

How to Cite (APA Style):

Ittaqillah, U. M., & Kusumadewi, R. F. (2026). The role of mindfulness in reducing FOMO in PGSD students' learning engagement in the digital era. *Global Elementary Education Journal*, 1(1), 30–41.



Global
Elementary
Education

Global Elementary Education Journal

Journal homepage: <https://jurnal.unissula.ac.id/index.php/GEE>

E-ISSN: xxxx-xxxx

The Role of *Mindfulness* in Reducing FOMO in PGSD Students' Learning Engagement in the Digital Era

Ulfa Maghfiroh Ittaqillah ¹, Rida Fironika Kusumadewi ²

^{1,2}Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, Sultan Agung Islamic University, Semarang City, Indonesia

Corresponding author's e-mail: 34302200063@std.unissula.co.id

Submitted: May 25th, 2026

DOI: 10.30659/gee.xx.x.xx.xx

Revised: May 30th, 2026

Accepted: June 7th, 2026

Keywords:

*Mindfulness;
FOMO;
Learning
Engagement*

Abstract

The rapid development of digital technology has brought about the Fear of Missing Out (FOMO) phenomenon, which can disrupt the learning engagement of Unissula PGSD students. This study aims to examine the role of mindfulness in reducing FOMO and increasing learning engagement. A descriptive quantitative approach was applied to a 4-point Likert scale questionnaire completed by 30 purposively selected PGSD students. The instrument consisted of a mindfulness scale (MAAS), FOMO (Przybylski et al., 2013), and student engagement, and was tested for validity ($r > r_{table}$, $\alpha = 0.05$) and reliability (Cronbach's Alpha ≥ 0.70). Data were processed using SPSS and Excel to obtain the average value of each variable. The results showed high levels of mindfulness and learning engagement, while FOMO was moderate. Interpretation of the results concluded that high levels of mindfulness play an effective role in managing FOMO so that students remain focused and active in learning. These findings support the literature suggesting that mindfulness plays a positive role in emotional regulation and academic performance (Saraswati et al., 2023) and underscore its potential as an intervention in higher education. Practical implications include the need for mindfulness training programs to support the professional readiness of prospective teachers.

INTRODUCTION

Background of the Study

The rapid development of digital technology over the past decade has brought significant changes to people's lives, including in higher education. Students today live

Global Elementary Education Journal, Vol. 01, No. 1, June, 2026, Page. 30-42

© The Author(s). 202 6



This work is licensed under a [Creative Commons - Attribution - NonCommercial - ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/)

in an era of high connectivity, where access to information, social interaction, and entertainment is instantly available through digital devices. However, this progress also brings new challenges in the form of unconscious psychological pressures, one of which is the phenomenon of Fear of Missing Out (FOMO). FOMO is a psychological condition characterized by anxiety or fear of being left behind by information, activities, or experiences enjoyed by others, especially through social media. Research by Elyna (2021) shows that student social media users with low self-control tend to experience high levels of FOMO, which can disrupt concentration and focus in learning.

The Problem of The Study

Based on observations, students of the Elementary School Teacher Education (PGSD) Study Program at Isla Sultan Agung University are not immune to this phenomenon. As prospective educators, PGSD students are required to have a high level of learning engagement to optimally develop pedagogical, personal, social, and professional competencies (Minister of National Education Regulation No. 16 of 2007). High learning engagement is characterized by active participation, a strong interest in the material, and perseverance in completing academic assignments. However, when students are trapped in a cycle of FOMO, their attention to the learning process can be disrupted, thus reducing the quality of their learning and professional readiness. This condition certainly impacts the quality of their readiness as future teachers.

Research's State of the Art

To address these challenges, mindfulness has emerged as a relevant approach to be applied in the context of higher education. Mindfulness is the ability to consciously and openly focus attention on experiences from moment to moment, with an attitude of self-acceptance (Ajeng et al., 2025). In education, mindfulness has been shown to have a positive influence on emotional regulation, concentration, and mental well-being in students. Research by (Saraswati et al., 2023) shows that mindfulness can predictably contribute to reducing the effects of stress and improving psychological well-being. By increasing self-awareness and managing emotions, mindfulness can help students restore optimal focus and engagement in learning.

