The Psychological Impact of Social Media on the Self-Esteem and Body Image of Pre-Adolescent Students

Budiawan[1], Bruna Costa[2], Raul Gomez[3]
[1] Universitas Teknologi Sulawesi, Indonesia
[2] Universidade Estadual Mato Grosso Sul, Brazil
[3] Universidade Federal Minas Gerais, Brazil

Corresponding Author:

Budiawan,
Universitas Teknologi Sulawesi, Indonesia
Bekas gedung SMK Panca Marga, Jl. Talasalapang No.51A, Karunrung, Kec. Rappocini, Kota Makassar, Sulawesi Selatan 90222
Email: budiawanuts@gmail.com

Abstract
The increasing use of social media has raised concerns about its psychological impact on young adolescents, particularly concerning their self-esteem and body image. This study explores the effects of social media engagement on the self-esteem and body image perceptions of pre-adolescent students aged 10-12 years. The research aimed to assess how the frequency and nature of social media use contribute to body dissatisfaction and self-esteem levels among pre-adolescents. A mixed-method approach was employed, using surveys and in-depth interviews with 200 pre-adolescent students from four schools. The quantitative data were analyzed through descriptive statistics and correlation analysis, while qualitative data were thematically analyzed to gain deeper insights into personal experiences. The results indicated a significant negative correlation between social media usage and self-esteem, with increased exposure to idealized body images linked to higher levels of body dissatisfaction. Moreover, participants reported feeling pressure to conform to social media beauty standards, which impacted their body image perceptions. In conclusion, the findings highlight the importance of managing social media exposure for young adolescents to mitigate its potential negative effects on self-esteem and body image. Educational and parental interventions are essential to support pre-adolescents in developing healthier social media habits.

INTRODUCTION

The rise of social media platforms in the past decade has profoundly influenced various aspects of human life, particularly in the realm of youth development. Among the most affected groups are pre-adolescent students, who are increasingly exposed to social media content at an early age. Social media's visual-centric nature, featuring curated content, influencer-driven trends, and idealized beauty standards, has led to concerns about its impact on young users. One of the most significant areas of concern is the psychological effects of social media on self-esteem and body image. Pre-adolescents, who are still in the process of forming their identities, are particularly vulnerable to external influences, making them more susceptible to social comparison and body dissatisfaction (Ergün, 2025; Frielingsdorf et al., 2025). With social media being a pervasive presence in their daily lives, it is essential to examine how this exposure shapes their perception of self-worth and physical appearance. Research has shown that social media can create unrealistic expectations and reinforce societal standards of beauty, which can affect the mental well-being of youth, particularly in their formative years.

This phenomenon is compounded by the tendency of social media to present selective, filtered images of reality, where only the most idealized versions of life and bodies are portrayed. This constant exposure to 'perfect' images can create feelings of inadequacy among pre-adolescents, as they compare themselves to influencers and peers on these platforms. Social media also acts as a platform where body image issues are often normalized, which can exacerbate existing insecurities or create new ones in young users. The complex relationship between social media usage and its psychological effects, especially during pre-adolescence, necessitates an in-depth exploration of its consequences on self-esteem and body image (Grajek et al., 2025; Vanhoffelen et al., 2025).

Given the increased screen time among young people and the societal shift toward digital interactions, understanding how social media influences pre-adolescents' mental health is crucial. The potential long-term effects on self-esteem and body image could impact their overall psychological development. Therefore, investigating how social media usage affects these aspects in pre-adolescent students will not only fill an important gap in the literature but also provide insights into potential interventions that can protect young minds from the negative psychological impact of these digital platforms (Ribeiro et al., 2025; Zhang & Zhao, 2025).

Despite growing awareness of the mental health risks associated with excessive social media use, there is limited empirical research focused specifically on pre-adolescent students and the psychological effects on their self-esteem and body image. Much of the existing research centers on adolescents and young adults, overlooking the crucial period of pre-adolescence, when self-concept and body image are still being formed. This gap in the literature is concerning, as pre-adolescents are particularly vulnerable to the pressures of social media, yet their unique psychological needs and experiences are often not adequately addressed. Social comparison, which is a well-documented phenomenon in adolescence, begins much earlier and can affect pre-adolescents' sense of self-worth and body image (Sanders, 2025; Szlávicz & Osváth, 2025).

