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Privacy Crisis on Instagram: a Factor Analysis Approach on Motivation Behind Privacy Disclosure in Adolescents

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Abstract
Instagram is one of the most preferred social media platforms in Indonesia. Based on the survey, Instagram users in Indonesia are dominated by teenagers aged between 18 and 24 years. Instagram is used by teenagers as a medium to create self-image, show existence, and do self-disclosure. The disclosure of privacy by teenagers is very risky and has negative impacts, such as provocation, data manipulation, and another cybercrime. This study aims to confirm the factors that motivate teenagers to disclose personal information on Instagram. By using communication privacy management theory and quantitative methodology, this research found interesting insights. Researchers surveyed 100 Instagram users who use public mode accounts. Through a series of factor analyses it was found that out of 17 indicators of the 7 main motivational factors formulated in the initial research framework, only 15 indicators were valid because the significance value of the other 2 indicators did not meet the requirements. These 15 indicators formed 6 new motivational main factors that influence teenagers to disclose their personal information on Instagram. These factors are self-presentation, information storage, emotional support, relationship development, entertainment, and information sharing. This finding also confirmed the novelty of the research that there are some similarities and differences in the factors that motivate Instagram users and Facebook users when disclosing their personal information on both social media platforms.
Keywords: privacy crisis; factor analysis; instagram; motivation; privacy disclosure

Introduction

Entering the technology era, digital devices have become one of the tools that are very closely linked with human life. Its presence eases many kinds of human's work, one of which is communication. Furthermore, with the invention of the internet as a main resource of information, exchange of information can be performed anytime and anywhere without boundaries of space and time. In Indonesia, the number of internet users registered by the Indonesia Internet Service Provider Association (APJII) in 2018 swelled to 171.17 million, accounting for 64.8% of the total population (APJII, 2018). The survey also illustrated the profile behaviour of internet users in 2018.

Nearly 27.7% of the participants said the main reason for using the internet is to communicate through messaging media platforms, while 18.9% access the internet for social media usage. Andreas Kaplan (Kaplan, 2010) revealed that the formal definition of social media consists of two main concepts,

namely Web 2.0 and User Generated Content. The definition of Web 2.0 is described as a platform with content that is not created by specific individuals, but is created in a participatory and collaborative manner. Meanwhile, User Generated Content places more emphasis on users' ability to create and exchange content. In its use, several studies discussed the positive and negative impacts of social media. Nursalam & Arifin (2016) explained the positive impacts of social media for adolescents are, among others, to serve: as a site to interact with friends and relatives, work on assignments, play games, and spend their leisure time. However, social media also has its negative impacts, such as interrupting learning activity, prompting ideas to copy other people's works on the internet, pornographies, addiction issues, and initiating violent behaviors (Khairuni, 2016). In addition to the points mentioned, several cyber-crimes that threaten social media users are also present, like espionage, sabotage, provocation, data manipulation, online scam or fraud, etc (Herlina & Safarudin, 2019).

The Directorate of the Criminal Investigation Agency in Indonesia, a branch of government work focusing on cyber-crimes, posted an article on its official website entitled *Tren Kejahatan Siber 2019: Penipuan Menempati Posisi Teratas* (Cyber Crime Trend 2019: Fraud Occupies the Top Spot). Through that article, it is learned that fraud was the most reported crime in 2019 with a total of 1617 reported cases. The target of cyber-crimes was not only money but also personal information for further crimes. Thus, it is highly important to protect personal information in order to avoid unwanted matters (*Tren Kejahatan Siber 2019: Penipuan Menempati Posisi Teratas*, 2020). This issue has also been emphasized by Yudhi Kukuh, an Information Technology (IT) Security Consultant of Indonesia's PT Prosperita-ESET (6/23/2019) who stated that internet users in the APAC (Asia- Pacific) region have been disclosing information to unknown parties consciously (Iskandar, 2019).

According to a survey conducted in 2018 by ESET, a company engaged in the IT sector, especially in the security and computer security sector, 79% of respondents checked the identity of unknown parties on social media before chatting, while 21% of respondents did not. Although the percentage of respondents who did not check the identity of unknown parties is smaller than that of those checking it, they run the risk of their identities being abused when chatting on social media. This study found that 31% of respondents admitted to having provided personal information to unknown parties on social media (ESET, 2018).

