

Fear of Missing Out (FOMO) and Social Media Addiction on Instagram among Adolescents Fear of Missing Out (FOMO) dan Adiksi Media Sosial Instagram pada Remaja

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Abstract :

This study examines the influence of Fear of Missing Out (FoMO) on Instagram Addiction among adolescents in the context of the rapid development of the internet and social media. The internet, especially Instagram, has become very popular among adolescents, providing convenience and creativity but also triggering FoMO, which is defined as the anxiety of missing out on other people's experiences. Quantitative methods were used using regression analysis with FoMO as a predictor and Instagram Addiction as the dependent variable. The ANOVA results showed that the regression model was significant ($F = 15.210$, $p < 0.001$), while the regression coefficient indicated a positive effect of FoMO on Instagram Addiction ($B = 0.005$, $p < 0.001$). These findings indicate that every one-point increase in FoMO corresponds to a 0.005-point increase in Instagram Addiction (logIG). In conclusion, FoMO is a significant predictor of Instagram Addiction, implying that higher levels of FoMO increase the likelihood of addictive behavior on Instagram, underscoring the importance of addressing FoMO in understanding adolescent digital behavior.

Keywords:

fear of missing out; social media addiction; instagram

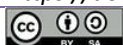
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1. Introduction

Currently, the use of internet technology allows access to many applications and websites for various information or the latest news. This information comes in the form of videos, images, writings, or articles according to the user's wishes. The convenience and suitability of social media users' needs make individuals tend to use social media. The use of social media is also easily accessible using smartphones through the internet, allowing it to be accessed anywhere and anytime users utilize various social media such as WhatsApp, Twitter, Instagram, and others. The development of the internet with various types of social media can influence the development of adolescents. Current technological updates can involve many people so that they remain up to date with existing developments, including adolescents. One of the technologies that is enjoyed by adolescents is the Internet. According to APJII survey data, Internet users in Indonesia increased by 27.91 million (10.12%) in 2018, reaching 171.18 million (64.8%) out of a total population of 264.16 million people. Among various social media applications, Instagram is currently more favored by adolescents. In other words, users can develop their own creativity by drawing inspiration from various features available on Instagram to produce more interesting and better photos and images (Saputera & Tamburian, 2018). Instagram is a social media platform where users can upload photos, comment on each other's posts, and easily express their interest in content via the Internet, as well as receive information posted quickly. This is why Instagram comes from the term 'instant telegram' (Prawitasari, 2012).

The tendency to use social media as a communication tool and to convey information makes internet users afraid of missing out on the latest updates, a phenomenon known as Fear of Missing Out (FOMO), as stated by Przybylsky, Dehaan & Gladwell (Przybylski et al., 2013) which defines Fear of Missing Out (FoMO) as the fear that individuals feel when they cannot see the experiences or activities of others and the desire to always be up to date with what others are doing. Adolescents

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spend an average of 2.7 hours per day, according to the Fear of Missing Out survey conducted by the Australian Psychological Society (APS, 2015). The fear of missing out occurs in 50% of teenagers and 25% of adults. The study shows that teenagers, in particular, have a higher level of fear of missing out compared to the adult group. The fear of missing out can continue to persist in teenagers, especially if it influences Instagram users. Social media itself can certainly have many positive effects for teenagers, but it can also have negative impacts on their lives if they cannot control their use of social media (Weinstein, 2018). Teenagers in today's digital world often feel a strong need to be involved and not to miss out on anything (Odgers & Jensen, 2020). Excessive fear of being disconnected from a smartphone is closely linked to Instagram addiction and the experience of FOMO, as individuals heavily rely on social media to maintain constant connection and avoid missing out on social interactions (Fuady dkk., 2024).

Based on the observations that have been made, currently, many new features provided by the Instagram application are often utilized by teenagers or students of SMK PGRI 2 Malang in various places and under any circumstances. The use of smartphones by students is not completely prohibited, as some teachers employ teaching methods that require students to search the Internet and have Wi-Fi facilities in every classroom. However, during class activities, many students take the opportunity to secretly open and create stories on their personal Instagram accounts, even though there are school regulations that explain the restrictions on smartphone use during lessons. Nevertheless, these regulations are rarely followed by students, allowing them to continue using smartphones inappropriately during the learning process. As a result, some teachers who regret this reported the issue to the guidance counselor so that it could be addressed promptly. The excessive use of smartphones is what is feared to lead to students' tendencies to use Instagram, causing them to lose focus during class.

