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## Are Self-Presentation of Instagram Users Influenced by Friendship-Contingent Self-Esteem and Fear of Missing Out?

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### Abstract

One social media platform that is still highly favored by most people in this day and age is Instagram. Instagram users can present themselves in a visual form (eg, pictures and video) and text. Instagram promotes visual use, coupled with editing features which enable Instagram users to present themselves distinctly on social media. Friendship-contingent self-esteem is an important factor in presenting one's behavior in the context of friendly relations. However, there are negative impacts of use of social networking sites, such as lowering self-esteem, which is mediated by the fear of losing or fear of missing out (FoMO). This study aims to analyze the influence of friendship-contingent self-esteem and fear of missing out on self-presentation of Instagram users. Participants of this study were 326 male and female Instagram users spread across several provinces in Indonesia. This study uses Structural Equation Modeling (SEM) to construct an empirical model of friendship-contingent self-esteem, fear of missing out, and self-presentation which fits the data. Results show adequate goodness of fit, however, the only variable found to influence self-presentation was only fear of missing out. Friendship-contingent self-esteem was found to affect the fear of missing out, while friendship-contingent self-esteem did not affect self-presentation.

### Apakah Presentasi Diri Pengguna Instagram dipengaruhi oleh *Friendship-Contingent Self-Esteem* dan *Fear of Missing Out*?

#### Abstrak

Salah satu media sosial yang hingga saat ini masih digemari oleh kebanyakan orang, yaitu Instagram. Di Instagram para pengguna dapat mempresentasikan dirinya dalam bentuk visual (misal, gambar dan video) dan tulisan. Instagram sangat mengedepankan visual dalam penggunaannya, ditambah dengan fitur-fitur edit yang ada pada Instagram membuat para penggunanya memiliki perbedaan dalam mempresentasikan dirinya di media sosial. *Friendship-contingent self-esteem* merupakan faktor penting dalam mempresentasikan diri perilaku seseorang dalam konteks hubungan persahabatan. Namun, adapun dampak dari penggunaan situs jaringan sosial dapat menurunkan *self-esteem* seseorang yang dimediasi oleh rasa takut kehilangan atau *fear of missing out* (FoMO). Penelitian ini bertujuan untuk menganalisis pengaruh *friendship-contingent self-esteem* dan *fear of missing out* terhadap *self-presentation* pengguna Instagram. Partisipan penelitian ini berjumlah 326 orang pria dan wanita pengguna Instagram yang tersebar di beberapa provinsi di Indonesia. Penelitian ini menggunakan *Structural Equation Modeling* (SEM) untuk mengonstruksi model empiris *friendship-contingent self-esteem*, *fear of missing out*, dan *self-presentation* yang *fit* dengan data. Hasil dari penelitian ini adalah didapatkan *goodness of fit* yang baik, namun demikian setelah ditelaah lebih lanjut yang berpengaruh pada variabel *self-presentation* hanya *fear of missing out*. Sedangkan *friendship-contingent self-esteem* berpengaruh terhadap *fear of missing out*, dan *friendship-contingent self-esteem* tidak berpengaruh terhadap *self-presentation*.

**Keywords:** *Self-Presentation, Friendship-Contingent Self-Esteem, Fear of Missing Out, FoMO, Instagram*

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## 1. Introduction

Internet use amongst Indonesian people has increased year after year. According to a survey conducted by APJII (Association of Indonesian Internet Service Providers/*Asosiasi Penyelenggara Jasa Internet Indonesia*), in 2016 there were 132.7 million internet users in Indonesia from the total population of 256.2 million people. This indicates a 51.8% increase from the number of internet users in 2014. APJII's survey in 2014 showed that there were only 88.1 million internet users from the total population of 252.4 million people (Association of Indonesian Internet Service Providers, 2016).

The motives for internet use in Indonesia are mostly to keep up to date (31.3 million people), have access to work-related information (27.6 million), spend free time (17.9 million), socialize (13.6 million), as well as for education (12.2 million), entertainment (11.7 million), and business (10.4 million). Most internet users in Indonesia are between 25 – 34 years of age, followed by the 10 – 24 years age group (Association of Indonesian Internet Service Providers, 2016).

Other social networking platforms like Facebook, Twitter, Path, BBM, Line, WhatsApp, etc. have become a necessity for Indonesian adolescents. The emergence of diverse social media signifies the progress of unconstrained communication, limited by neither space nor time. From the wide range of social media sites used by the Indonesian society, there is one in particular that has been popular with most Indonesians since its inception up until the present day, which is Instagram. The results of APJII's survey in 2016 show that Instagram is the second most used social media application after Facebook, with 71.6 million people (54%) using Facebook and 19.9 million people (15%) using Instagram (Association of Indonesian Internet Service Providers, 2016).

Facebook and Instagram are the most frequently used social media applications to present oneself online in various forms (Djafarova & Trofimenko, 2017). This research focuses only on Instagram users, because Instagram is such a popular platform used by teenagers and adults, who are the researcher's targets. Instagram is not only accessible through Android and iOS based devices, but can also be accessed through web browsers. Instagram was formally launched on October 6<sup>th</sup> 2010 by Kevin Systrom and his partner Mike Krieger (Aditya, 2013). On Instagram, users can present themselves visually (such as through pictures and videos) as well as through text. However, visual presentation is most dominant on Instagram as it is not possible to upload a post without a picture. Instagram users do not only communicate with pictures and text; "hashtags" and "emojicons" are also frequently used,

and users can search for certain pictures using hashtags (Nilsson, 2016).

There are more than 22 million Instagram users in Indonesia and this number will continue to rise (Fajrina, 2016). There are a wide variety of services available on Instagram, such as posting day-to-day activities in the form of photos and videos, using *InstaStory* and Instagram Live, using editing features such as adding the location of your photo, finding friends and tagging them in your posts, commenting on friends' posts, chatting, and using direct messages. Instagram users can also set their accounts to private, so that those who want to view their posts need to send a request first. According to Wendt (2014), Instagram gained popularity due to its design which motivates users to like and comment on posts which enables them to communicate with the creator of the posts.

With the increasing popularity of visual based social media, which in this context is Instagram, users undertake various efforts to improve their appearance in their posts. The use of filters, along with using particular angles and attractive styles, are several examples of efforts to improve appearance of Instagram photos (Nilsson, 2016). This has also increased the number of *selfie* uploads among Instagram users. Young adults have grown accustomed to this platform, and thus consider that posing and uploading these pictures to Instagram is "normal" (Wendt, 2014). The sheer amount of selfie uploads on Instagram is related to user narcissism and self-esteem (Pineiro, 2016).

