believe that in Taipei and Tainan cities, the investor behavior becomes less aggressive to risk taking, irrational and bias decision when the temperature is high. The humidity is a significant positive with stock returns in Taipei, Taoyuan, and Tainan cities that invest in comfortable condition can think clearly and make a rational decision. My hypotheses are supported previous research (Cao and Wei, 2005; Mirza et al., 2012; Chang, 2006; and Saunders, 1993). The cloudy is insignificant with stock returns in Taipei and Tainan cities, but significant in Taoyuan city. Akhtari (2011) said that cloudy days are effective for everyone, not only for
investor and Tufan and Hamarat (2004) found that cloudy are not impact on index returns.

Table 4 The Effect of the Weather on Stock Returns
The table present panel data with ordinary least square (OLS) regression estimating the effect of the weather on stock returns. The sample is Taiwan 50 firms in Taiwan Economic Journal (TEJ) over the time period (1 January – 15 June 2016). The independent variables are temperature, humidity, and cloudy and the control variables are return (t-1), volatility, Monday effect, and trading volume with dependent variable are stock returns. The coefficient and probability are shown in this table. *** , ** , * indicates significance at the 1%, 5%, and 10% level, respectively.

<table>
<thead>
<tr>
<th></th>
<th>Taipei</th>
<th>Taoyuan</th>
<th>Tainan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(1)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.3803**</td>
<td>-2.8021***</td>
<td>-1.3096</td>
</tr>
<tr>
<td></td>
<td>(0.0117)</td>
<td>(0.0035)</td>
<td>(0.1771)</td>
</tr>
<tr>
<td>Temperature</td>
<td>0.0195***</td>
<td>-0.0182**</td>
<td>0.0096</td>
</tr>
<tr>
<td></td>
<td>(0.0059)</td>
<td>(0.0107)</td>
<td>(0.2400)</td>
</tr>
<tr>
<td>Humidity</td>
<td>3.7583***</td>
<td>3.5701***</td>
<td>2.6647**</td>
</tr>
<tr>
<td></td>
<td>(0.0013)</td>
<td>(0.0022)</td>
<td>(0.0169)</td>
</tr>
<tr>
<td>Cloudy</td>
<td>0.0208</td>
<td>-0.0203</td>
<td>-2.1036***</td>
</tr>
<tr>
<td></td>
<td>(0.9462)</td>
<td>(0.9473)</td>
<td>(0.0000)</td>
</tr>
<tr>
<td>Return(t-1)</td>
<td>-0.0352**</td>
<td>-0.0389***</td>
<td>-0.0357**</td>
</tr>
<tr>
<td></td>
<td>(0.0133)</td>
<td>(0.0061)</td>
<td>(0.0122)</td>
</tr>
<tr>
<td>Volatility</td>
<td>0.4085**</td>
<td>0.4316**</td>
<td>0.4031**</td>
</tr>
<tr>
<td></td>
<td>(0.0386)</td>
<td>(0.0282)</td>
<td>(0.0418)</td>
</tr>
<tr>
<td>Monday</td>
<td>0.2247***</td>
<td>0.1803***</td>
<td>0.2287***</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.0050)</td>
<td>(0.0004)</td>
</tr>
<tr>
<td>Volume</td>
<td>0.0469***</td>
<td>0.0455**</td>
<td>0.0457**</td>
</tr>
<tr>
<td></td>
<td>(0.0096)</td>
<td>(0.0119)</td>
<td>(0.0118)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.48</td>
<td>0.95</td>
<td>1.12</td>
</tr>
<tr>
<td>Observation</td>
<td>4,900</td>
<td>4,900</td>
<td>4,900</td>
</tr>
</tbody>
</table>

Considering the correlation between weather factors and stock returns may be affected by the firm size, the chosen stocks are divided into five groups based on total assets. Table 5 show most of the variables in the regression are insignificant. It means that there is no relationship between small and large firms with stock returns.
I provide evidence that the temperature and humidity are a significance of stock returns and cloudy is insignificant in Taiwan stock exchange market. This paper also examines the stock returns following stock market variables and the effect on Monday as a dummy variable. I found that return \( (t-1) \), volatility, Monday effect, and trading volume are significance of stock returns in Taipei, Taoyuan, and Tainan cities.

Limitation in my paper is (1) the sample period is very short (1 January 2016 until 15 June 2016); (2) because only use 50 firms sample with 4,900 daily data, the Jarque-Bera statistic is not significant. Further examination can also investigate is there any difference stock returns between small and large firms and the coefficient determinant is very low, I suggest to add more related variables such as a stock performance ratio, economic factors, and firm news to get a better model.

4. References


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**Table 5 Quartile 1 – Quartile 5 Regression**

The table presents panel data with ordinary least square (OLS) regression estimating the effect of the weather on stock returns. The sample is Taiwan 50 firms in Taiwan Economic Journal (TEJ) over the time period (1 January – 15 June 2016). Each quartile has 10 stocks from smaller to larger stocks by firm size (total assets). The independent variables are temperature, humidity, and cloudy and the control variables are return \( (t-1) \), volatility, Monday effect, and trading volume with dependent variable is stock returns. The probability is shown in this table. ***, **, * indicates significance at the 1%, 5%, and 10% level, respectively.

<table>
<thead>
<tr>
<th></th>
<th>Quartile 1</th>
<th>Quartile 2</th>
<th>Quartile 3</th>
<th>Quartile 4</th>
<th>Quartile 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>0.8060</td>
<td>0.1259</td>
<td>0.4110</td>
<td>0.0082***</td>
<td>0.3900</td>
</tr>
<tr>
<td>Humidity</td>
<td>0.8987</td>
<td>0.1058</td>
<td>0.0089***</td>
<td>0.1882</td>
<td>0.0962*</td>
</tr>
<tr>
<td>Cloudy</td>
<td>0.4932</td>
<td>0.9701</td>
<td>0.8940</td>
<td>0.8667</td>
<td>0.2367</td>
</tr>
<tr>
<td>Return( (t-1) )</td>
<td>0.014**</td>
<td>0.8315</td>
<td>0.0177**</td>
<td>0.8246</td>
<td>0.6795</td>
</tr>
<tr>
<td>Volatility</td>
<td>0.1730</td>
<td>0.7151</td>
<td>0.1553</td>
<td>0.6597</td>
<td>0.9793</td>
</tr>
<tr>
<td>Monday</td>
<td>0.0612*</td>
<td>0.1527</td>
<td>0.0156***</td>
<td>0.1276</td>
<td>0.6347</td>
</tr>
<tr>
<td>Volume</td>
<td>0.4943</td>
<td>0.0422**</td>
<td>0.2194</td>
<td>0.094*</td>
<td>0.3635</td>
</tr>
</tbody>
</table>


http://www.weatherbase.com

**Appendix A. Variables Measurement**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>°C → Han (2009)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Humidity</td>
<td>% → Han (2009)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Cloudy</td>
<td>% → Han (2009)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Return (t-1)</td>
<td>% → Goetzmann and Zhu (2005)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Volatility</td>
<td>% → Han (2009)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Monday</td>
<td>0 or 1 → Goetzmann and Zhu (2005)</td>
<td>Nominal</td>
</tr>
<tr>
<td>Trading Volume</td>
<td>Σ shares → Chandrapala (2011)</td>
<td>Ratio</td>
</tr>
</tbody>
</table>
Education

Wednesday, July 5, 2017  08:40-10:10  Grand Ballroom (II)

Session Chair: Prof. Concepcion Libuit

HKICSS-0007
School-Community Cooperation in Natural Disaster Education and Preparedness in Barangay Dolores, Taytay, Rizal, Philippines
Omar G. Lamina  |  Department of Education-Division of Rizal

HKICSS-0008
How High-Poverty Schools Sustain Their High-Performance
Gloria C. Roque  |  Department of Education-Division of Rizal

HKICSS-0009
The Global Competitive Skills of BSIT Students in Selected Higher Education Institution (HEI) in Bulacan
Josan D. Tamayo  |  Centro Escolar University
Clarissa P. Vicente  |  Baliuag University
Mary Ann T. Lim  |  Dr. Yanga’s Colleges Inc.
Mary Eujene P. Malonzo  |  Centro Escolar University Malolos

HKICSS-0022
The Effect of Multimedia on Cultural Learning in an English Classroom
Pei-Shi Weng  |  Taipei College of Maritime Technology

HKICSS-0035
Organizational Commitment and Job Satisfaction of the Faculty in a Local Higher Educational Institution: For Effective Work Performance
Concepcion C. Libuit  |  City University of Pasay
Marigold L. Arroyo  |  City University of Pasay
Rosanie F. Estuche  |  City University of Pasay
HKICSS-0007
School-Community Cooperation in Natural Disaster Education and Preparedness in Barangay Dolores, Taytay, Rizal, Philippines

Omar Gonzales Lamina
Department of Education, Division of Rizal
E-mail: laminaomar@yahoo.com

Abstract
The Philippines is known as one of the most hazard-prone countries in the world. In a study conducted by World Bank in 2014, the country was identified as a natural disaster hot-spot with approximately 52.46 percent of its total area is exposed to natural disasters and 80.03 percent of its population is vulnerable to natural disasters. Partnerships between schools, families, and communities can create safer school environments, strengthen parenting skills, encourage community service, improve academic skills, and achieve other desired goals that benefit students at all ages and grade levels.

This research study entitled “School-Community Cooperation in Disaster Education and Preparedness in Barangay Dolores, Taytay, Rizal, Philippines” determined and analyzed the status of cooperation between the schools and the community members regarding disaster education and preparedness. Participants answered the questions administered through interviews and survey questionnaires. After the participants answered the questions, the researcher described the responses given by using several statistical tools. The systematic process of the study was conducted at Barangay Dolores which is one of the five barangays that makes up the municipality of Taytay. It is second largest community in the municipality of Taytay in terms of land area and human population. The subject of the study were selected 200 community members who are also parents of students studying in the identified learning institutions together with 100 teachers from three public elementary particularly Dolores Elementary School, Taytay Elementary School and Hapay na Mangga Elementary School and one public junior high school in Barangay Dolores which is Casimiro A. Ynares Sr. Memorial National High School. Non probability sampling technique was used to identify the respondents of the research study from the existing population. Subjects were chosen on a voluntary basis. The gathered data were grouped, tabled and carefully organized and interpreted by the researcher for the drawing of conclusions. Frequency, percentage distribution and ranking are all reflected in tabular form. The research survey form is a self evaluation questionnaire regarding their participation and attitude about disaster education and preparedness. The findings of the study were summarized based on the analysis and interpretation of the data. In the obtained weighted average mean of the three categories about the cooperation between the participating schools and the community in disaster preparedness and disaster education, the teachers and the community
representatives of Barangay Dolores revealed through the research survey questionnaire that there is an existing fair cooperation between them. The ranking of categories were based on the comparative weighted average mean of the response of both groups. According to teachers among the three categories, disaster preparedness is first in ranking with weighted mean of 2.270 and verbally interpreted as “Fair”, second on the rank is post disaster recovery the weighted mean is 2.254 and interpreted as “Fair”. Last on the rank, is disaster response with a weighted mean of 2.146 and interpreted also as “Fair”. On the other hand, the community members perceived the three categories about the cooperation between community and school in disaster education and preparedness as “Fair”. Disaster response is first on the rank with an average mean of 2.176, next is disaster preparedness with an average mean of 2.064 and last is post disaster recovery with an average mean of 1.172. It is also revealed that almost all of the teacher respondents integrate disaster preparedness and education in the subject that they handle in variety of ways. The summarized response of teachers and selected community respondents revealed that both groups believed in the importance of school and teachers’ lesson for the learning of students about disaster preparedness and education. Furthermore aside from educational institutions it is also important according to teachers and community respondents for experts and trained personnel about natural disaster to impart their knowledge to students and community members by conducting trainings, supervising drills and giving lectures in schools. In addition broadcast and social media is also an important tool for parents, community members, teachers and students in disseminating information about disaster preparedness in Barangay Dolores. Teachers and community officials are also expected to do inspection of the location and community around the school, classrooms and school facilities before and after a disaster to ensure the safety of students. Both groups also agreed that personal experience is an important learning factor in dealing with the natural disasters that is prone in their locality. Based on the computed p-value which shows the relationship and independence between the situations represented in questions forms within the categories, there are items within and between categories that are independent and with no clear relationship with the other questions as revealed by the response of teachers and members of the community.

Keywords: Barangay, cooperation, disaster, education, preparedness

1. Background

The concept and practice of reducing and managing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including reduced exposure to hazards, lessen the vulnerability of people and property, wise management of land and the environment, and improve preparedness to lessen its effect should be a global priority specially for countries which are considered highly prone like the Philippines.
The Philippines continues to face challenges brought about by typhoons, monsoon rains, earthquakes, volcanic eruptions, and landslides. Throughout the recorded history of the Philippines, disasters in various parts of the country have been reported every year. Unmistakably, floods, storms, volcanic eruption and earthquakes have been the most frequently occurring natural disasters. This confirms the high level of exposure of the country to hazards and natural disaster due to its location and geography. The location and geographic features explain the prevalence of earthquake, tsunami and landslide are frequent. The frequency, intensity and variability of hydrometeorological hazards also have heightened the compelling need for the nation to adopt programs on disaster management. An increase in the levels of vulnerability especially in areas which are considered disaster prone need special attention in order to reduce loss of lives, property, crops, natural resources and other assets in many parts of the country. Tropical storms accompanied by heavy rains and strong winds which yearly affects our country may result in floods, landslide and storm surge are the most prevalent types of hydrometeorological hazards in the country. The Philippines is situated along a highly active seismic plates which are lying along the Pacific ring of fire where major tectonic plates meet and is highly prone to earthquakes and volcanic eruption, earthquake disasters occur less frequently than typhoons and flooding, the impact to affected communities can be massive and devastating.

There is a need for proactive adaptation and disaster management measures to reduce the negative impacts of natural disasters on the environment and lives of people. Well designed adaptation measures can increase the resilience of people, and also reduce the risk of climate-related disasters. Educating the people is always the best way of building resilience. Disaster risk education at schools should be embedded as a key pillar of broader public disaster risk education to enhance community resilience to disasters, gain support for school-led activities, and motivate citizens to participate in local risk assessment and planning. Disaster risk education should be integrated into school curricula because children are among the most vulnerable during a disaster and they are very effective communicators and disseminators of disaster risk reduction and preparedness messages at the family and community level.

2. Methods
This research study is descriptive in nature since the primary objective is to determine and analyze the cooperation between the school and the community people regarding disaster education and preparedness. Survey method was used in gathering the needed data. Participants answered the questions administered through interviews and survey questionnaires. After the participants answered the questions, the researcher described the responses given through a mathematical tool.

The systematic process of the study was conducted in the municipality of Taytay, a first class,
densely populated municipality in the province of Rizal, Philippines. Barangay Dolores is one of the five barangays that makes up the municipality of Taytay. It is second largest community in the municipality in terms of land area, which is about 1237 hectares. In terms of human population, based on the 2010 national census it has almost 60,000 inhabitants, making it the third most densely populated community in the municipality. A barangay captain or the community leader is elected by the community people every three years who serve as the local chief executive having administrative functions and in charge of governance, financial stability, development provisioning, leading the barangay legislation or workforce and ensuring peace and order within the community. Considered disaster prone, Dolores frequently experienced flooding brought about by heavy rains and typhoons during the rainy season. Landslide is also a treat to many communities in Dolores because many of villages, subdivisions and dwelling places of people are situated in mountainous and hilly areas of the barangay that are considered landslide prone area. For such reasons, the researcher opted to choose the community and its members as the setting and subject of his study.

The subject of the study were selected 200 community members who are also parents of students studying in the identified schools together with 100 teachers from three public elementary particularly Dolores Elementary School, Taytay Elementary School and Hapay na Mangga Elementary School and one public junior high school in Barangay Dolores which is Casimiro A. Ynares Sr. Memorial National High School. Non probability sampling technique was used to be able to identify the respondents of the research study from the existing population, the samples were selected on a voluntary basis.

Figure 1. The Research Framework of Study

3. Results

3.1 Formula and Equation
The researcher was guided by the following equation:
A. Weighted Mean Computation

\[ \text{Mean} = \frac{(S \times F)}{n} \]

where:

- \( S \) = is the response of respondents
- \( F \) = is the frequency of response of respondents
- \( n \) = total number of cases or respondents

(1) Table of Equivalent/Validation of the Instruments

There are descriptive words which give the verbal interpretation of the weighted mean.

