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The Social Comparison Trap: Association between Fear of Missing out (Fomo) and Self-Esteem in College Students

Claudine Jade P. Abellana^{1*}, Angela Marie H. Mendez¹, Gerlie Mae V. Subido¹, Claire Lynn Culajara¹

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ABSTRACT

Fear of Missing Out (FoMO) is an internalized belief that others may experience valuable events which one feels excluded. This study delves into the connection between Fear of Missing Out (FoMO) and self-esteem of students. Its objectives include understanding the demographic makeup, levels of FoMO, and self-esteem among students, and examining the correlation between FoMO and self-esteem. Validated scales were used to gauge FoMO and self-esteem, employing descriptive-correlational research design implemented. This study involved 350 students, offering insights into their experiences with FoMO and self-esteem. The results indicate that the students experience moderate levels of FoMO, both in private and social contexts, alongside moderate levels of self-esteem, with signs of disagreement in self-competence and self-liking. Spearman's rho correlation analysis highlights a significant positive correlation between FoMO and self-esteem, suggesting that higher self-esteem may be associated with slightly greater FoMO experiences. The researchers recommend exploring potential mediating factors in the self-esteem and FoMO relationship, such as social media addiction or personality traits

INTRODUCTION

The profound need for social connection marked by shared experiences is inherent to the human experience, present from infancy, and transcends the realm of social media platforms (Mazlum & Atalay, 2022). However, the constant accessibility of social media through portable devices has significantly expanded the avenues for connecting with others and sharing gratifying moments (Fuster *et al.*, 2017). Young adults, especially, dedicate much of their time to social media for communication and interaction. Despite its revolutionary impact on accessibility and interaction compared to any other point in history, this hyper-social phenomenon also presents negative consequences (Parvaeiz *et al.*, 2023).

While online social media platforms facilitate the maintenance of social relationships, they can also become breeding grounds for social comparison, influencing self-worth (Reyes, 2023). This propensity for social comparison arises from the unique affordance of social media, which allows users to browse and scroll through the lives of others without having to engage in social interactions (Joinson, 2008; Pempek *et al.*, 2009). These platforms often showcase idealized versions of reality, presenting fertile ground for social comparison. As a result, research suggests social media use can trigger anxiety, loneliness, depression, and sensitivity to exclusion, along with poorer academic performance and overall well-being (Alabri, 2022). Consequently, a growing body of research views the fear of missing out (FoMO) as a byproduct of social media, hypothesizing that scrolling through feeds intensifies these feelings (Alabri, 2022; Buglass *et al.*, 2017; Lai *et al.*, 2016; Yin *et al.*, 2019).

The Philippines stands out for its pervasive social media

culture. Statistics indicate the Philippines boasts one of the highest internet penetration rates in the Asia-Pacific region, with Filipinos averaging 10 hours daily spent online, from social media engagement to streaming services and online gaming (Statista, 2023). As of January 2024, internet users in the Philippines reached 86.98 million, representing 73.6% of the population (DataReportal, 2024). Furthermore, the highest concentration of social media users lies within the 18–24 age group (NapoleonCat, 2024). This intense social media engagement raises concerns about the prevalence of fear of missing out (FoMO), according to research by Alutaybi *et al.* (2020).

Emerging in 2004, the concept of fear of missing out (FoMO) encapsulates the internalized belief that others are experiencing valuable events or opportunities, leading to feelings of exclusion (Sa'id & Dewi, 2022). Interestingly, this contemporary term reflects a fundamental human need: the desire for social connection and fulfilling experiences, evident from the earliest stages of life (Fuster *et al.*, 2017). FoMO represents a unique concept specific to the social media landscape, wherein it manifests through the perception of missing out on social interactions, often leading to compulsive behaviors aimed at maintaining those connections (Gupta & Sharma, 2021).