One of the most used social media platforms in Indonesia is Instagram. Instagram is an application that gives users access to share photos and videos, provide comments and likes, conduct conversations via direct messages, and other creative features. A survey conducted by NapoleonCat.com, a website running in the field of consumer services and marketing solutions, found the number of instagram users in Indonesia reached 64,020,000 as of March 2020 (NapoleonCat.com, 2020). This number represents 23.4% of Indonesia's population. In the same survey, as many as 24,000,000 Instagram users in Indonesia are adolescents aged between 18 and 24 years.

Meanwhile, Instagram with all its features integrates the boundaries of individuals' privacy and the public. Instagram users do not hesitate to post personal details such as sharing their routines and projecting their feelings through photos and videos. Adolescents often use Instagram as a medium to create self-image, show existence, and open up. Self-Disclosure is an expression of revealing personal information that has an affective, descriptive, and evaluative nature (Littlejohn & Foss, 2009).

Privacy disclosure on social media is an important issue because personal information in the form of text, photos, or videos uploaded on Instagram will leave a digital track record on the internet. The statement above suggested that social media, as a media that allows people to freely create and publish each of their own contents, has certain boundaries regarding public and private contents. Matters on privacy disclosures in social media may result in a crime that threatens the users' welfare. Threats of personal leaks will not only affect the individuals but also their families and relatives. For example, when an unknown party needs information, the party can enter certain keywords. Through various searching sites, the party can be directed to the personal Instagram account of someone who has uploaded the information.

Regarding privacy disclosure on social media, a previous study conducted by Waters

and Ackerman (Waters & Ackerman, 2011) explored what motivations and consequences of Facebook active users related to privacy disclosures. This study uses Communication Privacy Management Theory (Petronio, 2002) as the theoretical framework by conducting a survey of 59 respondents. The results of the study showed that there are four motivation responses when they disclose their privacy on Facebook, namely information sharing, information storage and entertainment, keeping up with trends, and showing off.

However, the digital landscape always develops every year. In the Digital 2020 July Global Statshot report conducted by We Are Social and Hootsuite, it is stated that there has been an increase in the use of technology connected to the internet. Even this year, the number of internet users grew 30%, with more than half of them being social media users. Furthermore, the data states that Instagram is the most popular social media currently. Instagram recorded an additional 111 million users in the past quarter, which equated to quarterly growth of more than 10 percent. The figure suggests that the number of new Instagram users grew by more than 1 million per day, thereby resulting in global reach of 1.08 billion by early July 2020.

Therefore, if the research conducted in 2011 identified the motivation of Facebook users as the most popular social media at that time, then this study intends to fill research gaps, as well as provide novelty in contemporary communication. This research aims to confirm what factors motivate adolescents to disclose their private information on Instagram as the most popular social media platform today.

The research subjects focused on adolescents aged 15-24 years who use Instagram with a public mode account and have disclosed privacy information in their accounts. This study applied Communication Privacy Management (CPM) Theory by conducting a survey on 100 respondents in 10 sub-districts of South Jakarta with a total sample of 10 subjects in each sub-district randomly. The survey was designed by using a Google Form and distributed to respondents across social media such as Whatsapp, Line, and Instagram. Researchers used confirmatory factor analysis, to confirm the factors that form the basis of a set of variables or a set of measures.

Theoretical Framework
Communication Privacy Management Theory: An Overview

The development of this theory had gone under numerous thought processes. Beginning in 1991, Petronio, along with her colleagues published several privacy-concerning articles. Communication Privacy Management (CPM) theory is based on Altman's thoughts in 1975 regarding self-disclosure. CPM theory used that theory as the ground theory for answering questions concerning the management of personal information, rejecting or allowing access to personal information. In communicating, verbally or nonverbally, at one point, communicators would reach a certain stage where one actor has the urge to express and/or share private information with the other actor.

However, the deciding power of what to share and what not to share will always stay in each individual's hand. If information is considered a very personal one, communicators tend to keep them and not share them with other parties or share them at the wrong time. This consideration of exposing information is what Sandra Petronio had analyzed in the Communication Privacy Management (CPM) theory. The CPM theory aims to entangle the process of decision making in sharing or keeping private information on building a relationship (West & Turner, 2017).

