

CYBERSEX ONLINE ACTIVITIES AMONG STUDENTS IN YOGYAKARTA

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Abstract---Objective of this research, to describe intensity on accessing cybersex online accounts, especially on mobile messenger application. The respondents of our research are students living and studying in Yogyakarta. This research applies predominantly descriptive quantitative method, but also includes data collection techniques using questionnaires. The sampling technique in this study is based on convenience sampling and a validity test was conducted on 62 respondents, that represents college students across Yogyakarta, as a region whereas this research conducted, with a tangible level of 5%. Online platform observed and analysed by this research is mobile messenger application known as LINE by Naver, specifically on frequency, intensity and content preference that moulds the pattern this particular mobile messenger application usage by respondents. Research finding proves that there is a slightly significant difference on the intensity of accessing cybersex on official LINE accounts between male and female respondents, with higher tendency to access cybersex online accounts by female respondents. Engaging in sexual activities on the network, female respondents seem to prefer online activities that involving textual interaction, chat, and dialogue. Female respondents have a high interest in cybersex through messenger application, textual expressions and connect to dating services which emphasize on erotic dialogues, objectifying sexual desire. While male respondents indulge in cybersex online activities through cybersex online accounts, specializing on messenger sites that provide pictures or videos with pornographic contents. Anonymity conducted by respondents while using cybersex online account, accommodate their freedom to occupy cybersex online account services to comply their sexual needs.

Keywords--- Accessing intensity, Cybersex, Mobile messenger app, Pornographic contents.

I. INTRODUCTION

With the advancement of the Internet everyone seems to get the opportunity to access any kinds of information quickly. The availability of millions of websites certainly offers a window on all sorts of information. Moreover, the attraction of the Internet is that most information is presented comprehensively, there are multiple platforms to interact with through and even business transactions become much easier.

The current generation of young internet users are often nicknamed digital natives. The characteristics of these natives are explained as figures born after 1980 (at the dawn of the digital era) and having grown up with *uset* technology and *bulletin board systems* online. It is generally assumed that digital natives are also able to access digital networking technologies more efficiently and that they have thorough skills and knowledge of computers (Palfrey and Gasser on Nureni, et al, (2013) although others have criticised such easy assumptions (Thomas 2011).

Referring to research carried out by the Indonesian Internet Service Providers Association (APJII) in collaboration with Universitas Indonesia's Computer Science Studies Center, in 2014 internet users in Indonesia were predominantly young people, aged 18-25 years. The large number of internet users among teenagers raises concerns about the negative side of the internet, one of which is the risk of them overindulging in so-called cybersex. According to Djatmiko (in Lestari, 2014), internet sex shows a

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tendency towards merging facts and fantasies, breaking into the dividing wall between reality and imagination, so that adolescents in the developmental phase are easily addicted to cybersex.

Cybersex is a subcategory of Online Sexual Activities (OSA) and is defined as when two or more people are engaging in sexual talk while online for the purposes of sexual pleasure and may or may not include masturbation. (Danebeck, et al: 2004)



Figure 1
Internet user data according to APJII on 2014

Teenagers in their young lives are usually experiencing various kinds of changes (both in the physical, sexual, emotional, religious, moral, social, and intellectual sense) that may cause a child's sexual drive to increase (Hurlock in Rahmawati, 2002). Adolescent awareness about pornography, encourages them to find out more about what sex is. Therefore, adolescents become one of the segments that are easily vulnerable to the existence of pornography, especially pornographic Internet sites.

Although in Indonesia a strict internet policy, known as the 'Internet Positif' has been implemented by the authorities and a ban for various adult sites prevails, there is still lack of adequate filtering to truly monitor, for example, college students' online behaviour. Students, generally considered to have higher intellectual abilities than other adolescents, can access various sources of information through internet sites.

Cybersex according to Merriam-Webster online dictionary translated as (1) Online sex-oriented conversations and exchanges; (2) Sex-oriented material available on a computer; (noun) 'activity in which people become sexually excited by sending messages about sex to each other over the Internet'. Meanwhile there are various and complex practices, technologies, intentions and behaviours of online love. (Briggle, 2008). Basically, there is no strict and agreed upon definition by human behaviour experts about cybersex activity. This reminds that sex is not carried out directly from other people but rather an intermediary media.

Adult sites contain vulgar pictures, porn stories, porn videos, even sex jokes. These sites are also a platform for the deliverance of a new phenomenon, known as 'cybersex'. If you pay close attention, many teenagers access sex services on the internet. This will have a serious impact on the sexual desire of these internet users, with many of them, admittedly, unable to withstand their sexual desires because of the presence of online sex (cybersex). In Indonesia 85% of all Internet users access the internet by cell phone. (APJII, 2014). The Indonesian Internet Service Providers Association (APJII) said 143.26 million of the total 262 million Indonesians now have some sort of access to the internet, although this access is highly different in character. Of these 143.26 million internet users in Indonesia, 49 percent of them are young people.