Pineiro (2016) explains that individuals have different levels of self-esteem and self-perception. Self-esteem is defined as an individual's overall evaluation on himself or herself (Lee, Moore, Park, & Park 2012). This study does not analyze self-esteem in general, but will focus on friendship-contingent self-esteem, which is a form of self-esteem which relies on relationships with peers.

Studies on friendship-contingent self-esteem have been conducted previously by Pettijohn II, LaPiene, Pettijohn and Horting (2012). This study concerned the relationship between intensity of Facebook usage, friendship-contingent self-esteem, and personality, and the study was conducted on 200 undergraduate students in public universities in Ohio and South Carolina. Their results showed that there was a positive and significant relationship between Facebook usage and friendship-contingent self-esteem, while there was no significant relationship between the intensity of Facebook usage and personality. This is because individuals feel that one main source of positive self-esteem is the quality of personal relationships, which is often expressed on social media activities. The intensity of social media use amongst individuals with high friendship-contingent self-esteem is apparent through these individuals'

emotional attachment to social media, and thus these individuals use social media for many activities (Pettijohn II, LaPiene, Pettijohn, & Horting, 2012).

Friendship-contingent self-esteem is an important factor in self-presentation behavior in the context of personal relationships. Thus, if an individual's self-esteem is highly contingent on the quality of their personal relationships, he/she may be more motivated to engage in positive self-presentation that takes into account others' positive perceptions towards them (Pineiro, 2016). Friendship-contingent self-esteem depends on one's assessment of values, as well as on the well-being of their personal relationships; if individual perceives that their relationship is not going well, they may feel bad about themselves, and the same applies in reverse (Cambron, Acitelli, & Steinberg, 2010).

Self-esteem that stems from attachment to friends tends to push individuals to present themselves online in relation to their personal relationships. That being said, online self-presentation can also show one's relation with people other than their friends (Overup, Brunson, & Acitelli, 2015).

Individuals require stimulation from their environment to feel valuable and to develop the feeling that there are competent. Stimulation in the form of feedback can push individuals to continually present a positive image of themselves in increasing intensity, to show to this individual's acquaintances that that he/she is a positive figure. The more dependent an individual is on other people's responses towards their self-presentation, the more intense their display of positive self-presentation online will be (Sun & Wu, 2012).

One's online self-presentation relates to the positive perception they hope for as a form of affirmation from others. Support or affirmation from other people makes individuals feel valuable. As a consequence, when individuals feel valuable by obtaining affirmation from other people, they then continue to present themselves online in increasing intensity, particularly in a positive way (Yang & Brown, 2016).

Individuals can feel valuable as a result of affirmation in the context of friendship. This feeling of affirmation may materialize in the number of friends they have on their social media accounts. The more friends one has on social media, the longer one spends on social media, and the more frequently they upload pictures of themselves as a form of online self-presentation (Moon, Lee, Lee, Choi & Sung, 2016).

The targeted audience of self-presentation of most people is people that they know, or people who know them. Users hope for a positive response from these people that can boost their self-esteem. Therefore, when

users feel appreciated through obtaining positive responses of other users, the more intense their online self-presentation will become (Kim & Baek, 2016).

In some particular conditions in which individuals are geographically separated from the important people in their lives, dependence on friends increases. Social media becomes an avenue to bridge relationships with people across different times and places, and becomes a form of social support for the individuals. In these conditions, there is a high "fear of missing out", because high levels of dependence of other individuals are considered important on social media (Hetz, Dawson, & Cullen, 2015).

A study conducted by Buglass, Binder, Betts and Underwood (2016) found that the effects of using social networking sites and the decrease of self-esteem was mediated by Fear of Missing Out (FoMO). Fear of Missing Out is defined as the feeling of discomfort or even the feeling of loss that results from knowing what one's friends are doing, and feeling that those friends have it better than them (Abel, Buff, & Burr, 2016). The phenomena of fear of missing out is a situation that results from lack of self-regulation and psychological satisfaction. Following this line of thought, low levels of satisfaction towards basic needs may relate to Fear of Missing Out.

The FoMO phenomena can help explain excessive use of social media amongst adolescents. FoMO affects the use of social media from the perspective of social relations, in which meaningful experiences are considered to be those related to personal relationships, or the perception that advantageous and satisfying social relations should be maintained. Individuals who have trouble maintaining positive social relations tend to have high Fear of Missing Out, which heightens rather excessively when using social media to interact with other people. Maladaptive behavior on social media can be better understood when Fear of Missing Out is put into context (Alt, 2016).

Various works of literature about adult millennials aged 18-34 years old show that 70% of adult millennials acknowledge that they relate to Fear of Missing Out (the highest percentage of any generation). Similarly, 36% of adult millennials said that they experienced Fear of Missing Out on moderate or frequent basis. Most importantly, 46% of adult millennials said that their Fear of Missing out had been exacerbated by social media use (JWT Intelligence, 2012).

The higher an individual's Fear of Missing Out, the more immersed the individual will be in social media activities, including in online self-presentation (Alt, 2015). Social media makes individuals present themselves online, build communications, as well as

form and maintain relationships with other people (Clark & Roberts, 2010; Ellison, Steinfield, & Lampe, 2007).

Not only does Fear of Missing Out help explain the excessive use of social media amongst individuals, it also helps explain addiction to social media. This is strengthened further by the factor of personality which can influence levels of Fear of Missing Out (Blackwell, Leaman, Tramosch, Osborne, & Liss, 2017).

Fear of Missing Out is also used to mediate the effect of certain personality characteristics (emotional problems) on social media involvement (Przybylski, Murayama, DeHaan, & Gladwell, 2013). Individuals have the tendency to become more anxious, easily angered, and can feel either temporarily superior or inferior when looking at social media (JWT Intelligence, 2012). With constant and ongoing updates on social media between friends, it is nearly impossible for individuals to not know what others are doing and saying at every moment.

The number of friends a user has on social media will influence how frequently they present themselves positively online. A large number of friends on social media is considered to be a form of social affirmation towards the individual. Individuals tend to strive to keep presenting themselves positively online in order to maintain and add to the number of friends they have on social media (Kim & Lee, 2011). Therefore, Fear of Missing Out can explain the deep and excessive involvement of individuals in all social media activities, including the activity of online self-presentation.

Deep involvement in social media, influenced by Fear of Missing Out, is often done through a smartphone. This is understandable as smartphones can perform many tasks on social media in an intense and fast manner (Oberst, Wegmann, Stodt, Brand, & Chamarro, 2017).

The use of smartphones has become an essential part of global lifestyles. The widespread use of smartphones has triggered maladaptive behavior in relation to individuals' relations to the technology they use. Fear of Missing Out is considered a factor that pushes individuals to display excessive behavior in the use of smartphones (Elhai, Levine, Dvorak, & Hall, 2016).