<table>
<thead>
<tr>
<th>Weight</th>
<th>Range of Average</th>
<th>Weighted Mean</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2.34-3.00</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.67-2.33</td>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1.00-1.66</td>
<td>Poor</td>
<td></td>
</tr>
</tbody>
</table>

(2) Cross Tabulation/Chi Square Test and P-value

Japanese statistical software was used by the researcher in computing the P-value and in performing cross tabulation (Chi Square Test) in order to determine the relationship and independence of the response of the respondents per category.

Below are the standard criteria as point of reference in comparing the relationship and independence of every category:

- a small value (≤ 0.05) indicates strong evidence against the null hypothesis.
- a large value (>0.05) indicates weak evidence against the null hypothesis.
- a value very close to the cut off 0.05 is considered to be marginal.

3.2. Figures and Tables

Table 1 shows the demographic characteristics of the 100 teacher respondent from the five participating schools in Barangay Dolores, Taytay, Rizal. Out of the 100 respondents 66% are non resident of the community, coming from the nearby municipalities and barangay.

Majority or 65% of the teacher respondents came from the only public secondary school in Dolores, the remaining populations are from the four elementary schools in the community. The table also shows that teachers varies in terms of the subjects taught or handle in schools. Thirty percent of the teacher respondents mostly from the elementary schools are teaching multi or several subjects in different grade levels in their school.
Although the research endeavor is not gender based or gender sensitive, 70% of the respondents are female teachers and 30% are male.

Table 1. Demographic Characteristics of the Teacher Respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30%</td>
</tr>
<tr>
<td>Female</td>
<td>70%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Less than 30</td>
<td>33%</td>
</tr>
<tr>
<td>31-40</td>
<td>42%</td>
</tr>
<tr>
<td>41-50</td>
<td>21%</td>
</tr>
<tr>
<td>51-60</td>
<td>4%</td>
</tr>
<tr>
<td>61-65</td>
<td>0</td>
</tr>
<tr>
<td>Educational Background</td>
<td></td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>72%</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>26%</td>
</tr>
<tr>
<td>Doctorate Degree</td>
<td>2%</td>
</tr>
<tr>
<td>Learning Institution</td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>35%</td>
</tr>
<tr>
<td>Junior High School</td>
<td>65%</td>
</tr>
<tr>
<td>Learning Area Handle</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>14%</td>
</tr>
<tr>
<td>English</td>
<td>10%</td>
</tr>
<tr>
<td>Science</td>
<td>13%</td>
</tr>
<tr>
<td>Filipino</td>
<td>9%</td>
</tr>
<tr>
<td>Technology and Livelihood Education</td>
<td>6%</td>
</tr>
<tr>
<td>Social Studies</td>
<td>7%</td>
</tr>
<tr>
<td>Values Education</td>
<td>6%</td>
</tr>
<tr>
<td>Music, Arts and Physical Education</td>
<td>5%</td>
</tr>
<tr>
<td>Multi Grade/Multi Subject</td>
<td>30%</td>
</tr>
<tr>
<td>Number of Years Teaching in Dolores</td>
<td></td>
</tr>
<tr>
<td>Below 10 years</td>
<td>79%</td>
</tr>
<tr>
<td>11-20 years</td>
<td>20%</td>
</tr>
<tr>
<td>21-30 years</td>
<td>1%</td>
</tr>
<tr>
<td>31-40 years</td>
<td>0%</td>
</tr>
<tr>
<td>41 years and above</td>
<td>0%</td>
</tr>
<tr>
<td>Residency (Barangay Dolores)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>44%</td>
</tr>
<tr>
<td>No</td>
<td>66%</td>
</tr>
</tbody>
</table>

Although the research endeavor is not gender based or gender sensitive, 70% of the respondents are female teachers and 30% are male.

According to the gathered data by administering survey questionnaire to teachers that is
presented in Table 2, there is a very high turnout of teachers that experienced meteorological or weather based natural disturbances like typhoon (86%), thunderstorm locally known as habagat (78%) and flooding due to typhoon, habagat and heavy rains (61%) while working or living in Baragay Dolores. On the other hand landslide and tornado are the least natural calamity that was experienced by the teacher respondents with only 6% and 5% of the population respectively.

<table>
<thead>
<tr>
<th>Table 3. School Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of School</td>
</tr>
<tr>
<td>Number of Students</td>
</tr>
<tr>
<td>Number of teachers</td>
</tr>
<tr>
<td>Number of non teaching staff</td>
</tr>
<tr>
<td>School Buildings</td>
</tr>
<tr>
<td>Classroom</td>
</tr>
<tr>
<td>ICT Room</td>
</tr>
<tr>
<td>Canteen</td>
</tr>
<tr>
<td>Library</td>
</tr>
<tr>
<td>Comfort Room</td>
</tr>
<tr>
<td>Emergency Facilities</td>
</tr>
<tr>
<td>-Clinic</td>
</tr>
<tr>
<td>-Fire Extinguisher</td>
</tr>
<tr>
<td>-First Aid Kit</td>
</tr>
<tr>
<td>-Siren/Bell</td>
</tr>
<tr>
<td>-Fire Exit</td>
</tr>
<tr>
<td>-Evacuation Map</td>
</tr>
<tr>
<td>-Spine Board/Stretcher</td>
</tr>
<tr>
<td>Serve as evacuation center during disaster</td>
</tr>
</tbody>
</table>

The demographic and physical characteristics of the schools considered by the researcher as source of research data is presented on Table 4. Based on the table the schools vary in terms of the number of students, teaching personnel and school facilities.
Based on the information presented on Table 4, 72.5% of the community respondents are female and the remaining 27.5% of the research population are male, considering that this research endeavour is not gender sensitive or gender related so the ratio between gender did not affect the results of the study. Data also revealed that range of age of the community respondents is between 30-60 years old. Furthermore majority or 60.5% of the community respondents are high school graduates and 20.5% are college or university graduate. Regarding the length of residency in the community, 40.5% of the respondents are living in Dolores 10 years and below and 27.5% are long term residents of the community with 21 years or more of the total length of residency in the setting of the research study.

As shown in Table 5, the most frequent natural disaster experienced by the community
respondents are meteorological or weather based disturbances while living in their community, similar to those experienced by the teacher respondents, typhoon (97%), thunderstorm locally known as habagat (94.5%), flooding due typhoon, habagat or heavy rains (63%). On the other hand tornado and landslide are the least natural disasters experienced by the community members with a percentage distribution of 6 % and 13.5% respectively of the total 200 population sample.

<table>
<thead>
<tr>
<th>Table 6. Percentage of Teachers that Integrate or Teach Disaster Preparedness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answer</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

Based on the survey conducted by the researcher to the 100 teacher respondents of the study, Table 6 shows that 97 % of the respondents integrate disaster preparedness education the subject that they handle in their respective schools.

<table>
<thead>
<tr>
<th>Table 7. Teachers’ Strategy in Teaching Disaster Preparedness to Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher’s Strategy</strong></td>
</tr>
<tr>
<td>1. Using textbooks and modules provided by the government.</td>
</tr>
<tr>
<td>2. Through reading materials like books, newspapers and pamphlets.</td>
</tr>
<tr>
<td>3. By using materials such as pictures, videos clips, maps and others.</td>
</tr>
<tr>
<td>4. By including it in the lesson plan particularly in the application/value part.</td>
</tr>
<tr>
<td>5. Through viewing and analysis of movies or documentaries that is about NDEAP.</td>
</tr>
<tr>
<td>6. By teacher-students sharing of personal experiences in dealing with natural disaster.</td>
</tr>
<tr>
<td>7. By commemorating/remembering disasters in the past that had great impact in the country.</td>
</tr>
<tr>
<td>8. By inviting resource persons like police, rescue officers or former victims to share their experiences in the class about NDEAP.</td>
</tr>
</tbody>
</table>

Table 7 shows that teacher respondents from the five participating schools in Barangay Dolores, Taytay, Rizal are using variety of teaching materials and strategies in educating their students regarding disaster preparation. Showing pictures, movie clips and documentaries about disasters in the Philippines is the top strategy of teachers based upon the results of the survey at 74.19 %, followed by experience sharing of teachers to their students with 69.89%. Sixty four percent of the teachers said that they integrate disaster preparedness education in their lesson plan as part of the valuing or values integration. Since concerned government agencies lacked to provide necessary and ample supplies of teaching-learning materials about disaster preparedness, it has become one of the least options to teachers at 39.78%. Results also revealed that teachers on a very few occasions invited in their classroom experts about disaster preparedness like police, firemen and trained rescue personnel to help educate students in dealing with disasters.

Based on the information revealed by the data presented on Table 8, teachers believed that the school and teachers’ lesson is the main agent for students in learning natural disaster
preparedness. In addition, students and community members also learned disaster preparedness in other ways other than what is thought in schools like mass, social media and one’s personal experiences. The Municipal Disaster Risk Reduction and Management Office (MDRRMC) police officers, firemen and other concern authorities has been collaborating with teachers and school official regarding the education of students about natural disaster by giving lectures and assistance during earthquake drills as seen on the results of the survey but the collaboration need to be strengthened. Furthermore, school officials and teachers rarely or very seldom involved the nearby community to observe and participate in the school earthquake evacuation drill and lecture about natural disaster preparedness. Regarding information dissemination about class suspension and resume of classes before, during and after the event of a natural disaster, teachers believe that mass media is an effective and fast tool for students and community people to getting such important information. Teachers also perform risk assessment within and outside the school community to ensure the safety of students. Students also learn from teachers basic knowledge of giving first aid to persons who are in need of immediate assistance like those who suffered injuries during the event of disasters. Some schools served and others are open for community people as evacuation center during the event of a natural calamity in Dolores. The community center or locally known as Barangay Hall, on the other hand is seen by teachers equipped with the necessary equipment in dealing with emergencies whether natural or manmade calamities, like ambulance, fire truck, rescue equipments, warning signs and many others. Trained rescue personnel and volunteers are also available to help and assist people in the event of emergency. For the post disaster rehabilitation of people, community and schools, teachers and school officials collaborate with the other concern agencies in the collection and distribution of relief goods, medicine and clothing for the victims of disasters. Teachers and other officials also conduct proper inspection of school facilities like classroom after a disaster to ensure the safety of students before the resume of classes. Moral and emotional assistance is also given by teachers to students who had traumatic experience on the occurrence of natural calamities. Table 8 also shows that the community members believed in the effectivity of the teachers’ lesson in disseminating information about disaster preparedness to students and the school and teachers are powerful agent in educating their children not only about in the different learning areas but also on how to deal with natural disasters the country and local community frequently experienced. Furthermore, according to the community respondents, students also learn from mass, social media and personal experiences in gathering knowledge and information regarding natural disasters and calamities.
Community members also believed that cooperation between the school management and teachers with other concerned agencies like policemen, fire marshals and the local disaster management office, regarding disaster preparedness education must be strengthen and improved together with the participation of the nearby communities.
The data presented in Table 9 clearly shows the summary of the computed mean and standard deviation in Category 1 with the corresponding verbal interpretations. Based on the table, in most questions the value of the mean and the interpreted results between the response of the teachers and community respondents have almost the same value and the gap is almost very close like in question 1, 2, 3, 5, 6, 8, and 10. On the hand in question 4 which is about the participation of the community members in the school organized evacuation and emergency drill, the verbal interpretation of the respond of teachers is fair and the community members is poor. In many occasion the school is open for the learning not just of students but for everyone including the people in the community, in learning disaster preparedness there are activities initiated by school officials and is also open for the community people to learn, observe and to participate but since school days is also a working day for many people, it is difficult for them to sacrifice one day of work to attend school activities that will enhance their knowledge about disaster preparedness. The situation depicted in question 7 is seen by both group as “poor”.

Question 9 which is about the school disaster preparedness plan, according to the interpreted response of teachers is good, but the according to parents it is just fair. Every school has their own disaster preparedness plan that is taught to students as mandated by the Department of Education like evacuation maps, designated safe area inside the school, disaster prone spots in and around the school, but in most cases parents and community members are not aware of the existences of those plans.

In summary the verbal interpretation of the computed average mean of the response of teachers and the community members in Category 1 is both fair. Category 1 is about disaster preparedness.

Questions in Category 2 is about disaster response, Table 10 shows the verbal interpretations of
the response of teachers and community members based on the computed mean and standard deviation. The verbal interpretations of the weighted mean in both groups are almost the same except in questions 13 and 15. Question 13 which about a siren or a bell which serves as a warning for people to evacuate during an emergency is seen by teachers as good on the other hand just fair for the community. The availability of rescue equipments in the community center as reflected in question 15 is just fair for teachers and good according to the members of the community. In general both teachers and community people responded fair in Category 2 based on the computed average mean.

Table 10. Computed Mean and Verbal Interpretation of Teachers and Community Members in Category 2

<table>
<thead>
<tr>
<th>Question</th>
<th>Teachers</th>
<th>Community Members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>11</td>
<td>1.94</td>
<td>0.99</td>
</tr>
<tr>
<td>12</td>
<td>1.93</td>
<td>1.15</td>
</tr>
<tr>
<td>13</td>
<td>2.58</td>
<td>0.70</td>
</tr>
<tr>
<td>14</td>
<td>2.06</td>
<td>1.11</td>
</tr>
<tr>
<td>15</td>
<td>2.22</td>
<td>1.06</td>
</tr>
<tr>
<td>Average</td>
<td>2.15</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The data on Table 11 shows the computed mean, standard deviation and the corresponding verbal interpretations of questions included in Category 3 which is about post disaster recovery. The teachers and the community members responded almost the same with values of mean almost at the same range and in all questions the verbal interpretations of their answer is dominantly fair. In summary Category 3 based on the average mean of the numerical response of teachers and community members is fair when interpreted verbally.

Table 11. Computed Mean and Verbal Interpretation of Teachers and Community Members in Category 3

<table>
<thead>
<tr>
<th>Question</th>
<th>Teachers</th>
<th>Community Members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>16</td>
<td>2.16</td>
<td>0.94</td>
</tr>
<tr>
<td>17</td>
<td>2.25</td>
<td>0.96</td>
</tr>
<tr>
<td>18</td>
<td>2.12</td>
<td>1.09</td>
</tr>
<tr>
<td>19</td>
<td>2.35</td>
<td>0.76</td>
</tr>
<tr>
<td>20</td>
<td>2.39</td>
<td>0.80</td>
</tr>
<tr>
<td>Average</td>
<td>2.25</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Table 12 presents the ranking of categories based on the comparative weighted average mean of the response of teachers and community members. Based on the teachers’ response regarding school-community cooperation in disaster preparedness and education, disaster preparedness is
first in ranking with weighted mean of 2.27 and verbally interpreted as “Fair”, second on the rank is post disaster recovery the weighted mean of 2.25 and interpreted as “Fair”. Last on the rank, is disaster response with a weighted mean of 2.15 and interpreted as “Fair”.

In summary according to the teacher respondents the cooperation between the school and the community where the school belong is “Fair”. On the other hand, the community members perceived the three categories about the cooperation between community and school in disaster education and preparedness as “Fair”. Disaster response is first on the rank with an average mean of 2.18, next is disaster preparedness with an average mean of 2.06 and last is post disaster recovery with an average mean of 2.17. In general according to the community respondents there is a “Fair” cooperation between the school and community in disaster preparedness and education.

Table 12. Ranking of Categories Based on the Weighted Average Mean

<table>
<thead>
<tr>
<th>Category</th>
<th>Average Mean Teacher</th>
<th>Verbal Interpretation</th>
<th>Rank</th>
<th>Average Mean Community</th>
<th>Verbal Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Disaster Preparedness</td>
<td>2.27</td>
<td>Fair</td>
<td>1</td>
<td>2.06</td>
<td>Fair</td>
<td>2</td>
</tr>
<tr>
<td>2. Disaster Response</td>
<td>2.15</td>
<td>Fair</td>
<td>3</td>
<td>2.18</td>
<td>Fair</td>
<td>1</td>
</tr>
<tr>
<td>3. Post Disaster Recovery</td>
<td>2.25</td>
<td>Fair</td>
<td>2</td>
<td>2.17</td>
<td>Fair</td>
<td>3</td>
</tr>
</tbody>
</table>

In summary according to the teacher respondents the cooperation between the school and the community where the school belong is “Fair”. On the other hand, the community members perceived the three categories about the cooperation between community and school in disaster education and preparedness as “Fair”. Disaster response is first on the rank with an average mean of 2.18, next is disaster preparedness with an average mean of 2.06 and last is post disaster recovery with an average mean of 2.17. In general according to the community respondents there is a “Fair” cooperation between the school and community in disaster preparedness and education.