Novelty, Research Gap, & Objective

However, research on the role of mindfulness in reducing the impact of FOMO on learning engagement is still limited, especially in the context of primary school teacher education students. Primary school teacher education students are prospective teachers who require high levels of mental health to navigate the increasingly complex dynamics of education. Therefore, it is crucial to examine the effect of mindfulness in reducing FOMO and increasing learning engagement among primary school teacher education students in the digital age.

Thus, this study focuses on determining the effect of mindfulness in reducing FOMO on the learning engagement of PGSD students in the digital era. In addition to offering a preventative approach to the negative impacts of social media, this study is urgently needed to fill the gap in empirical studies linking these three variables and provide alternative solutions to the declining quality of student learning engagement due to digital pressure. It is hoped that the results of this study can provide practical contributions in designing mindfulness-based training programs or curricula for education students. Furthermore, this research is expected to contribute to the development of learning strategies and mentoring programs that support the mental health and academic performance of PGSD students as future professional educators.

METHOD

Type and Design

This study uses a quantitative approach with a descriptive research type. This approach was chosen because it is appropriate to describe the conditions and characteristics of variables, namely mindfulness as the independent variable (X), FOMO as the mediating variable (Z), and learning engagement as the dependent variable (Y) in Unissula PGSD students without providing direct treatment as in an experiment, but analyzing data based on existing conditions (ex post facto).

This type of descriptive research is considered appropriate because it is able to map the scores and distribution of each variable statistically, so that it can provide an overview of how mindfulness, FOMO, and learning engagement generally occur among Unissula PGSD students.

Data and Data Sources

The population in this study were active students of the Elementary School Teacher Education (PGSD) Study Program at Sultan Agung Islamic University. The sample was determined using a purposive sampling technique based on the following

criteria: active students of the PGSD study program at Unissula, academic experience reflecting the dynamics of learning engagement, and willingness to complete the questionnaire. The sample size used in this study was 30 students.

Data Collection Technique

The research instrument was structured as a 4-point Likert scale questionnaire with three main sections. The first section is a mindfulness scale adapted from the Mindful Attention Awareness Scale (MAAS), which measures an individual's awareness and attention to current experiences. The second section is the FOMO Scale developed by Przybylski et al. (2013) to measure an individual's level of fear of missing out on information or social experiences. The third section is the Student Engagement Scale, which is used to assess students' level of learning engagement, from cognitive, affective, and behavioral perspectives.

Before being used for primary data collection, the instrument's validity was tested using Pearson correlation analysis. The validity criterion was set at a calculated r value $> r$ table ($\alpha = 0.05$). The validity testing process was conducted on a pilot sample of 30 respondents with similar characteristics to the primary study population.

Data collection was conducted online using Google Forms to reach respondents efficiently. All respondents were asked to complete all three sections of the questionnaire in a single session, with an estimated duration of 5–7 minutes. Prior to completion, informed consent was provided and a brief explanation of the research objectives, data confidentiality, and respondents' rights to participate.

Data Analysis

The collected data was analyzed using simple descriptive analysis using Microsoft Excel and SPSS. Data analysis was performed by calculating the average score for each variable (mindfulness, FOMO, and learning engagement) to determine the tendency or level of each variable. This study did not use inferential analysis such as correlation or regression tests, but instead focused on presenting descriptive data to understand how the three variables are interrelated within the context of the experiences of Unissula Elementary School Teacher Education students.

The success of this research was determined by three main criteria. First, the instrument was considered successful if it was valid, meaning it had questions that accurately measured mindfulness, FOMO, and learning engagement. Second, the data obtained must be suitable for descriptive analysis, characterized by complete data

and the ability to calculate averages for each variable. Third, the results of the descriptive analysis must be able to logically and meaningfully describe the actual conditions of Unissula's PGSD students, by grouping average scores into appropriate categories. If these three criteria are met, this research is considered successful in achieving its objectives as a quantitative descriptive study.

With a systematic approach, the use of validated instruments, and data analysis, this research is expected to contribute to the development of strategies to increase learning engagement among PGSD students, particularly through psychological approaches such as mindfulness. This research is also expected to serve as a foundation for mindfulness-based interventions in higher education settings in response to the increasing phenomenon of FOMO among students.