Instagram prioritizes the visual nature of its platform and provides a range of editing features that enables its users to present themselves online in different ways. Self-presentation is a form of communication that can facilitate the maintenance of relationships (Baumeister, 1982). Other than that, online self-presentation is a form of behavior that shows how individual wishes to present themselves, and is a part of individuals' attachment to social media (Alt, 2015; Sanderson, 2008).

The impression that an individual present online relates to the social attachments that the individual wishes to feel within their community (Sanderson, 2008). Self-presentation aims to communicate one's self-image, but on the other hand, self-presentation also aims to communicate information about how the individual views relationships and partners. Other than that, it can also affect how partners feel about themselves (Overup, 2012).

According to Overup (2012), every Instagram user has different ways of presenting themselves based on who is viewing their Instagram content. When presenting themselves to strangers, users tend to self-enhance, when information is available and identifiable (Giacalone & Rosenfeld, 1986), and when information about themselves is indisputable (Schlenker & Leary, 1982). In different situations, users may use different strategies in presenting themselves to strangers, such as to "suck up to" (such as through flattery, giving conforming opinions, offering help, giving gifts), or offering prayers (for instance, through emphasizing limitations, powerlessness and dependence) (Schlenker, & Leary, 1982). In general, every person presents themselves to strangers in the way thought to be most advantageous to themselves (Schlenker & Leary, 1982), especially when predicting future interactions with their social media audience (Danheiser & Graziano, 1982).

It is different when individuals present themselves to their own friends on social media. Tice, Butler, Muraven, and Stillwell (1995) found in their study that users tend to present themselves more simply with their friends in comparison to with strangers, and even when a stranger is present, the individuals are still more likely to present themselves more simply.

Tice et al. (1995) assume that these differences in self-presentation stem from the fact that friends have more information about the individual. Therefore, simple self-presentation is intended to avoid projecting an image that their friends know is untrue. If they do not do this, they risk being rejected by their friends and damaging their relationships.

In short, individuals are involved in multiple forms of self-presentation towards their friends and to strangers. The expectations of friends are considered more important to individuals compared to the desire to impress strangers and future friends that the individual may interact with, even though the latter is uncertain.

From the elaboration above, it can be concluded that the relationship between friendship-contingent self-esteem and self-presentation is mediated by Fear of Missing Out.

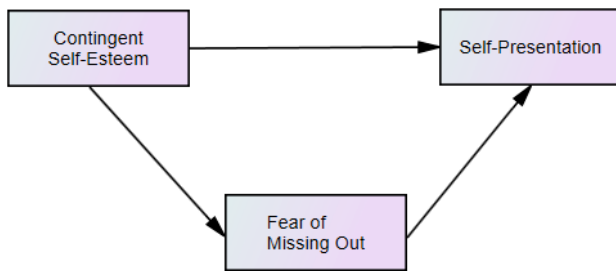


Figure 1. Theoretical Model

The hypotheses of this study are as follows:

H1: *To test the theoretical model of the effect of friendship-contingent self-esteem and fear of missing out on self-presentation*

H2: *Friendship-contingent self-esteem influences self-presentation.*

H3: *Friendship-contingent self-esteem influences fear of missing out*

H4: *Fear of missing out influences self-presentation*

The theoretical model is shown in Figure 1.

## 2. Methods

This study involved 326 people living in various provinces in Indonesia, which are Aceh, North Sumatera, West Sumatera, South Sumatera, Lampung, Banten, Jakarta, West Java, Central Java, Jogjakarta, East Java, and Bali. From these respondents, 85 people were male (26.1%) and the remaining 241 were female (73.9%). The age of the respondents ranged from 17 to 30 years of age ( $M = 21.44$ ;  $SD = 2.12$ ), classified into the under 20s group ( $n = 46$ ; 14/1%) and the 21-30 group ( $n = 280$ , 85.9%). The employment status of the respondents ranged from students ( $n = 19$ ; 5.8%), university students ( $n = 256$ ; 78.5%), employed ( $n = 48$ ; 14.7%), and unemployed ( $n = 3$ ; 0.9%). The majority of frequency of Instagram use was 30-60 minutes ( $n = 140$ ; 42%), over 60 minutes ( $n = 107$ ; 32.8%) and less than 30 minutes ( $n = 79$ ; 24.2%). Answering and collecting the questionnaires was voluntary through an online link using a Google Form questionnaire, distributed through messages and social media.

**Friendship-contingent self-esteem.** Friendship-contingent self-esteem is dependence on judgement of other people and the wellbeing of personal relationships. If individual feels that their friendship is not high-quality or is not prospective, this individual will feel bad about themselves (Cambron et al., 2010). The friendship-contingent self-esteem scale used in this study is the Friendship-Contingent Self-Esteem scale adapted from Cambron et al. (2010), which consists of 8 items and is unidimensional, and thus the model takes the form of observed variables. This instrument was translated to Bahasa Indonesia. One exemplary item from this scale

is, “*My overall feelings about myself are heavily influenced by how much my friends like me*”. There were 5 response options: Very Inaccurate, Inaccurate, Neutral, Accurate, and Very Accurate. No items were found to be dissatisfactory in the item discrimination power test. Furthermore, the reliability of the scale was tested using Alpha Cronbach and produced a result of 0.824.

**Fear of Missing Out (FoMO).** Fear of Missing Out is a feeling of discomfort which makes an individual feel left out, with the knowledge that their friends have something that the individual does not, or that their friends have something more meaningful than them (Abel et al., 2016).

The Fear of Missing Out scale used in this study was adapted from Przybylski et al. (2013), which consists of 10 items and is unidimensional, and thus the model takes the form of observed variables. This instrument was translated to Bahasa Indonesia. One example from the scale is, “*I get worried when I find out my friends are having fun without me*”. There were 5 response options: Very Inaccurate, Inaccurate, Neutral, Accurate, and Very Accurate. One item was found to be dissatisfactory in the item discrimination power test. The reliability of the scale was tested using Alpha Cronbach and produced a result of 0.796.

**Self-presentation.** Self-presentation is a different form of communication that can facilitate the maintenance of relationships (Baumeister & Schlenker in Overup, 2012). Self-presentation itself is the act of conveying a picture or presentation of oneself, including conveying information about how the individual perceives relationships and partners, and may influence how partners feel about themselves (Overup, 2012).

The scale used in this study is the scale for Self-Presentation Tactics in Social Media adapted and modified from Huang (2014), which consists of 4 dimensions, which are self-promotion, ingratiation, manipulation, and damage control, and has 12 items. In this model, self-presentation is a latent variable. This instrument was translated to Bahasa Indonesia. One example item from the scale is, “*I share my daily or travel photos on which I look good with friends in social media*”. There were 5 response options: Very Inaccurate, Inaccurate, Neutral, Accurate, and Very Accurate. After conducting the item discrimination power test, two items were found to be dissatisfactory in the self-promotion dimension. Furthermore, the scale produced an Alpha Cronbach value of 0.837.

