Journal of Education and Learning (EduLearn)
Vol. 19, No. 2, May 2025, pp. 900~908
ISSN: 2089-9823 DOI: 10.11591/edulearn.v19i2.21862

The effect of using social media and fear of missing out on emotional wellbeing in children in the digital age

Mujazi[1], Muhammad Rijal Fadli[1], Ainur Rosyid[1], Muhammad Soleh Hapudin[1], Moh. Imron Rosidi[2], Bahtiar Afwan[3]
[1]Department of Elementary Education, Faculty of Teacher Training and Education, Universitas Esa Unggul, Jakarta, Indonesia
[2]Department History of Education, Faculty of Teacher Training and Education, Universitas Negeri Gorontalo, Gorontalo, Indonesia
[3]Department History of Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Metro, Lampung, Indonesia

Article Info

Article history:

Received Feb 17, 2024
Revised Jun 29, 2024
Accepted Jul 3, 2024

Keywords:

Children's
Digital age
Emotional well-being
Fear of missing out
Social media

ABSTRACT

In today's digital age, social media (SM) offers convenient access to information, social connections, and various content. Nonetheless, the utilization of SM and the fear of missing out (FOMO) phenomenon profoundly influence children's emotional wellbeing (EW). This study seeks to investigate the impact of SM usage and FOMO on children's EW in the digital era. Employing a quantitative approach, the research involves elementary school students in Jakarta, Indonesia. Cluster sampling was utilized to select a sample of 265 students. Data collection was conducted through a questionnaire designed to capture relevant variables. Analysis was performed using structural equation modeling (SEM) facilitated by the SMART-PLS 3.0 software. Findings revealed a significant significance value of 0.000 ($0.000 < 0.05$), indicating that SM usage and FOMO have a positive and noteworthy effect on children's EW in the digital era. This study offers valuable insights for parents, educators, and child psychologists regarding the influence of SM on children's EW, thereby facilitating the formulation of more effective educational guidelines and strategies to assist children in managing their EW in the digital era.

This is an open access article under the CC BY-SA license.

Corresponding Author:

Mujazi
Department of Elementary Education, Faculty of Teacher Training and Education, Universitas Esa Unggul
Arjuna Utara St. No.9, West Jakarta City, Jakarta 11510, Indonesia
Email: mujazi@esaunggul.ac.id

1. INTRODUCTION

The digital era has brought major changes in everyday life, including in terms of communication and social interaction. One of the significant developments is the increasing popularity of social media (SM) [1]. SM provides a platform for children to interact, share content and connect with their peers online [2]. However, the impact of SM use on children's emotional wellbeing (EW) is a growing concern [3]. Children often feel pressure to keep themselves updated on SM, so they don't miss out on information or experiences shared by their peers. They may worry that if they don't participate in online conversations or don't keep up with the latest trends, they will feel isolated or considered irrelevant by their friends [4]. This is called "fear of missing out" (FOMO) which is one of the factors that is getting more and more attention referring to children's feelings of anxiety and worry that they will miss important moments or social experiences that are happening on SM when they are not active or not connected [5], [6]. FOMO is fueled by an urge to constantly monitor online activity and a sense of reliance on digital interactions. Children experiencing FOMO may feel trapped in a cycle of constant monitoring, worrying that they will be overlooked and abandoned by their peers.

SM and FOMO are closely related, FOMO arises because SM provides a platform that constantly displays the lives of other people, which often looks interesting and tempting [7]. When SM users see their friends sharing their precious moments, social events, or accomplishments, there is fear that they will miss out on those experiences. They feel pressure to stay connected and update themselves on SM, so they don't feel isolated or deemed irrelevant by others. With continued exposure to other people's lives through SM, FOMO can produce feelings of anxiety, dissatisfaction, and feelings of inferiority [8]. In addition, reliance on acknowledgment and validation from others through "likes" or comments can also be a driving factor for FOMO. Therefore, SM can significantly influence and reinforce concerns about missing important moments or social experiences [9].

FOMO can have a significant impact on a child's EW. Kids may feel anxious, low self-esteem, or dissatisfied with themselves when they see their friends share seemingly awesome moments or standout accomplishments on SM [10], [11]. Children's EW in the digital era is an increasingly important issue today. In an environment dominated by technology and online connectivity, children face new challenges in maintaining their emotional balance. In the digital era, children are exposed to a variety of SM, online games, and digital content that offer constant stimulation [12], [13]. While these technologies can provide entertainment, education, and opportunities for social interaction, there are also risks inherent in excessive or unhealthy use.

Previous research [14], [15] has demonstrated the complex relationship between SM use, FOMO, and children's EW. Excessive or unhealthy use of SM can interfere with a child's emotional development and increase the risk of stress, depression, and sleep disturbances. Children caught in a cycle of FOMO may feel high social pressure, feel dissatisfied with themselves, and experience feelings of loneliness or isolation when they cannot keep track of or engage in activities that are going on SM [16].

EW is an important aspect of children's development. This includes their ability to manage their emotions, form healthy social relationships, have good self-esteem, and experience adequate happiness [17], [18]. The influence of SM use and FOMO on children's EW in the digital age requires deep understanding. By understanding these complex influences, we can develop appropriate strategies and approaches to promote the healthy and positive use of SM and protect children's EW in an increasingly complex and fast-paced digital environment [19], [20]. In addition, this research can guide parents, educators, and policymakers to support children in developing healthy relationships with SM, enhancing digital literacy skills, and managing FOMO wisely. This research aims to explore the influence of SM use and FOMO on children's EW in the digital era. It is hoped that the research results will provide deeper insight into the influence of this phenomenon and contribute to efforts to protect and restore children's well-being, thereby renewing understanding of the challenges faced in today's digital era.