Table 13. Computed P-Value of the Teachers’ Response

<table>
<thead>
<tr>
<th>Category I II</th>
<th>Category I III</th>
<th>Category II III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1-Q11=0.0002</td>
<td>Q6-Q11=0.0001</td>
<td>Q1-Q16=0.0740</td>
</tr>
<tr>
<td>Q1-Q12=0.4038</td>
<td>Q8-Q12=2.2833</td>
<td>Q1-Q17=0.0707</td>
</tr>
<tr>
<td>Q1-Q13=0.0007</td>
<td>Q6-Q13=0.0004</td>
<td>Q1-Q18=0.0016</td>
</tr>
<tr>
<td>Q1-Q14=0.0094</td>
<td>Q8-Q14=0.0094</td>
<td>Q1-Q19=0.0526</td>
</tr>
<tr>
<td>Q1-Q15=0.0189</td>
<td>Q6-Q15=0.0160</td>
<td>Q1-Q20=0.0197</td>
</tr>
<tr>
<td>Q2-Q11=0.0995</td>
<td>Q7-Q11=0.0000</td>
<td>Q2-Q16=0.0226</td>
</tr>
<tr>
<td>Q2-Q12=0.0369</td>
<td>Q7-Q12=1.1131</td>
<td>Q2-Q17=0.0010</td>
</tr>
<tr>
<td>Q2-Q13=0.0139</td>
<td>Q7-Q13=0.0126</td>
<td>Q2-Q18=0.0019</td>
</tr>
<tr>
<td>Q2-Q14=0.0000</td>
<td>Q7-Q14=0.0031</td>
<td>Q2-Q19=0.0004</td>
</tr>
<tr>
<td>Q2-Q15=0.0030</td>
<td>Q7-Q15=0.0001</td>
<td>Q2-Q20=0.0118</td>
</tr>
<tr>
<td>Q3-Q11=0.0418</td>
<td>Q8-Q11=0.0387</td>
<td>Q3-Q16=0.0124</td>
</tr>
<tr>
<td>Q3-Q12=0.8334</td>
<td>Q8-Q12=0.0000</td>
<td>Q3-Q17=0.0022</td>
</tr>
<tr>
<td>Q3-Q13=0.1096</td>
<td>Q8-Q13=0.2290</td>
<td>Q3-Q18=0.0686</td>
</tr>
<tr>
<td>Q3-Q14=0.0308</td>
<td>Q8-Q14=0.0379</td>
<td>Q3-Q19=0.5244</td>
</tr>
<tr>
<td>Q3-Q15=0.9480</td>
<td>Q8-Q15=0.0000</td>
<td>Q3-Q20=0.4817</td>
</tr>
<tr>
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</tr>
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</table>

The computed p-value between categories of the response of teacher respondents is presented in Table 13. Cross between the questions in Category II and III shows that it is very close and related
with each other. Furthermore, between the questions in Category I and III there is also an indication of relations between questions. On the other hand, there are many unrelated and independent questions seen among the questions in Category I and II.

### 4. Conclusions

In the Philippine context, the school is a fundamental institution that is very much imbedded in communities. School children spend more of their daytime in school. The teachers are usually looked up and listened to by the community people and are involved in several non-teaching events such as election, disaster situation and emergencies, and cultural affairs.

The teachers are usually looked up and listened to by the community people and are involved in several non-teaching events such as election, disaster situation and emergencies, and cultural affairs. The school is a venue for several community activities. With these resources and potentials, the school can be a center for disaster risk reduction program that would combine the resources of both the school and the community. Disaster management in schools play a

### Table 14. Computed P-Value of the Response of the Community Members Showing the Independence and Relationship among Categories

<table>
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</table>

The computed p-value between categories of the response of the community members is presented in Table 14. The cross between the questions in Category II and III shows that it is very close and related with each other. Furthermore, between the questions in Category I and III there is also an indication of relations between questions. On the other hand, there are very few unrelated and independent questions seen among the questions in Category I and II.
significant role in educating and developing the basic skill to face any disaster.

The disaster management not only make the students aware but also inculcate the right attitude to respond to disasters. Training and capacity building enhance the ability of students and school communities to take the right decision during any emergency. Students act as communicators/ mediators of the government to convey the recent policies, guidelines on prevention and preparedness for disasters to the household communities. They are sensitized on different issues related to the disasters, causes and effect , prevention and preparedness practices as well as do’s and don’ts of the disaster in the school through school curriculum, capacity building and training by the use of demonstrations, mock drills, seminars and pamphlets. The disaster management in school not works for the sensitization of the school student about disasters but also ensure the safety of the students. School communities should be encouraged to treat schools as essential community facilities because of the significant impact on students and the locale if a damaged school is closed for an extended period of time. A higher level of protection is appropriate for facilities that will enhance community recovery, including schools which may be designated as emergency shelters, and other buildings that support vital services. A hazard assessment should assure that the school buildings have functioning locks and controlled access. During any disaster, the children in schools are the most vulnerable group among all the public facilities. Preparedness and prevention of any disaster by the school authority is one of the important responsibilities in order to protect and provide safety to the children of the schools. Schools need to prepare themselves for major damaging events. Being prepared will improve the ability to respond to disaster.

5. Recommendations

(1) Disaster preparedness education at schools should be embedded as a key pillar of broader public disaster risk education to enhance community resilience to disasters, gain support for school-led activities, and motivate citizens to participate in local and community based risk mitigation and planning.

(2) Disaster preparedness education should be integrated into the curricula of formal education at all levels because children are among the most vulnerable during a disaster and they are very effective communicators and disseminators of disaster risk reduction and preparedness messages at the family and community level.

(3) Schools should teach about all stages of the disaster risk reduction cycle, therefore education materials should introduce students to disaster prevention, mitigation, preparedness as well as response and recovery.

(4) Education materials should introduce students to land use planning, building codes, insurance and environmental stewardship, where applicable, as means of managing and reducing disaster risk.

(5) Education materials should supplement a range of academic subjects, be rooted in existing
learning materials, suit the local context, and be culturally sensitive taking into account indigenous and traditional knowledge.

(6) Disaster risk education should be cemented through learning extensions at home and the encouragement of child-parent and teacher-parent communication and activities such as community risk mapping, community-based fairs and exhibits, and publicized drills.

(7) Disaster education in schools should highlight the importance of child-led disaster risk reduction and response cadres in and out of school at the community level and of reaching out to children with disabilities, their teachers and parents.

(8) The development and integration of disaster risk education into national curricula should be led by the Department of Education, involve national and local governments from various sectors and be based on a multi-stakeholder approach engaging the private sector and local communities. Disaster risk education at schools is a continuous process that requires a constant collaborative effort from all stakeholders.

(9) Local community and civil society stakeholders should be involved in the development of disaster risk education materials for schools to help identify local risks and response measures. Often, the schools themselves form part of the response plan. Equally, disaster risk education policies should be taken into account in local development planning and future growth strategies.

(10) To ensure the effectiveness of disaster risk education, regular monitoring and evaluation should be carried out. This could involve measuring the ability of students to cope with and learn from a disaster, and whether an emergency management plan has been prepared and maintained by a student’s family.

(11) Resilience of school buildings should be ensured thorough adherence to building codes, land use planning, and emergency plans. Old school buildings should be retrofitted to meet safety standards.

Acknowledgments and Legal Responsibility
Without the utmost support of the persons behind this endeavor, this study may not be a reality. To the following, the researcher wishes to extend heart full of gratitude and appreciation: Takehiro Hayashi D.Sc., Research Supervisor and Earth Science Professor, Department of Science Education, Hiroshima University for the strict supervision, endless support and for imparting important knowledge about Science and Science Education to the researcher. Ministry of Education, Culture, Science and Technology (MEXT), for and giving the chance and granting financial support to the researcher to study in Japan. Department of Education Philippines (DepEd), for granting a study leave and endorsements to the researcher to be able to pursue the training program abroad. Acknowledgment is also given to the family of the researcher, parents, host families in Japan as well as his brother and sisters for their utmost and unconditional support while making this humble piece of work. In addition, the researcher is also grateful to the principals, coordinators, teachers, and the students and parents in the selected schools and
community leader in Barangay Dolores, Taytay, Rizal province for their active participation in this research. Above all, to the ALMIGHTY GOD, for the strength, knowledge and determination given to the researcher, without HIM this study would not be possible.

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How High-Poverty Schools Sustain Their High-Performance?

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Abstract
This study investigated the best practices of public school heads, in terms of management controls, of high-performing, high-poverty schools and developed a framework model that guide educational administrators in maintaining high-performing, high-poverty schools.

Using descriptive qualitative research method, five schools in the CALABARZON Region of the Philippines, which were identified to be high-performing, high poverty, underwent Creswell’s multiple case study approach. The data collection consisted of gathering pertinent documents and school records on the school’s performance, a one-on-one semi-structured interview with the school head, and on-site observations of the participants’ workplace.

It was found out that high-performing, high-poverty schools were characterized to be in a geographically challenged location, recipients of Pantawid Pamilyang Pilipino Program or conditional cash transfer, and experiencing scarcity of resources. Despite this, they have high academic performance, cooperative community and stakeholders, transparent administration, and a leader with intact core values. The study established the existence of management control practices of school heads of high-performing, high poverty schools. These practices include sharing of responsibility, establishing an enabling environment, managing transparent fiscal resources, continuing improvement for teachers and students, and interconnecting various stakeholders. Efforts to sustain the gains of high-performing, high-poverty schools were also identified.

This study created a framework model that could guide educational administrators in leading high-performing, high poverty schools and in transforming a high poverty school into high performing.

Keywords: high-performing, high-poverty, management controls, public schools, secondary

Background
Research over the past four decades has shared an impression that much needs to be done to improve schools for poor children. The link between poverty and low academic achievement is so pervasive that some educators have resigned themselves to the consideration that effort and
hard work are not enough, that the effects of socioeconomics are too strong and schools cannot in isolation overcome them (Levin, 2007).

Stiefel et al. (2000) state that many schools that cater children who live in poverty also often belong to the lowest performing schools. The National Achievement Tests (NAT) consistently show poor children lagging behind the performance. This is primarily because very poor communities face many hardships – where children, families, and the schools that serve them confront a host of challenges including scarcity of resources, unemployment of parents, children who start school without early literacy skills, and high rates of absenteeism.

Ladd (2011), in his observations, states that low socioeconomic status (SES) is highly predictive of poor educational outcomes; while Currie (2009) in her research, documents a clear link between child poverty and poor health outcomes, and how these poor health outcomes translate into low cognitive outcomes.

These findings made it very challenging to work to turn around low-performing schools in an impoverished community. However, there are researches that support the notion that it can be done – a high-performing, high-poverty (HP-HP) school can exist.

In discussing what factors in the school environment produce better student performance, Cawelti (2000) points out that giving incentives and student recognition is one expression of caring while McGee (2004) observes the attention that high-performing schools give to health and safety – ensuring that students have nutritional meals and access to health, dental, and counseling care.

Likewise, Huberman (1999) identified the ability of teachers to forge relationships with children in poverty and connecting with them as the key factor in high-performing schools. This was supported by Borman and Rachuba (2001) who identify “strong and supportive” relationships with teachers as crucial. Furthermore, Barth et al. (1999) and Carter (2000) reiterate that among the important factors of high-performing schools also includes the parents as partners in learning, professional development, and collaboration.

Moreover, the best practices of HP-HP schools contribute a positive impact on the higher learning outcome of students. One of these practices is the increased instructional time. These schools consistently find ways to provide additional instructional time for their students or what they call “time on task” especially in reading and mathematics.

Based on the research conducted by Kannapel and Clements (2005), HP-HP schools are described to have a safe and disciplined environment; a principal who is a strong instructional leader, hard-working, and committed; and able teachers. To Kannapel and Clements (2005), HP-HP
schools exhibit the characteristics in their school culture – the belief that all students can succeed at high levels. The culture of high expectations in both the students and education providers is embedded in a caring and nurturing environment, wherein adults and young people treat each other with respect.

In the context of school-based management in the Philippine setting, there are schools found in the rural or depressed areas that are performing. These are reflected in their NAT results, performance indicators (e.g., promotion rate, drop-out rate), school-based management level of practices, and performance-based assessment for teachers. On the other hand, these schools are poor based on their location (i.e., upland and island areas) and being recipients of Pantawid Pamilyang Pilipino Program (otherwise known as Conditional Cash Transfer or CCT).

Foregoing considered, the researcher asserted that there are high-poverty schools particularly found in the rural areas in CALABARZON Region of the Philippines that were turned into high-performing schools. This study looked into the manifestations of HP-HP schools and the best practices employed by school heads in effectively managing high-performing schools despite the scarcity of resources.

**Methodology**

Using descriptive qualitative research method, five schools in CALABARZON Region of the Philippines, identified to be HP-HP, underwent Creswell’s multiple case study approach. The data collection consisted of gathering pertinent documents and school records on the school’s performance, a one-on-one semi-structured interview with the school head, and on-site observations of the participants’ workplace.

**Findings**

The findings of the study were divided into four sections: (1) Characteristics of HP-HP schools, (2) Management Controls Practices, (3) Sustainability of Management Controls, and (4) Model of Management Controls of HP-HP schools.

**Characteristics of HP-HP Schools**

From the identified themes, there were four interrelated themes exhibited on the characteristics of HP-HP schools. The first was the academic performance of students – high performance in academics and in different competitions. Second was the learning community which derived from the cooperation with community, collaboration among stakeholders, and transparency. Third was the positive culture of the people which include the core values of a leader and the culture of the people. For all the HP-HP schools, they considered the culture of the community and the core values of a leader in the school governance. Finally, the socio-economic status of the family and the financial condition of the schools, that despite of the scarcity of resources, the HP-HP schools
still performed.

HP-HP schools focused on the curriculum and instruction for higher learning outcomes. They initiated teaching-learning methodologies that enhanced the knowledge and skills of the students.

Another factor why they performed was the support of the community. There was sense of ownership of the community to the school. This created a positive impact for the school to perform more. They valued the school-community harmonious working relationship regardless of the position. They worked as a team for the benefits of the students. Parents as partners resulted to the high performance of the students.

Furthermore, there was a clear direction of where the schools were going. Goals and objectives of the schools were communicated to the teachers and community. These practices of the schools made them to the top.

Transparency was also identified to be very important factor for HP-HP schools. Everything must be posted. Whatever plans, programs and projects and accomplishment of the school must be known to the community. In this case, trust was built between the schools and the community. The schools served as the mirror of the community which they could view all aspects of schools’ operations.

Being honest, sincere and transparent are the most significant core values that each school head must have. Being truthful in everything you do matters in leading the school. One must also sincere and honest in monitoring and in giving feedback. On the other hand, the integrity of the teachers and the school as a whole gave the community the assurance that their children were in good hands. Parents entrusted their children to the school because they knew that the school was performing.

All school participants were located in the rural areas of the five municipalities. They experienced scarcity of resources especially financial stability. Most of the parents were unemployed or no stable job. Despite of the struggles, they focused on the positive side and continue to work hard to ensure that their children are provided with quality education.

**Management Controls Practices**

The second section was the management controls practices of HP-HP schools comprised of seven interrelated themes. The first was solidifying for better results which was derived from shared responsibility as a form of empowerment and delegation of fiscal duties.

Everybody was empowered, responsible and accountable in the decision-making, HP-HP schools
exercise shared responsibility and accountability. Everybody was consulted and empowered to suggest and be involved in the decision making. Every voice was heard and taken into consideration from the teachers, staff, up to the various stakeholders in the community.

Delegation of fiscal duties was one of the critical responsibilities of HP-HP schools. All funds collected from the fund raising, donations, voluntary contributions and school canteen have their own savings account. For some schools, there were committees created who oversaw bank accounts, crafting of the Annual Procurement Plan (APP), and disbursement.

The second theme was mobilizing social network and linkages which extracted from outsourcing finances, collaboration among schools, what the school needs, support to teachers’ continuing education and support for students.

For HP-HP schools, full support of the stakeholders for the students’ scholarship, physical facilities, utilities and other equipment were received especially during Brigada Eskwela or School Maintenance Week, which was held on the last week of May as mandated by the Department of Education.

For all HP-HP schools, they gained the support of the different stakeholders. Through various programs and projects of the school, they were able to augment the day-to-day operations of the schools. Collaboration among schools and working with them and other stakeholders boost their morale. There was no dividing wall among public and private, elementary and secondary schools. Stakeholders in the community treated the schools both in private and public fairly.

Support for students’ education was very important for them to achieve beyond the target. Support from the parents, LGUs for the registration fee during seminars, trainings and competition were very evident.

Likewise, professional growth of teachers was part of the staff development plan of the schools. They were the direct primary sources of knowledge for the students. Scholarship was also being given to the teachers. They were also encouraged to explore more on their core competencies. For the HP-HP, support for teachers’ continuing education made the teachers inspired and motivated to strive more.