This theory consists of five underpin assumptions in regulating the process of privacy management (West & Turner, 2017). Assumption one: Focusing on private information ownership. Assumption two: Private boundaries between private and public information. Assumption three: The rules of private information. Private information consists of several criteria rules as follows: culture, gender, motivation, contextual, and risk benefits. Assumption four: Personal and Collective Boundaries. Assumption five: Boundary Turbulence.

Privacy Disclosure Motivation

In disclosing information, an individual must manage whether the information is public or private. This strain between the two forms is called control, i.e. the ability of individuals to negotiate boundaries in making disclosure decisions. This is stated in the theoretical assumptions regarding the rules of private information with five deciding criteria in

controlling privacy, namely: culture, gender, motivation, contextual, and risk benefits (West & Turner, 2017: 214). A prior study that researched privacy issues and self-disclosure on SNS revealed that there is an increasing trend of information dissemination over a period of five years, so it is very important to implement privacy boundary regulations on SNS (Tsay-Vogel et al., 2018). To know why the trend is increasing every year, it is necessary to know the motivation behind that behavior. Therefore, of the five criteria, this research specifically analyzes one of the criteria, namely the motivation criteria because it is following the objective of the study.

Lee et al.'s study (2008: 681-701) about voluntary self-disclosure on a blog, formulate seven supporting factors in performing a disclosure which are self-presentation, relationship management, keeping up with trends, storing information, sharing information, entertainment, and showing off. Social media and blogs have some similar characteristics, one of which is as media that creates two-way interaction or more between communicators. In blogging, the user can upload a content in which audiences would be able to respond in forms of comments or tips that are commonly called trackbacks or pingbacks (Gray, 2014). Same thing with Instagram as social media, Nasrullah (2016) described some of the characteristics of social media such as networks, information, archives, interaction, social simulation, and user-generated content. Through the definitions of the blog and social media above, it can be assumed that both possess similar characteristics.

Researchers lowered the motivation criteria into seven motivations which were adapted from the research of Lee et al. (2008) namely self-presentation, relationship management, keeping up with trends, storing information, sharing information, entertainment, and showing off. A previous study conducted by Lee et al. has investigated bloggers factors of voluntary self-disclosure. However, this research focuses on the SNS that is very popular in Indonesia which is Instagram. As of March 2020, there are 64,020,000 Instagram user in Indonesia (NapoleonCat.com, 2020). Of the seven motivations selected as variables, the researcher reduced them to several indicators so that a total of 17 indicators were obtained. The assumption is whether the 17 indicators can explain the various motivations that adolescents consider in disclosing privacy on Instagram accounts or are there any other motivational factors that are formed.

Several indicators or items referred are as follows X1 is posting achievements; X2 is posting one's daily routine and/or travelling; X3 is conveying personal character; X4 is expressing the will to develop a close relationship; X5 is expressing problems to other people; X6 is a facility to communicate virtually; X7 is showing an up-to-date lifestyle; X8 is expressing things just because everyone does it; X9 is expressing to keep personal records; X10 is archiving posts; X11 is sharing experience; X12 is sharing certain issues and knowledge; X13 is showing popularity or being liked by others; X14 is displaying abilities; X15 is gaining likes and comments; X16 is genuinely enjoying in expressing things; X17 is expressing as a source of fun.
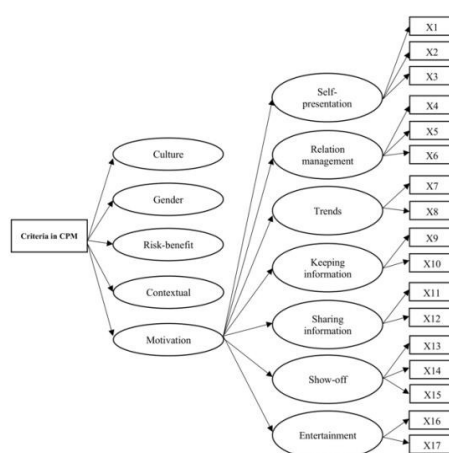

Figure 1. The conceptual framework of research

Material and Methodology

This study uses one type of multivariate analysis, namely factor analysis. Factor analysis is used to analyze interactions between variables with the same status. Factor analysis is one of the statistical techniques that have the basic function of reducing data from variables to being more concise, but still contains most of the information in the original variable (Supranto, 2004).