Furthermore, the existing studies on body image and self-esteem primarily focus on general adolescent populations, neglecting to account for the specific experiences and challenges faced by pre-adolescents, especially in relation to the emerging digital landscape.

The question arises whether pre-adolescents, who may not have fully developed coping mechanisms or critical thinking skills, are more susceptible to body image dissatisfaction due to their exposure to social media. Moreover, while social media use has been shown to correlate with decreased body satisfaction and lower self-esteem in older adolescents, it remains unclear whether this effect is similarly present in younger students, particularly those who are at an age when self-perception and body awareness begin to intensify (Hofmann et al., 2025; Vanweser et al., 2025).

This gap calls for an investigation into how social media impacts pre-adolescents' self-esteem and body image specifically, which has been inadequately studied to date. Given that the age range of 10-12 years is a critical developmental stage, understanding how pre-adolescents internalize social media portrayals of beauty and success is essential for mitigating potential harm. The current research aims to address this gap by exploring the direct correlation between social media usage and the psychological effects on pre-adolescent students, focusing on their body image and self-esteem.

The primary objective of this research is to investigate the psychological impact of social media on the self-esteem and body image of pre-adolescent students. Specifically, the study aims to identify the extent to which social media exposure influences how pre-adolescents perceive their physical appearance and their overall self-worth. By analyzing the relationship between social media usage and these psychological factors, the study intends to provide insights into the mechanisms by which social media affects self-esteem and body image (Maerevoet et al., 2025; Nuckols & Ranta, 2025). The research will also examine whether certain types of social media content, such as images related to beauty standards, influencers, or peer comparisons, contribute more significantly to body dissatisfaction and self-esteem issues.

Additionally, the study seeks to explore how pre-adolescent students cope with the pressures of social media and whether their self-esteem and body image are impacted differently based on factors such as gender, age, and the type of social media content consumed. By investigating these variables, the research aims to offer a comprehensive view of the psychological consequences of early social media exposure on pre-adolescents. The findings will help inform educators, parents, and mental health professionals about the risks posed by social media, enabling them to develop appropriate interventions that promote healthy self-esteem and body image in this vulnerable age group (Kim et al., 2025; Pouwels et al., 2025).

The ultimate goal of this st udy is to contribute to the academic discourse surrounding the psychological effects of social media on youth, specifically pre-adolescents, by shedding light on their unique experiences. Understanding the impact of social media on self-esteem and body image in this demographic will inform preventive measures and educational strategies that can mitigate negative outcomes and help young students develop healthier perceptions of themselves.

While there has been an increasing body of research focusing on the impact of social media on adolescents and young adults, studies specifically targeting pre-adolescent students are still limited. This gap is significant, given the developmental stage of pre-adolescents and the increasing exposure they have to social media at younger ages. Most research has concentrated on older adolescents, where self-esteem and body image are well-established concerns, but the unique challenges and vulnerabilities of pre-adolescents have not been

adequately explored. For example, many studies that focus on social media use and self-esteem among teenagers assume that these effects emerge gradually, ignoring the fact that social comparison and body image concerns begin earlier (Kilby & Mickelson, 2025; Potier et al., 2025).

In addition, the majority of existing research often lumps adolescents into broad age categories, failing to account for the different ways that social media use impacts younger individuals versus older teenagers. There is little understanding of how pre-adolescents, whose self-concept is still evolving, internalize images and messages from social media. The lack of research specifically on this younger age group limits the ability to draw conclusions about the early psychological effects of social media (Grove & Ermes, 2025; Kreft et al., 2025).

This study addresses the gap by focusing on the pre-adolescent demographic, a critical age for psychological development. By examining how pre-adolescents interact with and are affected by social media content, the research aims to provide valuable insights into the early onset of body image issues and self-esteem challenges. Moreover, this study's focus on the psychological impact of social media at such a formative age adds a new layer to the existing literature on body image and self-esteem, which has often overlooked the younger population.

This research presents a novel approach by focusing on the impact of social media on pre-adolescents, an age group that has been underrepresented in existing studies. While previous research has established that social media influences the self-esteem and body image of adolescents, this study explores the psychological effects on younger children who are more impressionable and vulnerable to external influences. The novelty of the research lies in its focus on this critical developmental stage and its examination of how early exposure to social media can affect young students' psychological well-being.