After conducting the item discrimination power test and reliability test through Alpha Cronbach, the next step was to test the reliability of the instrument using the Average Variance Extracted (AVE) method. This was

necessary because the method of testing reliability considered more accurate for constellated variables is the AVE method. Widhiarso (2012) explains that the value of AVE should be a minimum of 0.5, which indicates that the latent constructs are measuring the intended information, and not something else. However, all three variables produced an AVE score of under 0.5; friendship-contingent self-esteem scored 0.499, Fear of Missing Out scored 0.388, and self-presentation scored 0.469. Therefore, the instrument used was unable to optimally explain the variables in this study.

Structural Equation Modelling (SEM) was used to analyse data in this study, using AMOS.

### 3. Results

The model was tested in several steps. First, the accuracy of the model was tested, and next the accuracy of each of the parameters was tested. The theoretical model in the conceptual framework would be characterized as “fit” if it is supported by empirical data.

The first step was conducted to discover the goodness of fit of the model.

The first empirical model in Figure 2 did not have goodness of fit because of the high Chi-Square score (76.458,  $p > 0.05$ ). The modification indices require that several elements needed to be converted to covariance form, in order for the model to fit a smaller Chi-Square value. Those elements were from the dimension of ingratiation to friendship-contingent self-esteem, from the dimension of self-promotion to ingratiation, and from the dimension of ingratiation to manipulation.

After the modification indices were used in Table 1 in accordance with the requirements, the second empirical model was then tested. The second empirical model had goodness of fit with a Chi-Square value of 5.722 ( $p > 0.05$ ). That being said, the problem of this model was the presence of covariance between constructs, as shown in Figure 3.

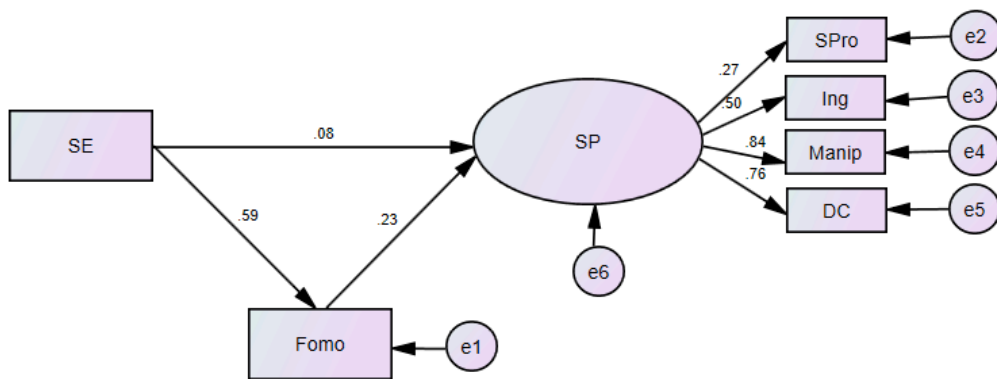


Figure 2. First Empirical Model

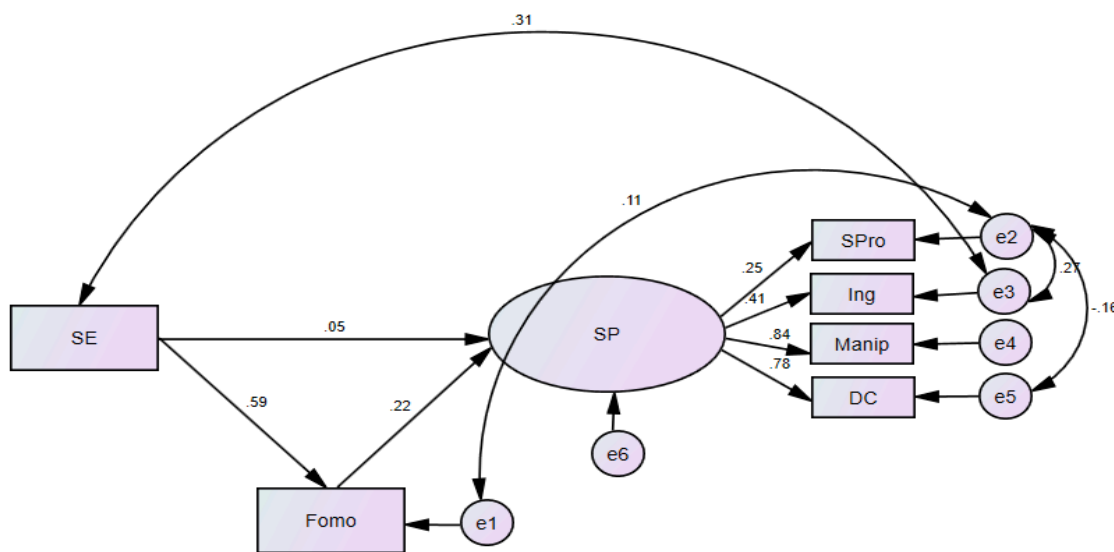


Figure 3. Second Empirical Model

Based on Figure 3 and Table 2, the dimensions of self-promotion and ingratiation in the self-presentation variable had a loading factor below 0.5 (self-promotion = 0.251 and ingratiation = 0.414), and thus self-promotion and ingratiation are both dimensions considered to not support the self-presentation variable.

Figure 3 also shows that the self-promotion and ingratiation dimensions have the smallest loading factors and need to be converted to covariance form with different constructs, which are friendship-contingent self-esteem and Fear of Missing Out. Correlation analysis results between parameters required of the modification indices are shown in Table 3.

On the other hand, the loading factor for the other self-presentation dimensions (manipulation and damage control) were relatively better, and thus could be maintained. However, the dimensions of self-promotion and ingratiation had to be dropped.

After the researcher reduced the self-promotion and ingratiation dimensions on the self-presentation variable and revised the model, the model had goodness of fit.

After obtaining a new, fit model, as displayed in Figure 4 and Table 4, Chi-Square results for the model were significant, showing 0.112 with a probability value of 0.738 ( $p > 0.05$ ). This significant probability Chi-Square value ( $p > 0.05$ ) signifies that there was no difference between the data and the mode. This shows that friendship-contingent self-esteem and Fear of Missing Out had impacts on self-presentation.