The third theme was the sharing of responsibility and accountability. This was shown their protocols in solving problems, the establishment of council of elders and failures as part of decision making.

For HP-HP schools, they have systems or protocols that they follow in solving the conflicts of
the school. The line was always open for communication among the concerned persons. Consultation was always conducted. The challenges that the schools encountered were referred to the committee called “The Council of Elders”. They were the ones who facilitated issues and conflicts in the schools.

The fourth was optimizing access for learners which derived from “add-ons to enhance student competency and Alternative Delivery Mode (ADM) or Flexible Learning Outcome (FLO). Enriched curriculum, intervention and various programs for the students both fast and slow learners were implemented. These initiatives gave the edge for the schools to excel more beyond what was expected. All HP-HP schools implemented these strategies to perform better.

Teachers were committed and passionate to devote their extra time to carry out programs for the students. This means that the schools should not only be content to deliver the prescribed competencies but take the initiatives to enrich the curriculum in a most engaging and interactive learning activities with the teachers.

The idea of Sallis denoted that every student in the school was an output or product of education. If a single student could not make it, students who were at risks of dropping, it could affect the performance of the school as whole. There were teachers who were committed to do the additional tasks – reaching for those students who were not able to attend to the regular schedule of classes. Teachers showed deep concerned for the students and even sponsored for the transportation allowance and other school materials needed for the whole school year

Child-friendly school as part of school administration and pursued healthy lifestyle were the themes which comprised establishing enabling environment as the fifth theme. The positive learning environment of the students contributed to significantly to the teaching-learning process which yielded for better learning outcomes. “First impression lasts” as they say was very evident for HP-HP schools. Physical facilities were maintained and there was a regular inspection for safety purposes. Everybody could feel the positive climate of the schools. The safe learning environment, the strong leadership in all aspects and competent teachers were significant in a child-friendly school.

Next was managing fiscal resources that were taken from proper utilization of allotment. For all HP-HP schools, proper disbursement and liquidation of funds done properly and in accordance with the Commission on Audit rules and regulations because it was one of the criteria in giving the Performance-based Bonus of the schools. They were aware that that utilization of funds should be spent based on Annual Procurement Plan.

And finally, tracking of performance for continuous improvement. This was extracted from the
practices of HP-HP schools on the student-to-school head and teacher evaluation. Schools conducted direct assessment on teacher evaluation. The performance of the teachers was evaluated based on the students’ attitude towards their classes, how they behaved inside the classrooms and school premises. In the monitoring and evaluation of the school focused on the teachers’ performance, the conduct of an interview among students validated the report or data of teachers’ performance.

**Sustainability of Management Controls**

The third section was the sustainability measures of management controls system of the HP-HP schools. There were four interrelated themes identified. The first was learning community which was taken from themes school report card to the community, keeping an open communication and gaining the trust of community. From the start of school year, plan of activities of the HP-HP schools for the whole school year was communicated with the community through a school report card. Usually, it was issued during education summit twice a year, before the classes start and before the end of school year.

For HP-HP schools, they did not need to advertise, the community will speak for the school for its achievement. The schools were well-known of their good reputation and performance. This was evident through words of mouth by the people in the community. Because of the high performance of the HP-HP schools, everybody was very proud of their achievement. But to keep informed the public or community, the school report card would serve as valid evidence on the schools’ performance and status report.

Moreover, this would build trust among the HP-HP schools and community. Keeping the line open and accepting feedback from the external stakeholders would give the schools baseline data and information on how to continuously improve themselves to better serve their stakeholders.

The second was continuous improvement process extracted from the experiences and practices the HP-HP schools on continuing cycle. Based on the Department of Education’s vision and mission, all schools are mandated to improve continuously in delivering educational services. Quality does matter. For HP-HP schools, continuous improvement processes or system was their way of life. Continuous monitoring of programs and projects for students was very important. Training to enhance the skills and competencies of the students should be conducted. School performance should always be the core of administrator’s supervision.

Third was the leadership mantra or style of the HP-HP schools which contributed to the performance of the school. And the last interrelated theme was balanced work-life which was generated from treating the school as a family and work-life harmony. Positivity matters for school heads and mistakes would always mean room for improvement.
One should work with a big heart. Having options in decision-making was very important. There should be plan A, B or C. Taking risks in initiating a project should be taken into consideration. Giving up was not in the vocabulary and students should be valued as family. Teachers treated them not only as students but as their own children.

The school head was meant to serve and not to be served. For HP-HP schools, the whole package of a leader should be clothed with passion for instructional and supervision, commitment in serving and empowering teachers, mobilizing support from stakeholders and creating safe, healthy learning environment for the children.

Working as one family enabled HP-HP schools to continue performing. They always made sure that no one was left behind. Everyone was inspired to move forward towards success. They treated the students as their own children. They treated the school as a second home. There should be satisfaction and happiness in performing the task which was being entrusted. Giving more what was expected was a self-fulfilling mission. There should be balance between job and family.

Model of Management Controls of HP-HP Schools

The management controls model of HP-HP schools emphasized the complement of the two dimensions which were the management controls practices and the sustainability measures implemented in the HP-HP schools. The two dimensions complement each other to sustain the characteristics of HP-HP schools.
Its symbolic representation was a cart. This signified that the model could be used by all educational administrators to the schools suited to their needs and interests. The model could serve as guide in the management controls not only in the HP-HP schools but also in the regular and special schools both in the public and private in the rural and urban areas.

Conclusions
The following conclusions were derived from the major findings of the study:

1. HP-HP schools are characterized to have high academic performance, educational leaders imbibed strong leadership and high morality, and increased collaboration between the school and community. Moreover, the scarcity of resources and socio-economic condition of the schools and the family did not hinder the HP-HP schools to perform.

2. The management controls practices of HP-HP schools covered all the aspects of educational administration, from the curriculum implementation, managing of resources from students, teachers, funds and physical facilities. Community linkages and social mobilization are very vital in their performance.

3. Educational administrators implement sustainability measures including sustainability plan for all programs and projects, planning, monitoring and evaluation scheme to track and maintain the high performance of HP-HP schools. There should be a continuous improvement of all the key result areas focus on access, quality and governance of basic education services of the schools.

4. The management controls model of HP-HP schools could be used by educational administrators based on schools’ needs and interests. The model could serve as guide in the management controls not only in the HP-HP schools but also in the regular and special schools both in the public and private in the rural and urban areas.

Therefore, there were high-poverty schools found in the rural areas in the CALABARZON Region of the Philippines that were high-performing. This was made possible through the management controls practices and sustainability measures of the school participants in the study.

Recommendations
Based on the conclusions of this study, following salient points were strongly recommended:

For the Educational Administrators and Practitioners. In order that the schools perform, characteristics and management controls practices of the educational administrators in HP-HP schools may adopt by all school heads, practitioners and teachers depending on the needs of the schools. Strengthening the linkages among stakeholders to gain their support is very significant especially schools found in the rural areas. Likewise, the sustainability measures to maintain the high performance of HP-HP schools should also be observed. Moreover, the main focus of the school heads should be the heart of school improvement. The management controls model that
was developed will serve as mechanism of every school head in facing everyday challenge in the schools operation and governance.

*For Policy Makers.* For policy making purposes, guidelines on the support of the HP-HP schools should be made through School-based Management (SBM) grant given by the Department of Education. In the allocation of funds for building construction and repair, furniture, and other instructional materials from the Basic Education Facilities Fund and Bottom-Up Budgeting (BUB), HP-HP schools should be the top priority. Specifically, the Department of Education through the Regional Operations Division and School Effectiveness Division should also consider the HP-HP schools for benchmarking purposes and sharing of best practices to other schools in the country and even abroad.

*For Research.* Research on characteristics of HP-HP schools must be conducted in poor urban areas in the country. Areas on the student population and other performance indicators may be included in the study. Pursue researches to inquire on the curriculum implementation, financial management, physical facilities, climate change adaptation and safety implementation controls of HP-HP schools. Mixed-method type of research may be used for further research specifically on the performance indicators and results intervention programs to provide quantifiable and generalizable conclusions on of the study. To adhere to the mandate of Continuous Improvement Program (CIP), all best practices of the HP-HP schools including management controls should undergo C.I., processes. In the further research, one may include the elementary schools as participant respondents. Researchers may conduct further research in relation with the present study.

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Abstract
This study conducted to assess the Global Competitive Skills of BSIT students from the selected Higher Education Institution in Bulacan, Philippines. Total of 126 respondents were participated in the study. Students were asked to answer the test questionnaire designed similar to the Global Competency Assessment Test (GCAT), questionnaire was validated using Cronbach Alpha reliability, value of 0.770 is obtained. Study showed that (1) BSIT program is being dominated with Male students, (2) selected HEIs in Bulacan provides adequate facilitation of the BSIT program in terms of Basic Skills, (3) there is a lack of Behavioral Skills acquired by the respondents and (4) with an imbalance skills acquired by the respondents they do not meet the standards as set by the IT-BPM Industry. Curriculum enhancement is recommended and a new curriculum in BSIT with specialization in Business Process Outsourcing was designed.

Keywords: Global Competitive Skills, Global Competency Assessment Test, IT-Business Process Management, Basic Skills and Behavioral Skills

1. Introduction
According to the Philippine Statistical Authority (PSA), the IT-Business Process Management (IT-BPM) Industry contributed 16% to annual increases in total number of employed individuals for the past four years. As the growth of the IT-BPM in the Philippines, demands for qualified graduates are increasing. However, the gap between the pool of skilled and qualified graduates and demand of IT-BPM industry is widening and creating quality pressures.

One of the identified challenges in the recruitment process of the IT-BPM industry is the lack of skilled and qualified graduates for the job. According to the study conducted by IT Business Process Association of the Philippines, out of 100 applicants only 7 to 10 graduates possessed the Global Competitive Skills and the most likely to be hired.
Global Competitive Skills as defined by the said association is the required skill necessary for an IT student to be hired in the IT- Business Process Management (IT-BPM) Industry. Basic Skills and Behavioral (Service Orientation) skills are the two major aspects of Global Competitive Skills. Basic Skills involves:

- **Learning Ability (Verbal and Numerical):** use of verbal reasoning, numerical and analytical reasoning.
- **English Proficiency:** knowledge of English grammar and English reading comprehension.
- **Perceptual Speed and Accuracy:** efficiency in comparing information and detection of errors.
- **Computer Literacy:** basic data management, internet competency and competency in basic Microsoft applications.

Behavioral Skills on the other hand involves:

- **Reliability:** consistency of performance and dependability. **Responsiveness:** willingness and readiness to provide service.
- **Understanding the Customer:** knowing the customer and making the effort to understand the customers’ needs.
- **Communication:** explaining service, keeping the customers informed in language they can understand and listening to them.
- **Courtesy:** politeness, respect, consideration, access, and friendliness of contact personnel.
- **Learning Orientation:** willingness to learn product and service information.

To date, there is a Global Competency Assessment Test (GCAT) which aims to measure skills needed for employment in IT-BPO Industry, this costs P500 per test. For this study an assessment test similar to GCAT is constructed and validated.

To assess the Global Competitive Skills of Batch 2016 BSIT graduating students of selected Higher Education Institution (HEI) in Bulacan, this study is conducted. Identified participating HEIs are Centro Escolar University Malolos (CEU) from Malolos, Bulacan, Baliuag University (BU) from Baliwag, Bulacan and Dr. Yanga’s Colleges Inc. (DYCI) from Bocaue, Bulacan.

### 1.1 Theoretical Framework

Figure below illustrates the theoretical framework of the study, presenting the Basic and Behavioral Skills which are equally essential factors of the Global Competitiveness of BSIT students.
Basic Skills and Behavioral (Service Orientation) skills are the two major aspects of Global Competitive Skills. Basic Skills involves Learning Ability (Verbal and Numerical), English Proficiency, Perceptual Speed and Accuracy and Computer Literacy. Behavioral Skills on the other hand involves Communication, Learning Orientation, Courtesy, Empathy, Reliability and Responsiveness.

1.2 Statement of the Problem
The study aims to assess the Global Competitive Skills of Batch 2016 graduating students of selected Higher Education Institution (HEI) in Bulacan.

Specifically, it seeks to answer the following questions:
(1) What is the profile of the respondents in terms of
   a. Gender
   b. Age
(2) What is the level of Basic Skills of the respondents?
(3) What is the level of Behavioral Skills of the respondents?
(4) What is the level of Global Competitive Skills of the respondents?
(5) Do the Global Competitive Skills of BSIT students meet the needs of IT-BPM Industry?

1.3 Scope and Limitations of the Study
The researchers limited the study on the assessment of the Global Competitiveness of graduating BSIT students in selected HEIs in Bulacan. The respondents of the study were taken from all the graduating BSIT students of Centro Escolar University Malolos, Baliuag University and Dr. Yanga’s Colleges Inc.

The assessment test served as the main instrument to gather the data needed in the study. The questions were focused only to identify the Basic and Behavioral Skills of the respondents and
were not intended to measure other factors that affect the global competitiveness of the respondents.

Self-constructed questions were formulated based from the computer and programming proficiency and English proficiency, work situations and scenarios.

1.4 Significance of the Study
From the point of view of development, there is an increasing awareness and concern on the global competitiveness of Filipino BSIT graduates.

As this study was an attempt to address specific issues related to the Global Competitiveness of BSIT students, the significance of the study was therefore premised on the following:

The study is expected to be a contribution to the field of research and education. Specifically, the outcome of this research is intended to be of help to CHED officials nationwide as to what possible preventive measures, modifications or changes may be made in the curriculum or school policies.

School Administrators and Teachers. Analysis and interpretation of the study may be used for the improvement of the school policies, instructional lessons, staff development, programs, supervisory practices and decision making toward a common purpose. This could also challenge the ICT teachers on how they would guide the students to properly educate BSIT students.

Students. As for students, the study can serve as a guide to learn the basic lifelong experiences to realize the Philippine dream — to become a knowledge center in Asia/Pacific by producing knowledge workers for ICT-enabled and so called “customer interaction service” centers. So that all IT graduates can gain not just the know-how that will make them employable but also the necessary competence and skills so they can remain not just gainfully employed but prosper in their chosen careers in the future.

2. Presentation, Analysis and Interpretation of Data
This chapter deals with the presentation, analysis and interpretation of the data gathered in answering the problems connected to the competitive skills of BSIT students in selected HEI in Bulacan. Based from the gathered data from the survey tool interpretations were derived. In order to calculate the corresponding statistic treatment Portable IBM SPSS Statistics v19 was utilized in the interpretation of data.

2.1 Profile of the Respondents
Based from the collected data respondents were ranging from ages 18 to 25 years old. There are 15.9% or 20 BSIT students under the age of 18 to 19. Majority of the respondents fall under 20 – 21 years old which is 69.8% or 88. Age from 22 – 23 are 10.3% or 13 BSIT students and the smallest percentage were from the 24 – 25 year old bracket with 4% or only 5 BSIT students.

Table 5 on the other hand shows the gender of the respondents. Majority of the respondents are Male with 74.6% of the population or 94 and Female BSIT students are 25.4% or 32.

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>18 - 19</td>
<td>20</td>
<td>15.9</td>
</tr>
<tr>
<td>20 - 21</td>
<td>88</td>
<td>69.8</td>
</tr>
<tr>
<td>22 - 23</td>
<td>13</td>
<td>10.3</td>
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<tr>
<td>24 - 25</td>
<td>5</td>
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<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>M</td>
<td>94</td>
<td>74.60</td>
</tr>
<tr>
<td>F</td>
<td>32</td>
<td>25.40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>126</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**2.2 Level of Basic Skills of the Respondents**

Basic Skills of the respondents which involves Learning Ability (Verbal and Numerical), English Proficiency, Perceptual Speed and Accuracy and Computer Literacy. The computed Mean is 79.21 as show from Table 6. Respondents scored within the computed mean is verbally interpreted as Average Basic with total of 6 students or 4.8%. While respondents who scored above the Mean is verbally interpreted as High Basic with total of 64 students or 50.8% and respondents who scored below the mean is considered as Low Basic with 56 students or 44.4%.

It can be seen the majority of the respondents scored above the computed mean. Furthermore, lowest score is 56 and the highest is 95 from all the respondents participated in the study.