Furthermore, the research found a strong relationship between FoMO and social media addiction. Blackwell et al. (2017) demonstrated that FoMO is a significant predictor of excessive social media use, while Elhai et al. (2020) explained that FoMO acts as a mediator between social media use and negative psychological symptoms, such as anxiety and depression. This condition reinforces the understanding that FoMO not only drives excessive engagement on social media but also exacerbates the negative impact of that addiction on mental health.

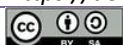
The novelty of this research lies in the analysis of the role of Fear of Missing Out (FoMO) as a psychosocial factor that strengthens the tendency towards social media addiction. Unlike previous studies that have largely highlighted FoMO as a psychological phenomenon related to anxiety or life satisfaction (Blackwell et al., 2017; Elhai et al., 2020; Przybylski et al., 2013), this research specifically positions FoMO as a key variable that is not only related to the frequency of use, but also to the quality of an individual's attachment to social media. Thus, this research provides a new perspective in understanding the mechanisms of social media addiction and expands the academic contribution to the study of digital psychology, particularly in the context of adolescents and students in Indonesia.

2. Methods

This research uses quantitative research methods with regression techniques to analyze the influence between "fear of missing out" (X) and "Instagram social media addiction" (Y) on the teenage population. The sampling technique used is convenience sampling. The subjects in this study are adolescents at SMK PGRI 02 Kota Malang, with a sample size of 127, aged 15-18 years, who are active Instagram users.

The researchers collected data through questionnaires that used a Likert scale. To measure Fear of Missing Out (FOMO), the study used a scale developed by Sette et al. (2020), namely online Fear of Missing Out (ON-FoMO), which consists of 4 aspects: Anxiety, need to belong, addiction, and need for popularity. This scale has good reliability with a Cronbach's alpha of $\alpha = 0.89$. Meanwhile, to measure addiction to the Instagram social media, the researchers used The Instagram Addiction Scale (TIAS) developed by Griffiths (2005) and adapted by Sholeh, A. & Rusdi, A. (2019), with a reliability of Cronbach's alpha $\alpha = 0.91$. The TIAS scale includes several aspects such as Salience, Tolerance, Mood Modification, Relapse, Withdrawal, and Conflict.

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3. Results

The research involved 127 students of SMK PGRI 2 Malang, in which 84 persons from Grade X and 43 persons from Grade XII. They are specialized in Digital Business, Computer Technique and Network, Visual Communication Design, Marketing Management, and Accounting. Meanwhile, 32,3 % were male and 67,7% were female.

Table 1. Fear of Missing Out and Instagram Addiction Categories

Variable	Category	Criterion	Frequency	Percentage
Fear of Missing Out	Low	$X < 48$	18	14,17%
	Medium	$48 \leq X \leq 70$	95	74,80%
	High	$X > 70$	14	11,02%
Instagram Addiction	Low	$X < 34$	18	14,17%
	Medium	$34 \leq X \leq 74$	83	63,35%
	High	$X > 74$	26	20,47%

The majority of participants sit in the medium category. It means that a greater portion of students experience a high level of FoMo which influences behavior, but it is not in the extreme category, while a small portion of students have either a high level of FoMo or a very low one. Analysis on social media such as Instagram shows its intense use of this media, but the majority of students has not reached a heavy addiction level yet. Although the majority is in the medium category, yet the percentage is still considered significant (20.47%). This figure may mean that a group of students is experiencing negative influence of excessive use of Instagram.

Table 2. Descriptive Fear of Missing Out and Instagram Addiction

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Fear of Missing Out	127	48	70	59	11
Instagram Addiction	127	34	74	54	20

Based on a descriptive analysis of the table above, Fear of Missing Out (FoMO) variable obtains 48 on minimum score and 70 on maximum score with mean score of 59 and standard deviation of 11. In general, it shows that participant's FoMo level is at medium level, with a wide spread of score between respondents. Meanwhile, minimum score on Instagram Addition Variable is 34 and maximum one is 74, with average of 54 and standard deviation of 20. This medium average score does indicate that the majority of students intensely use Instagram, but do not show a heavy addiction. The relatively high standard deviation score on Instagram means that there is a wide variation of usage among students and that there is a group of students with higher risk than others.

