

## Fear of Missing Out Scale Indonesian Version: An Internal Structure Analysis

Gayatri Wibaningrum<sup>1</sup>, Ciptari Dhienda Aurellya

Faculty of Psychology, Universitas Surabaya, Indonesia

s150118276@student.ubaya.ac.id<sup>1</sup>

### Abstract

*Fears of Missing Out (FOMO) is a form of anxiety that arises when someone uses social media. The FOMO scale has three components, namely Sense of Self/Self Esteem, Social Interaction/Extroversion, and Social Anxiety. The purpose of this study is to determine the number of dimensions that precisely measure the FOMO level of social media users. Factor analysis testing conducted on the FOMO Scale is exploratory factor analysis. Exploratory factor analysis is performed to determine the number of components that are most appropriate on the FOMO scale. This study involved 211 respondents who filled out the survey through Google Form. A total of 5 respondents were involved in the process of testing the Indonesian version of the FOMO scale measuring instrument and 2 respondents did not complete the demographic data. Therefore, 204 eligible respondents were used in the analysis process, namely undergraduate students and the frequency of social media checking in a day with an age range of 18-28 years. The results of the analysis show that the items on the Fear of Missing Out Scale are grouped into 3 components according to each component definitions.*

**Keywords:** *fear of missing out, social media, exploratory factor analysis.*

## Introduction

In the era of 4.0 *Industrial Revolution*, the use of internet has become an integral part of human life throughout the world, because there are so many benefits that provided from the internet. Based on Indonesian Internet Service Providers Association (APJII), there were 88.1 million internet users in Indonesia in 2014. The amount of social media users based on APJII, it states that there are 79 million Indonesians are active users of social media. As compared to the total of population of Indonesia, about 30% are active users of social media (Iskandar & Isnaeni, 2019). Based on the data that has been mentioned, it indicates that the presence of social media in our daily life are very inevitable. For many people especially for students, social media activities form a part inevitable habit and can even said as an addiction. Social media is a platform for communication, to get knowledge, entertainment or escape, a place to looking for something fun, and also expressing yourself (Abel, Buff, & Burr, 2016). In relation with using social media, this is closely related to problems in the use of social media. This is known as FOMO or Fear of Missing Out.

Based on research that has been done by JWT Intelligence in 2012, it is stated that 40% of internet users around the world experiencing Fear of Missing Out (FOMO). FOMO is a type of anxiety that appears when someone use social media. This anxiety will come up if they cannot open or use social media so that they do not know the latest information and also cannot see the activities carried out by their friends on social media (Sianipar & Kaloeti, 2019). FOMO is a form of anxiety that arises when someone uses social media. This anxiety will arise if they cannot open or use social media so that they do not know the latest information and also cannot see the activities carried out by their friends on social media (Sianipar & Kaloeti, 2019). FOMO is defined as a feeling of anxiety and fear when you feel left behind or when you see your friends are experiencing more pleasant things than what you experienced (Putri, Purnama, & Idi, 2019). When someone is consistently connected to social media and can see things that are overlooked, this will cause anxiety, experience dissatisfaction, and feel unworthy or valuable. The most prominent characteristic of FOMO is the fear of being left behind compared to friends on social media. According to Przybylski (2013), FOMO can be identified by the emergence of a desire to keep up-to-date or to be connected to what other people do. The development of FOMO in social media makes someone always want to find out what is happening on social media and this also increases the intensity of social media use in these individuals. One of the measurement instruments that can show a person's FOMO level is the FOMO scale. The FOMO scale is a measuring tool that was created and developed by Abel, Buff, and Burr in 2016 with the aim of knowing one's FOMO level in the use of social media. The FOMO scale has 10 items which are divided into 3 components, including Sense of Self/Self Esteem, Social Interaction/Extroversion, and Social Anxiety (Abel, Buff, & Burr, 2016). The Fear of Missing Outs scale has 8 response options ranging from 1 (never) to 8 (always).