2. METHOD

2.1. Design research

This research uses quantitative methods with an ex post facto correlational approach which aims to analyze variables that can predict results using structural equation modeling (SEM) [21]–[23]. The conceptual model for this research is “The effect of using SM and FOMO on EW in children in the digital age”. The exogenous factors in this model are represented by SM and FOMO, whereas EW is considered endogenous. This study investigates the impact of SM usage and FOMO on EW among children in the digital age. Both SM usage and the anxiety stemming from FOMO are significant factors affecting the EW of contemporary children. The diagram illustrating the research path model is presented in Figure 1.

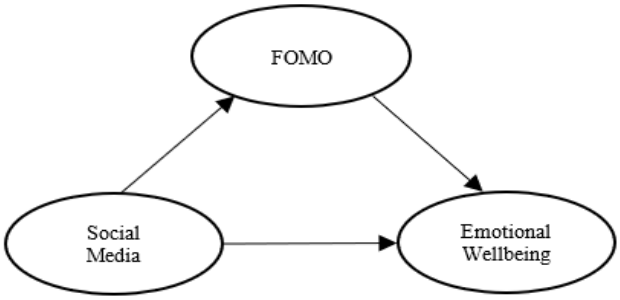

Figure 1. Research model framework

2.2. Population and sampling

The population participating in this research were elementary school students in Jakarta, Indonesia. The schools used in the research are Cengkareng Barat 16 State Elementary School, Duri Kosambi 09 Pagi

State Elementary School, and Duri Kepa 03 State Elementary School, these three schools are from West Jakarta City. The sample was selected through a survey method using cluster sampling techniques and involving the use of questionnaires in collecting information from respondents selected in a representative manner. The details are male 30.54% (f=69) and female 69.46% (f=196), class IV students 32.41% (f=77), class V 34.87% (f=99), and class VI, namely 32.72% (f=89). Further explanation can be seen in Table 1.

Table 1. Total of classes and students as participation

Class	Pretest Male	Treatment Female	N
Class IV	21	56	77
Class V	25	74	99
Class VI	23	66	89
Total	69	196	265

2.3. Instrument and indicator

This research gathered information regarding SM, FOMO, and EW through a Likert scale questionnaire, which was adapted from prior studies. The development of this questionnaire drew upon existing research, comprising two distinct surveys: one focusing on SM usage, and another on FOMO and EW. The SM and EW instrument consist of 30 questions. Important indicators that can be used to measure SM use in children include duration of use, consumed content, social interaction, online safety, emotional impact, and sleep quality [24], [25]. Indicators of FOMO are anxiety related to missing moments, reliance on social validation, loss of focus and distraction, feelings of dissatisfaction or not enough, and the inability to detach from SM [26], [27]. Meanwhile, indicators of EW in children include happiness and self-satisfaction, the ability to manage emotions, positive social relationships, self-confidence, emotional balance, and the ability to deal with stress [28], [29]. The research instrument comprises questions employing a Likert scale, offering five alternative responses for participants to express their agreement levels with the presented statements.

2.4. Data analysis in research

This research uses data analysis using the partial least square (PLS) method from SEM, which aims to analyze the relationship between variable construction, exogenous and endogenous variables, and consider measurement error. The data analysis process is supported by SmartPLS 3.0 software, which is used to test research hypotheses. PLS-SEM is a model used to analyze the relationship between variables by paying attention to latent variables (constructs) and indicators [30]. Through structural models, PLS-SEM derives path parameter estimations that optimize the explanation of endogenous variables by exogenous ones. The outer model (measurement model) in PLS-SEM analysis is aimed at assessing constructs (latent variables) via their measurable indicators [31]. This methodological approach enables the research to comprehensively understand variable relationships within the specified context, emphasizing the importance of precise measurement.

The external model is used to assess the validity and reliability of the questionnaire indicators and verify that the constructs are appropriately measured [32]. The outer model was tested using criteria such as a loading factor parameter of more than 0.7 and an average variance extract (AVE) of more than 0.5. These criteria examine parameters such as loading factor and AVE [33]. Furthermore, the criterion for evaluating the hypothesis is the p-value. If the p-value is less than 0.05, the hypothesis is accepted; if the p-value exceeds 0.05, the theory is rejected [34]. This hypothesis testing is carried out in the context of the inner model, where the relationship between variables is analyzed in more depth.

3. RESULTS

The assessment of the questionnaire's validity and reliability for each variable is conducted to ensure the trustworthiness and accuracy of the research data. The outcomes of this analysis, performed by the model, indicate that the validity criteria (both convergent and discriminant) have been met, along with fulfilling the reliability standards. Utilizing PLS-SEM, the research examines the validity and reliability of questionnaires administered to elementary school students concerning their SM usage, FOMO, and EW as assessed by the outer model. The factor loading values in this study are determined through confirmatory factor analysis (CFA), derived from Cronbach's alpha, composite reliability (CR), and AVE values as necessary, and the loading values of the outer model for each factor within the latent variable exceed 0.7. Table 2 explains the results of the validity and reliability assessment.