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>56 – 78</td>
<td>56</td>
<td>44.4</td>
<td>Low Basic</td>
</tr>
<tr>
<td><strong>Computed Mean – 79.21</strong></td>
<td><strong>6</strong></td>
<td><strong>4.8</strong></td>
<td><strong>Average Basic</strong></td>
</tr>
<tr>
<td>80 – 95</td>
<td>64</td>
<td>50.8</td>
<td>High Basic</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>126</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

**2.3 Level of Behavioral Skills of the Respondents**
Behavioral Skills on the other hand which involves Communication, Learning Orientation, Courtesy, Empathy, Reliability and Responsiveness. Based from the table below majority of the students scored below the computed mean of 74.57. There are 73 or 57.9% scored from 57 to 74 and verbally interpreted as Low Proficient. Average Proficient has 8 or 6.3% who scored 75. High Proficient are students who scored from 76 to 96 which has 45 or 35.7% of the respondents. The lowest score is 57 and highest score is 96 from all the respondents participated in this study.

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>57 – 74</td>
<td>73</td>
<td>57.9</td>
<td>Low Behavioral</td>
</tr>
<tr>
<td>Computed Mean – 74.57</td>
<td>8</td>
<td>6.3</td>
<td>Average Behavioral</td>
</tr>
<tr>
<td>76 – 96</td>
<td>45</td>
<td>35.7</td>
<td>High Behavioral</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

2.4 Level of Global Competitive Skills of the Respondents
As per total scores in the assessment test, the computed mean is 77.09 with 6 students or 4.8% fall as Average Behavioral. Large percentage scored from 58 to 76 with verbal interpretation of Low Behavioral, there are 67 or 53.2% students. And only 53 or 42.1% scored from 78 to 94 and considered as High Behavioral. The highest score recorded is 94 and the lowest is 58 from all the respondents answered the test questionnaire.

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Percent</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>58 – 76</td>
<td>67</td>
<td>53.2</td>
<td>Low GCS</td>
</tr>
<tr>
<td>Computed Mean – 77.09</td>
<td>6</td>
<td>4.8</td>
<td>Average GCS</td>
</tr>
<tr>
<td>78 – 94</td>
<td>53</td>
<td>42.1</td>
<td>High GCS</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Comparing the test results of the three (3) HEIs, it can be noted that school A has the computed mean of 80.91 in the GCS among the participating HEIs, while school C has the highest computed mean of 79.6 in the GCS. And the Global Competitive Skills, school C has the highest computed mean of 80.00. It can also be noted that school C has the highest scorer both from Basic, Behavioral Skills and Global Competitive Skills with scores of 95, 96 and 94 respectively. Based from Table 9, participating schools have High Basic Skills and Low Behavioral Skills.
3. Summary, Conclusions and Recommendations

This chapter provides a summary of the findings of the study, the conclusions based upon the obtained results, as well as the recommendations forwarded in the light of the conclusions arrived at.

Using the descriptive method of research, the study sought to investigate the global competitive skills of selected HEIs in Bulacan.

### 3.1 Summary of Findings

1. What is the profile of the respondents in terms of:
   a. Gender
      
      Majority of the respondents are Male with 94 (74.60%) respondents while 32 (25.40%) are Female.
   
   b. Age
      
      Age ranging from 20 to 21 dominates the study with 88 (69.8%), followed by 18 to 19 years old with 20 (15.9%), 22 to 23 years old with 13 (10.3%) and last is age ranging from 24 to 25 is 5 (4.0%).

2. What is the level of Basic Skills of the respondents?

   The Basic Skills of the respondents is categorized as High Behavioral with majority of 64 or (50.8%) respondents fall under this score, with computed mean of 79.21.
(3) What is the level of Behavioral Skills of the respondents?
The Behavioral Skills of the respondents is categorized as Low with majority of 73 or (57.9%) respondents and a computed mean of 74.57%.

(4) What is the level of Global Competitive Skills of the respondents?
The respondents were categorized as Low in their level of Global Competitive Skills, with 67 (53.2%) of respondents scored between 58 to 76 and a computed mean of 77.09.

(5) Do the Global Competitive Skills of BSIT students meet the needs of IT-BPM Industry?
With the scores achieved by the respondents from different HEIs in Bulacan, the skills of the students do not meet the standards set by IT-BPM Industry.

### 3.2 Conclusions
Based on the findings of the study, the following conclusions were drawn:

1. BSIT program is being dominated with Male students, and at the age of 20 to 21 most of the students finish the BSIT program.

2. Selected HEIs in Bulacan provides adequate facilitation of the BSIT program in terms of Basic Skills. As evident in this study, students have High Proficiency in their Learning Ability (Verbal and Numerical), English Proficiency, Perceptual Speed and Accuracy and Computer Literacy.

3. There is a lack of Behavioral Skills acquired by the respondents which includes Communication, Learning Orientation, Courtesy, Empathy, Reliability and Responsiveness. This will solidify the statement of Andrew King, country director of IDP Education Pty. Ltd. Philippines during a conference on English organized by the Centre for International Education (CIE) in Manila, he warned that the continuous decline in Filipinos’ English proficiency could affect the growth of the call center industry which provides thousands of jobs at home and abroad.

4. With an imbalance skills acquired by the respondents they do not meet the standards as set by the IT-BPM Industry. The industry requires potential worker to possess both Basic and Behavioral Skills. But the respondents excel only on the Basic Skills and lack knowledge in Behavioral Skills.

### 3.3 Recommendations
Based on the findings of the study and the conclusions derived from the study, the following recommendations are hereby forwarded.
(1) Strengthen Industry Linkages. The IT-Business Process Management (IT-BPM) Industry in the Philippines initiated the Talent Development Initiatives and in the process of being approved, funded and implemented. Programs include the following:

a. Global Competency Assessment Test (GCAT) which aims measures skills needed for employment in IT-BPO Industry
b. High English Proficiency Program which is designed to create fluent English language skills; planned for nationwide implementation
c. Training-for-Work Scholarship Program (TWSP) for near hires, pilots produced 70% hiring efficiency
d. Multilingual BPO Leadership Program
e. Services Management Program for entry-level program to enlarge talent pool
f. Certificate Program for management development
g. Service Management Program for Entry-Level course designed to enlarge talent pool

(2) Curriculum Development. Continuous development must still be observed by different colleges and universities in Bulacan. A balanced combination of subjects to enhance students’ Basic and Behavioral Skills must be ensured to be included in the BSIT curriculum to meet the standards of the IT-BPM Industry. A proposed BSIT curriculum is designed based on CHED Memorandum Order (CMO) NO. 34 Series of 2012, governing the revised policies, standards and guidelines for Information Technology Education (ITE) programs prescribing specialization track on Service Management for Business Process Outsourcing.

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The Effect of Multimedia on Cultural Learning in an English Classroom

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Abstract
Recently, the application of technology, including films, radio, television, the Internet, and other forms, is increased in various language classrooms. Interest in using multimedia as tools to improve learning is growing in language learners and teachers (Liu, Moore, Graham & Lee, 2002). In addition, culture teaching and learning has been considered as an important interest to language educators and over the past four decades. Thus, the present study is designed to investigate the impact of multimedia on EFL learners’ cultural understanding and raise learners’ learning motivation via different multimedia.

Forty Taiwanese college students with pre-intermediate English proficiency level participated in this project. The educator use a film, “Night at the Museum III,” to design a series of classroom activities to help learners to improve their cultural knowledge. The activities involved film watching, vocabulary learning, artist knowledge searching, on-line resource searching and feedback. The educator used both qualitative and quantitative methods as the tools. During the classroom activities, the educator provided a learning sheet including new words, phrases and sentences for students to check. Then, after the film, students searched the scene appearing in the movie, trying to surf on the Internet to search the background of the museum (the British Museum), the famous collections and then share some of their favorite collections to others. Finally, a questionnaire and interview related to learning motivation were used. With multimedia, the writer would like to assist learners to connect cultural awareness and language learning, and improve their motivation in learning English.

Keywords: cultural learning, multimedia, language learning motivation

1. Background
Nowadays, video is widely used to stimulate interests in various topics, to provide information on cultural or historical background for language learners. In addition, videos can be seen as stimuli to help students to involve in class activities. Videos would create a role to help students to improve the learning motivation and with the visual image, students can connect it to what they see in textbooks and then obtain real knowledge. Finally videos can facilitate critical thinking and deeper language processing.
As we know, the twentieth century witnessed an increase in the application of technology in ESL/EFL classrooms, including film, radio, television, language lab and so on (Cunningham, 1998). Also, the use of multimedia is widespread today. Technology-enhanced language learning provide positive impact, such as increased motivation and low-anxiety (Blasszar, 2001). Thus, interest in using multimedia as tools to improve learning is growing in language learners and teachers (Liu, Moore, Graham & Lee, 2002). With the increasing interest in computer technology, how to enhance teaching and learning through technology has become an important issue. As a result, this present study used multimedia as a tool to improve students’ motivation, providing different opportunities to help students familiar with cultural knowledge and finally improve their cultural awareness.

2. Methods

The main video material, Night at the Museum III, was used in class. Based on the above discussion of multimedia and language learning, two major research questions presented as follows:

(1) Is students’ English learning motivation improved through video teaching?

(2) Do students get better cultural understanding through those activities?

2.1 Subjects

A total number of forty sophomore college students with pre-intermediate English proficiency level from a college in New Taipei City participated in this project. All the subjects in this study shared the similar English learning experiences and majored in travel management.

Also, all the subjects had completed the ILTEA English Proficiency Tests (CEF A2). In the test, it contained 32 questions related to reading ability and 25 questions related to listening ability. Students passed the test have the basic reading and listening ability, such as topics related to daily life conversation, travel events, advertisement, business conversation and etc.

2.2 Instruments

In order to make good use of the film, the educator designed pre-watching learning sheet, after watching learning sheet, feedback questions, and interview.

2.2.1 Pre-Watching Sheet

It contains the learning of movie scene (the British Museum), such as the location, the features of the museum, basic new words they need to understand. From the activity, students can search on the Internet or discuss with their classmates to get basic understanding about the museum and the city.

2.2.2 After-Watching Sheet
A sheet related to the movie content was used. From the sheet, students need to check some important museum collections’ background, the feature and even the authors. Then they used some simple sentences to give a short feedback about the movie. Finally students need to find some museums interested them and write down the features. From this activity, students can learn art knowledge and then develop their cultural understanding.

2.2.3 Feedback Questionnaire and Interview Questions
The ten-question questionnaire for collecting students’ reflections included items with 5-point Likert scales. The questions involved motivation of cultural learning, English learning motivation, and video learning in class. In addition, for more detailed information, the educator interviewed some students. The questions presented as follows:
(1) What do you think about using video in class?
(2) Do you think this kind of learning can improve your English learning motivation?
(3) After this activity, do you think you understand more about foreign culture and art knowledge?

2.3 Procedures
It is a four-week project. The detailed class activities were presented as follows:

3. Results
Collected data were analyzed and discussed based on the two major research questions stated above. First, the educator presented the results of the feedback questionnaires. Then, to get more detailed information, the relationship among multimedia teaching, English learning motivation, and cultural reading were discussed.

At first, the results of the feedback questionnaires indicated that students provided positive reflection about this multimedia learning.
3.1 Multimedia Learning and English Learning Motivation

Among 40 subjects, only four subjects responded that this activity did not improve the motivation. However, most of the subjects believed the positive effect of learning motivation. As Keddie (2014) claimed, video is becoming the primary mode of communication around the world. As a result, with using videos, teachers are more likely to relate to their students’ lives and meet their expectations, and this provides positive influence on learning motivation. Videos provided authentic materials to help students to approach real languages. It combines visual and audio stimuli, and then it also allows students to see their facial expressions and body language at the same time when they hear the stress, intonation of English (Bello, 1999). From those stimuli, students can connect the video content with their textbook. With different opportunities, students would be more interested in English learning. Here are some students’ responses:

“I think this is an interesting movie. After that, I want to know the new words I hear.” (Den, March 20, 2017)

“At first, I think English is not useful. But after watching movie, I want to know more sentences to express myself.” (Alex, March 20, 2017)

3.2 Multimedia Learning and Cultural Understanding

For English learners, video has the benefit of providing cultural information (Bello, 1999). A number of videos are based on stories, and some particular cultures so that students can learn different cultures and then connect them with what they find in textbooks. In addition, with authentic image, the video provides a realistic view of famous history. From this interesting interpretation in the movie, students are motivated to stretch their comprehension (Stempleski, 1992). Here are students’ responses:

“The movie is fun. I learn more histories from it.” (Jenny, March 27, 2017)

“I didn’t know many museum collection before. After this movie, I know many collections’ names.” (Lily, March 27, 2017)

“After this movie, I want to travel to England.” (Felicia, March 27, 2017)
4. Conclusion
Based on the findings, multimedia offers positive impact on students’ language learning and cultural awareness. Most students thought this is a new way to learn language and learn different cultural knowledge. From visual and audio stimuli and the assistance of Internet, students could get authentic learning context and improve their cultural knowledge. Thus, language teachers should take advantage of using these tools in language-learning classrooms. However, when choosing appropriate video materials, teachers need to meet students’ needs and interests so that students’ learning motivation could be really improved. When multimedia is effectively integrated in language-learning classrooms, it helps in creating more meaningful teaching and learning experiences and provides various approaches for language learning.

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HKICSS-0035
Organizational Commitment and Job Satisfaction of the Faculty in a Local Higher Educational Institution: For Effective Work Performance

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Abstract

This research aimed to find out teacher’s level of organizational commitment and job satisfaction in a local higher educational institution. The organizational commitment and job satisfaction of the faculty were determined according to age, sex, faculty status, educational attainment and number of years teaching. The faculty’s organizational commitment based from the three components of commitment namely: affective, continuance and normative was also known. Likewise the correlation between organizational commitment and job satisfaction level of the faculty were also determined. The researchers used the descriptive method of research. Respondents of the study were teachers of the City University of Pasay with either a faculty status of regular / permanent or contract of service. From a total number of 116 teachers, sixty percent (60%) or seventy (70) teachers were taken as respondents: twenty-five (25) regular/permanent and forty-five (45) contract of service. Regular teachers are in the plantilla of the city government and contract of service teachers are those who are paid in an hourly basis depending on their qualifications and rank.

Data for organizational commitment were collected through a questionnaire which was framed by the researchers based from researches about work commitment (Meyer and Allen 1991; Mowday et al, 1979). Job satisfaction questionnaire was framed by researchers from varied readings about job satisfaction. The questions underwent validation done by experts in the field of human resource management. Suggestions, corrections were noted. Questionnaires were administered to teachers of other colleges for further revision before final copies were distributed to the intended respondents.

Organizational commitment and job satisfaction level of the faculty based on the variables of age, sex, faculty status, educational attainment and number of years teaching experience were determined.
The three component-model of organizational commitment was used to find out what kind of organizational commitment do the faculty manifest. Significant correlation between teachers’ organizational commitment and job satisfaction was computed at 0.05 level of significance using Pearson-Product Moment correlation method. Results showed that regular faculty showed a “strong positive correlation” in their organizational commitment and job satisfaction; contract of service faculty showed a “moderate positive correlation. The entire faculty manifested a “moderate positive correlation.

Keywords: commitment, job satisfaction, regular teacher, contract of service teacher

1. Background

Teachers make a difference in the education of the children. The future of the youth rests on the shoulders of the teachers who wield great influence upon the growing minds and providing them a firm foundation for lifelong learning (Salandanan, 2009). Educating children for self-directed learning. Teaching is not an easy task. To be able to do so, teachers should be committed, dedicated and competent. Worthwhile values of compassion and commitment provide the fine ingredients that make teaching truly humane and enriched with a sincere feeling of accountability.

Educational organizations can effectively carry out its objectives in providing adequate organizational structure, adequate and satisfactory resources, consistent policies based on scientific and technological developments and qualified teachers and employees with healthy working conditions. Even if educational organization may provide the physical, and economic conditions for effectiveness, its performance may not be successful if teachers’ needs and expectations are not taken into consideration. One of the aspects of teachers’ sense of working conditions is their interest toward their students, and the school. One of the concepts that determine person’s interest towards the objects in a working environment is his/her level of organizational commitment. The effectiveness of an organizational commitment especially in education depends on many factors. One of the most important factors is the interaction of the administrator, teacher, and the students who are the important players in teaching and learning. In this respect, teachers commit themselves to their schools, students, teaching activities and occupation. This is what is called as the organizational commitment of the teachers, the strength of a person’s identification with and involvement to a particular organization. Meyer and Allen (1991) presented a Three-Model Component of Commitment namely (1) Affective Commitment: is characterized by identification and involvement with the organization as well as enjoyment in being a member of the organization, (2) Continuance Commitment: refers to the extent which a person needs to stay with the organization due to the costs of forgoing benefits associated with the person’s investment in the organization. These investments consist of close relations of an employee with fellow faculty, pension benefits, seniority, career and special competencies
gained by working in an organization for (3) Normative Commitment: the person commits to and remains in the organization because of feelings of obligations. He stays because the organization may have invested resources in training an employee who then feel a “moral” obligation to put forth on the job and stay with the organization to “repay the debt”/ It may also reflect an internalized norm before the person joins the organization through the family or other agencies that one should be loyal to one’s organization.