RESULTS

This study used three variables: mindfulness as the independent variable (X), FOMO as the mediating variable (Z), and learning engagement as the dependent variable (Y). This study was conducted at the Faculty of Teacher Training and Education in the Elementary School Teacher Education Study Program, Sultan Agung Islamic University, Semarang, from April to July 2025. The aim was to determine how mindfulness and FOMO influence learning engagement in the real context of Unissula PGSD students. The data analysis used in this study is as follows.

1. Instrument Validity Test

Validity testing is the process of ensuring that an instrument actually measures what it is supposed to measure, not something irrelevant. The analysis used is Pearson correlation analysis. Data are considered valid if the calculated r value is greater than the table r value ($\alpha = 0.05$).

Table 1. Validity Test Results

Variables	r-count	t-count	t-table	Validity
Mindfulness (X)	0.788	6,771	2,306	Valid
Engagement (Y)	0.638	4,385	2,306	Valid
FOMO (Z)	0.705	5,261	2,306	Valid

Source: Researcher Data (2025)

Based on the results of the Pearson correlation analysis validity test, it was obtained that each questionnaire item had a correlation value (r-count) that was

greater than r -table ($\alpha = 0.05$), indicating that the item accurately measured the intended variable.

2. Descriptive Statistical Test Results

Table 1. Statistical Test Results

Variables	Mean
Mindfulness (X)	30.13
Engagement (Y)	31.13
FOMO (Z)	22.20

Source: Researcher Data (2025)

From the results of the statistical test of the Mean calculation above, a high average score of mindfulness (30.13) and learning engagement (31.13) was obtained, Unissula PGSD students showed current awareness and active participation in learning activities, both cognitively, affectively, and behaviorally. Meanwhile, the FOMO score of 22.20, indicates that Unissula PGSD students have moderate concerns about losing social information, which reflects a balance between information interest and the ability to control social media use. This indicates that mindfulness or better self-control can reduce digital distractions and increase learning engagement. Moderate FOMO can act as motivation, but if managed well through mindfulness, it can support positive engagement. The combination of high mindfulness and moderate FOMO creates conditions where students can be fully engaged without being distracted by digital social pressures.

DISCUSSIONS

The results of the study indicate that Unissula PGSD students have a high level of mindfulness (Mean = 30.13), which reflects the ability to be fully aware of the current learning experience. This finding is in line with research (Utami, 2023) which found a significant positive relationship between mindfulness and student engagement in students, with a correlation coefficient of $r = p\ 0.508$ ($p < 0.001$). This indicates that students who are more mindful tend to be more cognitively, affectively, and behaviorally involved in the learning process. The results of the study indicate that mindfulness has a significant role in creating a conducive learning environment. The average results indicate that most students are able to maintain present moment awareness or full mental presence during learning. The validity results ($r = 0.788$, $t = 6.771 > t$ -table) ensure that the mindfulness instrument truly measures this level of

awareness. This high level of mindfulness influences two main aspects: cognitive control, which is the ability to suppress irrelevant ideas or distractions when receiving material, and emotional regulation, so that students are less frequently distracted by external factors, such as social media notifications or personal emotional conditions unrelated to the lesson.

Furthermore, there was a strong correlation between mindfulness and learning engagement, as reflected in the average engagement score of 31.13. Although no direct correlation test was conducted, high scores on the instrument items indicate that students with high levels of mindfulness tend to exhibit engaged behavior, actively engage in discussions, participate emotionally, and demonstrate full attention. This means that high levels of mindfulness create consistency between mental presence and active engagement in the learning process.

The FOMO (Fear of Missing Out) variable was at a moderate level, with an average score of 22.40. This indicates that students still feel anxious about missing out on information or social experiences, but this anxiety does not exceed a detrimental level. In this context, mindfulness acts as a control factor; students with high awareness are able to recognize the urges of FOMO, such as the desire to always be updated, but do not allow themselves to be distracted by it. As a result, moderate FOMO can actually act as an adaptive motivator, encouraging students to stay engaged without causing emotional or academic harm.

Overall, this study demonstrates that mindfulness plays a crucial role as a psychological mediator in the relationship between FOMO and learning engagement. When mindfulness is high, students are able to manage their fear of missing out (FOMO), focus on the material, and actively participate in academic activities. This suggests that mindfulness, in addition to being an independent variable, is also a determinant of successful learning engagement in the context of today's digital challenges.