Table 2. Results of the analysis of the validity and reliability of the path model

Variable	Cronbach's alpha	CR	AVE
EW	0.869	0.902	0.706
FOMO	0.816	0.871	0.765
SM	0.868	0.900	0.812

The output results of the outer model that has been carried out to analyze the validity and reliability values of surveys on SM, FOMO, and EW are shown in Table 2. The results of the outer model analysis explain that all variables in this study were declared valid (0.706-0.902) and reliable (0.708-0.906). The validity test of each indicator for each variable has obtained a factor loading value above 0.7, which means it can explain the latent variables in this study. While the reliability test obtained an AVE value above 0.5, which means that each variable is declared reliable. The questionnaire in this study was stated to be accurate and able to measure students' perceptions of SM, FOMO, and EW so that it could be carried out at the hypothesis stage. The output results of the outer model have explained the validity and reliability values of surveys on SM, FOMO, and EW in more detail as shown in Figure 2.

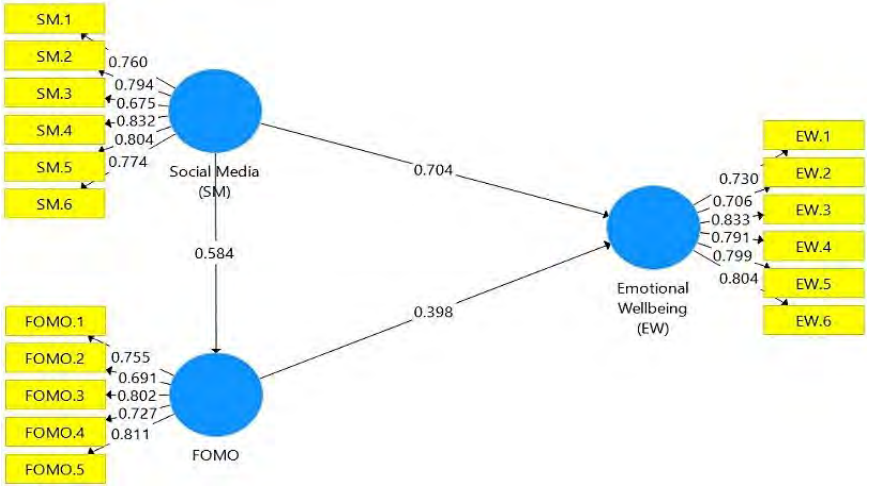

Figure 2. Path diagram of validity and reliability test results

Figure 2 shows that each variable is declared valid and reliable because the value obtained for each variable is adequate. This value indicates that the measurement instruments used in this research have a high level of consistency and accuracy based on accepted standards in statistical analysis. Thus, the results obtained from these variables can be relied on to support research conclusions and recommendations. This study uses the path coefficient test to analyze the hypothesis. However, before the hypothesis testing stage, it is necessary to analyze the fit model of the research data using the goodness of fit test. The results of the normed fit index (NFI) and standardized root mean square residual (SRMR) values are used as categories of whether the model is fit or not, this test for model fit is assisted by using the SMART-PLS-SEM program. Model fit if the NFI score is more than 0.8 and the SRMR is below 0.10. The results of the fit model of this study indicate that the NFI value is 0.832 and the SRMR value is 0.091 so the model of the research variables is declared fit. Analysis of research hypothesis data was carried out through the bootstrapping test method on SMART-PLS 3.0, this method aims to test hypotheses or obtain estimates of population parameters based on existing samples and test the significance value of each selected hypothesis. The results of the hypothesis analysis using the bootstrapping test method can be seen in the Table 3.

The output results of Table 3 explain that the direct effect of the research hypothesis is i) the magnitude of the parameter coefficient for SM on EW is 0.704 while the P-value is $0.000 < 0.05$, which means SM has a positive effect on SM by 70.4%; ii) the parameter coefficient value for SM on FOMO is 0.398, while the P-value is $0.000 < 0.05$ which means it has a positive effect on FOMO of 39.8 %; iii) the magnitude of the parameter coefficient for FOMO on EW is 0.584 while the P-value is $0.000 < 0.05$, which means that FOMO has a positive effect on EW of 58.4%.

The indirect effect of the research is seen from the total indirect effect which explains that the acquisition of the parameter coefficient values of all variables is equal to 0.233 and the acquisition of P-values is $0.000 < 0.05$ which means that the higher the SM and FOMO values, the EW value will increase

as well. only 23.3%. The overall direct effect of this study is seen from the total effect which explains that the acquisition of the R-square coefficient value from SM on EW is 0.512, and the acquisition of the R-square coefficient value from FOMO on EW of 0.387. While the acquisition of the R-square coefficient SM and FOMO on EW is 0.447 and the P-value is 0.000 which means simultaneously (simultaneously) SM and FOMO has a positive and significant effect on EW with an increase of 44.7%. The recapitulation results of the outer loading analysis can be seen in the Figure 3.