Job satisfaction is a determinant of organization commitment as stated by Meyer, et.al(2001). They further said that the main difference between organizational commitment and job satisfaction is that: organizational commitment can be referred to as the emotional response which the person has towards the organization; while job satisfaction is the response that an employee has towards any job. It may be possible that an employee may have positive feelings towards the organization, its values and objectives, but it is possible also that he is unsatisfied with the job he has in the organization.

From the foregoing statements, the researchers aimed to find out the level of organizational commitment and job satisfaction of the faculty in a local higher educational education for effective work performance. Specifically answers to the following questions are sought:

(1) What is the profile of the faculty of the City University of Pasay in terms of:
   1a. age
   1b. sex
   1c. educational degree (attainment)
   1d. number of years teaching experience
   1e. faculty status

(2) What is the organizational commitment and satisfaction level of the respondents in terms of the stated profile variables?

(3) Is there a significant relationship between respondents’ organizational commitment and job satisfaction level?

(4) What is the implication of the results of the study to effective work performance?

The setting of the study is the City University of Pasay (CUP); respondents were the faculty members with a status of either permanent / regular or contract of service.

CUP was founded on May 26, 1994 by virtue of City Ordinance No.3939 as amended by City Ordinance No.4155. It was later renamed City University of Pasay (CUP) by virtue of the latest amendment made in the year 2011 (City Ordinance No. 4604, s. Pamantasan ng Lungsod ng Pasay (PLP). The declaration of policy of Ordinance No.4604 states: “It shall hereby declared the policy of the City of Pasay to be genuinely committed in consonance with the policy of the State to promote the right of all citizens to quality education at all levels and to make such
education accessible to all. Moreover, the City of Pasay aware of its obligations to give the poor but deserving, talented and gifted students of the City of Pasay the opportunity to develop their potentialities, is committed to establish tertiary school to accommodate graduates of secondary education to pursue college education. Today, CUP offers degree programs in the area of Teacher Education, Business Administration, Office Management, Nursing, Two-Year Midwifery, Associate in Computer Studies, Arts and Sciences, Associate in Hotel and Restaurant Management, Law and Graduate Studies with programs in educational management and public governance. There are twenty-eight (28) regular faculty and eight-eight (88) contact of service faculty with a total of one-hundred sixteen (116) faculty. The total student population for SY 2016-2017 averaged to 4,600 students per semester.

2. Research Methodology

Research Method Used: the descriptive method of research was used in this study. To determine the organizational commitment of the faculty a questionnaire was framed based from the Three-Component Model of Commitment developed by Meyer and Allen (1991). The job satisfaction survey questionnaire was framed by the researchers, validated by university professors from other universities in Manila. Their suggestions for improvement were consolidated and a final copy was made for distribution to teachers who are connected in other schools for refinement of the items.

Respondents: there were one-hundred sixteen (116) faculty members at CUP consisting of faculty with either permanent/regular and contract of service status. A total of seventy (70) respondents or sixty (60) percent from a total of 116 population was taken as the sample: twenty-five (25) regular faculty and forty-five (45) contract of service faculty. Faculty with regular or permanent status are in the plantilla of the city government of Pasay after having met the criteria set by the Civil Service Commission and evaluated by the CUP Faculty Selection Board. Their appointments were recommended by the President of CUP for confirmation to the Board of Regents and approved by the City Mayor of Pasay. Faculty with contract of service status are those who have not complied with the requirements as: no civil service eligibility, no vacant item in the plantilla.

Data-Gathering Instrument: Part One of the questionnaire consists of the profile of respondents as to age, sex, educational degree or attainment, number of years teaching, and faculty status. The second part consists of questions to determine organizational commitment level of the respondents based from the Three-Model Component Commitment developed by John Meyer and Natalie Allen (1991) consisting of Affective Commitment, Continuance Commitment and Normative Commitment. Each commitment factor consists of eight questions totaling to 24 questions. Each question is given ratings ranging from 1 to 5 as: 5- Very Highly Committed/Very Highly Satisfied; 4- Highly Committed/Highly Satisfied; 3- Moderately
Committed/ Averagely Satisfied; 2- Slightly Committed/ A Little Satisfied; 1- No Commitment/ Not Satisfied. Questions for job satisfaction were framed by the researchers. There were twenty-three questions by which the respondents answered using the same 5-point Likert scale.

**Statistical Treatment of Data:** the data obtained from the questionnaire were computed and analyzed using percentages and weighted mean in finding out the organizational commitment and job satisfaction of faculty (regular and contract of service). Pearson Product-Moment Correlation Coefficient is used to determine if there is a significant relationship between organizational commitment and job satisfaction of the faculty: with regular and contract of service status.

### 3. Results and Discussion

#### 3.1 Profile of Respondents

**1a. Age and Sex**

Table 1 shows that seventeen (24.29%) of the respondents belong to age group 40-47 years old. Sixteen (22.86%) of the faculty are between 48-55 years of age. Only three (4.29%) faculty belong to age group 24-31 years old, while one (1.43%) faculty was between 80-87 years of age. Majority of the faculty are not yet of the retiring age.

<table>
<thead>
<tr>
<th>AGE</th>
<th>Range</th>
<th>Number of Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 – 31</td>
<td>3</td>
<td></td>
<td>4.29%</td>
</tr>
<tr>
<td>32 – 39</td>
<td>7</td>
<td></td>
<td>10.00%</td>
</tr>
<tr>
<td>40 – 47</td>
<td>17</td>
<td></td>
<td>24.29%</td>
</tr>
<tr>
<td>48 – 55</td>
<td>16</td>
<td></td>
<td>22.86%</td>
</tr>
<tr>
<td>56 – 63</td>
<td>12</td>
<td></td>
<td>17.14%</td>
</tr>
<tr>
<td>64 - 71</td>
<td>9</td>
<td></td>
<td>12.86%</td>
</tr>
<tr>
<td>72 – 79</td>
<td>5</td>
<td></td>
<td>7.14%</td>
</tr>
<tr>
<td>80 – 87</td>
<td>1</td>
<td></td>
<td>1.43%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEX</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31</td>
<td>44.29%</td>
</tr>
<tr>
<td>Female</td>
<td>39</td>
<td>55.71%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Table 2 presents the distribution of respondents in terms of faculty status, educational qualification and number of years teaching experience. Twenty-five (35.71%) from a total of seventy respondents have a regular or permanent status, while forty-five (64.29%) have a contract of service faculty status. Regular faculty has civil service eligibility with an item in the plantilla of the city government with an approved budget.

Twenty-two faculty (31.43%) hold a Master of Arts degree; nineteen (27.14%) have doctorate degrees either in Education or Public Governance; fifteen (21.43%) faculty are pursuing a doctorate program and twelve (17.14%) are finishing their master’s degree. Majority of the college faculty have finished graduate degrees as per requirement of the Commission on Higher Education for faculty members teaching in higher education.

Twenty-eight (40%) of the faculty have already gained teaching experience from 1-9 years; followed by twenty-three (32.86%) faculty with 10 to 19 years of teaching and twelve (17.14%) having taught from 20-29 years. It is observed that as the number of years teaching increases the number of faculty decreases. It may be due to the fact that some have already stopped teaching because they have retired from service or some may have died. Still others may have transferred residence from the city to the provinces.

### 3.2 Organizational Commitment and Job Satisfaction Mean Scores of Respondents

2a. According to Age and Sex
Table 3 presents the organizational commitment mean scores and job satisfaction mean scores of the faculty. For organizational commitment in terms of age, regular faculty whose ages ranged from 40-47, 48-55, and 56-63 years obtained mean scores of 3.81, 3.53, 3.52 respectively interpreted as “High Commitment”; while faculty whose age ranged from 32-39 got a mean score of 3.15 described as “Average Commitment”. It can be noted that as the faculty increase in age, they show a “high commitment”. For contract of service faculty, one faculty whose age range is from 80-87 obtained a mean score of 4.67 described as “Very High Commitment”. The said teacher has already stayed for some time in the university which follows that she is highly committed to the school. Faculty whose ages ranged from 40-47, 48-55, 72-79 obtained mean scores of 3.49, 3.39, and 3.41 described as “average commitment”.

For the job satisfaction regular faculty whose ages ranged from 32-39, 48-55 showed an “average job satisfaction” with mean scores of 2.96, 3.45 respectively. These faculty may not have yet felt the real essence of teaching. The contract of service faculty with ages ranging from 40-47, 48-55 years showed an “average satisfaction”. They are still searching for the fulfillment of whatever needs and wants they have.
Female and male with regular and contract of service faculty status showed a “High Commitment and a High Job Satisfaction” with a general weighted mean scores of 3.65 and 3.62 respectively.

2b. According to Faculty Status, Educational Attainment Number of Years Teaching

Table 4 – Distribution of Respondents’ Mean Score in Organizational Commitment Job Satisfaction: Faculty Status, Educational Attainment, No. of Years Teaching

<table>
<thead>
<tr>
<th>2b.1 FACULTY STATUS</th>
<th>ORGANIZATIONAL COMMITMENT</th>
<th>JOB SATISFACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WM</td>
<td>VD</td>
</tr>
<tr>
<td>Regular</td>
<td>3.42</td>
<td>AC</td>
</tr>
<tr>
<td>Contract of Service</td>
<td>3.76</td>
<td>HC</td>
</tr>
<tr>
<td>GWM</td>
<td>3.59</td>
<td>HC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2b.2 EDUCATIONAL ATTAINMENT</th>
<th>Regular</th>
<th>Contract of Service</th>
<th>Regular</th>
<th>Contract of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor Degree + Master Units</td>
<td>3.53</td>
<td>HC</td>
<td>3.66</td>
<td>HC</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>3.46</td>
<td>HC</td>
<td>3.84</td>
<td>HC</td>
</tr>
<tr>
<td>Bachelor Degree and CPA licensed</td>
<td>0</td>
<td>0</td>
<td>3.33</td>
<td>AC</td>
</tr>
<tr>
<td>Doctorate Degree</td>
<td>3.40</td>
<td>AC</td>
<td>3.95</td>
<td>HC</td>
</tr>
<tr>
<td>GNM</td>
<td>3.49</td>
<td>AC</td>
<td>3.90</td>
<td>HC</td>
</tr>
<tr>
<td>GWM</td>
<td>3.57</td>
<td>HC</td>
<td>3.73</td>
<td>HC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2b.3 NUMBER OF YEARS Teaching</th>
<th>Regular</th>
<th>Contract of Service</th>
<th>Regular</th>
<th>Contract of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 9</td>
<td>3.63</td>
<td>HC</td>
<td>3.98</td>
<td>HC</td>
</tr>
<tr>
<td>10 – 19</td>
<td>3.38</td>
<td>AC</td>
<td>3.27</td>
<td>AC</td>
</tr>
<tr>
<td>20 – 29</td>
<td>3.97</td>
<td>HC</td>
<td>4.18</td>
<td>HC</td>
</tr>
<tr>
<td>30 – 39</td>
<td>0</td>
<td>0</td>
<td>3.07</td>
<td>HC</td>
</tr>
<tr>
<td>40 – 49</td>
<td>0</td>
<td>0</td>
<td>3.50</td>
<td>HC</td>
</tr>
<tr>
<td>50 – 59</td>
<td>0</td>
<td>0</td>
<td>3.29</td>
<td>AC</td>
</tr>
<tr>
<td>GWM</td>
<td>3.66</td>
<td>HC</td>
<td>3.72</td>
<td>HC</td>
</tr>
</tbody>
</table>

2c. Regular and Contract of Service Faculty Based on the Three-Components Model of Organizational Commitment.

Table 5 – Distribution of Regular and Contract of Service Faculty Based on the Three-Components Model of Organizational Commitment.

<table>
<thead>
<tr>
<th>REGULAR FACULTY</th>
<th>WM</th>
<th>VD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective</td>
<td>3.94</td>
<td>High Commitment</td>
</tr>
<tr>
<td>Continuance</td>
<td>3.34</td>
<td>Average Commitment</td>
</tr>
<tr>
<td>Normative</td>
<td>3.69</td>
<td>High Commitment</td>
</tr>
<tr>
<td>GWM</td>
<td>3.66</td>
<td>High Commitment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTRACT OF SERVICE FACULTY</th>
<th>WM</th>
<th>VD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective</td>
<td>3.92</td>
<td>High Commitment</td>
</tr>
<tr>
<td>Continuance</td>
<td>3.16</td>
<td>Average Commitment</td>
</tr>
<tr>
<td>Normative</td>
<td>3.28</td>
<td>Average Commitment</td>
</tr>
<tr>
<td>GWM</td>
<td>3.45</td>
<td>Average Commitment</td>
</tr>
</tbody>
</table>

Table 5, presents the organizational commitment of the faculty: based on the three-component model of commitment: affective, continuance and normative. Faculty with regular and contract of service status shared weighted means of 3.94 and 3.92 respectively interpreted as “High Commitment” in the affective component the same group of faculty manifested an “Average
Commitment” with weighted means of 3.34 and 3.16 respectively. Regular faculty obtained a weighted mean of 3.69 “High Commitment” in the normative component described as “Average Commitment” in the continuance component of commitment because they may have invested a little time and effort that will make them stay in the university. Generally the entire faculty of the university registered a mean of 3.56 interpreted as “High Commitment”.

3.3 Correlation of Organizational Commitment and Job Satisfaction of Faculty

3a. Regular Faculty

From Table 6, the computed value of correlation coefficient of the organizational commitment and job satisfaction of the regular faculty is 0.8464. This value shows a strong positive correlation. The computed t-value of 7.62 at 0.05 level of significance with the degree of freedom of 23 is higher than the critical value of t which is 2.069. The hypothesis stating that there is no significant correlation between organizational commitment and job satisfaction is rejected. There is a significant correlation between organizational commitment and job satisfaction of regular faculty.

3b. Contract of Service Faculty

Table 7 shows the correlation between organizational commitment and job satisfaction of the faculty with contract of service status. The computed value of the correlation coefficient is 0.6614. This value shows a moderate positive correlation. The computed t-value is 5.78 at 0.05 level of significance with degree of freedom of 43 is higher than the critical value 2.0174. The null hypothesis which states that there is no significant correlation between the organizational commitment and job satisfaction of contract of service faculty is rejected. There is a significant correlation.
correlation between organizational commitment and job satisfaction of contract of service faculty.

3c. Regular and Contract of Service Combined: Organizational Commitment and Job Satisfaction

Table 8 – Correlation Between Organizational Commitment and Job Satisfaction of the Faculty (Combined)

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>df</th>
<th>Coefficient Correlation</th>
<th>Critical Value</th>
<th>t-test Value</th>
<th>Interpretation</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Commitment and Job Satisfaction</td>
<td>70</td>
<td>68</td>
<td>0.7415</td>
<td>1.9952</td>
<td>9.11</td>
<td>Moderate Positive Correlation</td>
<td>Reject ( H_0 )</td>
</tr>
</tbody>
</table>

Level of significance = 0.05

Table 8 shows the organizational commitment and job satisfaction of regular and contract of service faculty combined. The computed coefficient correlation is 0.7415. This value shows a moderate positive correlation. The computed t-value is 9.11 higher than the critical value of 1.9952 at 0.05 level of significance with degree of freedom at 68. The null hypothesis is rejected: there is a significant correlation between organizational commitment and job satisfaction of both regular and contract of service faculty.

4. Conclusions

From the results of the study the following conclusions are presented:

4a. Regular and contract of service faculty or (24%) showed an age range of 40 – 47 years; in terms of sex, male comprised 60% of the male population while the contract of service male faculty registered 36%. There was more of male faculty in the regular group of teachers; while in the contract of service, there was more of female Faculty (64%).

4b. There were 21.43% of the faculty have a master’s degree and 27.14% have doctorate degrees. CUP complies with requirements set by the Commission of higher education.

4c. Majority of the faculty have taught for 5 to 9 years.

4d. Organizational commitment In terms of age , one faculty with contract of service status expressed a “Very High Commitment “ with age between 80 -87 years old.

4e. Male and female faculty manifested a “high commitment and high satisfaction level.

4f. In terms of the number of years teaching experience; regular teachers with 10-19 years of teaching showed an “average commitment, but “High job satisfaction”.

183
4g. In the three components of commitment, regular faculty showed a high commitment in affective and normative commitment but average in continuous commitment. The contract of service faculty obtained a “high commitment: in the affective aspect of commitment and “average commitment” in the continuance and normative commitment.

4h. In terms of the correlation between organizational commitment and job satisfaction of the faculty, it shows a moderate positive correlation. The null hypothesis is rejected: there is a significant correlation between organizational commitment and job satisfaction of the faculty.