APJII Secretary General Henri Kasyfi states that the average Indonesian spends 1-3 hours a day using the internet. Internet services that are most frequently accessed are chatting.

"By using Whatsapp, Line, We Chat and others 89.35%. And social media 87.13% for uploading on Facebook, Instagram, Twitter and others," quoted from

<https://idntimes.com/news/indonesia/fitang-adhithia/millennials-dominasi-penggunaan-internet-kebanyakan-untuk-chatting-dan-media-sosial-1/full>

There are several applications facilitating internet users committing cybersex, together forming an intricate polymedia landscape (Madianou & Miller 2013). YouTube functions as a social network, facilitating the sharing of videos. Instagram and Facebook being social networks come with the ability to share timeline-based multimedia content, which can next be sent around using WhatsApp Messenger and Line, being the most used instant messaging applications. In January 2017 active WhatsApp users, using the application via a mobile phone reached the 35 million, and there were more than 120 thousand YouTube users in Indonesia. Next to that there is BBM with 34 million users. Although Line active users are not numbering as many as those using WA, BBM, and YouTube, Line has in fact the most complete features when compared to other applications. (<https://id.techinasia.com/comscore-whatsapp-adalah-aplikasi-terpopuler-di-indonesia>).

According to data submitted by Line Corp., currently registered users of Line applications in Indonesia reach 60 million accounts. Takeshi Idezawa said, throughout 2014 to 2016 the growth of monthly active users in Indonesia was more than 200 percent. (<https://www.liputan6.com/teknologi/read/2467013/pertumbuhan-pengguna-aktif-line-paling-tinggi-di-indonesia>)

This research project is mostly focussing on LINE users. Line as a messaging application, has as said many features. Users can exchange multimedia content manually and personally or through a so-called 'Home' feature. The 'Home' feature is like Facebook's timeline and comparable to that of Instagram. Users can share written content, images, videos, and sounds that can be seen and heard by other Line users. Line provides so-called Official Line features for business users. However, on its journey, Official Line is not only used to market products to Line users, but also to distribute multimedia content. It's exactly this feature that is currently used by many users to spread pornographic content. Many official accounts offer various types of sex using distinctive styles and ways of packaging with official accounts named, 'Ruang Malam', 'Ena Ena', '18+' and more along these lines. These accounts provide pornographic content that indirectly facilitates access. Line users only need to access these accounts' home pages and choose which content they desire. According to data derived from the above mentioned APJII's survey, Line users, are predominantly adolescents, and mostly students within the age group of 18-25 years.

According to the results of a survey by Patricia Goodson in 2001, using data derived from observing 506 American college students and internet users, 44% of teenager says to have regularly accessed sexual content via internet. About 57% of these are male teenagers engaging in cybersex, while 35% of female teenagers are similarly doing so. 15% of the male internet users are masturbating while they are being online. However, the data obtained were quite surprising, 5% of the female teenagers reported to have had cybersex with their online partners, compared to a mere 3% of the male teenagers (in Pribadi & Putri, 2009).

This US study of cybersex by young men and women is interesting. Both sexes seem to have the same motivation in accessing cybersex. A similar behaviour if it comes to the access of pornographic content also seems to surface in the use of young Indonesians of LINE. Technology and outside cultural influences have been included in people's lives, especially in Yogyakarta. Yogyakarta as a city of arts and culture as well as this student city slowly began to be affected by modernization and westernization which transforming trends and affecting inhabitant's attitudes and behaviour. In sum, like the previous US

research our study wants to unravel the frequency and character of cybersex among students in Yogyakarta as distinguished by gender

II. LITERATURE REVIEW

a. New Media

New Media is a term used for a variety of communication technologies that share the same characteristics, which are made possible by digitalization processes and their wide availability for personal and business use as a communication tool (McQuail, 2011). According to Denis McQuail, the main feature of new media is about its interconnectedness, access to individual audiences as recipients and senders of messages, their interactivity, its open characters, and its ubiquitous nature. The next development is the internet as a provider of goods and services.

Castells believes that at first, the internet began as a non-commercial communication tool and data exchange between professionals. The possible positive impact provided by use of the internet cannot be denied. The internet brings features as well as applications that support communication. Yet internet use has also come with many negative effects, one of which is the rise of cybercrime as a new mode of operation. The ease, speed, accuracy of information, and possibilities of wireless access seem to offer a special appeal to perpetrators of crime and those carrying out prohibited actions. The results of such actions is only visible to the perpetrators and their victims. As a result, cybercrimes emerged through a variety of new forms and strategies that previously were not covered by applicable legal provisions. Moreover, the absence of sanctions in, for exempling, also seems to apply to posting pornographic contents. More and more children can access information that is not suitable for their age and in Indonesia there are presently no laws or legislation to restrict access to such materials. One problem with the internet is the fact that, there is no sanction at all to forbid people to post this kind of material. (Thomas, 1997).