According to Zhang *et al.* (2020), fear of missing out stems from a perceived threat to one's self-concept, encompassing both public (social) and private aspects. The social dimension of FoMO arises from the anxiety of missing out on social interactions and events within an individual's social network. This social anxiety is linked to how individuals evaluate their social environment. It manifests as distress or fear of not being present at social

¹ Department of Arts and Sciences Psychology Program, University of Mindanao Digos College Digos City, Philippines

* Corresponding author's e-mail: cjadebellana@gmail.com

events, gatherings, or missing updates from peers on social media platforms (Mazlum & Atalay, 2022). Conversely, FoMO can also be driven by threats to the private self when individuals miss an opportunity to strengthen or protect their personal identity (Zhang *et al.*, 2020). This private aspect of FoMO encompasses feelings of regret, discontent, fear, anxiety, disappointment, and being left behind, arising independently of social interactions or how others perceive them. In this sense, the fear associated with the private facet of FoMO is centered on the individual themselves (Mazlum & Atalay, 2022).

Self-esteem, on the other hand, is the subjective evaluation of one's worth, reflecting the positive or negative attitude an individual holds toward oneself. It encompasses how individuals perceive and value their own capabilities, qualities, and overall self-image (Ryszewska-Łabędzka *et al.*, 2022). According to Buchanan (2024), self-esteem has self-liking and self-competence factors. Self-competence refers to an individual's belief in their ability to achieve goals and overcome challenges. It encompasses feelings of confidence, capability, and efficacy. Self-liking, on the other hand, reflects an individual's inherent sense of worth and value as a person. It is associated with feeling good about oneself and having a sense of social belonging (Schmitt & Allik, 2005).

Studies suggest that young people today are particularly vulnerable to fear of missing out (FoMO), social comparison, and social media addiction. The rise of social media platforms, filled with curated content from others' lives, has fundamentally reshaped social interaction. Users can easily compare themselves to these seemingly perfect portrayals, leading to a relentless sense of inadequacy (Parveiz *et al.*, 2023). This, in turn, can trigger FoMO, where individuals become preoccupied with what they might be missing out on. FoMO then shifts a user's focus outward, potentially leading to a loss of self-esteem and a blurred sense of identity (Du, 2023).

A growing body of research across the globe has investigated the link between fear of missing out (FoMO) and its negative impact on self-esteem, particularly in young people. One study by Torres-Serrano (2020) examined the complex interplay between these factors. The research revealed a negative correlation between FoMO and self-esteem, meaning individuals with higher FoMO tend to have lower self-esteem. This suggests that the constant comparison facilitated by social media, coupled with the pressure to stay perpetually connected and updated, may be detrimental to self-esteem. Further supporting this notion, Santos *et al.* (2023) found that both low self-esteem and high FoMO are associated with online trolling behavior. Individuals experiencing low self-esteem may be driven towards online environments to fulfill a need for social validation and external affirmation, potentially manifesting in the adoption of trolling behaviors. Conversely, high FoMO can exacerbate feelings of insecurity and cultivate a compulsive need for perpetual online engagement, which can also elevate the likelihood of engaging in trolling behavior.

Moreover, the Philippines' widespread internet and social media access led researchers to explore how these platforms influence FoMO and self-esteem. A 2022 study by Hernandez *et al.* found a positive correlation between social media use and FoMO in Filipino freshmen college students, suggesting that increased social media engagement heightens the fear of missing out on social events and opportunities. It implies that excessive social media use elevates the risk of developing FoMO. Similarly, Reyes *et al.* (2023) examined the link between social media use, social comparison, and self-esteem in young Filipino adults. Their study revealed that social comparison mediates the association between increased social networking and lower self-esteem. In essence, their study found that greater social media engagement stimulates self-comparison, leading to decreased self-esteem.

Prior research has predominantly delved into the intersection of fear of missing out (FoMO) and self-esteem independently. The literature has extensively explored FoMO, particularly its association with social media usage, often overlooking a direct examination of its impact on students' self-esteem. While international studies demonstrate a relationship between fear of missing out (FoMO) and self-esteem, research within the Philippines, specifically the Davao region, remains limited. Few studies, if any, have directly explored this relationship.