5. Implications of the Results of the Study to Education

School administrators can greatly capitalize on the high affective commitment manifested by the faculty. Regular and contract of service faculty love the university that they will do their very best to help achieve whatever goals and objectives the institution may set up. They stay in the university because they have identified themselves with the school’s mission, values and goals.

Because of this scenario, school administrators should set up programs and projects which will help the faculty align their role with their skills and interest and help them seek further the purpose and value in their work.

A moderate positive correlation has been found between organizational commitment and job satisfaction. The result can help administrators in making decisions regarding promotion and ranking and identify faculty who can be prepared to take the reign of administration in the future for the university. A high job satisfaction among the faculty can lead to less absenteeism, and lower the percentage of faculty turnover.

Acknowledgement

I should like to acknowledge the help extended to me by a staff at the President’s Office Ms. Mylene Hilapo.

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Poster Sessions

Management / Management and Decision Science / Psychology

Tuesday, July 4, 2017  11:00-12:00  Grand Ballroom (III)

HKICSS-0017
Based on the Time Series between Topics to Improve the Performance of Blog Search
Lin-Chih Chen  |  National Dong Hwa University

APCMB-0006
Exploring the Negative Leadership of Supervisor Dependence on Subordinates
Chia-Wu Lin  |  National Dong-Hwa University
Chia-Yen Wu  |  National Dong-Hwa University

HKICSS-0056
The Effect of Social Networks and Recreational Sport Participation on Residents’ Subjective Well-Being
Chia-Ming Chang  |  National Chiayi University
Hsiu-Chin Huang  |  Tatung Institute of Technology
Tsung-Liang Lin  |  Tatung Institute of Technology
Chen Tzu-Wen  |  National Chiayi University
Based on the Time Series between Topics to Improve the Performance of Blog Search

Lin-Chih Chen  
Department of Information Management, National Dong Hwa University, Taiwan  
E-mail: lcchen@mail.ndhu.edu.tw

1. Background  
From the 1990s to 2015, the number of posts on the Internet grew from a few thousand to several million, and its growth rate was exponentially fast (Pingdom 2015). In so many posts, how to use information technology to find useful information for the bloggers has become an important issue. Fortunately, blog search engines can give bloggers some useful posts based on the queries they enter. One difference between a general search engine and a blog search engine is that they index different objects (Tsai 2011). For all crawled pages, the general search engine indexes any page and the blog search engine indexes only the posts. The other difference is that they consider different time series. General search engine usually only display the last update time on the page, but the blog search engine must display the various update time on the post. This difference is important because, for the same topic, bloggers and subscribers at different times to discuss the meaning may be different.

The latent semantic analysis model can effectively identify the topic that exists between different documents (Blei et al. 2003). In recent years, some well-known semantic models such as Latent Semantic Analysis (LSA), Probabilistic LSA (PLSA), and Latent Dirichlet Allocation (LDA) have emerged to find latent topics in documents. However, since these semantic models do not consider any time-related parameters, they cannot effectively solve the problem of time series in blog search. This is important because, in an environment where documents often update, people often decide whether it is time-sensitive information based on the update time of the document.

2. Methods  
LSA, PLSA, and LDA can effectively identify the topic relationship between different documents. However, since these semantic models do not consider any time-related parameters, they cannot effectively solve the problem of time series in blog search. In general, the emergence of a hot topic is usually associated with the post update time, because these posts are often in a similar time to discuss the same topic. Therefore, compared to other semantic models, our model focuses on how to set properly the time series for blog search. There are two reasons our model chooses LDA as the underlying semantic model. The first reason is that LDA focuses on finding relationships between topics and terms for a given document. The second reason is the LDA uses the Gibbs sampling algorithm to estimate the relevant parameters, so its computational time is
much faster than PLSA.

3. Results

Figure 1 is the average NSS (Normalized Similarity Score) (Liu et al. 2015) value between the test query and all its related topics when the number of test queries equals 1000. According to the results in the figure, we found the performance of LSA is the lowest, because it can only find the query-related synonymous topics. Compared with other models, the number of these synonymous topics is not only small, but also focused on a few topics. PLSA, LDA, and our model can further find the query-related polysemous topics, so they perform better than LSA. According to the experimental results, we found that PLSA is superior to LDA in dealing with polysemy topic. However, the computation time of PLSA is significantly longer than other models. These blog search queries contain many queries that have the same topic but differ in their meaning because of the time difference. For often updated blog topics, increasing the time series can effectively distinguish the same topic at different times to show different meanings. Our model is superior to other models because it increases the time series that is often considered in blog search.

![Figure 1: The average NSS values for different models](image)

Keywords: Blog Search, Time Series, Normalized Similarity Score, Semantic Model

Acknowledgements

This work was supported in part by Ministry of Science and Technology, Taiwan under Grant Most 105-2221-E-259-030 & 104-2221-E-259-038.

4. References


February 2017
Abstract
This study aimed to explore the influence of supervisors’ dependence on the subordinates which the perspective of top-bottom dependence among the employees’ job performance and the leadership behaviors of supervisors’ abusive supervision. The research samples used in this study were focused on both the insurance practitioners and supervisors working for major insurance companies in Taiwan. Questionnaire surveys obtained 317 valid paired samples. Research results indicated that when supervisors’ dependence on the subordinates, employees had better job performance, and they had lower level perception of subordinates’ abusive supervision. The research findings not only can provide the antecedents for studies related to abusive supervision, but also it can provide different aspects for studying various dependencies occurring in the organizations that even can also be considered as the basis for conducting follow-up studies of leadership.

Keywords: Abusive supervision, leadership, supervisor dependence on subordinates

1. Introduction
According to prior studies and developments related to leadership topics, it had been found that leaders in the workplace might not merely engage in positive leadership behaviors. However, supervisors’ negative behaviors exhibited by some of the important leaders in the workplace have become the focus of many researchers (Aasland, Skogstad, Notelaers, Nielsen, & Einarsen, 2010). In the studies of negative leadership behaviors, “abusive supervision” was a kind of aggressive organizational behavior conducted by supervisors against subordinates. Abusive supervision meant that subordinates were the perception that supervisors had continuously display malicious acts toward subordinates either by using verbal or nonverbal behaviors, but the nonverbal malicious behaviors did not involve any physical contact (Tepper, 2000). The supervisors adopted malicious behaviors toward subordinates in the workplace, including always making snide comments or having a temper tantrum to his/her subordinates, or holding his subordinates back (Tepper, 2000).

Although Tepper (2000) pointed out that the reasons why a supervisor conducted an abusive supervisory behavior did not actually come out of nothing. This behavior might originate from
supervisors’ perception about injustice perception in an organization or the condition of the breach of a contract, it would cause abusive supervisory behaviors due to the cognitive or emotional reaction. While reviewing the researches of abusive supervision, when occurring a leadership behavior with abusive supervision conducted by a supervisor who usually trigger a high degree of disadvantages. Between supervisors and subordinates might deteriorate the relationship to each other (Xu, Huang, Lam, & Miao, 2012). It would also become a source of pressure in the subordinates’ lives and working conditions and it could finally lead to a poor job performance (Hu, 2012). Furthermore, abusive supervision would reduce subordinates’ organizational commitments, task performance and organizational citizenship behaviors (Xu et al., 2012), and even made deviant behaviors in terms of interpersonal, organizational aggression in the workplace (Burton & Hoobler, 2011). According to a retrospective study on abusive supervision conducted by Hu and Cheng (2014), which summarized antecedents in the supervisors, subordinates, and contexts, and pointed out that the low level of the leader-member exchange, the higher level effect on the subordinates’ perception of abusive supervision (Harris, Harvey, & Kacmar, 2011). However, there were still additional antecedents existing which influence the subordinates’ perceptions of supervisors’ abusive supervision.

When supervisors were interacting with subordinates in an organization, it could be found that some certain jobs should always be assigned to specific subordinates who could not be replaced by another employee, or otherwise, such subordinate possessed a unique skill, competence or competitive advantage related to relevant tasks (Tjosvold, 1985). This type of subordinates was often very popular and took to their positions like ducks to water in the organization or task teams. Moreover, they could easily have more opportunities to gain more personal benefits (such as promotions, authority, etc.), in addition to a better performance (Andrews, Kacmar, & Harris, 2009), and they would become an important role among colleagues, also become the employees whom the supervisors could depend on. In the consideration of overall interests of the organization (Sheppard & Sherman, 1998).

The demand for supervisors’ dependence on the subordinates and under the conditions of supervisors had positive and reciprocal for interaction with subordinates. It would generate subordinates’ interest in the impression management (Bolino & Turnley, 2003). While supervisors were fearing the withdrawal of subordinates (Molm, 1988), or worrying about the loss of helpful subordinates working for them. The supervisors might converge with aggressive or hostile behaviors, or even concealing their own negative management motivation (Hu & Cheng, 2014) to maintain the relationships, which could influence the subordinates’ perspectives of supervisors’ abusive supervision. In view of these circumstances, this study proposes that when a supervisor is depending on his/her subordinates, it would likely to make them lower their perceptions of supervisors’ negative leadership behaviors. Therefore, this study aimed to explore the effects of supervisors’ dependence on the subordinates on supervisors’ abusive supervision.
and employees’ job performance, which could provide an alternative aspect of dependence between supervisors and subordinates (Kark, Shamir, & Chen, 2003). In addition, acting as a foundation for the follow-up studies, and deepening the development of negative leadership theory.

2. Literature Review and Hypotheses
2.1 Supervisors' Dependence on the Subordinates and Job Performance
Since the exchange relationships in the workplace were often embedded within the working groups (Venkataramani, Green, & Schleicher, 2010). The values acquired by each member might probably depend on the quality of the relationship (Wilson, sin; & Conlon, 2010) as well as the degree of mutual maintenance (Gabarro & Kotter, 2005). For subordinates, the supervisors had hold assets of inside and outside organizations (Janssen & Van Yperen, 2004), also had the power to transfer social and economic resources to their members (Andrews & Kacmar, 2001). Therefore, the subordinates’ usually dependent on the supervisors would occur more frequently. In general, when subordinates and supervisors had a better social exchange relationship (Wilson et al., 2010), it would easily enhance the subordinates’ job performance, self-efficacy, and effectiveness (Schyns, 2004). Besides, it could also contribute to the mutual emotional relationship between each other (Maslyn & Uhl-Bien, 20013).

In contrast, there should be dyad reciprocal relationship existing between the supervisors and subordinates (Graen & Uhl-Bien, 1995). In other words, subordinates also have the influence on the supervisors, if they have become the objects of dependence for supervisors. The situation can be observed through the facts that supervisors may provide different forms of benefits or exchange values to the subordinates. Wilson et al. (2010) revealed that when members received more specific resources (such as position and affiliation) in the high-quality relationship, it would indicate that such members were considered as more valuable. The value of this point refers to the interpretation based on the supervisors’ aspect, which can be considered as the favorable to supervisors, or the benefits generated due to the dependence on subordinates by the supervisors. When subordinates had a specific professional skill, had a better social influencing with other members or connections with other leaders (Shi, Johnson, Liu, & Wang, 2013).

Supervisors would provide many benefits to their subordinates, such as considering their needs, assist them in dealing with working problems, providing emotional supports, and offering formal or informal incentives (Gerstner & Day, 1997). Sometimes, even provided extra benefits beyond the scope defined in the work contracts (Wayne et al., 1997), for example, to recognize and promote the subordinate positions, and to satisfy their needs of self-esteem (Zhang, Wang, & Shi, 2012). These could be used to explain the importance of subordinates to the supervisors, and the willing of supervisors’ in the confirmation of social exchanges for maintaining better relationships between the supervisors and subordinates. Therefore, although
Supervisors were considered to be key persons who were responsible for assessing the subordinates’ job performance. They might tend to exchange the better performance with their subordinates when there was a necessity for the dependence on subordinates by the supervisors. Thus, we propose the following hypothesis:

Hypothesis 1: Supervisors’ dependence on the subordinates is positively related to employees’ job performance.

2.2 Supervisors’ Dependence on the Subordinates and Abusive Supervision

Tepper, Moss, and Duffy (2011) pointed out that subordinates with better job performance would have lower level perception of supervisors’ abusive supervision. It was mainly because that the supervisor could treat subordinates who had poor job performance badly or were deliberately opposed to such subordinates by means of abusive supervisory behaviors (Hu & Cheng, 2014). Harris et al. (2011) pointed out that leader-member exchange relationship would have a negative relationship with abusive supervision. A low exchange relationship would strengthen the subordinates’ perceptions. The former perspective was similar to Tepper et al. (2012) pointed out cold aggression motivation of abusive supervision. That was a behavior deal with achieving some specific purposes, and even some persons would like to do personal impression management through negative behaviors. The latter perspective indicated that suggested to develop a high-quality social exchange relationship along with mutual trust, appreciation and respects (Graen & Uhl-Bien, 1995). Furthermore, it would generate a more positive feeling and better performance (Schyns, 2004).

In addition to the possibility of lowering the supervisor’s abusive supervision due to the reason of mutual benefits. The research of Liu, Wu, and Lin (2009) evidenced that when subordinates had better political skills or tried to ingratiate themselves with their supervisors, it would surely make the supervisors reduce abusive supervisory behaviors. In other words, the supervisor might perform abusive supervisory behaviors for achieving a particular goal, the subordinates might disregard the supervisors’ abusive supervisory behaviors while they were encountering less cold aggression, getting better treatments are due to some particular reasons.

Because supervisors often used power to manage their dependence on the subordinates (Tjosvold, 1985). In fact, power and dependence were concepts that mutually opposed to each other (Deshpande, Joseph, & Prasad, 2008). For example, the supervisors had realized the management dependence of subordinates’. Hence, they used the power to control subordinates to ensure they would not reject such exchange relationship (Molm, 1988). Shi et al. (2013) pointed out that if subordinates could provide irreplaceable personal expertise, or had built a good relationship with other managers, or became a key member of a team, and so on. Under these circumstances, it had become important resources and dependence required by the supervisors.
In other words, the supervisors would use all powers to protect it.

When subordinates knew that supervisors needed such resources to help them succeed, so despite the rewards or punishments, it was impossible to take serious disciplinary action (Deshpande et al, 2008). Generally the supervisor’s management was enforced differing degree of interaction, which ignore some fundamental standards or extent of some criteria. The subordinates would not pay attention to all ridicule, belittle or emotionally aggressive behaviors, and would have a higher tolerance for supervisors’ negative leadership behaviors. In summary, this study considers that when supervisors display a dependency on the subordinates, the subordinates will have a lower level of perception of supervisors’ abusive supervisory behaviors. Thus, we propose the following hypothesis:

Hypothesis 2: Supervisors’ dependence on the subordinates is negatively related to supervisors’ abusive supervision.

3. Methods

3.1 Sample and Procedure

This study used a convenience sampling method along with the snowball sampling technique. The subjects who were selected the insurance practitioners working for major insurance companies in Taiwan. In addition, to avoid the problems such as excessive concentration of sample sources as well as high level similarity of questionnaire properties, hence, a suitable sampling rate for each area was determined by using 2012 statistical data collected from the “The Life Insurance Association of the Republic of China (LIA-ROC)”. The proportion of total insurance practitioners in Taiwan was calculated according to the sampling rate of the commercial sector in every city (i.e. northern, central, southern and eastern). Then the number of questionnaires were distributed by primarily referring to the population of each sector.

The questionnaires were distributed to both insurance field business representatives and internal staff, in which, one supervisor was assigned at most five subordinates to complete these questionnaires. During the survey period, this study used entity questionnaires for supervisors along with online questionnaires for subordinates to collect research data. Moreover, the individual URL with pairing function was provided in the description column of supervisor questionnaires, which should be provided to relevant subordinates for completing the online questionnaires. Thereby, the purpose was to avoid the problem of incorrect measurement on leadership behaviors while subordinates were worried about that such questionnaires could also affect individual performance assessment.

Totally, this study distributed 203 copies of questionnaires to supervisors, 572 copies of questionnaires to subordinates. After the screening, the valid number of questionnaires provided
from supervisors were 110, and 317 valid questionnaires were provided from subordinates. Because the model proposed in this study was for conducting for the individual level of analysis. Therefore, the description was focusing on the employee sample structure. The average age of the participants was 30.28 years (SD = 4.71). Of all the participants, 62.8% were female, the education degree by the participants, junior college/university/college reported 65.3%, the average total tenure of the participants was 3.51 years (SD = 2.97), and the average length of the participants’ work-based relationships with the reported supervisors was 3.18 years (SD = 2.80).