**Table 1. Covariance based on Modification Indices for First Empirical Model**

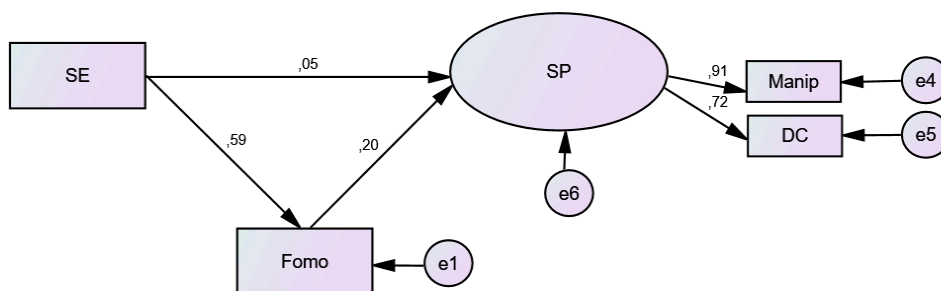
		M.I.	Par Change
e2 <-->	e1	6.655	0.569
e5 <-->	e2	9.352	-0.288
e3 <-->	SE	26.314	2.776
e3 <-->	e2	25.340	0.552

**Table 2. Regression Weights Standardized between Variables**

		Standardized Coefficients
Fomo <---	SE	0.593
SP <---	SE	0.049
SP <---	Fomo	0.221
Ing <---	SP	0.414
Manip <---	SP	0.840
DC <---	SP	0.788
SPro <---	SP	0.251

**Table 3. Correlations based on Modification Indices**

			Estimation
SE <-->	e3		0.315
e1 <-->	e2		0.109
e2 <-->	e3		0.269
e2 <-->	e5		0.160



**Figure 4. Third Empirical Model**

**Table 4. Results of Test on Third Empirical Model**

Goodness of Fit Coefficient	Test Result Value	Confidence level	Explanation
Chi-Square	0.112	df = 1 ; level of sig 5% = <3.84	Model is satisfactory
p-value	0.738	>0.05	Model is satisfactory
GFI	1.000	>0.90	Model is satisfactory
TLI	1.016	>0.90	Model is satisfactory
CFI	1.000	>0.90	Model is satisfactory
AGFI	0.998	>0.90	Model is satisfactory
RMSEA	0.000	<0.01	Model is good



**Table 5. Description of Regression Weights between Variables, Especially for Significance**

			Unstandardized Coefficients	Standardized Coefficients	S.E.	C.R.	P
Fomo	<---	SE	0.681	0.593	0.051	13.270	***
SP	<---	SE	0.021	0.055	0.028	0.742	0.458
SP	<---	Fomo	0.066	0.199	0.028	2.397	0.017
Manip	<---	SP	1.133	0.909	0.282	4.012	***
DC	<---	SP	1.000	0.723			

**Table 6. Empirical and Hypothetical Averages for All Variables**

Variable	Empirical Average	Hypothetical Average	Empirical Standard Deviation	Hypothetical Standard Deviation	Category
<i>Friendship-Contingent Self-Esteem</i>	29.31	24	4.61	5.33	Moderate
<i>Fear of Missing Out</i>	26.25	27	5.30	6.00	Moderate
<i>Self-Presentation</i>	22.52	30	5.94	6.67	Low

Looking at the results, it is evident that not all relationships between variables showed significant effects. The effect of friendship-contingent self-esteem towards self-presentation was found to be insignificant. On the contrary, significant effects were found between (1) friendship-contingent self-esteem on Fear of Missing Out, and (2) Fear of Missing Out on self-presentation. Therefore, Hypotheses 1, 3 and 4 are supported, while Hypothesis 2 is not supported. Concrete explanations are displayed in Table 5 and Table 6.

In general, friendship-contingent self-esteem participants were categorized as moderate. Similarly, Fear of Missing Out participants were also categorized as moderate, while self-presentation participants were categorized as low.

#### 4. Discussion

*Friendship-contingent self-esteem* did not influence the self-presentation of Instagram users. Results show a 0.055 coefficient and p-value of 0.458. This indicates that self-esteem that stems from friendship does not affect self-presentation on Instagram. The self-esteem of an individual who depends on friendships is not related to the way they present themselves to their friends on social media. According to Overup et al. (2015), specific forms of self-esteem do not have specific effects on online self-presentation. Self-esteem in general is considered to be a stronger influencing factor on online self-presentation. Cambron et al. (2010) explain that specific forms of self-esteem such as friendship-contingent self-esteem influence self-esteem in general. Friendship-contingent self-esteem can predict the instability of general self-esteem. This may explain why the impact of friendship-contingent self-

esteem is not as strong as self-esteem in general, even though general self-esteem relies on specific forms of it, like friendship-contingent self-esteem. Self-esteem in general has a strong influence on the online self-presentation of individuals (Djafarova & Trofimenko, 2017).

The results of this study are in line with research done by Kramer and Winter (2008) regarding the relationship between self-esteem and self-presentation on StudiVZ users. Their results showed that there was no significant relationship between self-esteem and self-presentation. Self-presentation was unrelated to use of StudiVZ and certain profile styles (Kramer & Winter, 2008).

The self-esteem of individuals does not rely on how intensely they feel about their relationships on Instagram and neither is it reliant on the quality of relationships with friends. It is not problematic for individuals to interact with their friends on social media without conveying a certain impression that they make on themselves. Thus, user uploads on Instagram do not affect the relationships of the user.

Through having a wide range of relationships, new types of audiences are created for the self-presentation of users on their profiles. This is evident from the fact that previously small friendship groups that interacted through meeting face-to-face and experiencing things together have now expanded to larger and more abstract groups. They are abstract in the sense that the members of these groups may be commercial entities, like members of bands or friends obtained through exclusive links and offline links (Manago, Graham, Greenfield, & Salimkhan, 2008).

These findings contradict research by Gonzales and Hancock (2011), who explained that the editing features on social media enable individuals to optimize their self-presentation, which can increase their self-esteem. This may imply that individuals might not feel the need to project themselves in certain ways on Instagram.

These findings are also not in line with findings from Cambron et al. (2010) who explained that friendship-contingent self-esteem is a factor that influences how individuals present themselves in personal relationships.

Fear of Missing Out was found to have a significant impact on the self-presentation of Instagram users, with a coefficient of 0.199 and p-value of 0.017. This means that there is a positive significant effect of the fear variable (Fear of Missing Out) on self-presentation on Instagram. Fear of Missing Out relates to the duration of social media use. The higher one's Fear of Missing Out, the more immersed the individual will be in social media activities, including self-presentation. These individuals need more time on social media, engaging in self-presentation activities such as updating one's status, uploading photos, location, etc. (Alt, 2015; Baker, Krieger, & LeRoy, 2016).

Fear of Missing Out helps explain individuals' immersive and even excessive use of social media, including self-presentation. This heavy use of social media, influenced by Fear of Missing Out, is usually done on smartphones. This is understandable as smartphones are able to perform many social media activities quickly and with heavy usage (Oberst et al., 2017).