A normality test is conducted to understand if a research data is distributed normally. A normal distribution is required so to obtain a non-biased regression coefficient distribution and to enable appropriate interpretation. The normality test used the Komogorov-Smirmov Test using SPSS program. Based on the normality test result of residuals, a significant score of 0.000 (< 0.05) is obtained, and this indicates that residual data is not distributed normally. This means that data abnormality exists in which it may be caused by abnormal response scores from some respondents, for example, giving similar scores consistently (such as, answering all items with 2 or 5 score). Hence, it is suggested to provide data transformation as near as possible to normalities if it is to obtain the validity result of regression analysis. This transformation is aimed at improving data distribution by reducing skewness and at narrowing impact of extreme score.

Table 3. Normality Test Result after Data Transformation
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
logIG	.071	127	.196	.976	127	.022
a. Lilliefors Significance Correction						

After the transformation is conducted, the result of the normality test shows that the significant score is increasing to $P=0.196$ ($p > 0.05$) and which can be concluded that the data has been distributed normally. Consequently, the variables meet normality assumption so that an analysis can be continued to the next assumption test. After the normal data distribution is obtained, a linearity test is then held to explore if there is a linear relationship between a free variable (Fear of Missing Out) with a dependent variable (Instagram Addiction). Linearity is an important requirement of linear regression because a regression model assumes that changes in the free variable do make equal changes in the dependent variable. Without linearity, a regression model can not make accurate assumptions. The analysis shows that relation between FoMo as a variable and Instagram Addiction (after transformation) as another one shows a significant $P= 0.587$ ($p > 0.05$). It means that there is a linearity relation between the two variables by which then it opens an access to continue toward simple linear regression analysis.

Residual normality test is conducted to ensure that remains (residue) from the regression model is distributed normally, in accordance with basic linear regression assumption. A test is conducted in three methods: histogram analysis, Normal P-P Plot, and Kolmogorov-Smirnov statistic test.

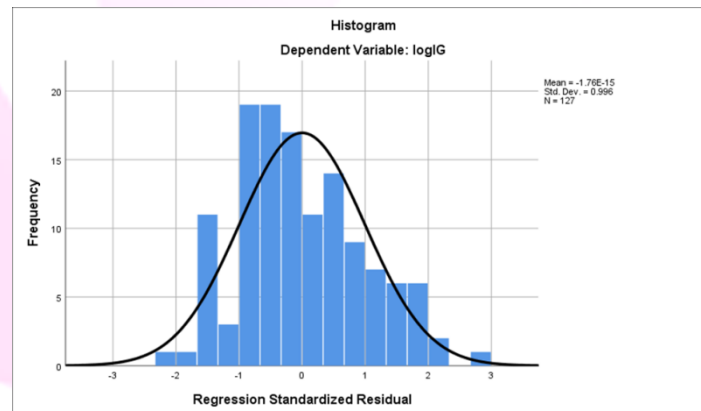


Figure 1. Histogram of Standardized Residuals

The histogram above shows that the shape of the distribution curve is almost similar to the shape of the normal distribution curve (bell-shaped curve). Peak distribution is near the residual score of 0, while data frequency is stepping down symmetrically to the left or right, although asymmetry at the distribution tail. In general, residual data spread lays around the normal curve line (black line), then it can be concluded that normality assumption has been met.

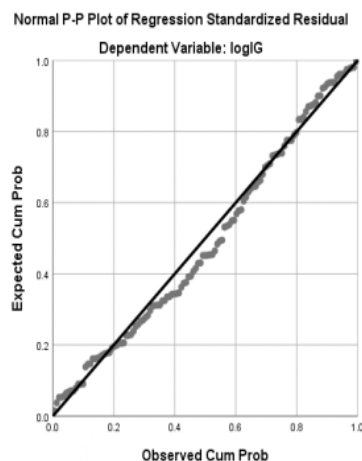


Figure 2. Normal P-P Plot of Regression Standardized Residual

From the above figure, data dots represent observed residual cumulative distribution. The black diagonal line represents theoretical normal distribution. The observation result shows that data dots tend to follow the diagonal line, with some little portion of deviation. Figure 1.2 does not indicate a specific pattern which indicates residual distribution is closed to normal distribution. Then, it can be concluded that the normality assumption has been obtained based on visual observation from P-P Plot.