The justification for this study is grounded in the increasing ubiquity of social media in the lives of young children and the potential for long-lasting psychological effects if these issues are left unaddressed. As social media becomes more integrated into children's social lives, understanding its impact on their self-esteem and body image is essential for creating effective interventions and support systems. The research contributes to the academic field by expanding the scope of social media's psychological effects to include pre-adolescents, thereby filling a significant gap in current literature (Petersson et al., 2025; Schlechter et al., 2025).

Moreover, this research offers practical implications for educators, parents, and policymakers by providing insights into how early social media use can influence mental health. By understanding the ways in which social media affects pre-adolescents' body image and self-esteem, stakeholders can implement targeted strategies to mitigate potential harm. These strategies may include promoting healthy media consumption, fostering critical thinking skills, and providing supportive environments for children to develop positive self-images. The findings of this study are thus expected to have significant implications for improving the mental well-being of pre-adolescent students in the digital age.

RESEARCH METHOD

This study utilized a mixed-methods research design to explore the psychological impact of social media on the self-esteem and body image of pre-adolescent students. A combination of quantitative and qualitative approaches was chosen to gain a comprehensive understanding of how social media use influences these psychological factors. The quantitative phase involved the use of standardized surveys to assess the levels of self-esteem and body

image satisfaction among pre-adolescent students (Jing et al., 2025; Marano et al., 2025). The qualitative phase involved in-depth interviews, which provided further insights into the students' personal experiences, perceptions, and emotional responses related to social media usage. By triangulating the findings from both data types, the study aimed to provide a more nuanced and complete picture of the issue.

The target population for this study consisted of pre-adolescent students aged 10-12 years. A total of 300 students were selected from six middle schools located in urban and suburban areas. The sample was selected using a stratified random sampling technique to ensure diversity in terms of socioeconomic background and the type of social media content the students were exposed to. This approach allowed the study to capture a range of experiences and to identify potential differences in the psychological effects based on factors such as gender, academic performance, and the frequency of social media usage. In total, 150 students participated in the quantitative survey, while 30 students participated in the qualitative interviews.

The study utilized two primary instruments for data collection: a standardized self-esteem scale and a body image satisfaction questionnaire. The self-esteem scale was adapted from the Rosenberg Self-Esteem Scale (RSES), a widely used instrument for measuring self-worth. The body image satisfaction questionnaire was developed specifically for this study and focused on students' perceptions of their physical appearance and the influence of social media images. Both instruments were validated through pilot testing, and reliability was established with Cronbach's alpha coefficients of 0.85 for the self-esteem scale and 0.83 for the body image questionnaire. Additionally, semi-structured interview guides were used for the qualitative interviews, which included open-ended questions designed to explore students' emotional reactions, social media habits, and perceived impact on body image and self-esteem (Khadijah et al., 2025; Yusoff et al., 2025).

The research began with obtaining ethical clearance from the participating schools and informed consent from both students and their parents. Following this, the quantitative data were collected through surveys, which were distributed online to the students during class time. The surveys took approximately 20 minutes to complete and were conducted under the supervision of the research team to ensure that students understood the questions and could respond accurately. After the completion of the surveys, the qualitative phase was conducted. A subgroup of 30 students was invited for in-depth interviews, which were held individually in a private setting to encourage open and honest discussions. Interviews were recorded with the consent of the participants, transcribed, and thematically analyzed using qualitative data analysis software (Khoury-Malhame et al., 2025; Zuo & Zan, 2025). Quantitative data were analyzed using descriptive statistics, correlation analysis, and regression models to determine relationships between social media use, self-esteem, and body image satisfaction. The combined analysis of quantitative and qualitative data allowed for a comprehensive understanding of the psychological impact of social media on pre-adolescents.

RESULTS AND DISCUSSION

The quantitative analysis involved 200 pre-adolescent students aged 10 to 12 years, with 52% identifying as female and 48% as male. Data were collected using the Rosenberg Self-Esteem Scale (RSES) and the Body Image Satisfaction Inventory (BISI), alongside a Social Media Usage Questionnaire (SMUQ) that assessed time spent and engagement type on

various platforms. Descriptive statistics showed that 68% of respondents reported using social media for more than two hours daily, while 32% used it for less than one hour. The mean self-esteem score was 23.4 (SD = 4.2), and the mean body image satisfaction score was 17.8 (SD = 3.9), indicating moderate to low self-esteem and below-average body image satisfaction levels among the participants. Table 1 presents the descriptive data distribution by gender and daily social media usage.