In the contemporary world characterized by pervasive social media connectivity, the fear of missing out (FoMO) has emerged as a significant concern, potentially undermining self-esteem. While existing research has shed light on the individual components of FoMO and self-esteem, there is a critical need for more integrated studies that examine their intersection and broader implications for mental health. By deepening our understanding of these phenomena, we can work towards developing holistic approaches to address the challenges posed by FoMO and promote positive psychological well-being among individuals across diverse socio-cultural contexts.

Research Objectives

The researchers aimed to clarify and provide a detailed explanation of the relationship between fear of missing out (FoMO) and self-esteem. Additionally, this study endeavors to investigate the following:

1. What is the demographic profile of students in terms of gender, year level, and department?
2. What is the level of FoMO among students in terms of private and social?
3. What is the level of self-esteem of students in terms of self-competence and self-liking?
4. Is there a significant relationship between FoMO and the self-esteem of students?

Conceptual Framework

The conceptual framework of this study is shown above in Figure 1. The independent variable is the fear of missing out (FoMO), with two indicators: social and

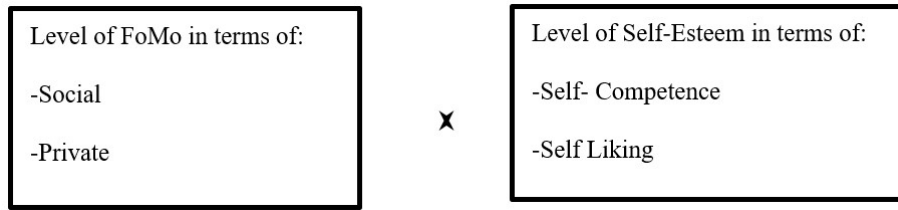


Figure 1: Schematic Diagram Showing the Variables of the Study

private. Meanwhile, self-esteem is the dependent variable with two indicators: self-competence and self-liking. The visual representation in the schematic diagram illustrates the variables of the study, demonstrating how FoMO, the independent variable, impacts self-esteem, the dependent variable, through its indicators.

MATERIALS AND METHODS

Research Respondents

Using simple random sampling, the respondents (n=350) were randomly selected exclusively within the university in Davao region across all gender, year level, and department during the academic year 2023-2024 (Noor *et al.*, 2022). In determining the sample size Slovin’s formula was utilized, wherein 350 respondents were employed (Anugraheni *et al.*, 2023).

Research Instruments

Gathering data was completed by utilizing the Fear of Missing Out (FoMO), (Mazlum & Atalay,2022) scale and the Rosenberg Self-Esteem Scale (RSE) (Buchanan, 2024) with the permission from the authors. FoMO Scale comprised a total of 17 items, with 8 items in the private factor and 9 in the social factor. This scale demonstrated commendable validity and reliability, evidenced by a Cronbach’s alpha level of 0.88. On the other hand, Buchanan (2024) assessed self-esteem through 10 items in the RSE, dividing the construct of the tool into 2 parts, where the first 5 items were for self-competence and the remaining 5 items were for self-liking. This scale was recognized as one of the most extensively employed tools for gauging self-esteem with an excellent stability of Guttman scale coefficient of 0.92 validity and reliability.

Table 1: Fear of Missing Out scale Mean Interpretation

Mean Interval	Description	Interpretation
4.21 - 5.00	Extremely true	Constantly experience FoMO
3.41 - 4.20	Very true	Frequently experience FoMO
2.61 - 3.40	Moderately true	Moderately experience FoMO
1.81 - 2.60	Slightly true	Occasionally experience FoMO
1.00 - 1.80	Not at all true	Rarely experience FoMO

Table 2: Rosenberg Self-Esteem scale Mean Interpretation

Mean Interval	Description	Interpretation
3.26 - 4.00	Strongly agree	High self-esteem
2.51 - 3.25	Agree	Moderate self-esteem
1.76 - 2.50	Disagree	Low self-esteem
1.00 - 1.75	Strongly disagree	Very low self-esteem

Above is the interpretation used to evaluate the mean scores of the Fear of Missing Out scale (FoMO) and Rosenberg Self-Esteem scale (RSE) of the students. The mean interval is presented, following the description column and the interpretation of the mean column.