First, the Sense of Self/Self Esteem component is a component that evaluate how the individual perceives themselves (Abel, Buff, & Burr, 2016). Self-esteem play a role in the addictive use of social media (Andreassen, 2015). Evaluation of core belief of self-esteem, attributions, schemas, and automatic thinking for generating general behaviors. This happened when someone thinks that they are being displeased by others or when someone feels that they have poor social skills, but on the other hand they have many friends or followers on social media. This is goes along with research which shows that someone with low self-esteem thinks that social media is a safe place for them to express themselves, this is also related to reports of negative relationships between people with high self-esteem and addiction the use of social media (Anwar & Fury, 2020).

Second, the social interaction component is a component that evaluate individual towards perceptions towards others, this component more focus on the shame that may arise and the level of comfort when

interacting with other people (Abel, Buff, & Burr, 2016). Social interaction is a type of interaction or relationship that involving individuals along with other individuals, individuals with groups, and between groups and groups. This social interaction is based on the existence of imitation, suggestion, identification, and sympathy which causes the social interaction process singularly or simultaneously (Soekanto, 2001). The definition of interaction itself is a reciprocal relationship that occurs between two or more people and each of them plays an active role (Prasanti & Indriani, 2017).

Third, the Social Anxiety component is a component that evaluate the level of anxiety that specifically appear when using social media (Abel, Buff, & Burr, 2016). Social Anxiety also associated with sensitivity to rejection. This rejection sensitivity includes excessive expectations, the perception of anxiety, and excessive reactions to rejection (Downey, 1996). People with high rejection sensitivity often express their anxiety over the possibility of saying “no” in response to a request for help from a friend or relative, and often expect to be rejected in ambiguous social situations (Berenson, et al., 2009). Social Anxiety is defined as a specific and lasting fear that a person from various social situations has when they feel that they are being observed by others and have an irrational fear that their behavior is subject to criticism and rejection given by others (Stein & Stein, 2008). There are several studies said that low self-esteem is one of the psychological predisposing factors associated with people with social anxiety. Based on research conducted by Kocovski and Endler on social anxiety, it shows that someone who evaluates themselves negatively tends to be more susceptible to experiencing social anxiety (Apaolaza, Hartmann, D'Souza, & Gilsanz, 2019).

Based on the components on the Fear of a Missing Out Scale, this measuring instrument is composed of psychological elements, such as how individuals perceive themselves and their achievements, how individuals interact with others, and levels of anxiety in using social media. The data analysis conducted in this study was exploratory factor analysis and testing of the Cronbach's Alpha reliability coefficient. Exploratory factor analysis is one type of factor analysis that aims to see the grouping of items, get the most appropriate number of factors (components or dimensions), and which factors may intersect with other factors (Yong & Pearce, 2013). Meanwhile, the reliability test was carried out to measure and determine the consistency of the measured data (Azwar, 2008). This study aims to determine the exact number of component factors of the FOMO scale to measure the level of FOMO for social media users.

## Methods

The adaptation of the FOMO scale measuring instrument into Indonesian was carried out referring to the guidelines from the International Test Commission (Hambleton, 2005). Shigenobu (2007) states that back translation can improve the quality of translation results. According to this guidance, includes translation from English to Indonesian which is carried out by 1 independent translator, then put through it the accuracy of the translation made by 1 the reviewer, then does the translation from the Indonesian version which has been checked for accuracy by a reviewer returns to English which is carried out by 1 independent translator which is different from the initial translation process, and the last one conducted trials on several respondents to find out the respondent's understanding of the instrument measure the Indonesian version of the FOMO Scale.

This study involved 211 respondents who filled out a survey via google form. There were 5 respondents involved in the Indonesian version of the FOMO Scale trial process and 2 respondents did not complete the demographic data. Therefore, 204 eligible respondents were used in the analysis process. The requirements stated in this survey are adjusted to the original journal FOMO scale measuring instrument, which is undergraduate students and their frequency of checking social media in a day (Abel, Buff, & Burr, 2016).