These results are in line with findings from Kim and Lee (2011), who explain that the amount of friends an individual has on social media will push them to increase their positive self-presentation. Having a large number of friends on social media is perceived as a form of social affirmation. Individuals tend to strive to present themselves online in a positive light, in order to gain and maintain friends on social media. The main motive to present oneself on Internet sites is to convey a certain image that the individual finds desirable.

Papacharissi (2002) states that personal homepages on the Internet (which in this case refers to Instagram profiles), in accordance with Goffman's approach to self-presentation, can be used by individuals to control what they present online so as to shape a certain image that they convey to others. They present an image which they believe is in line with trends, feeling that this is the way for them to form relationships with other people, and also as a tool to develop social skills and deepen social ties (Przybylski et al., 2013).

One's online presentation enables them to change the aspects of their appearance, including their likes and dislikes, tastes, sense of humor, popularity, and other aspects of interaction that are impossible to change offline (Manago et al., 2008).

In line with Hkheadline's (2011) research regarding the self-presentation of Facebook users, it was found that Facebook users shape their image by adjusting their profiles, including their description, photos, connections with friends, and joining groups with similar people on Facebook. People can observe their Facebook posts to portray a positive image, while information from other users that might convey a negative or undesirable image can be hidden (Hkheadline, 2011).

Friendship-contingent self-esteem was found to be significantly impactful towards Fear of Missing Out of Instagram users, with a coefficient of 0.593 and p-value of 0.000. This signifies a positive significant effect of friendship-contingent self-esteem on the fear variable (Fear of Missing Out) on Instagram. People with positive self-esteem tend to self-enhance, particularly in public situations with the aim of being accepted by one's surroundings (Baumeister, 1982; Baumeister, Tice, & Hutton, 1989; Britt, Doherty, & Schlenker, 1997; Schutz & Tice, 1997), which in this case refers to situational involvement in social media. This kind of goal can be categorized as Fear of Missing Out, because in order to be accepted by their social media friends (especially Instagram friends), they use editing features to enhance their pictures and selfies, such as through the use of filters and hashtags to make their uploaded photos appear desirable to other users (Wendt, 2014).

Psychological symptoms can become strong predictors of Fear of Missing Out, such that when one's self-esteem is very reliant on personal relationships, negative tendencies will grow. These individuals become unable to see themselves as valuable without the presence and influence of friends they deem important. This negative tendency amongst individuals with friendship-contingent self-esteem is what pushes them to eventually develop Fear of Missing Out (Wegmann, Oberst, Stodt, & Brand, 2017).

The desire to have and to be had, including the desire to be with people deemed important is a factor that strongly influences Fear of Missing Out. Similarly, friendship-contingent self-esteem sometimes influences individuals to have a high desire to have and to be had. The better this need is fulfilled, the more positive the individual's self-esteem becomes. This means that individuals with high friendship-contingent self-esteem also have high Fear of Missing Out (Beyens, Frison, & Eggermont, 2016).

In situations where individuals are geographically separated from people they deem important, individuals become even more dependent on social media. Social media becomes an avenue to overcome barriers of time and space to maintain relationships, and thus becomes a form of social support. These conditions cause high levels of Fear of Missing Out, due to dependence towards relationships they deem important on social media (Hetz et al, 2015).

Furthermore, social media can also increase one's self-esteem, particularly self-esteem that results from the narcissism of upholding a positive image on social media, (Bergman, Fearington, Davenport, & Bergman, 2011). The narcissism of self-reporting on posting selfies on social media relates to the amount of time spent editing photos on social networking sites (Fox & Rooney, 2015, and by choosing certain profile pictures that accentuate physical attractiveness or the attractive personality of an individual (Kapidzic, 2013).

The average of the friendship-contingent self-esteem variable participants was categorized as moderate. This suggests that friendship-contingent self-esteem depends on the assessment of other people and the quality of friendships. If individual doubts the quality or prospective sustainability of their friendships, these individuals tend to feel bad about themselves (Cambron et al., 2010).

Positive self-esteem relates to positive will, particular the will to portray a positive impression to one's friends. Individuals tend to project different versions of themselves depending on the level of their self-esteem. People with high self-esteem tend to self-enhance, especially in public situations or when they receive negative feedback or threats (Baumeister, 1982; Baumeister et al.; Britt et al., 1997; Schutz & Tice, 1997).

Individuals with low self-esteem tend to protect themselves in their self-presentation and downgrade themselves in public or in threatening situations (Baumeister, 1982; Britt et al., 1997). This is in line with Swann's self-verification theory (in Cambron & Acitelli, 2010), which states that individuals are motivated to accept interpersonal feedback that is in line with their own self-conception; thus, for individuals with low self-esteem, this theory predicts that they will actually want and expect negative feedback from other people. On top of this, people with low self-esteem tend to only participate in online activities that boost their self-esteem (Mehdizadeh, 2010).

The average of the Fear of Missing Out variable participants was categorized as moderate. This suggests that the participants who filled in our questionnaire were moderately capable of overcoming imbalances in their psychological needs of social media, though not perfectly.

This is also supported by the fact that most of our participants were aged between 21 – 30 years old, categorized as young adults. According to Vaillant (in Papalia, Feldman, & Martorell, 2011), young adulthood is the phase in which people adjust to their adult lives and truly develop themselves, seek independence, get married, have children, and form close friendships.

Therefore, young adults are at the stage where they determine right from wrong and start forming priorities in their lives. This process does not happen perfectly, because as stated before, this is the stage of life where people are adjusting with adulthood.

The average of self-presentation variable of participants was categorized as low. This indicates that individuals can obtain higher levels of closeness or attachment, openness, trust, and optimism, with low levels of self-presentation. This may be because individuals who feel securely attached to their friends or other people might not feel the need to influence other people's views towards them. Additionally, this also enables individuals to feel comfortable with themselves and their relationships with other people.

Harter (in Manago et al., 2008) states that individuals who have reached adulthood have abstract concepts about themselves, and internalize social acceptance which transcends to how they present themselves. In their social interactions, adults aim to reflect values of togetherness, helping each other to consolidate their identities as they enter adulthood (Nurmi in Manago et al., 2008). Individuals tell stories about themselves to other people to develop and defend themselves (McLean, Pasupathi, & Pals, 2007).

## 5. Conclusions

This study found that Fear of Missing Out is an important factor in influencing the self-presentation of Instagram users. Based on analysis using empirical and hypothetical averages, we found that friendship-contingent self-esteem was moderate in participants and Fear of Missing Out was also moderate. However, self-presentation of the participants was low. This study contributes to literature regarding friendship-contingent self-esteem, fear of missing out, and self-presentation. Apart from that, this research also contributes by giving suggestions to communities of young adults (aged 21 – 30) to balance their social needs by joining certain communities that can shape their self-presentation to become more positive. Further research should be broader in addressing all of Indonesia, with different social and economic backgrounds and different cultures, and thus may encounter different behavioral patterns.