Table 3. Results of hypothesis analysis through SEM

Variable	Original sample (O)	T-statistics	P-values
SM → EW	0.704	26.789	0.000
SM → FOMO	0.398	10.937	0.000
FOMO → EW	0.584	17.120	0.000
SM → FOMO → EW	0.233	8.859	0.000
SM → FOMO → EW	0.236	8.862	0.000

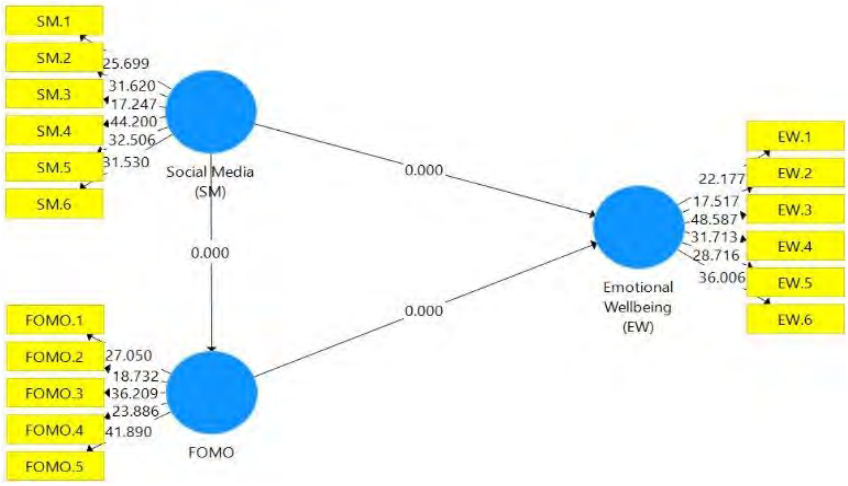

Figure 3. Significant path coefficient results of hypothesis testing

Figure 3 explains the results of hypothesis testing, which shows that SM and FOMO significantly affect EW in the current digital era. SM use and FOMO can substantially affect a child's emotional condition, both positively and negatively. These findings are significant because they emphasize the need to understand the dynamics of interactions on SM and how feeling left behind or disengaged can impact psychological well-being in an increasingly digitally connected world. The application of SEM in this study is aimed at unraveling the intricate dynamics among the variables under scrutiny and offering a comprehensive framework to elucidate the impact of SM usage and FOMO on the EW of children in the digital age [35]. The proposed structural model in this investigation endeavors to delineate how SM engagement and the levels of FOMO exert both direct and indirect effects (mediated through latent variables) on children's EW within the digital milieu. The data analysis conducted in this study has demonstrated a good fit of the statistical data, indicating a congruence with the observed data [36]. Thus, this model stands as a credible depiction of the interrelations among the variables under investigation. Through the adept application of SEM, this research has provided profound insights into the factors influencing children's EW, thereby facilitating the formulation of more efficacious strategies to bolster their welfare in the digital epoch.

4. DISCUSSION

The rising digital era has impacted SM use, which has become a widespread phenomenon, even among children [37]. SM enables simple access to a wide range of information, social connections, and engaging entertainment. Nonetheless, SM use may hurt children's emotional health, mainly when it is associated with FOMO, an anxiety condition characterized by the dread of missing out on exciting activities or events on SM [38], [39].

FOMO, or the fear of missing out, serves as a crucial mechanism for understanding how and why excessive SM use can impact children's EW. As children immerse themselves in SM platforms for extended

periods, they may experience heightened stress levels attributed to FOMO [40]. This fear stems from the anxiety of being excluded or left behind from social events, experiences, or connections showcased on these platforms. Consequently, as children constantly compare their lives to the curated content of others, feelings of inadequacy, loneliness, and anxiety may intensify, adversely affecting their emotional wellness [41], [42]. They may see their friends share seemingly awesome moments or notable accomplishments on SM, which then triggers feelings of anxiety or fear that they missed something important [43]. This can trigger feelings of low self-esteem, anxiety, and dissatisfaction with oneself, which in turn can affect a child's EW.

Previous research [44], [45] has revealed that the use of SM and experiences of FOMO in the current digital era has an adverse impact, which then contributes to the vulnerable level of EW of elementary school children. Anastasya *et al*. [46] research explains that in Indonesia, the use of SM and FOMO, it turns out that it has a vulnerable influence on the EW of children in the digital era, creating concerns about negative impacts that are increasing among elementary school children [47]. This shows the importance of further research to understand the dynamics of interactions between SM, FOMO, and children's EW in Indonesia [48].

Intensive SM use and the stress that arises from FOMO can cause feelings of anxiety, low self-esteem, and self-dissatisfaction in children [49], [50]. The results of this research highlight the importance of understanding and managing children's interactions with SM and emphasize the need for wise educational and parenting efforts in facing this challenge, to protect and improve the EW of young people from an early age in the digital era [51], [52]. This is an urgent call for parents, educators, and society to come together to create an environment that supports children in facing modern digital pressures so that they can grow and develop with more balance and confidence in an increasingly connected world [53].

Although SM usage has a negative impact on children's welfare, it can also have a good effect [54]. Children can use SM to improve their communication skills, find new friends, pursue their interests, and share ideas. Children can also use SM to interact with friends who they may not be able to see in person [55], [56]. However, parents and educators must ensure that children's SM use is managed and balanced not to harm their mental well-being. SM can also reduce online browsing and increase overall quality of life [57].

While there are positive aspects to using SM, it is still important to strike the right balance between healthy use and minimizing negative impacts [58]. Parents and educators need to provide oversight, educate children about online ethics and safety, and help them develop a critical understanding of the content they consume on SM [59], [60]. It is important to acknowledge that SM use is not entirely negative [61]. However, keep in mind that healthy and controlled use is very important. Parents, educators, and other stakeholders must ensure proper supervision, provide guidance on responsible use, and assist children in developing critical skills in dealing with content and interactions on SM. With the right approach, negative impacts can be managed while potential positive impacts can be maximized.