Specifically, this research uses confirmatory factor analysis, intending to confirm the factors that form the basis of a set of variables or a set of (Wagiran, 2019). Primary data was obtained by a survey with a questionnaire as the instrument. The survey was designed by using a google form and distributed to respondents across social media such as Whatsapp, Line, and Instagram. Once the data had reached the aimed total amount of sample, data were processed by using SPSS software. Questionnaires were given by using the Likert scale measurement that consists of 17 main questions. This research used a 1-5 scale as follows: scale 1 for strongly disagree, scale 2 for disagree, scale 3 for uncertain, scale 4 for agree, and scale 5 for strongly agree.

In this study, the researcher used samples to determine the representation of a population. The researcher uses a probability sampling technique, with details of sample conditions as the following: An Instagram active user (at least uploads a content once a week); Jakarta citizens aged between 15 and 24 years. The reason for choosing the youth population is based on a survey conducted by the website NapoleonCat.com as of March 2020, where the most Instagram users in Indonesia are teenagers aged between 18 and 24 years. Meanwhile, the reason for choosing Jakarta is because the number of Instagram users in this area is very high. This is known from CNN news which states that Jakarta is the city with the most popular location tag in 2017 (Susilo, 2017). Based on this, using BPS data in 2015, the number of vulnerable Jakarta residents aged 15-24 years was 1,506,800; Have performed privacy disclosure on an Instagram account; An Instagram user with a public mode account.

Based on the population above, the number of samples can be found using Slovin formula:

$$n = \frac{N}{Nd^2 + 1}$$

n = number of samples
N = total of population
d = tolerance limit for sampling error. In this case the precision is set at (0.1 or 10%)

$$n = \frac{1.506.800}{1.506.800 \times (0,01) + 1}$$

$$n = \frac{1.506.800}{15.068 + 1}$$

$$n = \frac{1.506.800}{15.069}$$

n = 99,993364

n = 100, the number of samples is rounded up to 100, because the sample cannot be used if the number is not round.

After setting the total number of samples, the researcher separated the samples into a smaller region using cluster sampling method. Sub-districts in South Jakarta were chosen as samples, with 10 subjects for each sub-district. Thus, sampling was conducted randomly in 10 sub-districts of South Jakarta with a total sample of 10 subjects in each sub-district. The total population sampling is 100 people.

In analyzing data, the researcher conducted several tests. All tests were processed by using SPSS software: First, conducting validity test to measure the accuracy of the data held by the object with the data collected by the researcher in finding an item. The score of each item needs to be correlated with the total items (Sugiyono, 2016). In this study, the researcher used the Pearson Product Moment Correlation formula as the basis for making a decision about whether an item is valid or not. Second, conducting reliability test. Research instruments can be considered reliable if it has a Cronbach's Alpha coefficient whose value is greater than 0.6 and if the value is less than 0.6.

then the instrument is declared unreliable. Third, conducting correlation matrix formation through the KMO MSA test and the Bartlett Test of Sphericity. Through the KMO MSA (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) values, it can be seen whether the measurement items are feasible or not.

Eligibility is determined from the KMO value, if not less than 0.5 the factor analysis process can be carried out. While the Bartlett Test of Sphericity is used to compare the correlation matrix with the identity matrix. If the significance value is smaller than the significance level (5%), then factor analysis can be used. Fourth, extracting factors to determine the factors that will be used through principal components analysis. In determining the number of factors, the
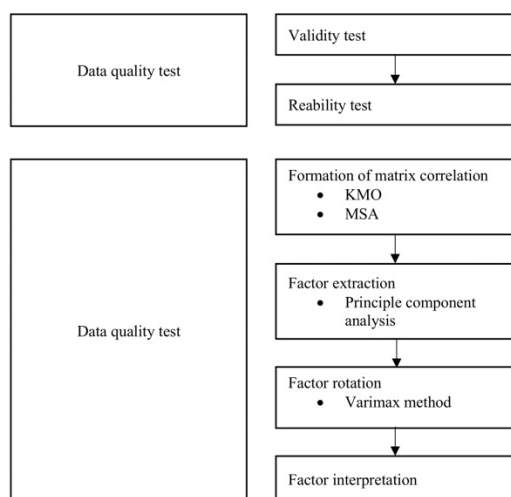