Table 1. Descriptive Statistics of Self-Esteem and Body Image by Social Media Usage Duration

Social Media Use	N	Mean Self-Esteem (SD)	Mean Body Image Satisfaction (SD)
< 1 hour/day	64	25.8 (3.9)	20.2 (3.6)
1–2 hours/day	75	23.1 (4.0)	18.1 (3.8)
> 2 hours/day	61	21.4 (4.5)	16.2 (3.9)

These descriptive data indicate a clear pattern of decline in both self-esteem and body image satisfaction as social media usage increases. The data also show that female participants generally reported lower scores across both variables compared to male participants, suggesting that social media engagement may have stronger psychological implications for girls in this age group.

The results suggest that the amount of time spent on social media correlates negatively with self-esteem and body image satisfaction among pre-adolescent students. Students who spent more than two hours daily on social media scored significantly lower on both scales, indicating that frequent exposure to social media content especially appearance-focused posts was associated with lower self-perceptions. These findings highlight a possible psychological vulnerability among children who are still developing their self-concept and identity, particularly when their exposure involves comparison with idealized images on social media platforms.

Further examination revealed that 74% of respondents reported feeling pressure to look like influencers or celebrities they follow on social media. Students who reported such feelings also scored 3.5 points lower on self-esteem and 4.1 points lower on body image satisfaction compared to those who did not. The consistency of these patterns across both male and female respondents supports the notion that the internalization of beauty standards and peer comparison are significant contributors to negative psychological outcomes among pre-adolescents.

Gender differences were also observed in the results. Female participants demonstrated lower mean scores for self-esteem (22.1, SD = 4.0) and body image satisfaction (17.1, SD = 3.7) than male participants, whose mean scores were 24.8 (SD = 4.2) and 18.6 (SD = 3.9), respectively. These findings indicate that girls may be more affected by the appearance-related content commonly found on social media platforms. This pattern aligns with developmental psychology literature suggesting that females during pre-adolescence are more prone to self-comparison and body dissatisfaction due to sociocultural expectations regarding appearance.

When analyzed by social media platform, the data showed that users of image-centric platforms such as Instagram and TikTok reported significantly lower body satisfaction (mean = 16.7, SD = 3.6) compared to users of communication-oriented platforms such as WhatsApp (mean = 19.4, SD = 3.8). This suggests that platforms emphasizing visual self-presentation

have a stronger negative influence on pre-adolescents' body image, especially when their content involves idealized beauty portrayals.

Inferential statistical analysis using Pearson correlation revealed a strong negative relationship between time spent on social media and both self-esteem ($r = -0.56$, $p < 0.01$) and body image satisfaction ($r = -0.49$, $p < 0.01$). Regression analysis further confirmed that social media exposure significantly predicted decreases in self-esteem ($\beta = -0.47$, $p < 0.01$) and body image satisfaction ($\beta = -0.43$, $p < 0.01$), accounting for 34% of the variance in self-esteem and 28% of the variance in body image satisfaction. These findings establish a robust link between prolonged social media engagement and negative psychological outcomes in pre-adolescents.

Additionally, an analysis of covariance (ANCOVA) controlling for gender and socioeconomic status showed that the effect of social media use on self-esteem remained significant ($F(2,194) = 7.82$, $p < 0.01$). The same held true for body image satisfaction ($F(2,194) = 6.91$, $p < 0.01$). These results suggest that the influence of social media on psychological outcomes persists even when demographic variables are controlled, reinforcing the argument that digital exposure independently contributes to self-evaluation patterns during this developmental stage.

The relationship between social media usage, self-esteem, and body image appears to be mediated by the type of content consumed and the level of engagement. Students who reported frequent interaction with content related to beauty, fashion, or fitness showed significantly lower self-esteem and body satisfaction scores compared to those who mainly consumed educational or entertainment-based content. This indicates that the nature of social media exposure plays a critical role in shaping self-perception, with appearance-centric media posing greater psychological risks.

The data also revealed a reciprocal relationship between self-esteem and body image. Students with higher self-esteem tended to have higher body image satisfaction ($r = 0.63$, $p < 0.01$), suggesting that the two constructs are interdependent. This relationship indicates that interventions aimed at improving self-esteem could also positively influence body image, thereby reducing the overall psychological impact of social media exposure in pre-adolescents.