The Multicollinearity test is conducted to identify if the independent variable of the model possesses high intensity of relation between one another. If the relation is too high, it can influence accuracy of regression coefficient calculation. Based on Table 1.11, Tolerance of FoMo as a variable is 1.000, it is considered as too high above minimum limit of 0.10. Moreover, the value of Variance Inflation Factor (VIF) is 1.000 (<10). Based on these two indicators, it can be concluded that the regression model does not show multicollinearity, because of this FoMo Variable can be used to predict the level of Instagram Addiction (logIG).

Heteroscedasticity Test is performed so as to assess if residual value spread of the regression model is constant on every level of prediction. If residual variants are not the same, it means that heteroskedasticity may influence the accuracy of regression results.

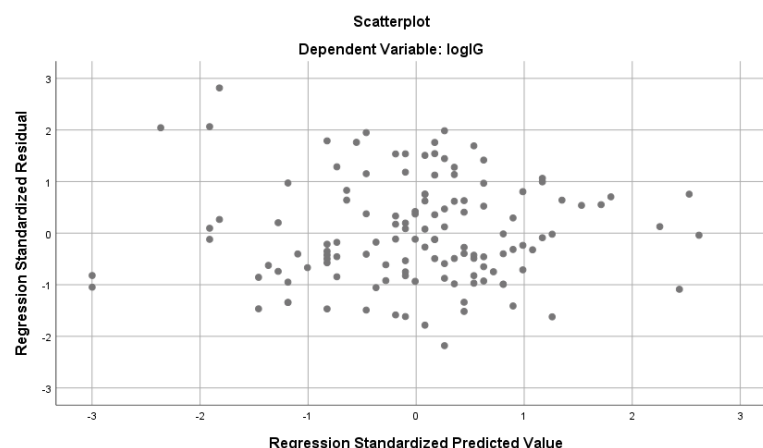


Figure 3. Scatterplot between Standardized Predicted Value

The scatterplot from the above figure shows that residual dots scatter randomly, either over or under the horizontal line (zero value), and do not follow a specific pattern, such coning or widening. This random spread indicates that there is no heteroskedasticity indication, then homoscedasticity is met and consequently the regression model can be trusted. After all assumptions are met, the next phase is to perform a simple linear regression test to find the influence of Fear of Missing out toward Instagram Addiction.

Table 4. Model Summary

Model Summary ^b					
Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Durbin-Watson
1	.329 ^a	.108	.101	.15289	1.772
a. Predictors: (Constant), FoMO					
b. Dependent Variable: logIG					

On the Model Summary, the analysis result shows coefficient correlation score known as R is 0.329 which is a sign of positive relation with medium strength between FoMo and Instagram Addiction. Determination coefficient score (R²) at 0.108 means that with this score FoMo is capable of explaining 10.8% variation found at Instagram Addiction. Meanwhile, the remaining score of 89.2% is influenced by other factors not covered in the study. The adjusted score of 0.101 is indicating that the contribution of the same models is relatively stable although it is adapted to the number of samples being used.

Table 5. Results of the ANOVA Test for Simple Linear Regression

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.356	1	.356	15.210	.000 ^b
Residual	2.922	125	.023		
Total	3.277	126			
a. Dependent Variable: logIG					
b. Predictors: (Constant), FoMO					

Anova Table, the test result displays F score of 15.210 with significance P of < 0.001, and this means that the regression model can be used to predict Instagram Addiction. Besides, Coefficient Table also indicates the regression coefficient (B) of FoMo at 0.005 (p < 0.001) by which it means that every 1-point increase of FoMo will be followed with a-0.005 score increase on Instagram Addiction (logIG). In another word, the higher an individual's FoMo, the bigger the possibility of Instagram Addiction.