Figure 2. The summary of the analysis process

Result and Discussion

Data was collected by sending questionnaires to 100 respondents that fulfilled the criteria. Through the tabulation of data from the questionnaires filled in by the respondents, the researcher sees respondents who use their Instagram accounts in public mode and are based in Jakarta are mostly college students with a percentage of 43% (n=43). The majority of respondents are between 15 and 20 years old with a percentage of 57% (n=57), the rest are respondents aged 21-24 years with a percentage of 43% (n=43).

By questionnaire, the researcher also sees that female respondents disclose more information on Instagram with a percentage of 62% (n = 62) than male respondents with a percentage of 38% (n = 38). Therefore, it can

eigenvalue is calculated. If the variable has an eigenvalue ≥ 1, then the variable is considered a factor. If a variable has an eigenvalue <1, then the variable does not enter into a factor set. Fifth, rotating the factors with the aim of making the factors more meaningful by playing back the initial factors according to the rotation method. This research uses the varimax method because it can maximize the variance of the structural coefficients for each factor which tends to limit the number of indicators with high correlations and evenly distribute the indicators across all factors (Petscher & Schatschneider, 2013).

Finally, interpreting factors based on factor loading values, followed by the naming of factors based on the characteristics of the items in them.

be concluded that respondents who use Instagram with the public account mode and disclose information on their accounts are dominated by female users aged 15-20 years..

Data was analyzed using SPSS Software. Before the analysis of factors is conducted, measured indicators on the questionnaire had to be validated first. The result of the validity test in 17 originals indicators has a higher value of r table product-moment which has been determined based on a 5% significant rate equaling 0,165. Afterward, through the reliability test, Cronbach's alpha coefficient value is obtained equaling 0,874. Thereby the measurement of indicators on the questionnaire is declared reliable and can be used consistently for other measurements.

While conducting validity and reliability test, the researcher did Correlation Matrix Formation through the KMO MSA test and the Bartlett Test of Sphericity.

Table 1. KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser–Meyer–Olkin Measure of Sampling Adequacy.		.771
Bartlett's Test of Sphericity	Approx. Chi-Square	712.922
	df	136
	Sig.	.000

It was found that the KMO MSA (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) value was worth 0.771 (table 1). Bartlett test of sphericity illustrated a value worth 712.922 with significance value (sig. 0,000). Therefore, after conducting examinations of KMO and Bartlett's test, all items/indicators had met the

requirements and were presumed eligible to be analyzed furtherly by factor analysis.

Meanwhile, from the MSA (Measure of Sampling Adequacy) table, all items/indicators have an anti-image correlation value higher than 0,5 (table 2). Thus, all items/indicators are worthy to conduct factor analysis.

Table 2. Measure of Sampling Adequacy (MSA)

Item	*Anti-image correlation*	Item	*Anti-image correl ation*
X1	0,693	X10	0,658
X2	0,771	X11	0,790
X3	0,875	X12	0,568
X4	0,866	X13	0,859
X5	0,870	X14	0,742
X6	0,741	X15	0,863
X7	0,737	X16	0,730
X8	0,751	X17	0,775
X9	0,666		

The next analysis is factor extraction. Factor extraction was conducted to transform original items into new correlating factors. As to informing factors, principal component analysis method is applied. The result is illustrated in table 3, where 6 (six) indicators possess eigenvalues of higher than 1. With a rather high cumulative total variance number of 72.791%, it is suggested that the six formed factors by the SPSS output would represent 17 motivation items of private information disclosures on Instagram.