Design and Procedure

In this descriptive-correlational study, it engaged a quantitative research approach to validate the relationship between fear of missing out (FoMO) and self-esteem of students with the credibility of using a Likert scale for the assessment. The researchers collected the data both in physical and online surveys. The researchers used the Jamovi app to analyze the study’s objectives after collecting the data.

Statistical Treatment

In testing the normality of the data using Shapiro Wilk Test, the researchers were able to conclude that the data was not normally distributed (W = 995, p-value = 326) indicating rejection of null hypothesis (Shreshta, 2023). After establishing the results, Spearman correlation coefficient was applied for evaluating the presence of a monotonic association within the study. (Schober *et al.*, 2018). Conversely, linear regression was utilized and it was observed that none of the subscales of Fear of Missing Out (FoMO) were identified as predictors for the overall mean of self-esteem. Therefore, the analysis in this methodology did not satisfy the linear pattern in the relationship between the subscales of FoMO and self-esteem (Hope, 2020).

Ethical Consideration

The researchers involved in this study followed the restrictions set forth by the University’s Research Ethics Committee and closely upheld ethical standards to protect both the respondents and the researchers to ensure strict adherence to ethical codes during the research process (Hasan *et al.*, 2021).

Voluntary Participation

The respondents were given free will to give their consent in a voluntary procedure. They were informed that the consent forms provided should be signed to confirm their approval and involvement in this study.

Privacy and Confidentiality

The respondents were clearly aware that there is confidentiality of contact and personal information. They were ensured that only the researchers involved were aware of their identities and were given the right to secrecy and privacy.

Informed Consent Process

The researchers took the time to ask for consent from the dean of the university for the approval of this study before distributing the consent to the respondents. It was demonstrated that the participation was voluntary and that the ethical procedures were followed.

Risks

The respondents were not subjected to any adverse consequences because the study only pursued beneficence and non-maleficence. The data was only collected inside the university, where it was an advantage to be safe enough for them to participate.

Benefits

The research may contribute to enhancing awareness among the respondents. It enables them to recognize and understand themselves better, thus reducing the likelihood of experiencing FOMO and its potential negative impact on their mental health.

RESULTS AND DISCUSSION

The researchers provide a detailed examination that includes data collection, findings, data-derived interpretation, and discussions elucidating the findings. The tables are categorized under several subheadings, including Level of FoMO Among Respondents, Level of Self-Esteem Among Respondents, Summary of Spearman's rho Correlation between FoMO and Self-Esteem, and Regression Analysis for Variables Predicting FoMO and Self-Esteem (n=350).

Demographic Profile of Respondents

Table 3 presents the overall respondents of the conducted research comprising students studying in the university. Department of Technical Program as DTP, Department of Teacher Education as DTE, Department of Arts and Science as DAS, Department of Business Administration as DBA, Department of Accounting Education as DAE, and Department of Criminal Justice Education as DCJE. Reaching the goal of respondents' recruitment, 350 students from the university took part in the study as respondents. Out of 350 respondents, 56.6% identified as female, 42.0% as male, and 1.4% as LGBTQ+ in which the majority, 46.9%, were 1st-year students (164 individuals),