The sampling technique using accidental sampling, where anyone who meets the criteria will be taken as a sample (Neuman, 2014). The sample of respondents obtained ( $n = 204$ ) were students at undergraduate level (S1) with an age range of 18-28 years who came from different universities in Surabaya, consisting of 69% ( $n = 141$ ) women and 31% ( $n = 63$ ) male. The criteria for undergraduate students (S1) were chosen because individuals who are in the age range of emerging adult development, which is 18 to 25 years of age (Arnett, 2006) and early adulthood, which is the early age of 20 to 30 years (Santrock, 2012) are Active social media users who are susceptible to experiencing social media addiction (Majorsy, Kinasih, Andriani, & Lisa, 2013), one of which is the phenomenon of Fear of Missing Out (FOMO). With the distribution of this survey among undergraduate students (S1), it was found that 23% ( $n = 46$ ) were 2nd semester students, 68% ( $n = 139$ ) were 4th semester students, 7% ( $n = 15$ ) 6th semester students, and 2% ( $n = 4$ ) 8th semester students. The researcher also asked the frequency of checking social media in a day, the distribution was as follows: A total of 7% ( $n = 15$ ) checked social media 1-4 times a day, 22% ( $n = 45$ ) checking social media 5 - 9 times a day, 34% ( $n = 68$ ) checking social media 10-15 times a day, and 37% ( $n = 76$ ) checking social media more than 15 times a day.

The data that has been collected is then tested for data analysis using IBM SPSS Statistics 21 software. These data go through 2 internal structure analytical tests, including exploratory factor analysis and reliability testing

## Results and Discussion

### Results

Based on testing the factor analysis of the FOMO scale using exploratory factor analysis, it was found that 4 dimensions were the best proposals for grouping the 10 items. The grouping based on the results of factor analysis is the loading factor value of the Sense of Self/Self Esteem, Social Interaction/Extroversion, and Social anxiety component, starting from -0.508 to 0.905 (KMO = 0.657; Sig <0.001). The results of grouping items on the Fear of Missing Out Scale are based on the following factor analysis:

**Table 1.** Rotated Component Matrix

| Item(s)<br>Code | COMPONENT                            |                                    |                                    |                |
|-----------------|--------------------------------------|------------------------------------|------------------------------------|----------------|
|                 | Social Interaction /<br>Extroversion | Sense of Self /<br>Self Esteem (A) | Sense of Self /<br>Self Esteem (B) | Social Anxiety |
| SS_1*           |                                      | -0.508                             | 0.531                              |                |
| SS_2*           |                                      |                                    | 0.867                              |                |
| SS_3*           |                                      |                                    | 0.881                              |                |
| SS_4            |                                      | 0.878                              |                                    |                |
| SS_5            |                                      | 0.865                              |                                    |                |
| SI_6            | 0.826                                |                                    |                                    |                |
| SI_7            | 0.833                                |                                    |                                    |                |
| SI_8            | 0.723                                |                                    |                                    |                |
| SA_9            |                                      |                                    |                                    | 0.822          |
| SA_10           |                                      |                                    |                                    | 0.905          |

Researchers also conducted reliability testing using the Cronbach's Alpha reliability coefficient. The results of the reliability analysis based on the initial blueprint and after the factor analysis (we use the initial blueprint because all items are retained on their respective components) show the overall FOMO

scale the number of items is 10 ( $N = 204$ ) with a mean value of 38.505; variance 78.892; and a standard deviation of 8.882 has a reliability coefficient of 0.763 with a range of the Corrected Item-Total Correlation (CITC) coefficient moving between 0.365 to 0.517 ( $R = 0.152$ ).