5. CONCLUSION

SM and the FOMO can have a good and significant impact on children's EW in today's digital age. SM use's impact is viewed from a variety of angles. One way or another, excessive and unchecked use can result in negative social comparisons, low self-esteem, and trouble sleeping. What's more, the FOMO phenomenon can lead to psychological distress and anxiety that are detrimental to EW. However, on the other hand, SM can also have a positive impact on children. Through SM, they can expand their social networks, develop creative skills and self-expression, and gain access to useful information. Parents, educators, and society need to realize how strong the impact of SM use and the FOMO is on children's EW in the digital era. To overcome the negative impacts, several practical steps can be taken. First, it is important to limit the time children spend on SM. In addition, education about online ethics and safety must be provided. Physical activity and direct interaction with friends should also be encouraged. Providing emotional support and being an example of healthy SM use also plays a big role. Finally, it is important to provide counselling resources if the child needs them. All these efforts will help protect children's EW, reduce the stress caused by the digital world, and ensure they grow up in an ever-evolving digital age.

REFERENCES

[1] M. Badri, A. Alnuaimi, A. Al Rashedi, G. Yang, and K. Temsah, "School children's use of digital devices, social media and parental knowledge and involvement – the case of Abu Dhabi," *Education and Information Technologies*, vol. 22, no. 5, pp. 2645–2664, Sep. 2017, doi: 10.1007/s10639-016-9557-y.

[2] A. F. McGloin and S. Eslami, "Digital and social media opportunities for dietary behaviour change," *Proceedings of the Nutrition Society*, vol. 74, no. 2, pp. 139–148, May 2015, doi: 10.1017/S0029665114001505.

[3] N. K. Agusintadewi, N. M. M. Mahastuti, K. A. S. Darma, and A. A. N. Aritama, "The use of social media in the creation of personal learning environment during the #studyfromhome period," *Journal of Education and Learning (EduLearn)*, vol. 15, no. 1, pp. 78–87, Feb. 2021, doi: 10.11591/edulearn.v15i1.17851.

[4] J. M. Twenge, "More time on technology, less happiness? associations between digital-media use and psychological well-being," *Current Directions in Psychological Science*, vol. 28, no. 4, pp. 372–379, Aug. 2019, doi: 10.1177/0963721419838244.