Table 3. Total Variance Explained

Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.762	33.897	33.897	5.762	33.897	33.897	3.127	18.396	18.396
2	1.781	10.479	44.375	1.781	10.479	44.375	2.202	12.950	31.346
3	1.456	8.563	52.938	1.456	8.563	52.938	2.149	12.643	43.989
4	1.246	7.332	60.271	1.246	7.332	60.271	1.875	11.029	55.019
5	1.066	6.270	66.541	1.066	6.270	66.541	1.605	9.443	64.461
6	1.063	6.250	72.791	1.063	6.250	72.791	1.416	8.330	72.791
7	.892	5.246	78.037						
8	.647	3.804	81.841						
9	.535	3.149	84.990						
10	.467	2.748	87.738						
11	.410	2.410	90.147						
12	.376	2.214	92.361						
13	.364	2.139	94.500						
14	.300	1.765	96.265						
15	.271	1.594	97.859						
16	.208	1.226	99.085						
17	.156	.915	100.000						

Extraction Method: Principal Component Analysis

In the previous analysis, 17 indicators have been reduced to 6 factors. In the rotated component matrix table, a more detailed item distribution can be seen. This rotation of loading value aims to view the highest correlation number between the items/indicators and the newly-formed factors.

The result is illustrated in table 4.

Table 4. Rotated Component Matrix Table

Rotated Component Matrix

	Component					
	1	2	3	4	5	6
X01	.848	-.057	.173	.008	.063	-.091
X02	.696	.282	-.044	.067	.156	-.117
X03	.381	.435	.057	.439	-.068	.267
X04	.181	.463	.130	.422	.321	-.012
X05	.436	.209	.653	-.079	-.078	.203
X06	.055	-.007	.111	.828	.106	.154
X07	.050	.099	.733	.455	.084	-.194
X08	.213	.165	.818	-.038	.214	.069
X09	.067	.839	.224	-.094	.073	.163
X10	.118	.816	.114	.193	.165	-.102
X11	.352	.318	-.231	.574	.149	.336
X12	-.055	.021	.082	.246	.048	.866
X13	.622	.254	.408	.083	.076	.236
X14	.703	-.009	.180	.305	.028	.093
X15	.636	.242	.252	.045	.431	.124
X16	.266	.140	-.097	-.040	.719	.469
X17	.066	.141	.239	.242	.795	-.126

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization

Based on the rotated component matrix above, factor interpretation was conducted to group factor loadings which consist of the 17 items that correlate the six formed factors. Loading value is presumed at a significance level when it holds a value higher than 0,55 (Stevens, 1996). In his book, Stevens (1996) described the significance level of the loading value of 100 people in the sample is 0,55. Loading values lower than 0,55 is removed from the model. Therefore, regarding the value, X03 and X04 are not included in the factors.

The table illustrates that item X01 has the highest factor loading value of 0.848 on factor 1. Therefore, X01 is included in factor 1, and so are the rest of the items. It can be concluded as shown from the table above that factor number 1 named "self-presentation factor", consists of 5 (five) items which are: to provide contents about success and achievements (X01), provide daily routines and/or traveling contents (X02), present to flaunt popularity and likeability (X13), present certain skill and/or ability (X14), and post contents to attract responses such as likes and comments (X15).

Meanwhile, factor number 2 named "information storage factor", consists of 2 (two) items which are: to reveal things for personal records or journals (X09) and serve as an archive to be re-accessed sometime in the future (X10). Factor number 3 named "emotional support factor", consists of 3 (three) items which are: to reveal personal problems (X05), fear of missing out (X07), and create contents just because everyone else does too (X08).

Furthermore, factor number 4 named "relationship development factor", consists of 2 (two) items which are: to serve as a platform to communicate and meet virtually (X06) and share experiences (X11). Factor number 5 named "entertainment factor", consists of two items which are: to genuinely enjoy creating contents (X16) and create contents as a form of entertainment source (X17). Factor number 6 consists of one item which is to share certain knowledge or issue (X12). This last factor is named the "sharing information factor".
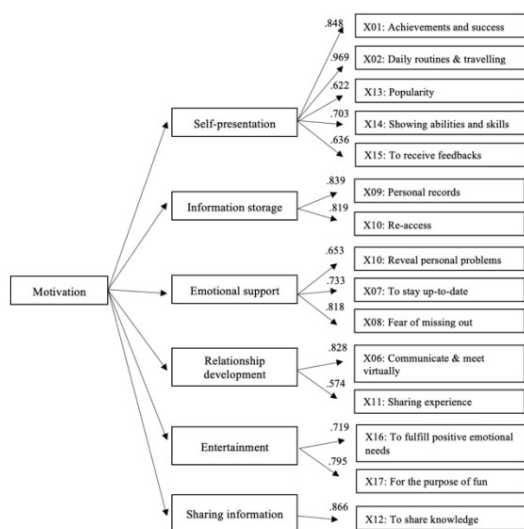

Figure 3. The summary of research findings

This study aims to confirm the factors that motivate adolescents in disclosing personal information on Instagram social media. Research subjects focused on adolescents aged 15-24 years who use Instagram with a public mode account and have disclosed in their accounts. The number of respondents in this study was 100 who had been determined according to the research criteria.