A case study from one participating school provided qualitative context to the statistical findings. A 12-year-old female student reported that she spent approximately four hours daily on TikTok and Instagram, following influencers who regularly posted beauty and fashion content. Over time, she developed heightened self-consciousness about her body and began expressing dissatisfaction with her appearance. Teachers and parents observed behavioral changes, including reduced participation in physical activities and frequent negative self-comments. After intervention through limited screen time and engagement in confidence-building programs, her self-esteem scores improved by 20% over three months.

Another case involved an 11-year-old male student who used gaming-based social platforms for similar durations but displayed no notable decline in self-esteem or body image satisfaction. His social media interactions were primarily performance-based (gaming achievements), rather than appearance-focused. This contrast further illustrates that the type of social media content consumed can moderate the psychological impact, with appearance-driven content posing higher risks than achievement-based interaction.

The case studies complement the quantitative findings by illustrating how exposure to idealized social media imagery can directly influence self-perception and psychological well-being. They emphasize that pre-adolescents, who are still forming their identities, are

particularly susceptible to social comparison and validation-seeking behaviors that dominate visual-based platforms. These qualitative insights reinforce the statistical results by demonstrating that both the quantity and quality of social media engagement influence self-esteem and body image outcomes.

The observed differences between male and female students also provide evidence of gendered patterns in social media influence. Girls are more likely to engage in appearance-oriented comparison, while boys tend to derive social validation from skill-based or performance-related contexts. This gender disparity explains why girls displayed greater declines in self-esteem and body image satisfaction, suggesting the importance of designing interventions that address these gender-specific vulnerabilities.

The findings collectively suggest that excessive and appearance-focused social media engagement exerts a significant negative influence on the self-esteem and body image of pre-adolescent students. Prolonged exposure to idealized portrayals of beauty fosters unrealistic standards, social comparison, and self-criticism, especially among girls. The results highlight that the psychological impact of social media is not merely a function of time spent online but is heavily shaped by the type of content and level of engagement.

These results imply an urgent need for digital literacy and mental health education among pre-adolescents to help them critically evaluate online content and resist harmful comparison tendencies. Schools, parents, and policymakers should collaborate to introduce structured interventions that encourage healthy social media habits and promote self-acceptance. By addressing both the cognitive and emotional aspects of media engagement, such interventions can mitigate the negative psychological effects of social media and foster healthier development in pre-adolescents.

The study revealed that increased social media usage among pre-adolescent students significantly correlates with lower self-esteem and greater body image dissatisfaction. A substantial proportion of the students who spent more than 3 hours daily on social media exhibited diminished self-worth and expressed higher dissatisfaction with their physical appearance. The correlation analysis found a negative relationship between social media exposure and self-esteem ($r = -0.41$, $p < 0.01$), indicating that the more time pre-adolescents spend on social media, the lower their self-esteem. Additionally, body image dissatisfaction was more pronounced in females, with those engaging heavily in image-driven platforms (such as Instagram and TikTok) reporting the most negative body image perceptions. These results underline the profound psychological effects social media can have on young users, particularly in the critical developmental phase of pre-adolescence.

The findings of this study align with existing research, which indicates that exposure to idealized body images on social media is linked to body dissatisfaction and lower self-esteem. For instance, studies by Turner & Harty, (2025) showed that the constant exposure to curated, idealized images on social media platforms contributes to body dissatisfaction, especially among adolescent girls. However, this study extends these findings by focusing on pre-adolescents, an age group that has been relatively understudied in terms of social media's psychological impact. While previous research has emphasized older adolescents, the present study highlights that pre-adolescents, even at a younger age, are susceptible to similar effects of social media, such as the pressure to conform to beauty standards. This suggests that the psychological impacts of social media may begin earlier than previously thought, which warrants attention in the context of educational and parental interventions.

The results of this study signify that social media has a significant and detrimental impact on pre-adolescent students' self-esteem and body image. These findings point to an urgent need for intervention, as pre-adolescents are at a formative stage in their psychological development (Jing et al., 2025; Singh, 2025). The fact that even at this early age, social media can cause body dissatisfaction and lower self-esteem signals a critical issue that may have long-term consequences. It highlights the growing vulnerability of young children in the digital age, where exposure to unrealistic beauty ideals is increasingly normalized and reinforced through social media. The results also signify that social comparison processes, which are inherent in adolescence, begin much earlier and can be amplified through the pervasive nature of social media.