Table 3: Demographic Profile of Respondents

Profile	f	%
Gender		
Male	147	42.0%
Female	198	56.6%
LGBTQ+	5	1.4%
Year Level		
1st Year	164	33.1 %
2nd Year	116	12.3 %
3rd Year	43	7.7 %
4TH Year	27	46.9 %
Department		
DTP	44	12.6 %
DTE	42	12.0 %
DAS	74	21.1 %
DBA	42	12.0 %
DAE	36	10.3 %
DCJE	112	32.0 %

followed by 33.1% 2nd-year (116 respondents), 12.3% 3rd-year (43 respondents), and 7.7% 4th-year (27 respondents). Moreover, regarding departments, the highest percentage, 32.0%, falls under DCJE, followed by 21.1% in DAS, 12.6% in DTP, 12.0% in DTE and DBA, 12.9% in DBA alone, and 8.6% in DAE. The respondents were guaranteed that the information they provided would be securely maintained and would be disregarded once the study was completed.

The Level of FoMO of Respondents

Table 4 presents an overview of the statistical analysis outcomes employed to assess the levels of fear of missing out (FoMO) among college students enrolled at the University, focusing on two distinct criteria: private and social.

Table 4: Level of FoMO Among Respondents

Indicator	X	SD	Interpretation
Private	3.23	0.699	Moderately Experience FoMO
Social	2.95	0.798	Moderately Experience FoMO
Overall	2.75	0.560	Moderately Experience FoMO

According to the provided results, there is an overall total of (X = 2.75, SD = 0.560) for the level of FoMO among respondents, described as "moderately true." In per-item evaluation, private has a higher (X = 3.23, SD = 0.699), described as "moderately true," which demonstrates that students partially undergo FoMO privately. In contrast, Social has a lower (X = 2.95, SD = 0.798), described as "moderately true," which demonstrates that students

partially undergo FoMO socially. This underscores that the level of FoMO among respondents in both social and private settings experience FoMO moderately. Multiple factors can explain why students experience fear of missing out in a moderate level. Excessive use of smartphones can be a factor to the reason why students experience fear of missing out moderately. According to Qutishat and Sharour's (2019) study, smartphones and their apps are pivotal in worldwide communication. Increased interaction with others through these devices reduces the fear of missing out, making them aware of the events of their loved ones, reinforcing a sense of connection and feeling of inclusion. Another factor based on Sa'id and Dewi's (2022) study observed that people who have low to moderate levels of FoMO (fear of missing out) feel at ease within their social media surroundings, experiencing no sense of isolation from the information or activities of others. Both studies have comparable results.

The Level of Self-Esteem of Respondents

Table 5 presents an overview of the statistical analysis outcomes employed to assess the levels of Self-esteem among college students enrolled at the University, focusing on two distinct criteria: Self-competence and Self-liking.

Table 5: Level of Self-Esteem Among Respondents

Indicator	X	SD	Interpretation
Self-competence	2.27	0.459	Low self-esteem
Self-liking	2.18	0.499	Low self-esteem
Overall	2.19	0.471	Low self-esteem

According to the provided results, there is an overall total of ($X = 2.19$, $SD = 0.471$) for the level of self-esteem among respondents, described as "disagree." In per-item evaluation, self-competence is higher ($X = 2.27$, $SD = 0.459$), described as "disagree." Self-liking, on the other hand, is lower ($X = 2.18$, $SD = 0.499$), described as "disagree." This underscores that the level of self-esteem among respondents in both self-competence and self-liking is low.

Low self-esteem among students can be influenced by various factors, and these factors can interact in complex ways. According to Vannucci *et al.* (2012), students frequently engage in comparisons with their peers, whether it be in academic achievements or social interactions, which can result in emotions of inadequacy and diminished self-esteem. According to findings by Fardouly *et al.* (2015), an extensive engagement with social media platforms coupled with frequent comparisons to the carefully constructed portrayals of others' lives may result in a decline in self-esteem. This decline in self-esteem can manifest due to the tendency of individuals to internalize perceived discrepancies between their own lives and the idealized representations often showcased on social media platforms, thereby fostering

feelings of inadequacy and diminished self-worth. Such repetitive exposure to idealized imagery and lifestyles may exacerbate feelings of inferiority, highlighting the profound impact of social media on individuals' self-perception and psychological well-being.