[5] A. Alutaybi, D. Al-Thani, J. McAlaney, and R. Ali, "Combating fear of missing out (FoMO) on social media: the FoMO-R method," *International Journal of Environmental Research and Public Health*, vol. 17, no. 17, p. 6128, Aug. 2020, doi: 10.3390/ijerph17176128.
[6] J. A. Roberts and M. E. David, "The social media party: fear of missing out (FOMO), social media intensity, connection, and well-being," *International Journal of Human–Computer Interaction*, vol. 36, no. 4, pp. 386–392, Feb. 2020, doi: 10.1080/10447318.2019.1646517.
[7] A. Tandon, A. Dhir, S. Talwar, P. Kaur, and M. Mäntymäki, "Social media induced fear of missing out (FoMO) and phubbing: Behavioural, relational and psychological outcomes," *Technological Forecasting and Social Change*, vol. 174, p. 121149, Jan. 2022, doi: 10.1016/j.techfore.2021.121149.
[8] M. Hattingh, A. Dhir, P. Ractham, A. Ferraris, and D. Yahiaoui, "Factors mediating social media-induced fear of missing out (FoMO) and social media fatigue: A comparative study among Instagram and Snapchat users," *Technological Forecasting and Social Change*, vol. 185, p. 122099, Dec. 2022, doi: 10.1016/j.techfore.2022.122099.
[9] F. Jabeen, A. Tandon, J. Sithipolvanichgul, S. Srivastava, and A. Dhir, "Social media-induced fear of missing out (FoMO) and social media fatigue: The role of narcissism, comparison and disclosure," *Journal of Business Research*, vol. 159, p. 113693, Apr. 2023, doi: 10.1016/j.jbusres.2023.113693.
[10] R. Bottaro and P. Faraci, "The use of social networking sites and its impact on adolescents' emotional well-being: a scoping review," *Current Addiction Reports*, vol. 9, no. 4, pp. 518–539, Sep. 2022, doi: 10.1007/s40429-022-00445-4.
[11] J. P. Abel, C. L. Buff, and S. A. Burr, "Social media and the fear of missing out: scale development and assessment," *Journal of Business & Economics Research (JBER)*, vol. 14, no. 1, pp. 33–44, Jan. 2016, doi: 10.19030/jber.v14i1.9554.
[12] E. Weinstein, "The social media see-saw: positive and negative influences on adolescents' affective well-being," *New Media & Society*, vol. 20, no. 10, pp. 3597–3623, Oct. 2018, doi: 10.1177/1461444818755634.
[13] B. Schivinski, M. Brzozowska-Woś, E. Stansbury, J. Satel, C. Montag, and H. M. Pontes, "Exploring the role of social media use motives, psychological well-being, self-esteem, and affect in problematic social media use," *Frontiers in Psychology*, vol. 11, Dec. 2020, doi: 10.3389/fpsyg.2020.617140.
[14] D. Alt, "Students' social media engagement and fear of missing out (FoMO) in a diverse classroom," *Journal of Computing in Higher Education*, vol. 29, no. 2, pp. 388–410, Aug. 2017, doi: 10.1007/s12528-017-9149-x.
[15] A. Tandon, A. Dhir, N. Islam, S. Talwar, and M. Mäntymäki, "Psychological and behavioral outcomes of social media-induced fear of missing out at the workplace," *Journal of Business Research*, vol. 136, pp. 186–197, Nov. 2021, doi: 10.1016/j.jbusres.2021.07.036.
[16] P. D'Lima and A. Higgins, "Social media engagement and fear of missing out (FOMO) in primary school children," *Educational Psychology in Practice*, vol. 37, no. 3, pp. 320–338, Jul. 2021, doi: 10.1080/02667363.2021.1947200.
[17] J. L. Weaver and J. M. Swank, "An examination of college students' social media use, fear of missing out, and mindful attention," *Journal of College Counseling*, vol. 24, no. 2, pp. 132–145, Jul. 2021, doi: 10.1002/jocc.12181.
[18] N. Bloemen and D. De Coninck, "Social media and fear of missing out in adolescents: the role of family characteristics," *Social Media + Society*, vol. 6, no. 4, p. 205630512096551, Oct. 2020, doi: 10.1177/2056305120965517.
[19] N. Gugushvili, K. Täht, D. Rozgonjuk, M. Raudlam, R. Ruiter, and P. Verduyn, "Two dimensions of problematic smartphone use mediate the relationship between fear of missing out and emotional well-being," *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, vol. 14, no. 2, May 2020, doi: 10.5817/CP2020-2-3.
[20] A. Hartanto, J. Wong, V. Y. Q. Lua, G. Y. Q. Tng, K. T. A. S. Kasturiratna, and N. M. Majeed, "A daily diary investigation of the fear of missing out and diminishing daily emotional well-being: the moderating role of cognitive reappraisal," *Psychological Reports*, vol. 127, no. 3, pp. 1117–1155, Jun. 2024, doi: 10.1177/00332941221135476.
[21] J. J. Dobrinski, *A quantitative, ex post facto, correlational study of voluntary resignations of federal public employees*. 2014.
[22] R. O. Mueller and G. R. Hancock, "Structural equation modeling," in *The Reviewer's Guide to Quantitative Methods in the Social Sciences*, New York: Routledge, 2018.
[23] T. Teo, Ed., *Handbook of quantitative methods for educational research*. Rotterdam: SensePublishers, 2013. doi: 10.1007/978-94-6209-404-8.
[24] H. E. Sadagheyani and F. Tatari, "Investigating the role of social media on mental health," *Mental Health and Social Inclusion*, vol. 25, no. 1, pp. 41–51, Feb. 2021, doi: 10.1108/MHSI-06-2020-0039.
[25] L. Braghieri, R. Levy, and A. Makarin, "Social media and mental health," *American Economic Review*, vol. 112, no. 11, pp. 3660–3693, Nov. 2022, doi: 10.1257/aer.20211218.
[26] Z. Zhang, F. R. Jiménez, and J. E. Cicala, "Fear of missing out scale: a self-concept perspective," *Psychology & Marketing*, vol. 37, no. 11, pp. 1619–1634, Nov. 2020, doi: 10.1002/mar.21406.
[27] Y. Syahputra, M. Miswanto, and M. Hafni, "Exploration of the fear of missing out internet based on demography," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 12, no. 4, p. 2186, Dec. 2023, doi: 10.11591/ijere.v12i4.25353.
[28] M. M. Barry, A. M. Clarke, and K. Dowling, "Promoting social and emotional well-being in schools," *Health Education*, vol. 117, no. 5, pp. 434–451, Aug. 2017, doi: 10.1108/HE-11-2016-0057.
[29] E. Langeland, "Emotional Well-Being," in *Encyclopedia of quality of life and well-being research*, Cham: Springer International Publishing, 2022, pp. 1–3. doi: 10.1007/978-3-319-69909-7_859-2.
[30] A. Aktoprak and C. Hursen, "A bibliometric and content analysis of critical thinking in primary education," *Thinking Skills and Creativity*, vol. 44, p. 101029, Jun. 2022, doi: 10.1016/j.tsc.2022.101029.
[31] H. Lin, M. Lee, J. Liang, H. Chang, P. Huang, and C. Tsai, "A review of using partial least square structural equation modeling in e-learning research," *British Journal of Educational Technology*, vol. 51, no. 4, pp. 1354–1372, Jul. 2020, doi: 10.1111/bjet.12890.
[32] R. Heale and A. Twycross, "Validity and reliability in quantitative studies," *Evidence Based Nursing*, vol. 18, no. 3, pp. 66–67, Jul. 2015, doi: 10.1136/eb-2015-102129.
[33] M. Al-Emran, V. Mezhuyev, and A. Kamaludin, "PLS-SEM in information systems research: a comprehensive methodological reference," in *Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2018*, Cham: Springer, 2019, pp. 644–653. doi: 10.1007/978-3-319-99010-1_59.
[34] T. Teo, L. T. Tsai, and C.-C. Yang, "Applying structural equation modeling (SEM) in educational research," in *Application of Structural Equation Modeling in Educational Research and Practice*, Rotterdam: SensePublishers, 2013, pp. 3–21. doi: 10.1007/978-94-6209-332-4_1.
[35] G. R. Hancock, L. M. Stapleton, and R. O. Mueller, Eds., *the reviewer's guide to quantitative methods in the social sciences*, 2nd ed. New York: Routledge, 2018. doi: 10.4324/9781315755649.
[36] J. B. Grace and K. A. Bollen, "Representing general theoretical concepts in structural equation models: the role of composite variables," *Environmental and Ecological Statistics*, vol. 15, no. 2, pp. 191–213, Jun. 2008, doi: 10.1007/s10651-007-0047-7.
[37] H. Bashir and S. A. Bhat, "Effects of social media on mental health: a review," *International Journal of Indian Psychology*, vol. 4, no. 3, Jun. 2017, doi: 10.25215/0403.134.
[38] T. Burns and F. Gottschalk, Eds., *Educating 21st century children*. in Educational Research and Innovation. OECD, 2019. doi:

10.1787/b7f33425-en.
[39] S. Bauman and I. Rivers, *Mental health in the digital age*. Cham: Springer International Publishing, 2023. doi: 10.1007/978-3-031-32122-1.
[40] S.-C. Chen, Y.-H. Chang, J.-H. Huang, C.-W. Hsu, C.-H. Lin, and P.-Y. (Patricia) Kuo, "Exploring the effect of emotion awareness intervention on reducing FoMO," in *CHI Conference on Human Factors in Computing Systems Extended Abstracts*, New York, NY, USA: ACM, Apr. 2022, pp. 1–7. doi: 10.1145/3491101.3519839.
[41] A. Tandon, A. Dhir, I. Almugren, G. N. AlNemer, and M. Mäntymäki, "Fear of missing out (FoMO) among social media users: a systematic literature review, synthesis and framework for future research," *Internet Research*, vol. 31, no. 3, pp. 782–821, May 2021, doi: 10.1108/INTR-11-2019-0455.
[42] U. Oberst, E. Wegmann, B. Stodt, M. Brand, and A. Chamarro, "Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out," *Journal of Adolescence*, vol. 55, no. 1, pp. 51–60, Feb. 2017, doi: 10.1016/j.adolescence.2016.12.008.
[43] J. A. Savitri, "Impact of fear of missing out on psychological well-being among emerging adulthood aged social media users," *Psychological Research and Intervention*, vol. 2, no. 2, pp. 23–30, Dec. 2019, doi: 10.21831/pri.v2i2.30363.
[44] D. Rosen, *The social media debate: unpacking the social, psychological, and cultural effect of social media*. Oxon: Routledge, 2022.
[45] R. Pratiwi, M. N. A. K. Putri, A. R. Rahmatullah, N. P. P. A. T. Dewi, and N. K. D. P. Sari, "Social media engagement as a mediator of fear of missing out and self-esteem in adolescents," in *Proceedings of the International Conference of Psychology: International Conference on Indigenous Treatment and Contemporary Psychology (ICoP 2022)*, Atlantis Press, 2023, pp. 53–59. doi: 10.2991/978-2-38476-080-0_8.
[46] Y. A. Anastasya, C. M. Hadiah, I. Amalia, and E. Suzanna, "Correlation between fear of missing out and internet addiction in students," *International Journal of Islamic Educational Psychology*, vol. 3, no. 1, Jul. 2022, doi: 10.18196/ijiep.v3i1.14038.
[47] L. Brown and D. J. Kuss, "Fear of missing out, mental wellbeing, and social connectedness: a seven-day social media abstinence trial," *International Journal of Environmental Research and Public Health*, vol. 17, no. 12, p. 4566, Jun. 2020, doi: 10.3390/ijerph17124566.
[48] F. Sutanto, R. Sahrani, and D. Basaria, "Fear of missing out (FoMO) and psychological well-being of late adolescents using social media," in *Proceedings of the 2nd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2020)*, Paris, France: Atlantis Press, 2020. doi: 10.2991/assehr.k.201209.071.
[49] M. G. Hunt, R. Marx, C. Lipson, and J. Young, "No more FOMO: limiting social media decreases loneliness and depression," *Journal of Social and Clinical Psychology*, vol. 37, no. 10, pp. 751–768, Dec. 2018, doi: 10.1521/jscp.2018.37.10.751.
[50] S. Bacaksız, İ. Özsoy, T. Teğin, P. Bıçaksız, and B. Tekeş, "Anonymity as a moderator of the relationship between FOMO (fear of missing out) and psychological well-being," *Psychological Reports*, vol. 126, no. 5, pp. 2303–2321, Oct. 2023, doi: 10.1177/00332941231180115.
[51] W. Rahardjo and I. Mulyani, "Instagram addiction in teenagers: the role of type d personality, self-esteem, and fear of missing out," *Psikohumaniora: Jurnal Penelitian Psikologi*, vol. 5, no. 1, p. 29, Apr. 2020, doi: 10.21580/pjpp.v5i1.4916.
[52] P. T. S. Sulistyo, M. E. Sukamto, and N. Ibrahim, "Social media pressure and the body dysmorphic disorder tendency in women: The mediating role of perfectionism," *Psikohumaniora: Jurnal Penelitian Psikologi*, vol. 7, no. 2, pp. 137–152, Oct. 2022, doi: 10.21580/pjpp.v7i2.10637.
[53] P. Satrio, L. Wu, C. Cheng, K. Qian, Y. M. Ho, and K. D. Prihadi, "Parenting style and students' happiness in China," *Journal of Education and Learning (EduLearn)*, vol. 18, no. 1, pp. 185–193, Feb. 2024, doi: 10.11591/edulearn.v18i1.20878.
[54] F. Reer, W. Y. Tang, and T. Quandt, "Psychosocial well-being and social media engagement: The mediating roles of social comparison orientation and fear of missing out," *New Media & Society*, vol. 21, no. 7, pp. 1486–1505, Jul. 2019, doi: 10.1177/1461444818823719.
[55] H. Stead and P. A. Bibby, "Personality, fear of missing out and problematic internet use and their relationship to subjective well-being," *Computers in Human Behavior*, vol. 76, pp. 534–540, Nov. 2017, doi: 10.1016/j.chb.2017.08.016.
[56] M. A. Fabris, D. Marengo, C. Longobardi, and M. Settanni, "Investigating the links between fear of missing out, social media addiction, and emotional symptoms in adolescence: The role of stress associated with neglect and negative reactions on social media," *Addictive Behaviors*, vol. 106, p. 106364, Jul. 2020, doi: 10.1016/j.addbeh.2020.106364.
[57] T. Birkner and A. Donk, "Collective memory and social media: fostering a new historical consciousness in the digital age?," *Memory Studies*, vol. 13, no. 4, pp. 367–383, Aug. 2020, doi: 10.1177/1750698017750012.
[58] C. G. Murungi, B. Nyakwara, and T. Mwoma, "Children's safety and security in non formal pre-primary schools: The intervention measures," *Journal of Education and Learning (EduLearn)*, vol. 15, no. 4, pp. 505–510, Nov. 2021, doi: 10.11591/edulearn.v15i4.20287.
[59] F. A. Ubaidillah, S. Suryanto, and D. E. Santi, "The mediation effect of social support on the religiosity and resilience of santri students during the COVID-19 pandemic (in Indonesian: *Efek mediasi dukungan sosial terhadap religiusitas dan resiliensi mahasiswa santri selama pandemi COVID-19*)," *Jurnal Psikologi Islam dan Budaya*, vol. 5, no. 2, pp. 85–94, Dec. 2022, doi: 10.15575/jpib.v5i2.17251.
[60] Y. Tang, Y. Ma, J. Zhang, and H. Wang, "The relationship between negative life events and quality of life in adolescents: Mediated by resilience and social support," *Frontiers in Public Health*, vol. 10, Sep. 2022, doi: 10.3389/fpubh.2022.980104.
[61] C. Hayran and L. Anik, "Well-being and fear of missing out (FOMO) on digital content in the time of COVID-19: A Correlational analysis among university students," *International Journal of Environmental Research and Public Health*, vol. 18, no. 4, p. 1974, Feb. 2021, doi: 10.3390/ijerph18041974.