This study uses the Communication Privacy Management Theory as a theoretical framework. Communication Privacy Management Theory describes the process of managing information needed to be disclosed or needed to be shared. In other words, this theory explains how an individual can manage what information is considered private and what information is considered public. One assumption from the theory states that individuals have full control over deciding to share or to keep certain information. In this assumption, there are five criteria regarding the rules of personal information that can determine someone to hide or disclose their personal information, namely culture, gender, motivation, contextual, and risk benefits.

In this study, researchers focused on motivational criteria which were developed into 7 (seven) motivations, an adaptation from the research of Lee et al (2008). These seven main motivations were further determined as research variables, which are: self-presentation, relationship management, keeping up with trends, storing information, sharing information, entertainment, and showing off. Regarding seven motivations, the researchers lowered them into 17 indicators to confirm whether the 17 indicators/items were able to explain the various motivations that adolescents consider in disclosing privacy on Instagram accounts or there are other motivational factors that are formed.

Through a series of factor analyses, this study found that out of 17 indicators of seven main motivational factors formulated in the initial research framework, only 15 indicators were valid because the significance value of the other 2 indicators did not meet the loading value of higher than 0.55. Furthermore, these 15 indicators formed six new motivation factors that influence adolescents in disclosing their personal information on Instagram. These factors are self-presentation, information storage, emotional support, relationship development, entertainment, and information sharing.

Based on the findings of six newly-formed factors, it can be concluded that the self-representation factor possesses the most indicators/items compared to other factors, which are to provide content disclosure regarding achievements and success (X01), provide daily routines and/or traveling contents (X02), present to flaunt popularity and likeability (X13), present certain skill and/or ability (X14), and post contents to attract responses or to receive feedback such as likes and comments (X15). In the other words, self-presentation becomes a primary motivation in privacy disclosure for Instagram users. Whereas the information sharing factor has the least indicator that consists of only 1 (one) indicator/item which is to share certain knowledge or issue (X12).

The significant results of this study stated

there are some similarities and differences between the motivations behind privacy disclosure on Facebook and Instagram compared to the previous study which explored disclosures on Facebook users (Waters & Ackerman, 2011). The study revealed that there are four motivations for respondents to disclose their privacy on Facebook, namely information sharing, information storage and entertainment, keeping up with trends, and showing off. Whereas the results of this study concluded that six motivations influence teenagers to disclose their personal information on Instagram, namely self-presentation, information storage, emotional support, relationship development, entertainment, and information sharing.

Both studies found that information sharing and information storage were the same motivation for Facebook and Instagram users to disclose privacy. Interestingly, Facebook users considered information storage and entertainment to be very similar motivations. However, entertainment motivations for Instagram users serve as one of the main motivation factors that contain two indicators; they post content to fulfill positive emotional needs and for the purpose of fun. The other three motivations, self-presentation, emotional support, and relationship development, differed from Water's results. These findings are the novelty of research that were not found significantly from Facebook users.

Furthermore, it's very interesting to discuss the findings of the research. Regarding motivational factors formulated in the initial research framework, keeping up with trends and showing off, are two of 7 main motivational factors. Yet, through a series of factor analyses, researchers found six newly-formed motivational factors created, each of which has a strong correlation between its indicators. Then the researcher conducted factor interpretation to group factor loadings which consist of the 15 significant indicators that correlate the 6 six formed factors. The six formed factors were given new names based on the characteristics of the indicators that had been grouped.