b. Online Sexual Activities

Internet serves as super-highway connection to all digital information possible, including cybersex. Early research about cybersex also uses the term '*Online Sexual Activities*' (OSA). In '*An Internet Study of Cybersex Participants*' conducted by Daneback, Cooper and Mansson (2004), the authors tell us about the online sexual activities by Swedes aged between 18 and 65. According to Cooper and Griffin-Shelley (in Daneback, Cooper, and Mansson, 2004), OSA can even be characterized as the next sexual revolution. Some have used a Triple-A-Engine model (access, affordability, and anonymity), to explain the attraction and power of OSA (Cooper, 1998; Cooper & Griffin-Shelley, 2002). Some OSA tend to be more visually oriented (e.g., containing adult pictures and movies), while others are more interactive and/or communicative (e.g., online dating, chatting, discussion, forums) in character. A further distinction can be made according to various educational, recreational, and social/community types of OSA (Daneback, Cooper, and Mansson, 2004). Especially gender and age range seem to be determining aspects of 'Doing OSA'. Although both women and men are well represented in all categories mentioned above, research proves that women generally tend to be more interested in interactive OSA, whereas men are more interested in visually oriented OSA (Cooper, Mansson, Daneback, Tikkanen, & Ross, 2003). In addition to gender, age is another variable that has proven to be important in analyses of OSA. For example,

people between 18 and 24 years have a different usage pattern when compared with those over 25 years, and the difference is foremost apparent when compared with people ranging from 50 to 65 years. For younger people, the use of the Internet is more complex and multifaceted, particularly where OSA is concerned (Cooper et al., 2003; Mansson, Daneback, Tikkanen, & L'ofgren-M'artenson, 2003).

Research conducted in Indonesia by Satria Ajie Pribadi and Dona Eka Putri, mentions that there are differences in attitudes towards cybersex between male students and female students. The attitude of male students is generally more positive than the attitude of female students. In general, the differences in male and female attitudes towards sex in cyberspace are influenced by biological and psychological factors. When viewed from biological factors hormonal changes in men, the increase of testosterone can generate enthusiasm in all things related to sex. This is unlike women. If the estrogen hormone increases, it does not have a significant impact. In addition, psychically, men are generally more assertive, very active, very forthright and not ashamed to talk about sex, unlike women who are less so.

Cybersex poses to be a problem across all demographic boundaries, as is also stated by Delmonico & Griffin (2011) in their research (2000) where they estimate that nearly 80% of those who engage in online sexual activity can be considered as "recreational users," and do not report themselves any significant problems related to their online behavior. However, for the remaining 20% of individuals who struggle with problematic online sexual behavior, the consequences can be devastating and long lasting. Some individuals become compulsive with collecting and viewing pornography, others even cross legal boundaries, while still others find themselves spending 10+ hours each day online in search of intimacy or romance.

Sulandjari and Habsari (2014) stated that the role of '*pornotext*' perceived as pornographic content in online media was the most popular among with 86% of the activities ranked as such. This is due to the ease of disseminating and consulting such online media without being followed by laws and regulations. Based on our bivariate analysis, it can be seen that the role of '*pornotext*' online is indeed high with 20%.

Research on the frequency and character of accessing cybersex was also carried out by I Gede Asmarayasa (2004) and he stated that changes in the sexual aspect are related to the maturation of the pituitary gland that stimulates the release of hormones that affect reproductive organs which causes sexual drive in adolescents to increase. Teenagers become more aware of sex-related things and try to find more information about sex, including information about sex that is so easily obtained through pornographic sites on the internet. There is a significant positive relationship between the frequency of accessing pornographic sites with premarital sexual behaviour in adolescents. The higher the frequency of accessing pornographic sites, the higher the sexual active behaviour among Javanese teenagers(?).³

III. METHODOLOGY

This research mostly consists of a descriptive analysis with a quantitative character, thereby solely focussing on single and independent variables. The independent variable of this study is the intensity of accessing cybersex. Furthermore, data collection techniques consisted of questionnaire, observations and documentation. The sampling technique in this study is convenience sampling and non-probability sampling, by appointing a group of random people who are reachable. In total we talked to 60 respondents. A validity test in this study was conducted on 30 respondents with a significant level of 0.05 or 5%. The formula used to find the correlation value is by using the Pearson's 'Correlation Product Moment'. Reliability testing in this study was similarly conducted on those 30 respondents with a

³ (http://library.usd.ac.id/Data%20PDF/F.%20Psikologi/Psikologi/989114107_full.pdf accessed on February 5th, 2018).

significant level of 0.05 or 5%⁴. The independent sample t-test is one way to find out whether the two sample groups show a significant average difference or otherwise.

IV. RESULTS AND DISCUSSION

a. Characteristics of the respondents

Data was collected from respondents across Yogyakarta. These were college students from public and private Universities in Yogyakarta. Our research team distributed questionnaires presented in a Google Form format. The characteristics of the respondents in our study mainly could be divided into two categories, based on gender and age. There are 62 respondents in the age range of 18-25 years. The characteristics of respondents based on gender show that as many as 31 are male, and 31 are female. On average the LINE users we have been talking to are 22 years old.