4. Discussion

The results of this study reveal that Fear of Missing Out (FoMo) has a positive and significant effect on Instagram Addiction among students of SMK PGRI 2 Malang. This was evidenced through a simple linear regression analysis, which obtained a correlation coefficient (R) of 0.329 and a coefficient of determination (R²) of 0.108. These findings indicate that the higher a person's level of FoMo, the greater their tendency to engage in excessive Instagram use. This result is in line with the study of Rahardjo & Soetjiningsih (2022), which showed a positive relationship between FoMo and social media addiction, where the higher the FoMo level, the stronger the tendency toward social media addiction. Furthermore, research by Salim et al. (2023) also demonstrated a positive correlation between FoMo and Instagram addiction among university students, showing that individuals experiencing FoMo tend to use Instagram more frequently so as not to feel left behind in social interactions. Theoretically, FoMo reflects the fear of missing out on important information, experiences, or social interactions Przybylski et al (2013). In the context of social media, this condition drives individuals to continuously monitor others' activities and update information, ultimately increasing the frequency and duration of Instagram use.

Although, the contribution of FoMO in explaining the tendency toward Instagram addiction is relatively low, at 10.8% ($R^2 = 0.108$). This means that although FoMO plays a role, it is not the sole determinant of this phenomenon. The findings of Fathadhika & Afriani (2018) revealed that social media addiction may also be influenced by other psychological factors, such as loneliness and social anxiety, which drive individuals to seek escape more frequently through online interactions. In addition, social environmental factors also contribute to Instagram addiction, as individuals often face social pressure to remain connected to the digital world (Sinaga et al., 2023). Emotional attachment to peers can further encourage individuals to stay active on Instagram, thereby increasing the risk of addiction (Falcha & Kristianingsih, 2023).

Furthermore, when compared to previous studies, most research on Fear of Missing Out (FoMO) and social media addiction including Instagram use has generally focused on the general population or university students. Very few have examined the influence of FoMO and social media addiction among adolescents at the vocational high school (SMK) level, who possess distinct socio-emotional characteristics and interactional needs compared to other age groups. In addition, most prior studies have tended to highlight the relationship between FoMO and social media addiction in general, without differentiating between specific platforms. Research that specifically explores the effect of FoMO on Instagram Addiction remains relatively limited. Based on these gaps, the present study aims to empirically examine the effect of FoMO on Instagram Addiction among students of SMK PGRI 2 Malang and to determine the extent to which FoMO contributes to the tendency of excessive Instagram use.

5. Conclusions

This study shows that Fear of Missing Out (FoMO) plays a significant role in shaping adolescents' engagement with Instagram. The findings show that higher levels of FoMO are linked to a stronger tendency toward excessive Instagram use, indicating that the anxiety of being left out of others' experiences can act as a psychological driver of social media addiction among vocational high school students. This contributes to the understanding that FoMO is not merely a passing emotional state, but a factor that meaningfully influences adolescents' digital behavior and their risk of problematic media use.

The novelty of this study lies in its focus on vocational high school adolescents, a group with distinct socio-emotional characteristics that has rarely been examined in previous FoMO research, and in its emphasis on Instagram as a specific platform rather than social media in general. These elements provide a more contextualized understanding of how FoMO operates within particular developmental and social settings. From an academic perspective, this research highlights the need for further studies to explore other psychological and social factors such as loneliness, peer dynamics, or family communication that may interact with FoMO in driving social media addiction. Future research may also examine protective variables, including digital literacy or self-regulation, which could mitigate the negative impact of FoMO on adolescents' psychological well-being.

6. CRediT Authorship Contribution Statement

Rizka Fibria Nugrahani: Conceptualization, data curation, statistical analysis, introduction, writing-review & literature review, software. **Laila Indra Lestari:** methodology design, sampling & recruitment. Questionner development, writing methods section, data analysis. **Khasdyah Dwi Dewi Setyoningtias:** Reference check, editing, supervision, review, and final commentary. **Wulan Zaesa Aurelli:** visualization of results (tables and figure), writing result section, interpretation of findings. **Zidan Achmad:** writing discussion, critical revision of the manuscripts, proofreading and language editing, writing conclusions.

7. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

8. Declaration of Generative AI and Assistive Technologies in the Writing Process

During the preparation of this work, the authors used Grammarly to check errors in the English language. After utilizing this tool, the authors thoroughly reviewed and edited the content as necessary and took full responsibility for the final content of the published article.