BIOGRAPHIES OF AUTHORS

Mujazi is a lecturer in the Department of Elementary School Education at the Faculty of Teacher Training and Education, Universitas Esa Unggul, Jakarta, Indonesia. Apart from that, he serves as coordinator of the Department of Elementary School, at the Faculty of Teacher Training and Education, Universitas Esa Unggul. His research focuses on educational management, educational psychology, health education, and research methods. He can be contacted at email: mujazi@esaunggul.ac.id.

Muhammad Rijal Fadli is a lecturer in the Department of Elementary School Education, Faculty of Teacher Training and Education, Universitas Esa Unggul, Jakarta, Indonesia. He completed a Master of Education (M.Pd.) and Doctoral (Dr.) at the Graduate School, Universitas Negeri Yogyakarta which focused his study program on social science and social studies education. His research focuses on educational sciences, character education, Islamic studies, elementary education, and social sciences. He can be contacted at email: m.rijalfadlii@gmail.com.

Ainur Rosyid is a lecturer in the Department of Elementary School Education, Faculty of Teacher Training and Education, Universitas Esa Unggul, Jakarta, Indonesia. He completed a Master of Arts (M.A.) at the Michigan State University, United States of America which focused his study program on K-12 Educational Administration. His research focuses on educational leadership, curriculum development, teacher professional development, teaching, and learning. He can be contacted at email: ainur.rosyid@esaunggul.ac.id.

Muhammad Soleh Hapudin is a lecturer in the Department of Elementary School Education, Faculty of Teacher Training and Education, Universitas Esa Unggul, Jakarta, Indonesia. He completed a Doctoral (Dr.) at the Graduate School, Universitas Islam Nusantara which focused his study program on educational sciences. His research focuses on educational sciences, education management, elementary education, teaching, and learning. He can be contacted at email: hms_hapudin@yahoo.co.id.

Moh. Imron Rosidi is a lecturer in the Department of History Education, Faculty of Social Sciences, Universitas Negeri Gorontalo, Indonesia. His research focuses on history education, character education, and social studies education. He can be contacted at email: mohimronrosidi@ung.ac.id.

Bahtiar Afwan is a lecturer in Department of History Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Metro, Indonesia. He is also on the quality assurance team for the Faculty of Teacher Training and Education, Universitas Muhammadiyah Metro. His research focuses on history, educational technology, local wisdom, and history education. He can be contacted at email: bahtiarafwan@gmail.com.