CONCLUSION

This study, involving 30 Elementary School Teacher Education (PGSD) students at Unissula, successfully mapped levels of mindfulness, FOMO, and learning engagement. Key findings indicated that students' mindfulness was high, while FOMO was moderate, and learning engagement was also high. Pearson validity testing ensured the instrument accurately measured the intended constructs, thus providing a strong foundation for the analysis.

From these results, it can be concluded that mindfulness plays a significant role as a foundation that enables students to effectively manage FOMO. A high level of mindfulness supports cognitive and emotional control, helping students stay focused and engaged in learning, and transforming FOMO from a potential distraction into a positive motivator in academic settings.

The essence of these findings suggests that enhancing student mindfulness can be a key strategy in managing the risk of modern distraction (FOMO) and increasing engagement in the learning process. This research confirms that developing mindfulness can be a practical step to empower PGSD students to be more productive, engaged, and resilient to digital pressures. This broadens the research objective from purely quantitative descriptive to practical recommendations for higher education strategies that are adaptive to digital challenges.

ACKNOWLEDGEMENT

The researcher would like to express her gratitude to Allah SWT who has bestowed ease upon the researcher in completing this research. Her sincere thanks go to Dr. Rida Fironika Kusumadewi, M.Pd., the lecturer in charge of the scientific paper writing course, for her guidance and constructive input during this research process, the Elementary School Teacher Training and Education Study Program, FKIP Unissula, for permission to use the data, and fellow students who have agreed to be respondents. Furthermore, the researcher would like to express her gratitude to all parties who have provided support and participated in this research, including parents, lecturers, and friends. The support and contributions from all parties are invaluable and have made this research a success.

REFERENCES

- Ajeng, Z., Rosita, R., Yuli, I., Dewi, M., & Hardiansyah, F. (2025). IMPLEMENTATION OF MINDFULNESS TECHNIQUES ON LEARNING MOTIVATION OF GRADE VI STUDENTS OF SDN PABERASAN I SUMENEP. 07(01), 206–214.
- Fan, L., & Cui, F. (2024). Mindfulness, self-efficacy, and self-regulation as predictors of psychological well-being in EFL learners. *Frontiers in Psychology*, 15 (March), 1–15. <https://doi.org/10.3389/fpsyg.2024.1332002>
- Saraswati, V., Hardika, IR, & Retnoningtias, DW (2023). The Role of Mindfulness in the Relationship between Perceived Stress and Psychological Well-Being in College Students. *Journal of Psychogenesis*, 10 (1), 12–24. <https://doi.org/10.24854/jps.v10i1.2081>
- Savitri, ENA, & Suprihatin, T. (2021). The Role of Self-Control and Fear of Missing Out

(FoMO) on Social Media Addiction Tendencies in Generation Z Students. *Psisula: Proceedings of the Psychology Periodical*, 3 (November), 336–346.

Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be constructed as a potential conflict of interest.

APPENDIX

Table 1 List of Respondents

No	Name	Semester
1	Hanifah Raehana	6
2	Siti Kholifatul Ulyatun N	6
3	Ahmad Falah	4
4	Nurul Aini RH	4
5	Cindy Agnestya	6
6	Usi Sutinah	6
7	WPB	6
8	Ufera	6
9	Nur Aini F	6
10	Shinta Ainun N	6
11	Siska Ayu A	6
12	Nailul Hidayatus	6
13	Fera	6
14	Umi Nurul S	6
15	Anik Sofwatin	6
16	Siti Istithoah	6
17	Muhammad Muhsin	6
18	Pramesti Dyah P	6
19	Sisina Cantika	6
20	Muhammad Fatih	6
21	Viona Nova K	6
22	Zahrotun Nisa	6
23	Nafi'atur Rosyidah	6
24	Tania Dwi Prawesti	6
25	Ifatul Karimah	6
26	Nauja Fatimah	6
27	Muhammad Khariswan	6
28	Ihda Malihatun	6
29	Ayu Pujiyanti	6
30	Afif Diah Wulandari	6

Table 2 Indicator Grid and Questionnaire How Focused Are You in Learning in the Digital Era?