In addition, further research should focus on adolescents in specific, as this age group is usually in the phase of

self-discovery. As Fear of Missing Out is a variable relatively underexplored in research, further studies can use and develop Fear of Missing Out in relation to other variables, like personality. Fear of Missing Out is not only helpful in explaining the excessive use of social media, but can also help explain addiction to social media. With the factor of personality, this can exacerbate one's Fear of Missing Out. Moreover, further studies may consider using sharper and more accurate instruments to measure the relevant constructs, and develop research variables related to social media use, in order to obtain more complex results.

## References

- Abel, J. P., Buff, C. L., & Burr, S. A. (2016). Social media and the fear of missing out: Scale development and assessment. *Journal of Business & Economics Research, 14*(1), 33-44. Retrieved from <https://www.cluteinstitute.com/ojs/index.php/JBER/article/view/9554/9632>.
- Aditya, R. (2013, October 29<sup>th</sup>). *Okezone Techno*. Retrieved March 3<sup>rd</sup>, 2017, by Okezone: <http://techno.okezone.com/read/2013/10/29/363/888645/kevin-systrom-si-pencetus-lahirnya-instagram>.
- Alt, D. (2015). College students' academic motivation, media engagement and fear of missing out. *Computers in Human Behavior, 49*, 111-119. doi:10.1016/j.chb.2015.02.057.
- Alt, D. (2016). Students' well-being, fear of missing out, and social media engagement for leisure in higher education learning environments. *Current Psychology, 35*, 1-11. doi:10.1007/s12144-016-9496-1.
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII). (2016). *Infografis penetrasi & perilaku pengguna internet Indonesia survey 2016*. Retrieved September 12<sup>th</sup>, 2017, by <https://apjii.or.id/survei2016/download/3zkcUWB5KLNporYEVFR4A0tIuDZehf>.
- Baker, Z. G., Krieger, H., & LeRoy, A. S. (2016). Fear of missing out: Relationships with depression, mindfulness, and physical symptoms. *Translational Issues in Psychological Science, 2*, 275-282. doi:10.1037/tps0000075.
- Baumeister, R. F. (1982). A self-presentational view of social phenomena. *Psychological Bulletin, 91*, 3-26. doi:10.1037/0033-2909.91.1.3.
- Baumeister, R. F., Tice, D. M., & Hutton, D. G. (1989). Self-presentational motivations and personality differences in self-esteem. *Journal of Personality, 57*(3), 547-579. doi:10.1111/j.1467-6494.1989.tb02384.x.
- Bergman, S. M., Fearington, M. E., Davenport, S. W., & Bergman, J. Z. (2011). Millennials, narcissism, and social networking: What narcissists do on social networking sites and why. *Personality and Individual Differences, 50*, 706-711. doi: 10.1016/j.paid.2010.12.022.
- Beyens, I., Frison, E., & Eggermont, E. (2016). "I don't want to miss a thing": Adolescents' fear of missing out and its relationships to adolescents' social needs, Facebook use, and Facebook related stress. *Computers in Human Behavior, 64*, 1-8. doi:10.1016/j.chb.2016.05.083.
- Blackwell, D., Leaman, C., Tramposch, R., Osborne, C., & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. *Personality and Individual Differences, 116*, 69-72. doi:10.1016/j.paid.2017.04.039.
- Britt, T. W., Doherty, K., & Schlenker, B. R. (1997). Self-evaluation as a function of self-esteem, performance feedback and self-presentational role. *Journal of Social and Clinical Psychology, 16*(4), 463-483. doi:10.1521/jscp.1997.16.4.463.
- Buglass, S. L., Binder, J. F., Betts, L. R., & Underwood, J. D. (2016). Motivators of online vulnerability: The impact of social network site use and fomo. *Computers in Human Behavior, 66*, 248-255. doi:10.1016/j.chb.2016.09.055.
- Cambron, M. J., & Acitelli, L. K. (2010). Examining the link between friendship contingent self-esteem and the self-propagating cycle of depression. *Journal of Social and Clinical Psychology, 29*(6), 701-726. doi:10.1521/jscp.2010.29.6.701.
- Cambron, M. J., Acitelli, L. K., & Steinberg, L. (2010). When friends make you blue: The role of friendship contingent self-esteem in predicting self-esteem and depressive symptoms. *Personality and Social Psychology Bulletin, 36*(3), 384-397. doi:10.1177/0146167209351593.
- Clark, L. A., & Roberts, S. J. (2010). Employer's use of social networking sites: Asocially irresponsible practice. *Journal of Business Ethics, 95*, 507-525. doi: 10.1007/s10551-010-0436-y.
- Danheiser, P. R., & Graziano, W. G. (1982). Self-monitoring and cooperation as a self-presentational strategy. *Journal of Personality and Social Psychology, 42*, 497-505. doi:10.1037/0022-3514.42.3.497.
- Djafarova, E., & Trofimenko, O. (2017). Exploring the relationship between self-presentation and self-esteem of mothers in social media in Russia. *Computers in Human Behavior, 73*, 20-27. doi:10.1016/j.chb.2017.03.021.
- Elhai, J. D., Levine, J. C., Dvorak, R. D., & Hall, B. J. (2016). Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use.

*Computers in Human Behavior*, 63, 509-516. doi:10.1016/j.chb.2016.05.079.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168. doi: 10.1111/j.1083-6101.2007.00367.x.

Fajrina, H. N. (2016, Juni 27). *CNN Indonesia*. Retrieved March 3<sup>rd</sup>, 2017, by CNN Indonesia: <http://www.cnnindonesia.com/teknologi/20160623112758-185-140353/ada-22-juta-pengguna-aktif-instagram-dari-indonesia/>.

Fox, J., & Rooney, M. C. (2015). The dark triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites. *Personality and Individual Differences*, 76, 161-165. doi: 10.1016/j.paid.2014.12.017.

Giacalone, R. A., & Rosenfeld, P. (1986). Self-presentation and self-promotion in organizational setting. *The Journal of Social Psychology*, 126(3), 321-326. doi:10.1080/00224545.1986.9713592.

Gonzales, A. L., & Hancock, J. T. (2011). Mirror, mirror on my Facebook wall: Effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior, and Social Networking*, 14, 79-83. doi:10.1089/cyber.2009.0411.

Hetz, P. R., Dawson, C. L., & Cullen, T. A. (2015). Social media use and the fear of missing out while studying abroad. *Journal of Research on Technology in Education*, 47, 259-272. doi:10.1080/15391523.2015.1080585.