Correlation between FoMO and Self-Esteem

Table 6 indicates the Spearman's rho correlation coefficients between two variables: FoMO (Fear of Missing Out) Overall and Self-Esteem Overall.

Table 6: Summary of Spearman's rho Correlation between FoMO and Self-Esteem

Independent Variable	Self-Esteem		
	r	p-value	Remarks
FoMO	.298	< .001	Significant

The correlation coefficient of 0.298 suggests a weak positive correlation between FoMO and self-esteem. This suggests that if an individual's self-esteem increases, their fear of missing out may also increase. The result was highly unexpected however it can be supported by a study conducted by (Servidio *et al.*, 2024). The increased fear of missing out (FoMO) experienced by individuals often drives them towards increased engagement in social activities, particularly through the use of social media platforms, in order to mitigate feelings of exclusion. The more they feel included in a group, the higher their self-esteem gets. On the other hand, this finding contradicts the study of Maes (2023), indicating that adolescents with an increased level of fear of missing out (FoMO) tend to exhibit lower self-esteem. The result noted a significant relationship between two variables. This result is supported by a study by Santos *et al.* (2023), which found that there is a relationship between self-esteem and fear of missing out linked to online trolling.

CONCLUSION

The conducted research investigated the correlation between Fear of Missing Out (FoMO) and self-esteem among college students. The study encompassed 350 respondents from diverse departments and academic levels, with a predominance of female participants. It unveiled a moderate level of FoMO experienced both privately and socially. Furthermore, the research identified a prevalent issue of low self-esteem among participants, indicating a necessity for interventions aimed at bolstering self-concept and acknowledging support networks. Spearman's rho correlation analysis established a weak positive correlation between FoMO and self-esteem, underscoring their interconnected nature. Consequently, exploring mediating factors like social media addiction or personality traits is recommended. Such an exploration holds promise in providing valuable insights for predictive analysis and targeted interventions addressing self-esteem concerns.

RECOMMENDATION

Based on the established positive correlation, recommendations are formulated to enhance student well-being. For Administrators, organizing seminars addressing FoMO and self-esteem could empower students by promoting growth mindsets and encouraging mindful social media usage. For Students, comprehending FoMO can mitigate its detrimental effects on self-esteem and academic performance, while engaging in activities fostering a sense of belonging is encouraged. Educators, equipped with insights into student challenges, can create supportive environments conducive to identifying and assisting students grappling with anxiety or feelings of inadequacy. Psychology Practitioners are urged to delve into the concept of “healthy FOMO” to enhance self-esteem and develop interventions targeting positive behavioral changes. Lastly, Future Researchers are encouraged to explore mediating factors in the FoMO and self-esteem relationship, utilizing adjusted sample sizes to deepen comprehension in the digital era.