Diagram 1
Respondents Distribution based on Gender

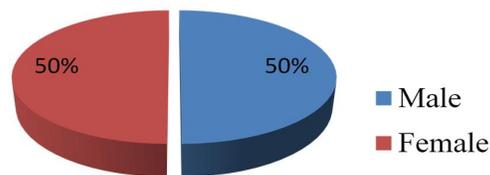


Diagram 2
Respondents Distribution by Age

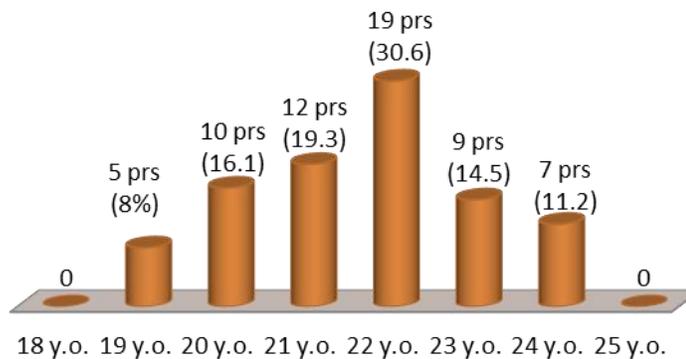


Table 1
Respondents Distribution based on Gender and Age

Age	Male	Female

⁴ There are several ways to calculate reliability, one of them is the Cronbach Alpha coefficient formula. In this study, researchers used quantitative data analysis techniques, thus, data that could be manifested by the numbers obtained from the field. The formula used is the Independent Sample t-test test formula.

18 y.o.	0	0
19 y.o.	2 prs. (6.4 %)	3 prs. (9.6 %)
20 y.o.	8 prs. (25.8 %)	2 prs. (6.4 %)
21 y.o.	6 prs. (19.3 %)	6 prs. (19.3 %)
22 y.o.	9 prs. (29 %)	10 prs. (32.3 %)
23 y.o.	4 prs. (12.9 %)	5 prs. (16.1 %)
24 y.o.	2 prs. (6.4 %)	5 prs. (16.1 %)
25 y.o.	0	0

Table 1 shows that the largest percentage of LINE users, which indulged in cybersex through LINE official accounts, were users within the range of 22 years old, as many as 9 persons (29 %) for male users, and 10 persons (32.2 %) for female users.

Sexologist, Tracey Cox, in her bestseller book "*Sextasy*" reveals male and female character and sexual behaviour based on age range. In their 20s, most of them cannot stop imagining sex every two hours. Women usually want to be more carefree to imagine about sex. They also want to share sex fantasies and even want to try bisexuality. A study in 2006 involving about 2,000 people found that 76 percent of women try to sleep with the same sex and reach orgasm (whereas for women with men, 50 percent) (<https://health.detik.com/sexual-health/d-2237750/beda-usia-beda-pula-perilaku-seksual-seseorang?u18=1>)

b. Variable Analysis

The data derived from our 62 respondents could be related to the following research variables i.e. 1) Accessing Intensity, and 2) Depth of Access.

1) Accessing Intensity.

The first variable is intensity of access pornographic contents on LINE official accounts, Intensity can be further sub-divided by several factors, including: a) Accessing frequency (how many visits / occurrences within a week); b) Accessing duration (how many hours the cybersex activities last within a day); c) Frequency of paying close attention to content; d) Level of comprehension related to the content; e) preferences for which content; f) Extent of desire to repeat accessing the content. Each indicating factor was described by the highest point on the following table.

Table 2
Respondents Distributions based on Intensity of Accessing Pornographic Content

Determining Factors	Male Respondents	Female Respondents
Frequency to access Pornographic content (Seldom = once a week)	19 prs. (61.3 %)	13 prs. (41.9 %)
Duration to access pornographic content within a day.	< 1 hour 13 prs. (41.9 %)	1 – 2 hours a day 18 prs. (58.1 %)
Frequency on paying close attention to pornographic content. (Often)	14 prs. (45.2 %)	11 prs. (35.5 %)
Level of comprehension related to pornographic content. (Fully understand)	13 prs. (41.9 %)	16 prs. (51.6 %)

Fondness (preferences) of pornographic content. (Likes the content)	16 prs. (51.6 %)	16 prs. (51.6 %)
Extent of desire to repeat accessing pornographic content.	17 prs. (54.5 %)	19 prs. (61.3 %)

2) Depth of Access.

The second variable is depth of accessing pornographic contents on LINE official accounts, which indicates the scale of entanglement on cybersex activity. Also this variable is determined by several factors, including: a) The desire to log on to LINE Official accounts with pornographic contents; b) Frequent commenting on pornographic contents (interactivity); c) Fulfilment of sexual desire by accessing pornographic content; d) Level of satisfaction by accessing pornographic content; e) Extent of desire to collect pornographic content; f) Extent of desire fantasizing sexual scenes derived from the frequented content. Also, here each indicating factor is described by the highest point on the following table.