9. Funding

This project was independently funded by the research team at the Faculty of Psychology, State University of Malang.

10. Ethical Approval

All participating students provided written informed consent after receiving oral and written information about the study, including the information that participation in the study was voluntary. All data were processed anonymously and cannot be traced to any students.

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12. References

- Australian Psychological Society. (2015). *Teens suffer highest rates of FOMO*. https://psychology.org.au/news/media_releases/8Nov2015-fomo
- Blackwell, D., Leaman, C., Trampusch, 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. <https://doi.org/10.1016/j.paid.2017.04.039>
- Elhai, J. D., Yang, H., McKay, D., & Asmundson, G. J. G. (2020). COVID-19 anxiety symptoms associated with problematic smartphone use severity in Chinese adults. *Journal of Affective Disorders*, 274, 576–582. <https://doi.org/10.1016/j.jad.2020.05.080>
- Falcha, S. N., & Kristianingsih, S. A. (2023). Hubungan Intensitas Penggunaan Media Sosial Instagram Dengan Interaksi Sosial Pada Mahasiswa. *Jurnal Psikologi Malahayati*, 5(2). <https://doi.org/10.33024/jpm.v5i2.8320>
- Fathadhika, S., & Afriani, -. (2018). Social Media Engagement Sebagai Mediator Antara Fear Of Missing Out Dengan Kecanduan Media Sosial Pada Remaja. *Journal of Psychological Science and Profession*, 2(3), 208–215. <https://doi.org/10.24198/jpsp.v2i3.18741>
- Fuady, I., Prasanti, D., & Yusnita, T. (2024). Assessing The Level Of Nomophobia Among Students. *MOTIVA: JURNAL PSIKOLOGI*, 7(2), 145–151. <https://doi.org/10.31293/mv.v7i2.7980>
- Odgers, C. L., & Jensen, M. R. (2020). Adolescent development and growing divides in the digital age. *Dialogues in Clinical Neuroscience*. <https://doi.org/10.31887/DCNS.2020.22.2/codgers>
- Prawitasari, J. E. (2012). *Psikologi Terapan: Melintas Batas Disiplin Ilmu*. Uluangkep Press.
- 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. <https://doi.org/10.1016/j.chb.2013.02.014>
- Rahardjo, L. K. D., & Soetjiningsih, C. H. (2022). Fear of Missing Out (FOMO) dengan Kecanduan Media Sosial pada Mahasiswa. *Bulletin of Counseling and Psychotherapy*, 4(2), 456–461. <https://doi.org/10.51214/bocp.v4i3.328>
- Salim, A., Jatnika, R., & Yudiana, W. (2023). Hubungan Fear of Missing out dengan Social Media Addiction pada Pengguna Instagram. *Jurnal Ilmu Siber Dan Teknologi Digital*, 2(1), 1–11. <https://doi.org/10.35912/jisted.v2i1.2372>
- Saputera, R., & Tamburian, D. (2018). Pemanfaatan Media Sosial Instagram oleh Endorser dalam Membangun Citra Diri. *Prologia*, 2(2), 473–479. <https://doi.org/10.24912/pr.v2i2.3732>
- Sette, C. P., Lima, N. R. S., Queluz, F. N. F. R., Ferrari, B. L., & Hauck, N. (2020). The Online Fear of Missing Out Inventory (ON-FoMO): Development and Validation of a New Tool. *Journal*

of Technology in Behavioral Science, 5(1), 20–29. <https://doi.org/10.1007/s41347-019-00110-0>

Sinaga, S. W., Yusniarita, Y., & Palestin, B. (2023). Tekanan Teman Sebaya Dan Intensitas Penggunaan Media Sosial Instagram Terhadap Gangguan Makan Pada Remaja Di Smp Singkawang: Peaceful Pressure And Use Intensity Instagram Social Media On Eat Disorders.

Quality : Jurnal Kesehatan, 17(2), 140–148. <https://doi.org/10.36082/qjk.v17i2.826>

Weinstein, E. (2018). The social media see-saw: Positive and negative influences on adolescents' affective well-being. *New Media & Society*, 20(10), 3597–3623. <https://doi.org/10.1177/1461444818755634>