3.2 Measures
The measurement used in this study was based on the scales constructed by the scholars, and these scales had been shown to have good reliability and validity in prior studies. In this study, the data were collected by using a dayd method to avoid singel-source bias. The abusive supervision was evaluated based on the direct supervisor’s leadership behaviors from subordinates. The supervisors’ dependence on the subordinates, and employees’ job performance are evaluated from supervisors.

3.2.1 Supervisor Dependence on Subordinates
This study used Shi, Johnson, Liu, and Wang (2013) 4-items questionnaire to measure the degree of supervisors’ dependence on the subordinates on 5-point Likert scale (1 = Rarely, 5 = Always). An sample item is “It would be very difficult for me to find a replacement for this subordinate if he were to leave.” The Cronbach’s alpha coefficient was .76.

3.2.2 Job Performance
The scale proposed by Hochwarter, Witt, Treadway, and Ferris (2006) was used to measure job performance. This scale has 6-itmes on 5-point Likert scale (1 = Very bad or bottom 10%, 5 = Very good or top 10%). An sample item is “The employee adapts readily to changing rules or requirements.” The Cronbach’s alpha coefficient was .79.

3.2.3 Abusive Supervision
A 15-items scale adapted from Tepper (2000) was used to measure abusive supervision on 6-point Likert scale (1 = He has never conducted such kind of behavior toward me, 6 = He has always conducted such kind of behavior towards me). An sample item is “My supervisor tells me my thoughts or feelings are stupid.” The Cronbach’s alpha coefficient was .71.

3.2.4 Control Variable
Because during subordinate’s work period with the supervisor, the interaction process may interfere with the research results (Shi et al., 2013). This study controlled for the subordinate’ age, and the length of the participants’ work-based relationships with the reported supervisors would be considered as a control variable.
4. Results

4.1 Descriptive Statistics and Correlations

Table 1 presents the descriptive statistics and correlation analysis matrices results. The results of correlation analysis indicate that supervisor’s dependence on the subordinates demonstrates a positive correlation with job performance ($r = .23, p < .01$), but it demonstrates a negative correlation with abusive supervision ($r = -.15, p < .01$). Furthermore, there is no significant correlation between job performance and abusive supervision ($r = .07, p > .05$). The results are preliminary consistent with the inference of this study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>30.28</td>
<td>4.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Time with supervisor</td>
<td>3.18</td>
<td>2.80</td>
<td>.80*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Supervisor dependence on subordinates</td>
<td>3.76</td>
<td>.70</td>
<td>.12*</td>
<td>.17**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Job performance</td>
<td>3.71</td>
<td>.68</td>
<td>.13*</td>
<td>.13*</td>
<td>.23**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Abusive supervision</td>
<td>1.45</td>
<td>.27</td>
<td>-.04</td>
<td>-.05</td>
<td>-.15**</td>
<td>.07</td>
<td>.71</td>
</tr>
</tbody>
</table>

Notes. $n = 317$. *p < .05, **p < .01. Reliability coefficients for the scales are in parentheses along the diagonal.

4.2 Confirmatory Factor Analyses

Before conducting hypothesis tests, this study firstly performed a confirmatory factor analysis to assess three constructs (including supervisors’ dependence on the subordinates, job performance, and abusive supervision). It would be able to understand the convergent validity between research indicators and constructs as well as the discriminant validity among various constructs. The hypothesized three-factor model indicated an excellent data-model fit ($\chi^2 = 150.96; df = 116; \text{RMSEA} = .03, \text{GFI} = .95, \text{AGFI} = 93, \text{CFI} = .97$). All factor loadings were more than .47 and were statistically significant ($p < .001$) supporting convergent validity. The hypothesized model fit was significantly better than two-factor model ($\chi^2 = 444.39, df = 118; \text{RMSEA} = .09; \text{GFI} = .81; \text{AGFI} = 75; \text{CFI} = .70$) and one-factor model ($\chi^2 = 697.18, df = 119; \text{RMSEA} = .12; \text{GFI} = .72; \text{AGFI} = 65; \text{CFI} = .50$), providing evidence for constructs of this study have a good discriminant validity.

4.3 Hypothesis Tests

The results of hierarchical regression analyses (Table 2) showed that supervisors’ dependence on the subordinates have a positive effect on subordinate’s job performance ($\beta = .21, p < .001$). It can be found that, according to results from statistical analysis of M2. Hypothesis 1 is supported. The supervisors’ dependence on the subordinates has a significant negative influence on the
abusive supervision ($\beta = -0.15, p < .01$). It can be found that, according to results from statistical analysis of M4. Hypothesis 2 is supported.

Table 2. The result of hierarchical regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Job performance</th>
<th>Abusive supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
<td>M2</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.07</td>
<td>.08</td>
</tr>
<tr>
<td>Time with supervisor</td>
<td>.07</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Independent variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor dependence on subordinates</td>
<td>.21***</td>
<td>-.15**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.02</td>
<td>.06</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>2.99</td>
<td>6.84***</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001

5. Discussion and Conclusion

This study aims to explore subordinates’ perceptions of supervisors’ abusive supervision and subordinates’ job performance through supervisors’ dependence on the subordinates. From the results, it can be found that following with the supervisor’s dependence on the subordinates, the supervisors will use the performance assessment as a bargaining chip to control subordinates. The higher dependence on the subordinates by the supervisors, the better job performance that subordinates will perform. This study also evidences that subordinates will have the lower perception of supervisors’ undesirable management behaviors such as abusive supervision due to the supervisors’ dependence on subordinates. In addition, the subordinates may disregard the supervisors’ malicious behaviors either by using verbal or non-verbal behaviors, hence, there is a negative relationship between each other.

Unlike the prior studies, which usually explored the role of dependence from the subordinates’ perspectives. This study explores the effect of dependence based on the supervisors, despite that the supervisors had a higher social power, possessed and be able to allocate resources in an organization (Lian, Ferris, and Brown, 2012), and they would become subordinate dependent objects. But under two-way interaction, subordinates could also be the object of the supervisor’s dependence, which was the reason why the supervisors always used their powers to ensure the relationship with subordinates (Tjosvold, 1985), or maintain a high degree of dependence on each other by providing substantive or non-substantive rewards to subordinates (Bartol & Martin, 1990). This result was responding to the proposal of Kark et al. (2003), they suggested that the study of the dependence should be conducted according to different aspects. Second,
Tepper (2007) suggested that the level of subordinates’ perception of abusive supervision deal with the same supervisor were not always consistent with each other. Based on the findings of this study, it is possible to explain the differences between subjective assessments and it can also respond to the Tepper’s perception by explaining the differences in the different contexts. But it is undeniable that some subordinates might have a high demand of power to influence others (Jha, 2010), which was not thoroughly discussed in this study. Therefore, it is suggested that future studies shall discuss the moderation effect of subordinates’ power needs.

Finally, this study is considered based on the perception of supervisor’s dependence on the subordinates, which is different from the retrospective study on abusive supervision conducted by Hu and Cheng (2014), which proposed the concepts of supervisors’ perception of injustice was different from the perceived psychological contract breach. In addition to the use of results of this study as a basis for subsequent studies relating to the field of abusive supervision. Furthermore, the study of political skill assessment on the degree of supervisors’ dependence, the subordinates’ level of networking ability, interpersonal influence, social astuteness and apparent sincerity in an organization (Ferris et al., 2005) shall be incorporated into the scope of follow-up studies in order to clarify their mental process. In addition, the implicit followership theories (IFTs) can also provide a prototype from the leader’s perspective to understand the subordinates’ perceptions (Sy, 2010) in order to explore whether the characteristics of subordinates will meet the requirement of supervisor’s dependence, leading to contradictory phenomena arising from the supervisors’ abusive supervision.

6. Acknowledgments
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HKICSS-0056
The Effect of Social Networks and Recreational Sport Participation on Residents’ Subjective Well-Being

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Abstract
The purpose of this study is to explore the influence relationship between the social network, recreational sports participation and subjective well-being of the residents in Chiayi City. The residents living in Chiayi City were treated as the subjects. A total of 600 questionnaires were distributed, and 461 valid samples were retrieved, with a valid return rate of 76.8%. The statistical results showed that: According to the influence results of the social network, recreational sports participation and subjective well-being of the residents in Chiayi City, the social network positively influences the recreational sports participation. The social network positively influences the subjective well-being. The recreational sports participation positively influences the subjective well-being. The social network variables can explain 10\% explanatory variables of the residents’ recreational sports participation variables. The social network and recreational sports participation variables can explain 33\% explanatory variables of the residents’ subjective well-being variables. The findings can serve as reference for relevant units and future studies.

Keywords: social network, recreational sports participation, subjective well-being

1. Background
One of the important functions of recreational sport is social activity. Construction and expansion of interpersonal relationship, in particular, is one of the value added obtained by participating in recreational sport. In research related to motive of recreational sport, social network is the key factor of participants’ intention of engagement (Tseng & Tsai, 2013; Elkins, Forrester, &Noël-Elkins, 2011; Walseth, 2008). Social network refers to interpersonal interaction in social phenomenon and it is the social relationship of the connected individuals (humans, groups and things). The individuals are conceived as the actors and their social relationship is the line which associates the actors. The network interweaved by the lines is called social network (Pi, 2007; Adamic & Adar, 2005; Burt, 2000).

When a social network is more intensive, it means the individuals’ interaction is more significant.
Social network reveals the degree of individuals’ social support. Social support by the peers, friends and families can reinforce individuals’ behavior and attitude to actively participate in recreational sport (Li & Jung, 2010; Tan & Tung, 2013). In addition, it can strengthen interaction and emotional exchange with families and friends to lead to more harmonious family affection and more stable friendship. Thus, this study intends to probe into Chiayi City residents’ social networks and explores the effect of social networks on recreational sport participation.

In addition, the issue of community residents’ pursuit of health and life quality gradually becomes major healthy behavior in the society. It particularly represents the maintenance of people’s physical health and prosperity of the country. Healthy physical and mental states and life of happiness are associated with sport, recreation and living habit. Improvement of physical fitness and enhancement of people’s well-being by regular exercises is generally accepted and encouraged by modernized society. (Lu, 2013). It is argued that sport is happiness and by exercises, people become cheerful. People obtain more significant sense of well-being by participating in sports (Deng & Chen, 2010). Well-being tends to be associated with happiness, optimism, vitality, self-realization, self-acceptance, purposive life, the most ideal operation, life satisfaction, etc. (Carruthers & Hood, 2004).

Well-being is a kind of subjective and positive perception. When individuals recognize their positive feelings, they attempt to perceive well-being. Therefore, when exploring well-being, most of researchers adopted the term “subjective well-being”. Subjective well-being refers to individuals’ cognitive evaluation of satisfaction with overall life, presentation of positive emotion and shortage of negative emotion. Recreational sport participation can lead to individuals’ positive evaluation and result in well-being (Huang, 2004). Social network is based on social support and individuals perceive positive psychological outcome, are satisfied with life and acquire well-being. Thus, this study will explore the effect of social network on subjective well-being.

In the process of recreational sport, participants tend to perceive the positive feelings of satisfaction, happiness and comfort resulted from recreational sport and experience well-being. It encourages participants to re-participate in recreational sport. There is positive relationship between recreational sport and subjective well-being and it results in participants’ continuous behavior of recreational sport (Lee, Shin, & Chiou, 2007; Wu & Wang, 2006). The process of recreational sport participation generates recreational satisfaction which leads to participants’ psychological perception of subjective well-being (Lin, Lee, & Huang, 2009). Thus, this study will also probe into effect of recreational sport participation on subjective well-being. It will study Chiayi City residents’ perception of subjective well-being.

Based on above, this study will validate relationship among Chiayi City residents’ social
networks, recreational sport participation and subjective well-being and propose suggestions according to research findings as reference for related units in future construction of policy or promotion of national recreational sport.

2. Methods

2.1. Research Subjects
Research subjects were residents who lived in Chiayi City and were at least 18 years old. As to sampling, according to administrative districts of Chiayi City, this study respectively distributed 300 questionnaires in eastern and western districts, with a total of 600. It retrieved 532 questionnaires and after deleting questionnaires with missing responses and invalid ones, it obtained 461 valid questionnaires. Valid return rate was 76.8%.

2.2 Research Tools
2.2.1 Basic Information
It includes gender, age, education, marital status and monthly income.

2.2.2 Scale of Social Network
The scale was based on research of Tsai (2011) and meanings of items were modified according to research purpose. The scale includes 3 dimensions: network scope, connection intensity and network reputation, with a total of 13 items. The items are ranged from “totally disagree” to “totally agree”. They are measured by Likert 5-point scale (1-5 points). Composite reliability of total scale of social network is .912 and Cronbach’s α is .893. The previous results match the standard and they are above .70. It shows that reliability of measurement model of social network is acceptable.

2.2.3 Scale of Recreational Sport Participation
Sports participation in this study is based on sports participation formula proposed by Fox (1999). The formula is shown below: sports participation=sports frequency*(average sports intensity +average sports time).

2.2.4 Scale of Subjective Well-Being
The scale was based on related literatures and those in research of Lin (2004) and Xu (2011). Meanings of items were modified according to research purpose. The scale includes 3 dimensions: total life satisfaction, positive emotion and negative emotion, with a total of 15 items. The items are range from “totally disagree” to “totally agree”. They are measured by Likert 5-point scale (1-5). Composite reliability of total scale of subjective well-being is .918 and Cronbach’s α is .867. The previous results match the standard and they are above .70. It reveals that reliability of measurement model of subjective well-being is acceptable.
2.3 Data Analysis
This study was tested on reliability and validity using partial least squares, and the statistical software program WarpPLS 5.0 developed by Kock (2015) was applied. Item reliability, convergent validity and discriminant validity were assessed (Hulland, 1999).

3. Results

3.1 Demographic Description
According to results of this study, as to Chiayi City residents’ basic information. There are 213 male residents (46.2%), 248 female residents (53.8%); 199 residents are below 25 years old (43.2%), 79 residents are aged 26-35 (17.1%), 117 residents are aged 36-50 (25.4%) and 66 residents are above 51 years old (14.3%); as to marital status, 183 residents are married (39.7%), 260 are unmarried (56.4%) and 18 residents are divorced, widower or widow (3.9%); as to education, 107 residents are below senior high school (23.2%), 329 residents are graduated from college and university (71.4%) and 25 residents are above graduate school (5.4%).

3.2 Hypotheses Tests
All hypotheses were tested and the results were as following.
H1: According to analytical result, effect of Chiayi City residents’ social network on recreational sport participation is significant ($\beta_1 = .31$, $p<.05$). It shows that when Chiayi City residents’ social network is more significant, residents’ recreational sport participation will be higher.
H2: According to analytical result, effect of Chiayi City residents’ social network on subjective well-being is significant ($\beta_2 = .52$, $p<.05$), it means that when Chiayi City residents’ social network is more significant, residents’ subjective well-being will be higher.
H3: According to analytical result, effect of Chiayi City residents’ recreational sport participation on subjective well-being is significant ($\beta_3 = .11$, $p<.05$). It means that when Chiayi City residents’ recreational sport participation is higher, residents’ subjective well-being will be more significant.
H4: According to analytical result, indirect effect of Chiayi City residents’ social network on subjective well-being through recreational sport participation is insignificant ($\beta_4 = .03$, $p>.05$). It means that the said indirect effect is not important and recreational sport participation does not show mediating effect in the model.
3.3 Explanatory Power of Research Model
R² value means prediction power of research model. It is percentage of variance explained of exogenous variable on endogenous variable. It represents prediction power of research model. When the value is higher, it means the prediction power is more significant. Research result is shown in Figure 1. Variance explained of social network on residents’ recreational sport participation is 10% (R²=.10). Variance explained of social network and recreational sport participation on residents’ subjective well-being is 33% (R²=.33).

4. Conclusion and Suggestions

4.1 Conclusion
This study validates effect of Chiayi City residents’ social network on recreational sport participation and subjective well-being. According to the findings, social network positively influences recreational sport participation and social network positively influences subjective well-being. Recreational sport participation positively influences subjective well-being. Variable of social network can explain 10% variance of residents’ recreational sport participation. Social network and recreational sport participation can explain 33% variance of residents’ subjective well-being.

4.2 Suggestions
Social network should not only refer to interaction between two individuals. It is associated with
the connection intensity of the two. It can be applied to broader scope such as interpersonal relationship, social capital, social interaction, etc. According to findings of this study, social network positively influences recreational sport participation and it also positively influences subjective well-being. Therefore, by reinforcing residents’ social network, it can strengthen residents’ physical and psychological health. It is suggested that residents should participate in some recreational sport organizations in order to establish positive friendship and thus they can be motivated to show positive performance in the group and attempt to challenge their goals.

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