Table 3
Respondents Distributions based on Depth of Accessing Pornographic Content

Determining Factors	Male Respondents	Female Respondents
Desire to log on to LINE Official accounts with pornographic contents.	Less desiring 16 prs. (51.6 %)	Quite desiring 18 prs. (58.1 %)
Frequent commenting on pornographic contents → never leave a comment	18 prs. (58.1 %)	18 prs. (58.1 %)
Fulfillment of sexual desire by accessing pornographic content. (Quite fulfilled)	16 prs. (51.6 %)	22 prs. (71 %)
Level of satisfaction by accessing pornographic content. (Quite satisfy)	20 prs. (64.5 %)	20 prs. (64.5 %)
Extent of desire to collect pornographic content. (Less likely to collect)	12 prs. (38.7 %)	9 prs. (29 %)
Extent of desire fantasizing sexual scene from the content. (Often fantasizing)	18 prs. (58.1 %)	17 prs. (54.8 %)

c. Descriptive statistical analysis

Descriptive statistical analysis was carried out by using SPSS 22 for Windows, the process of which can be described as follows:

1. Normality Test

The normality test on gender, done using the *Shapiro-Wilk* test, with a significance level of 0.05.

Table 4
Normality Test on Gender aspect

Test of Normality			
	Shapiro-Wilk		
	Statistic	df	Sig.
Female	.978	31	.769
Male	.977	31	.729

Source: SPSS data (2018)

Based on the output of this normality test, the significance value in the third column (see table 4) based on gender was 0.769 for women and 0.729 for men. Because the significance value of both is more than 0.05, it concluded, that both are normally distributed.

2. Homogeneity Test

Based on the results of the normality test on gendered aspects, both scores seem normally distributed so that the analysis was continued by testing the homogeneity of variance equality using a *Levene* test with a significance level of 0.05. The results showed:

Table 5
Homogeneity of Variance Equality

Intensity accessing pornographic content (committing Cybersex/ Online Sexual Activity)	<i>Levene</i> Test for Equality of Variances	
	F	Sig.
Equal variances assumed	2.444	.123
Equal variances not assumed		

Source: SPSS data (2018)

Based on the Homogeneity test, the results in table 5 show a significance value of 0.123. Because the significance value is more than 0.05, it can be concluded that the results have the same variant or are homogeneous.

3. Balance Test (Independent Sample T-Test)

An Independent Simple T-Test was conducted with a significance level of 0.05 : SPSS data (2018)

Table 6
Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
IntensitasMengkakses Cybersex	Perempuan	31	36.52	4.426	.795
	Laki-Laki	31	32.94	6.638	1.192

Independent Samples Test

	<i>Levene's</i> Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
IntensitasMengkakses Cybersex	Equal variances assumed	2.444	.123	2.499	60	.015	3.581	1.433	.714	6.447
	Equal variances not assumed			2.499	52.274	.016	3.581	1.433	.706	6.456

Based on the results of the *Balance test* table 6 shows a significance value of 0.015, and less than 0.05. It may therefore be concluded that the results have a significant difference, referring to the differences within research data as derived from male and female respondents, we decided to focus our discussion on the mean value in the *Statistics Group* table. The result shows that *mean* value from female respondent is 36.52 and *mean* value from male respondent is 32.94, and it can be concluded that female respondents have a higher intensity on accessing pornographic content than male respondent.

V. CONCLUSION

Sex is the most frequently searched topic on the internet (Cooper et al, 2000). Sexual interest and desire can be fulfilled through media. The tendency of online sexual activity, also known as cybersex, or

Online Sexual Activity, is often associated to introvert people, or others who shy away from attention, as in cyberspace, anonymity is guaranteed. For internet users, committing cybersex (*online sexual activity*) is clearly also supported by technological access. (Doring in Satria, Aji Pribadi, 2009).

Data derived from our respondents show that most of them responded to our question on intensity and frequency within the range "seldom" to "often", these results indicate that internet facilitating fulfilment of sexual needs. Usage of LINE official account indicates that in accessing cybersex, there is a two-way interaction, between the user and content provider. Accessing pornographic content (indulging in a cybersex activity, as we define it) through a LINE account is distinct from visiting porn content provider sites, which only present pornographic images or videos to enjoy. But it also involves chat, exchanging pictures, sharing emojis, telephone and video calls. (Irianto, 2015).

There are three obvious reasons internet users prefers to use social media to channel their sexual desires. (1) Accessibility, as it allows users to search for websites and use social media technologies that satisfy sexual desires as needed, (2) Affordability, that allows access to such technologies with low costs and can save time, (3) Anonymity, that enables user to freely express their sexual needs and leave them unidentified (Cooper, 2000). 'Anonymity' was secured in this study, so users would be able to respond to sensitive questions freely, taking also into account the possibilities of socially undesirable behaviour, and answers to research question that were considered (too) sensitive, such as duration of access, desire to repeat behaviour, channelling desire, fulfilment of sexual needs, and fantasizing sexual scenes.