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REFERENCES

- Alabri, A. (2022). Fear of missing out (FOMO): the effects of the need to belong, perceived centrality, and fear of social exclusion. *Human Behavior and Emerging Technologies*, 2022, 1–12. <https://doi.org/10.1155/2022/4824256>
- Alutaybi, A., Al-Thani, D., McAlaney, J., & Ali, R. (2020). Combating Fear of missing out (FOMO) on social media: the FOMO-R Method. *International Journal of Environmental Research and Public Health (Online)*, 17(17), 6128. <https://doi.org/10.3390/ijerph17176128>
- Anugraheni, T. D., Izzah, L., & Hadi, M. S. (2023). Increasing the Students’ Speaking Ability through Role-Playing with Slovin’s Formula Sample Size. *Jurnal Studi Guru Dan Pembelajaran*, 6(3), 262–272. <https://doi.org/10.30605/jsgp.6.3.2023.282>
- Buchanan, B. (2024, February 14). Rosenberg Self-Esteem Scale (RSES). NovoPsych. <https://novopsych.com.au/assessments/well-being/rosenberg-self-esteem-scale-rses/?fbclid=IwAR1c4N-N e 0 W r x m i 3 3 u R 9 3 u E f K a G A U 6 R 1 - - dNHgee5seYKcdHw8AjRTVjPRI>
- Buglass, S. L., Binder, J. F., Betts, L. R., & Underwood, J. (2017). Motivators of online vulnerability: The impact of social network site use and FOMO. *Computers in Human Behavior*, 66, 248–255. <https://doi.org/10.1016/j.chb.2016.09.055>
- DataReportal. (2024). Digital 2024: The Philippines. DataReportal – Global Digital Insights.
- Du, Y. (2023). Social Media: Exploring the Relationship between Social Media Experience and Self-esteem on Chinese Youth. *Lecture Notes in Education Psychology and Public Media*, 3(1), 790–799. <https://doi.org/10.54254/2753-7048/3/2022339>
- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: Examining the effects of Facebook on young women’s mood and body image. *Body Image*, 13, 38–45.
- Fúster, H., Carbonell, X., Pontes, H. M., & Griffiths, M. D. (2016). Spanish validation of the Internet Gaming Disorder-20 (IGD-20) Test. *Computers in Human Behavior*, 56, 215–224. <https://doi.org/10.1016/j.chb.2015.11.050>
- Gupta, M., & Sharma, A. (2021). Fear of missing out: A brief overview of origin, theoretical underpinnings and relationship with mental health. *World Journal of Clinical Cases*, 9(19), 4881–4889. <https://doi.org/10.12998/wjcc.v9.i19.4881>
- Hasan, N., Rana, R. U., Chowdhury, S., Dola, A. J., & Rony, M. K. K. (2021). Ethical considerations in research. *Journal of Nursing Research Patient Safety and Practise*, 11, 1–4. <https://doi.org/10.55529/jnrps11.1.4>
- Hernandez, C. V., Reyes, R. J. A., Tejada, K. C. M., & De Luna, L. R. (2022). Fear of Missing Out, Social Media Engagement and Social Anxiety Among Filipino First Year College Students: A Mediation Analysis. Proceedings of the 2022 6th International Conference on Education and E-Learning. <https://doi.org/10.1145/3578837.3578881>
- Hope, T. M. (2020). Linear regression. In *Elsevier eBooks* (pp. 67–81). <https://doi.org/10.1016/b978-0-12-815739-8.00004-3>
- Joinson, A. (2008). Looking at, looking up or keeping up with people?: Motives and Use of Facebook. Proceeding of the twenty-sixth annual SIGCHI conference on Human factors in computing systems. 1027-1036. <https://dl.acm.org/doi/10.1145/1357054.1357213>
- Lai, C., Altavilla, D., Ronconi, A., & Aceto, P. (2016). Fear of missing out (FOMO) is associated with activation of the right middle temporal gyrus during inclusion social cue. *Computers in Human Behavior (Print)*, 61, 516–521. <https://doi.org/10.1016/j.chb.2016.03.072>
- Maes, M. (2023). The influence of passive social networking site use on Self-Esteem: The Mediating Role of Upward Comparison and FOMO. <https://studenttheses.uu.nl/handle/20.500.12932/44511>
- Mazlum, M. M., & Atalay, A. (2022). Developing the fear of missing out (FoMO) scale for Col students: The validity and reliability study. *Journal of Pedagogical Research*, 6. <https://doi.org/10.33902/jpr.202215485>
- NapoleonCat. (2024). Social Media users in Philippines-March 2024. Retrieved from NapoleonCat: <https://napoleoncat.com/stats/social-media-users-in-philippines/2024/03/>
- Noor, S., Tajik, O., & Golzar, J. (2022). Simple random