INDICATOR	STATEMENT	EVALUATION			
		1	2	3	4
FOMO	I feel anxious if I don't check social media for a few hours.				
	I open social media automatically even when I don't need the information.				
	I prefer to open social media rather than do college assignments				
	I keep checking notifications for fear of missing something.				
	I feel like I have to stay online so I don't miss out on the latest news.				
	I feel uncomfortable if I don't know what's going on around me.				
	I'm afraid of being considered uncool if I don't follow the viral trends.				
	I get anxious if I don't reply to messages or comments from friends right away.				
	I have a hard time concentrating when I can't access social media.				
	I felt forced to join in activities just because my friends were doing them.				
Mindfulness	I am aware of the thoughts that arise while I am studying.				
	I pay attention to my breathing when I feel stressed.				
	I realized when my attention started to wander				
	I realized how my physical feelings affected my concentration while studying.				
	I am aware of the emotions I am experiencing without immediately judging them as good or bad.				
	I accept unpleasant experiences without avoiding them.				
	I don't immediately blame myself when I make a mistake.				
	I let thoughts come and go without getting caught up in them.				
	I remain calm when facing academic pressure.				
	I am able to be aware of my reactions without rushing to respond.				
Learning Engagement	I try to understand the material in depth				
	I am looking for additional learning resources apart from lecturers.				

INDICATOR	STATEMENT	EVALUATION			
		1	2	3	4
	I try to relate the lecture material to my experiences.				
	I think critically about the material being studied.				
	I prepared myself before attending lectures.				
	I feel happy when I follow the learning process				
	I feel proud when I understand difficult material.				
	I feel interested in the topics discussed in class.				
	I enjoy the learning process despite the many challenges.				
	I actively participate in class discussions.				



Figure 3 Questionnaire QR Code

Table 4 Summary of Answer Scores for Each Variable

No.	Variable Name	Variable X (Mindfulness)	Variable Y (Learning Engagement)	Variable Z (FOMO)
1	Hanifah Raehana	30	31	23
2	Siti Kholifatul Ulyatun	31	29	15
3	Ahmad Falah	29	29	23
4	Nurul Aini RH	29	35	20
5	Cindy Agnestya	33	35	19
6	Usi Sutinah	28	31	16
7	WPB	30	28	25
8	Ufera	30	34	24
9	Nur Aini Faizah	29	29	25
10	Shinta Ainun Nafisah	31	32	19
11	Siska Ayu Adeylia	28	31	22
12	Nailul Hidayatus	33	35	23
13	Fera	27	29	20

No.	Variable Name	Variable X (Mindfulness)	Variable Y (Learning Engagement)	Variable Z (FOMO)
14	Umi Nurul Syamsiyah	36	35	30
15	Anik Sofwatin Ni'mah	32	31	23
16	Siti Istithoah	30	31	22
17	Muhammad Muhsin	30	31	19
18	Pramesti Dyah P	28	27	26
19	Sisina Cantika	32	30	20
20	Muhammad Fatih	32	34	24
21	Viona Nova K	31	30	24
22	Zahrotun Nisa'	29	33	20
23	Nafi'atur rosyidah	35	34	26
24	Tania Dwi Prawesti	29	31	22
25	Ifatul Karimah	29	31	23
26	Nauja Fatimah	32	30	19
27	Muhammad Khariswan	27	31	18
28	Ihda Malihatun	28	29	26
29	Ayu Pujiyanti	27	29	22
30	Afif Diah Wulandari	29	29	28
Amount		904	934	666

Table 5 Interview Questions Table

No	Indicator	Question
1	FOMO	Do you feel anxious if you don't check social media for a few hours? How often do you experience this? Can you tell me what makes you feel anxious? Do you automatically open social media even when you don't need the information? Why do you think this happens? Does this happen while you are studying? Do you prefer opening social media rather than doing college assignments? In what situations do you usually do it?
2	Mindfulness	Do you realize when your attention starts to wander? What usually distracts you? What do you do to get back focused? Can you accept unpleasant experiences without avoiding them? What did you learn from that?
3	Learning Engagement	Are you trying to understand the material in depth? What learning strategies do you use? How do you know that you really understand? Do you feel interested in the topics discussed in class? What topic interests you the most? Why do you think it's interesting?