Laier, et al (2014) define cybersex as sexually motivated behaviour on the internet. This behaviour involves watching pornography, having sex chat on the telephone or webcam, reading literature online that arouses sexual desire, or using online shop services, dating sites, forums, or advisors for sexual practices. Over time, women and men, use all the categories mentioned above, but women in their research are more interested in sexual activity within interactive networks, while men are more interested in visually oriented sexual content (see also Cooper, 1998a; Cooper et al., 1998b; Cooper, Delmonico, & Burg, 2000; Doring, 2009; Flood, 2010, in Corley & Hook, 2012). These findings are corroborated by other research findings that show there are differences in permissiveness of sexual behaviour between male adolescents and female adolescents, whereas males are more permissive than females. (Jufri, 2004)

Based on findings of this research, result from the validity test show there are 12 valid items throughout the 16 items, with a reliability coefficient of 0.914, which shows that the intensity scale of accessing pornographic content via LINE Official Accounts is reliable. In addition to the normal curve results, data derived from respondent within the range of 18-25 years old, shows that the majority of the LINE users that commit cybersex among college student in Yogyakarta is within the range of 22 years old. This is in accordance with other findings, that the internet and especially cybersex is demanded most by men and women in early adulthood. (Surono on Pribadi and Putri, 2009: 124).

Meanwhile, differences between male and female respondents in the intensity of accessing pornographic content are also proven in this study. Based on the results of our Independent Simple T-Test, there is a generated significance level of 0.015; that is less than 0.05, and it can be concluded that our hypothesis is accepted. This means that there is a difference in the intensity of accessing pornographic content (committing cybersex) between men and women. It can be concluded that the intensity of accessing cybersex amongst female respondents is higher than that of men. This is reinforced by a survey conducted by Patricia Goodson with her colleagues at Texas A & M University on 506 US college, which shows that as many as 43.5 % of the students said they had accessed sexual material through the internet. Men (56.5 %) are more likely to seek sexually connected materials than women (35.2 %). Only 2.9 % of the total number of students accessed such sexual material regularly and more men masturbate looking at online contents (15 %). However, the data they obtained was quite surprising; namely 5.3 % of women

reported already had online sex (online sexual activity) with their online partners compared to men within the range of 3.1 %.

The difference in intensity of accessing pornographic content (committing cybersex) is caused by several factors, i.e. the media (apps.) used to commit cybersex. This study refers to LINE as a medium (apps.) used to access pornographic content (commit cybersex). As mentioned, in addition to providing pornographic content, LINE allows interaction between its users and stands as a content provider. The LINE app contains more possibilities for social interactions than just watching videos or viewing pornographic images. Meanwhile, women seem to prefer interactive online sexual activities. Women tend to use several cybersex applications, rather prefer applications that also allow social interaction (Ferre, 2003).

Other studies show that women tend to use chat rooms for sexual purposes (sex chat), while men use them to watch pornography. One of the reason using online sexual media was to help men masturbate, release sexual tension while women more often used chat rooms with sexual or erotic narratives helping them with sexual fantasies and looking for partners (Cooper, McLoughlin, Campbell, 2000).

Research findings related to aspect 'Sexual desire fulfilment by accessing pornographic content' refers to the response given by the majority respondent. Indicating their sexual desire is quite fulfilled, with 71 % from the female respondent, and 51.6 % of the male respondent, these findings corroborated with female respondent preference for interactive features as most use the LINE app for chat rooms.

The tendencies are quite different from the male respondents, which prefer to watch and collect pornographic content related to LINE Official Accounts content, mostly short video footage. These findings strengthened with 38.7% of male respondents who would like to watch and collect, rather than 29% of female respondent.

Leiblum (1997) views cybersex as sexual expression that is on a continuum from mere curiosity to obsessive involvement. For people who have sexual problems, accessing sexual (pornographic) content online is often regarded as part of their social isolation and life dissatisfaction. Leiblum distinguished three profiles of people who experienced clinical problems with cybersex. The first group is "loners" which consist of people who utilize cybersex to accommodate short-term or long-term problems and life situations. Second is "partners" consisting of people who already have partners but who are involved with cybersex because of sexual and relationship problems. The third group is called "paraphilics", those who depend on cybersex as a source to stimulate and satisfy their sexual needs that are not common.

Meanwhile Cooper et al (1999) divided sexual users into networks of three profiles, and they called them Recreational, Compulsive, and At-risk users. Recreational or non-pathological users refer to those who access sexual (pornographic) content online, solely needing to satisfy their curiosity with available online sexual material, to occasionally experimenting or satisfy sexual desires, or to seek certain sexual information. Those who access sexual (pornographic) content online or committing to cybersex activity less than one hour a week are not associated with negative consequences. This can be contrasted with compulsive users, who described as individuals who show compulsive sexual characteristics and experience negative consequences as a result. Compulsive users may previously have had an unusual sexual pattern, such as: being too preoccupied with pornography, having many relationships (not monogamous), having sex with an anonymous couple (having multiple sexual partners), doing phone-sex, frequent visits to prostitution area (brothels) and conduct sexual services transactions, or experiencing paraphilia, problems which are identical with deviant sexual behaviour and habits, such paedophilia, exhibitionism.