While the reliability results and the CITC value which shows the internal consistency of each item based on the initial blueprint and after conducting factor analysis for each component is presented in the following table:

**Tabel 2.** Cronbach's Alpha Value and Corrected Item-Total Correlation (CITC)

| Item(s)' Code | Component                               | Cronbach's Alpha | CITC  |
|---------------|---|------------------|-------|
| SS_1*         | <i>Sense of Self/ Self Esteem (A)</i>   | 0.711            | 0.389 |
| SS_2*         |   |                  | 0.583 |
| SS_3*         |   |                  | 0.657 |
| SS_4          | <i>Sense of Self/ Self Esteem (B)</i>   | 0.809            | 0.367 |
| SS_5          |   |                  | 0.518 |
| SI_6          | <i>Social Interaction/ Extroversion</i> | 0.749            | 0.571 |
| SI_7          |   |                  | 0.632 |
| SI_8          |   |                  | 0.529 |
| SA_9          | <i>Social Anxiety</i>                   | 0.752            | 0.622 |
| SA_10         |   |                  | 0.622 |

\*Unfavorable item(s)

This reliability result is obtained without deleting any items because the coefficient values of Cronbach's Alpha and CITC are already good.

## Discussion

Based on the results of the exploratory factor analysis test, the items on the FOMO (Fear of Missing Out) scale which initially contained 3 components (Abel, Buff, & Burr, 2016), were changed to 4 components. In this study it was found that the unfavorable items in the Sense of Self/Self Esteem dimension formed a new factor component that was split from favorable points on the same dimension. The items in the Sense of Self/Self Esteem component are divided into 2, namely in items 1, 2, and 3 as components of Sense of Self/Self Esteem (A) which are unfavorable items and items number 4, and 5 as components of Sense of Self / Self Esteem (B) which are favorable items. However, if we look semantically or by definition of its components, these items refer to the same construct. Meanwhile, the items in the Social Interaction/Extroversion and Social Anxiety components stand alone in their respective components.

The formation of new factors as found in this study is called artifactual factor according to Spector (1997), which is a factor arising from inaccuracies in measurement or factors that appear or are observed but are not actually there. Several studies mention the possible causes of how the artifactual factors composed of unfavorable items appear, including the large number of unfavorable items (Widhiarso, 2017), this can be seen from the number of items in the Sense of Self/Self Esteem component. has a proportion of 3 unfavorable items and 2 favorable items. In addition, artifactual factors can also arise due to the influence of respondents who are less able to understand the existence of unfavorable items (Cordery & Sevastos, 1993) and carelessness in the way respondents respond to items (Schmitt & Stults, 1985). Unfavorable items can cause measurement errors (Bradley, Royal, & Bradley, 2008). Research conducted by Sonderen, Sanderman, & Coyne (2013), using unfavorable items as a form of prevention of bias responses is a counterproductive strategy and prefers a measuring instrument where all the points

are arranged in one direction (favorable) in accordance with purpose of each dimension. In addition, the emergence of new factors in the Sense of Self / Self Esteem component is assumed to occur because the items presented do not pay attention to the details of the purpose of making the items. In making items, there are things that are important to pay attention to, namely the limits of the scope of the items, the people who are the respondents, and the language used must be short, clear, and not wordy (Azwar, 2008).

To confirm the existing findings, the researcher also reviewed the five items of the Sense Self/Self Esteem component, namely item number 1 to 5. The five items are correct in describing the definition of the Sense of Self / Self Esteem component, which is the item that assesses the individual's perception of himself. Sense of Self is a person's description of himself. How deeply a person knows himself is often influenced by his environment so that it also has an impact on his behavior in the environment. People with Sense of Self will feel that they know themselves, this also has something to do with that person's Self Esteem. People who have a high Sense of Self will easily determine the daily behaviors that will be raised and tend to have autonomy or independence so that it is not easy to depend on the people around them (Irel, 2017). Based on the theory, Self-Esteem is defined as one's own ability which is the result of someone who has a Sense of Self. Someone with Self Esteem has confidence in his ability to do things in his life. People with high Self Esteem will always look positively towards themselves, and also feel confident that they are someone who deserves to be relied on (Yuniarti, Sulasmini, Rahmadhani, Rohaeti, & Fitriani, 2018). Based on the explanations described above, the researcher agrees that items number 1 to 5 are in accordance with the definition of the Sense of Self/Self Esteem component.