- sampling. www.ijels.net. <https://doi.org/10.22034/ijels.2022.162982>
- Parveiz, S., Amjad, A., & Ayub, S. (2023). Fear of Missing Out (FOMO), Social Comparison and Social Media Addiction among Young Adults. *Pakistan Journal of Applied Psychology*, 3, 224-235. <https://doi.org/10.52461/pjap.v3i1.1283>
- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of applied developmental psychology*, 30(3), 227-238. <http://dx.doi.org/10.1016/j.appdev.2008.12.010>
- Qutishat, M., & Sharour, L. A. (2019). Relationship between fear of missing out and academic performance among Omani University students: A Descriptive correlation study. *Oman Medical Journal*, 34(5), 404-411. <https://doi.org/10.5001/omj.2019.75>
- Reyes, M. E. S., Buluran, C. A. D., Celicious, A. M. B., & Zsila, Á. (2023). Social Networking Sites Use and Self-Esteem among Filipino Young Adults: Does Social Comparison Mediate or Moderate this Association?. *North American Journal of Psychology*, 25(4), 697-716. https://www.researchgate.net/publication/375895617_Social_Networking_Sites_Use_and_Self-Esteem_among_Filipino_Young_Adults_Does_Social_Comparison_Mediate_or_Moderate_this_Association
- Ryszewska-Labędzka, D., Tobis, S., Kropińska, S., Wieczorowska-Tobis, K., & Talarska, D. (2022). The Association of Self-Esteem with the Level of Independent Functioning and the Primary Demographic Factors in Persons over 60 Years of Age. *International Journal of Environmental Research and Public Health*, 19(4), 1996. <https://doi.org/10.3390/ijerph19041996>
- Sa'id, M., & Dewi, D. C. S. (2022). Mindfulness and fear of missing out in final year undergraduate students. *KnE Social Sciences*, 7(18), 125-136. <https://doi.org/10.18502/kss.v7i18.12382>
- Santos, I. L. S., Lima, D. C. N., Dias, E. V. A., Pessoa, T. E. G., Paiva, T. T., & Pimentel, C. E. (2023). Low Self-Esteem, high FOMO? The other side of the internet troll. *Psychological Reports*. <https://doi.org/10.1177/00332941231183136>
- Schmitt, D. P., & Allik, J. (2005). Simultaneous Administration of the Rosenberg Self-Esteem Scale in 53 nations: Exploring the universal and Culture-Specific features of global Self-Esteem. *Journal of Personality and Social Psychology*, 89(4), 623-642. <https://doi.org/10.1037/0022-3514.89.4.623>
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation Coefficients: appropriate use and interpretation. *Anesthesia & Analgesia*, 126(5), 1763-1768. <https://doi.org/10.1213/ane.0000000000002864>
- Servidio, R., Soraci, P., Griffiths, M. D., Boca, S., & Demetrovics, Z. (2024). Fear of missing out and problematic social media use: A serial mediation model of social comparison and self-esteem. *Addictive Behaviors Reports*, 19, 100536. <https://doi.org/10.1016/j.abrep.2024.100536>
- Statista. (2023). Internet usage in the Philippines - statistics & facts. Retrieved from <https://www.statista.com/topics/5660/internet-economy-in-the-philippines/>
- Torres-Serrano, M. (2020, May). Fear of missing out (FoMO) and Instagram use: Analysis of the relationships between narcissism and self-esteem. *Aloma*, 38(1), 31-38. <https://doi.org/10.51698/aloma.2020.38.1.31-38>
- Vannucci, A., Flannery, K. M., & Ohannessian, C. M. (2012). Social media use and anxiety in emerging adults. *Journal of Affective Disorders*, 207, 163-166.
- Yin, L., Wang, P., Nie, J., Guo, J., & Feng, J. (2019). Social networking sites addiction and FoMO: The mediating role of envy and the moderating role of need to belong. *Current Psychology*, 40(8), 3879-3887. <https://doi.org/10.1007/s12144-019-00344-4>
- Zhang, Z., Jiménez, F. R., & Cicala, J. E. (2020). Fear Of Missing Out Scale: A self-concept perspective. *Psychology & Marketing*, 37(11), 1619-1634. <https://doi.org/10.1002/mar.21406>