Cooper et al (1999) in their study found that those who claimed to spend at least 11 hours in online sex practices a week experience distress and compulsive sexual behaviour. Finally, At-risk users, those who have no history of compulsive sexual behaviour, but experience some problems in their lives from

sexual activity in the network (online). These risk users are the most interesting group in the study of sexual behaviour in the network, because they may not experience problems with sexual behaviour but only because of the reasons for accessibility, affordability, and anonymity.

Respondents in our study, on average accessed pornographic content (committing cybersex activity) one to three times a week, with an accessing time of 1 to 2 hours. When referring to the accessing time, they are likely to be included in a group of compulsive sexual behaviour that is vulnerable with some negative consequences. Strongly confirmed by indicators that disclose experiencing sexual satisfaction, sex-drive fulfilment, and the desire repeatedly accessing to pornographic content (committing cybersex activity). When accessing cybersex websites, which causes sexual stimulation that produces a pleasant effect on the body that tends to be repeated, on the other hand, psychologically could lead to addiction. This sexual stimulation causes the desire to fantasize sexual acts and at the same time, these particular internet users are motivated to get self-satisfaction, by having sexual intercourse or masturbating.

Adolescents during their cybersex activities are heavily influenced by their curiosity and by peer-influence (Purwaningsih, 2008). There are several reasons that lead teenagers to commit cybersex, i.e. (1) privilege in accessing or acquiring sexual content, (2) privacy protection (anonymity), and (3) 'immunity' on expressing their sexual fantasies. (Noni and Purba, 2012)

Committing cybersex indicates serious relationship problems, and these problems are determined by proximity aspects, dependence, neglect. A person could be heavily involved in cybersex so that they neglect their partners (Leiblum, 1997). In addition, cybersex is also associated with depression, withdrawal, attempted suicide, sexual abuse, and exposure to pornography on childhood age. (Corley & Hook, 2012).

There is a significant distinction in the intensity of accessing pornographic content (committing to cybersex) on LINE Official Accounts (OA) between male and female students, closer look at respondents in this study, it can be concluded that female students can be related to a higher level of intensity rather than male students. Hypothesis (Ha) in this study proven. The determining factors that influence higher degree of intensity on accessing pornographic content (committing cybersex activity) by female students, seems mostly given in because of the interactivity features on LINE apps., Findings of this study show that female college students are more interested in interaction via text, images and sound. In online sexual activity, women prefer things that involve interaction, chat, and dialogue. Among students, women have a high interest in cybersex through e-mail, microphones and connected dating services which contain erotic dialogues, while men are more on e-mails and internet websites that provide pictures or videos.

Some of respondents could be included in the compulsive sexual behaviour group. In terms of committing cybersex, respondents are on average frequency, 1 to 3 times a week with average duration 1 to 2 hours. Respondents also disclose several distinctive characteristics, such as having an unusual sexuality-matters related pattern, such as: deeply involved with pornography, having multiple relationships, having sexual intercourse with various yet unknown partner, doing phone-sex, frequent visits to prostitution area (brothels) and conduct sexual services transactions, or they experienced paraphilia problems which in the literature are often associated with deviant sexual behaviour and habits, such paedophilia, exhibitionism.