Hkheadline. (2011). 網民玩 FACEBOOK 助提升自我評價. Retrieved March 8<sup>th</sup>, 2017, by News Hkheadline: [http://news.hkheadline.com/dailynews/content\\_in/2011/03/03/140708.asp](http://news.hkheadline.com/dailynews/content_in/2011/03/03/140708.asp).

Huang, H. (2014). Self-presentation Tactics in Social Media. *2014 International Conference on Social Science (ICSS 2014)* (hal. 416-421). Chengdu, Sichuan: Atlantis Press.

JWT Intelligence. (2012, Maret 7). *JWT: Fear Of Missing Out (FOMO)*. Retrieved Maret 4, 2017, by slideshare: <https://www.slideshare.net/jwtintelligence/the-fear-of-missing-out-fomo-march-2012-update>.

Kapidzic, S. (2013). Narcissism as a predictor of motivations behind facebook profile picture selection. *Cyberpsychology, Behavior, and Social Networking*, 16, 14-19. doi: 10.1089/cyber.2012.0143.

Kim, J., & Lee, J. E. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends

and self-presentation on subjective well-being. *Cyberpsychology, Behavior, and Social Networking*, 14, 359-364. doi:10.1089/cyber.2010.0374.

Kim, Y., & Baek, Y. M. (2016). When is selective self-presentation effective? An investigation of the moderation effects of "self-esteem" and "social trust". *Cyberpsychology, Behavior, and Social Networking*, 17, 697-701. doi:10.1089/cyber.2014.0321.

Kramer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology*, 20(3), 106-116. doi:10.1027/1864-1105.20.3.106.

Lee, J. E., Moore, D. C., Park, E. A., & Park, S. G. (2012). Who wants to be "friend-rich"? Social compensatory friending on Facebook and the moderating role of public self-consciousness. *Computers in Human Behavior*, 28(3), 1036-1043. doi:10.1016/j.chb.2012.01.006.

Manago, A. M., Graham, M. B., Greenfield, P. M., & Salimkhan, G. (2008). Self-presentation and gender on MySpace. *Journal of Applied Developmental Psychology*, 29, 446-458. doi:10.1016/j.appdev.2008.07.001.

McLean, K. C., Pasupathi, M., & Pals, J. L. (2007). Selves creating stories creating selves: A process model of self-development. *Personality and Social Psychology Review*, 11, 262-278. doi:10.1177/1088868307301034.

Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 357-364. doi:10.1089/cyber.2009.0257.

Moon, J. H., Lee, E., Lee, J. A., Choi, T. R., & Sung, Y. (2016). The role of narcissism in self-promotion on Instagram. *Personality and Individual Differences*, 101, 22-25. doi:10.1016/j.paid.2016.05.042.

Nilsson, M. (2016). *"First, let me take a selfie": Young adults' self representation on instagram* (Master's Thesis). Malmö: Malmö University.

Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamorro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence*, 55, 51-60. doi:10.1016/j.adolescence.2016.12.008

Overup, C. S. (2012). *Who you are matters to how i 'show' myself: Self-presentation to friends and intimate partners* (Master's Thesis). Houston: University of Houston.

- Overup, C. S., Brunson, J. A., & Acitelli, L. K. (2015). Presenting different selves to different couple: Self-presentation as a function of relationship type and contingent self-esteem. *The Journal of General Psychology, 142*, 213-237. doi:10.1080/00221309.2015.1065787
- Papacharissi, Z. (2002). The internet as a public sphere. *New Media Society, 4*(1), 9-27. doi:10.1177/14614440222226244
- Papalia, D. E., Feldman, R. D., & Martorell, G. (2011). *Experience human development, 12<sup>th</sup> edition*. Singapore: McGraw-Hill.
- Pettijohn II, T. F., LaPiene, K. E., Pettijohn, T. F., & Horting, A. L. (2012). Relationships between Facebook intensity, friendship contingent self-esteem, and personality in U.S. college students. *Cyberpsychology: Journal of Psychology Research on Cyberspace, 6*(1), 1-7. doi:10.5817/CP2012-1-2
- Pineiro, C. R. (2016). *Social media use and self-esteem in undergraduate students*. (Master's Thesis). New Jersey: Rowan University.
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional and behavioral correlates of fear of missing out. *Computers in Human Behavior, 29*(4), 1841-1848. doi:10.1016/j.chb.2013.02.014
- Sanderson, J. (2008). The blog is serving its purpose: Self-presentation strategies on 38pitches.com. *Journal of Computer-Mediated Communication, 13*, 912-936. doi:10.1111/j.1083-6101.2008.00424.x
- Schlenker, B. R., & Leary, M. R. (1982). Audiences' reactions to self-enhancing, self-denigrating, and accurate self-presentation. *Journal of Experimental Social Psychology, 18*(1), 89-104. doi:10.1016/0022-1031(82)90083-X
- Schutz, A., & Tice, D. M. (1997). Associative and competitive indirect self-enhancement in close relationships moderated by trait self-esteem. *European Journal of Social Psychology, 27*(3), 257-273. doi:10.1002/(SICI)1099-0992(199705)27:3<257::AID-EJSP820>3.0.CO;2-1
- Sun, T., & Wu, G. (2012). Traits, predictors, and consequences of Facebook self-presentation. *Social Science Computer Review, 30*, 419-433. doi:10.1177/0894439311425978
- Tice, D. M., Butler, J. L., Muraven, M. B., & Stillwell, A. M. (1995). When modesty prevails: Differential favorability of self-presentation to friends and strangers. *Journal of Personality and Social Psychology, 69*, 1120-1138. doi:10.1037/0022-3514.69.6.1120
- Wegmann, E., Oberst, U., Stodt, B., & Brand, M. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence, 55*, 51-60. doi:10.1016/j.adolescence.2016.12.008
- Wendt, B. (2014). *The allure of the selfie: Instagram and the new self-portrait*. Amsterdam: Institute of Network Cultures. Retrieved from [http://networkcultures.org/wp-content/uploads/2014/10/The\\_Allure\\_of\\_Selfie\\_lo.pdf](http://networkcultures.org/wp-content/uploads/2014/10/The_Allure_of_Selfie_lo.pdf)
- Widhiarso, W. (2012). *Estimasi reliabilitas pengukuran dalam pendekatan model persamaan struktural*. Makalah (Unpublished). Yogyakarta: Fakultas Psikologi Universitas Gadjah Mada.
- Yang, C. C., & Brown, B. B. (2016). Online self-presentation on Facebook and self-development during college transition. *Journal of Youth Adolescence, 45*, 402-416. doi:10.1007/s10964-015-0385-y