Compared to the results of Waters' research, keeping up with trends and showing off, are two of four main motivational factors for Facebook users in disclosing privacy. These motivational factors are quite different from those of Instagram users. The findings

provided that keeping up with trends that consisted of initial indicators, namely to stay up-to-date (X7) and fear of missing out (X8), grouped into new factors that of emotional support, together with indicators of revealing personal problems (X5). Whereas showing off factor that consisted of initial indicators: popularity (X13), showing abilities and skills (X14), to receive feedbacks (X15) grouped into new factor, namely self-presentation, together with the indicator achievements and success (X1) and daily routines and traveling (X2).

When studied from the communication privacy management theory, individuals as information owners have the full right to the information disclosed to others. In other words, an individual is faced with a dialectic regarding which information should be shared with the public and which should be hidden. The link between the theory and the findings of this research is that a person thinks and communicates by making certain choices and rules. This assumption is then a process that not only emphasizes personal motivation but also identifies the relational context and characteristics of the media used. Certain information has a privacy value for someone, but it may be different for others.

The simplicity offered by Instagram in uploading content through a variety of features becomes the reason why this social media platform is very likable. The research confirms that the factors that motivate adolescents to disclose personal information on Instagram are more varied than privacy disclosure motivational factors on Facebook. Adolescents are somehow unconscious about the fact that the media they have been using (Instagram accounts with public modes) are very accessible by other users. When disclosing certain private information in a public Instagram account, everyone who receives that information becomes co-owner of the said information. In other words, information can very easily be accessed and used by strangers to conduct a variety of behaviors, including crime.

Another thing that is also interesting from this study is the characteristics of the adolescents themselves. The research conducted by Tiyarestu & Cahyono (Tiyarestu & Cahyono, 2015) explains that the management of personal information on adolescents is closely related to three aspects,

namely self-autonomy, self-identity, and intimacy. Psychologically, most adolescents have not reached a point where they are able to differentiate things that would have negative or positive impacts on their lives. Hurlock (Hurlock, 1992) stated that adolescence is a very vulnerable time for many things that are starting to shift and transform physically and/or mentally. He also emphasized certain criteria of teenagers, one of which is emotional instability and high tendency in searching for an identity.

Regarding the large number of adolescents who frequently publish their data, the dangerous risks of privacy disclosure on social media, and psychological issues of the characteristics of adolescents themselves, the idea of this research about the factors that motivate adolescents to disclose privacy on Instagram is very strategic. However, privacy is important. When someone discloses their privacy on social media as part of the public space, there will be risks that might impact that person. Especially if this is done by adolescents, negative risks are very vulnerable to occur. Therefore, Instagram users, specifically adolescents who are the majority of Instagram users, need to have full consciousness in managing private information on their Instagram accounts. Adolescents need to have education regarding the importance of media literacy. This effort is not only beneficial in maintaining privacy, but also in dealing with the misuse or abuse of private information in cyberspace.

Conclusion

According to Communication Privacy Management Theory of the assumption regarding private information regulations, there are several existing rules which become the standard of individuals in managing information. In this study, motivation is applied as one of the criteria being used and becomes the study's variable with seven main factors on the initial conceptual framework.

Through a series of factor analyses, there are 17 indicators (items) from 7 (seven) main factors that were tested. Yet there are only 15 items found to be valid and immediately grouped into newly-formed factors. Meanwhile, two other items did not meet the significance level so that they were removed from the model.

Furthermore, based on significance level of loading value, there are six newly-formed factors created, each of which has a strong correlation between its items. Therefore, from the seven initial motivation factors, this research confirmed that there are only six main factors of privacy disclosures by adolescents on Instagram. The six factors are self-presentation, information storage, emotional support, relationship development, entertainment, and sharing information. Those factors are presumed to be significant factors of privacy disclosures by adolescents on Instagram because they possess eigenvalues of higher than one.

Regarding six main factors that were formed by factor analysis, most motivation in carrying out a disclosure is the desire of self-presentation on each account. Although Instagram mainly functions as a Social Networking System (SNS) which facilitates platforms for its users to communicate and conduct limitless interaction, there are still existing boundaries unknown by users. One of the boundaries is the boundary of disclosing personal and/or private information. Adolescents must fully understand that every single upload they make is accessible by the public. Therefore, adolescents as users of Instagram must be very careful in deciding what kinds of information are appropriate to be shared to the public.

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