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REFERENCES

- [1] Asosiasi Penyelenggara Jasa Internet Indonesia (APJII) *Indonesian Internet Service Provider Association* (2014). Profil Pengguna Internet di Indonesia. Accessed from <https://apjii.or.id/download/file/PROFILPENGGUNAINTERNETINDONESIA2014.pdf> on September 8th, 2017.
- [2] Admin. Detik Health. (2013) *Beda Usia, Beda Pula Perilaku Seksual Seseorang* on May 3rd, 2013. Accessed from <https://health.detik.com/sexual-health/d-2237750/beda-usia-beda-pula-perilaku-seksual-seseorang?u18=1> on August 18th, 2018.
- [3] Admin. IDN Times. (2018). *Millennials Dominasi Penggunaan Internet, Kebanyakan untuk Chatting dan Media Sosial* published on February 21st, 2018. Accessed from <https://idntimes.com/news/indonesia/fitang-adhitia/millennials-dominasi-penggunaan-internet-kebanyakan-untuk-chatting-dan-media-sosial-1/full> on March 17, 2018.
- [4] Admin. *Meriam-Webster Online Dictionary definition of 'Cybersex'*. Accessed from <https://www.merriam-webster.com/dictionary/cybersex> on December 21st, 2017.
- [5] Briggie, Adam (2008) "*Love on the internet: a framework for understanding Eros online*", *Journal of Information, Communication and Ethics in Society*, Vol. 6 Issue: 3
- [6] Cooper, A., Putnam, D.E., Planchon, L.A., & Boies, S.C. (1999). *Online sexual compulsivity: Getting tangled in the net. Sexual Addiction & Compulsivity: The Journal of Treatment and Prevention*, 6:79–104.
- [7] Cooper, AL, Irene P.M., Kevin M.C. (2000). *Sexuality In Cyberspace: Update For The 21st Century. Cyber Psychology & Behavior*. Volume 3, Number 4.
- [8] Corley, M. D., J. N. Hook. (2012). *Women, Female Sex and Love Addicts, and Use of the Internet, Sexual Addiction & Compulsivity. The Journal of Treatment & Prevention*, 19:1-2, 53-76, DOI: 10.1080/10720162.2012.660430.
- [9] Daneback, Cooper and Mansson (2004). '*Online Sexual Activity (OSA): An Internet Study of Cybersex Participants*' from '*Archives of Sexual Behavior*', Vol. 34, No. 3, June 2005 accessed from <https://.researchgate.net/publication/7772444> on August 16th, 2018.
- [10] Delmonico & Griffin. (2011). '*Cybersex Addiction and Compulsivity*' from '*Internet Addiction: A Handbook and Guide to Evaluation and Treatment*' edited by Young, Kimberly S. and Cristiano Nabuco de Abreu. (2011). Canada: John Wiley & Sons. Inc.
- [11] Ferree, Marnie. (2003). *Women and the web: Cybersex activity and implications. Sexual and Relationship Therapy*, 18:3, 385-393, DOI:10.1080/1468199031000153973
- [12] I Gede Asmarayasa, (2004). *Hubungan Antara Frekuensi Mengakses Situs Porno Dengan Sikap Remaja Terhadap Perilaku Seksual*.
(http://library.usd.ac.id/Data%20PDF/F.%20Psikologi/Psikologi/989114107_full.pdf accessed on February 5th, 2018).

- [13] Irianto, K. (2014). *Epidemiologi Penyakit Menular dan Tidak Menular Panduan Klinis*. Bandung: Alfabeta.
- [14] Hatta, Raden Trimutia. (2016). *Pertumbuhan Pengguna Aktif Line Paling Tinggi di Indonesia on March 24th, 2016*. Accessed from <https://www.liputan6.com/tekno/read/2467013/pertumbuhan-pengguna-aktif-line-paling-tinggi-di-indonesia> on September 10th, 2018.
- [15] Laier, Christian., Jaro Pekal, Matthias Brand. (2014). *Cybersex Addiction in Heterosexual Female Users of Internet Pornography Can Be Explained by Gratification Hypothesis*. *Cyberpsychology, Behavior, and Social Networking*. Volume 17, Number 8. DOI: 10.1089/cyber.2013.0396
- [16] Leiblum, S. R. (1997). *Sex and the net: Clinical implications*. *Journal of Sex Education and Therapy*, 22, 21-28.
- [17] Lestari, Ayu Indah dan Hartosujono (2014). *Hubungan Kontrol Diri dengan Perilaku Cybersex Remaja pada Pengguna Warung Internet di Glagah Sari Yogyakarta dalam Jurnal Spirits*. Volume 4. No 2.
- [18] McQuail, Denis (2011). *Teori komunikasi massa*. Jakarta, Salemba Humanika. 2011
- [19] Nureni, Reni, dkk (2013). *Perilaku Remaja dalam Menggunakan Media Baru: Pemetaan Habit Media Baru Remaja Daerah Sub-Urban Kota Bandung dalam Jurnal Sositologi Edisi 30*.
- [20] Pratama, Aditya Hadi. (2017). *Laporan comScore: WhatsApp Adalah Aplikasi Mobile Terpopuler di Indonesia on April 4th, 2017*. Accessed from <https://id.techinasia.com/comscore-whatsapp-adalah-aplikasi-terpopuler-di-indonesia> on December 17th, 2017
- [21] Pribadi, S.A., Dona E.P. (2009). *Perbedaan Sikap terhadap Seks Dunia Maya pada Mahasiswa ditinjau dari Jenis Kelamin*. *Proceeding PESAT (Psikologi, Ekonomi, Sastra, Arsitektur, & Sipil)*. Vol. 3. ISSN: 18582559
- [22] Purwaningsih, Renny (2008) *CYBERSEX DI KALANGAN REMAJA*. Universitas Muhammadiyah Surakarta. Accessed from <http://eprints.ums.ac.id/1959/> on August 20th, 2018
- [23] Rahmawati, dkk (2002). *Hubungan Antara Kecenderungan Perilaku Mengakses Situs Porno Dan Regisitas Pada Remaja dalam Jurnal Psikologi*. No 1, Hal 1-13.
- [24] Sulandjari, Rekno dan Habsari, Sinung Utami Hasri (2014). *Peran Pornoteks Media (Online) Perilaku Seksual Remaja dalam Majalah Ilmiah Universitas Pandanaran*, Volume 12, No 28.
- [25] Thomas, Daphyne Saunders (1997) *"Cyberspace pornography: problems with enforcement"*, *Internet Research*, Vol. 7 Issue: 3