Based on the results of the reliability analysis, it can be seen that the FOMO scale has a reliability coefficient in the range of 0.7 and above based on both the initial blueprint and after doing exploratory factor analysis. This indicates that the Fear of Missing Out Scale has good internal consistency.

## Conclusion

Thus, the results of this study can be concluded that the number of components on the Fear of Missing Out (FOMO) scale after doing exploratory factor analysis is still maintaining 3 components, same with the theory, because the items in the Sense of Self/Self Esteem component splitting into 4 components is the result of the inappropriate use of unfavorable items. In addition, all items on the FOMO scale have good factor loading and reliability tests. However, in the use of this measuring instrument for subsequent studies, researchers need to further consider the use of this measuring instrument.

In an effort to improve the accuracy of the Indonesian version of the FOMO Scale measuring instrument, researchers suggest adding items to the Social Anxiety component so that the data obtained can describe the results more precisely and ensure in advance that respondents have understood and are aware of this FOMO phenomenon. Researchers also suggest making improvements to items or adding favorable points to the Sense of Self/Self Esteem component. Expected items are items that can be understood by the respondents so that they do not cause a difference in perception. Researchers also suggest testing respondents' understanding with the Think Aloud Protocol on some respondents or by involving more respondents in the first trial process after the measuring instrument has been translated into the Indonesian version. In addition, to obtain more complete and precise research results, the researcher also suggests conducting other statistical analysis tests that can obtain more accurate validation results so that this measuring tool can help further research related to the Fear of Missing Out phenomenon in Indonesia.

## 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.
- Andreassen, C. S. (2015). Online social network site addiction: A comprehensive review. *Current Addiction Reports*(2), 175-184.
- Anwar, Z., & Fury, E. D. (2020). The Fear of Missing Out and Usage Intensity of Social Media. *Advances in Social Science, Education and Humanities Research: 5th ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2019)*, 395, 183-187.
- Apaolaza, V., Hartmann, P., D'Souza, C., & Gilsanz, A. (2019). Mindfulness, compulsive mobile social media use and derived stress: The mediating roles of self-esteem and social anxiety. *Cyberpsychology, Behavior, and Social Networking*, 22(6), 388-396. doi:10.1089/cyber.2018.0681
- Arnett, J. J. (2006). Emerging adulthood in Europe: A response to Bynner. *Journal of Youth Studies*, 9(1), 111-123. doi:10.1080/13676260500523671
- Azwar, S. (2008). *Penyusunan skala psikologi*. Yogyakarta: Pustaka Belajar.
- Berenson, K. R., Gyurak, A., Ayduk, O., Downey, G., Garner, M. J., Mogg, K., & et al. (2009). Rejection sensitivity and disruption of attention by social threat cues. *Journal of Research on Personality*, 43(6), 1064-1072. doi:10.1016/j.jrp.2009.07.007
- Bradley, K., Royal, K., & Bradley, J. (2008). An investigation of 'honesty check' items in higher education course evaluations. *J Coll Teach Learn*, 5(8), 39-48.
- Cordery, J. L., & Sevastos, P. P. (1993). Responses to the Original and Revised Job Diagnostic Survey - Is Education a Factor in Responses to Negatively Worded Items. *Journal of Applied Psychology*, 78(1), 141-143.
- Downey, G. &. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, 70(6), 1327-1343.
- Hambleton, R. K. (2005). Issues, designs and technical guidelines for adapting tests into multiple languages and cultures. In R. K. Hambleton, P. F. Merenda, & C. D. Spielberger (Eds.), *Adapting educational and psychological tests for cross-cultural assessment* (pp. 3-38). Mahwah, NJ, US: Erlbaum.
- Irel, I. R. (2017). Hubungan Sense of Self dengan Kecenderungan Perilaku Bullying. *Psikodimensia*, 16(1), 91-106.
- Majorsy, U., Kinasih, A., Andriani, I., & Lisa, W. (2013). Hubungan antara keterampilan sosial dan kecanduan situs jejaring sosial pada masa dewasa awal. *Proceeding PESAT (Psikologi, Ekonomi, Sastra, Arsitektur & Teknik Sipil)*, 5, 78-84.
- Neuman, W. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Harlow: Pearson Education.
- Prasanti, D., & Indriani, S. S. (2017). Interaksi sosial anggota komunitas Let's Hijrah dalam media sosial group Line. *Jurnal The Messenger*, 9(2), 144-152.
- Przybylski, A. K. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in human behavior*, 29(4), 1841-1848.
- Putri, L. S., Purnama, D. H., & Idi, A. (2019). Gaya hidup mahasiswa pengidap Fear of Missing Out di kota Palembang. *Jurnal Masyarakat&Budaya*, 21(2), 129-148.
- Santrock, J. W. (2012). *Life-span development: Perkembangan masa hidup* (13th ed.). (N. Sallama, Ed., & B. Widiasinta, Trans.) Jakarta: Penerbit Erlangga.
- Schmitt, N., & Stults, D. M. (1985). Factors Defined by Negatively Keyed Items - the Result of Careless Respondents. *Applied Psychological Measurement*, 9(4), 367-373.
- Shigenobu, T. (2007). Evaluation and usability of back translation for intercultural communication.

*Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 4560 LNCS (PART 2), 259–265. doi:10.1007/978-3-540-73289-1\_31.

- Sianipar, N. A., & Kaloeti, D. V. (2019). Hubungan antara regulasi diri dengan Fear of Missing Out pada mahasiswa tahun pertama fakultas psikologi Universitas Diponegoro. *Jurnal Empati*, 8(1), 136-143.
- Soekanto, S. (2001). *Sosiologi suatu pengantar*. Jakarta: PT Raja Grafindo Persada.
- Sonderen, E., Sanderman, R., & Coyne, J. (2013). Ineffectiveness of reverse wording of questionnaire items: Let's learn from cows in the rain. *PLoS ONE*, 8(7), 1-7. doi:10.1371/journal.pone.0068967.
- Spector, P. E., Van Katwyk, P. T., Brannick, M. T., & Chen, P. Y. (1997). When Two Factors Don't Reflect Two Constructs: How Item Characteristics Can Produce Artifactual Factors. *Journal of Management*, 23(5), 659-677. doi:10.1177/014920639702300503
- Stein, M. B., & Stein, D. J. (2008). Social anxiety disorder. *The Lancet*, 371, 1115–1125.
- Widhiarso, W. (2017, Februari 4). *Peranan butir unfavorabel dalam menghasilkan dimensi baru dalam pengukuran psikologi*. Retrieved from Belajar Metodologi Penelitian: <https://widhiarso.staff.ugm.ac.id/wp/peranan-butir-unfavorabel-dalam-menghasilkan-dimensi-baru-dalam-pengukuran-psikologi/>.
- Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), 79-94. doi:10.20982/tqmp.09.2.p079
- Yuniarti, N., Sulasmini, L., Rahmadhani, E., Rohaeti, E. E., & Fitriani, N. (2018). Hubungan kemampuan komunikasi matematis dengan self-esteem siswa SMP melalui pendekatan contextual teaching and learning pada materi segi empat. *Jurnal Nasional Pendidikan Matematika*, 2(1), 62-72.