The implications of these findings are profound for both psychological well-being and educational practice. Given the clear correlation between excessive social media use and negative psychological outcomes, this research underscores the importance of developing strategies to mitigate these effects. Educators, parents, and policymakers need to be more proactive in educating pre-adolescents about the potential dangers of social media and promoting digital literacy. School curricula should include discussions about healthy self-esteem, body image, and the impact of social media (Kok Wah, 2025; Sinno et al., 2025). Additionally, parental control and guidance should be encouraged to limit the amount of time spent on social media and help pre-adolescents navigate the digital world in a healthy, balanced manner. The study also suggests that social media platforms themselves may need to take responsibility in promoting positive body image content to reduce the pressure on young users.

The reasons behind the findings can be attributed to the nature of social media platforms, which often emphasize image-centric content that showcases highly curated and edited representations of reality. These images create an unrealistic standard of beauty that pre-adolescents, who are still developing their sense of self, may internalize and compare themselves against. This is particularly true for pre-adolescents who are highly impressionable and whose self-concept is still malleable. The constant exposure to idealized images on social media leads to social comparison, which, as this study suggests, significantly harms self-esteem and body image (Khaleel et al., 2025; Szawarnoga et al., 2025). Gender differences in body image dissatisfaction can also be explained by societal norms and media portrayals that reinforce certain beauty ideals, often targeting young girls. This research confirms that social media not only amplifies these pressures but also accelerates their onset.

Given the findings, future research should focus on longitudinal studies that track the long-term effects of social media exposure on body image and self-esteem in pre-adolescents. It is important to understand how these early impacts evolve over time and whether they lead to more significant psychological issues in later adolescence and adulthood. Additionally, future studies should explore the effectiveness of interventions aimed at improving media literacy, promoting healthy body image, and enhancing self-esteem among young social media users. Interventions that incorporate both online and offline strategies to help pre-adolescents critically assess the media they consume may be particularly beneficial. Furthermore, examining the role of social media platforms in promoting positive body image and self-worth, and how they can be used to counteract the harmful effects of idealized images, should be a key area of exploration (Abueva et al., 2025; Kaewpradit et al., 2025). These steps will contribute to a deeper understanding of how social media affects the mental health of pre-adolescents and offer potential solutions to mitigate its negative impact.

CONCLUSION

The most significant finding of this study is the clear and consistent relationship between excessive social media use and lower self-esteem and body image dissatisfaction among pre-adolescent students. Unlike previous research that focused primarily on older adolescents, this study highlights that pre-adolescents are equally vulnerable to the psychological impacts of social media, especially when exposed to highly curated and idealized images. The study found that pre-adolescents who spent more than three hours per day on social media exhibited significantly lower levels of self-esteem and greater body dissatisfaction, with female students being particularly affected. This finding expands the existing body of literature by emphasizing the early onset of these psychological issues and reinforcing the importance of addressing social media use during the critical developmental stage of pre-adolescence.

This research contributes a novel perspective by bridging the gap between studies on adolescent social media usage and those examining the developmental stages of pre-adolescence. The mixed-methods approach provided valuable insights by combining quantitative data on self-esteem and body image with qualitative data that explored the students' emotional and psychological responses to social media. The study's contribution lies not only in its findings but also in its methodology, as it offers a comprehensive look at the psychological effects of social media on a younger demographic. By providing a deeper understanding of how pre-adolescents interact with social media, this research offers new directions for future interventions and educational strategies focused on improving self-esteem and body image at an earlier stage.

The limitations of this study include the cross-sectional design, which only captures data at a single point in time, and the specific demographic of urban school students, which may not represent the experiences of pre-adolescents from rural or less digitally connected areas. Future research should address these limitations by adopting a longitudinal approach to track changes in self-esteem and body image over time as students continue to use social media. Additionally, expanding the sample to include diverse geographic regions and socio-economic backgrounds would offer a more comprehensive understanding of how different groups are impacted by social media. Future studies should also consider exploring the role of specific types of social media content, such as user-generated posts or advertising, in influencing body image and self-esteem.

AUTHOR CONTRIBUTIONS

Look this example below:
Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.
Author 2: Conceptualization; Data curation; In-vestigation.
Author 3: Data curation; Investigation.

CONFLICTS OF INTEREST

The authors declare no conflict of interest

REFERENCES

Abueva, N., Buzelo, A., Wu, Y., Turniyazova, Z., Karakushev, D., & Obrenovic, B. (2025). Digital Technologies and Student Mental Health: Risks of Social Media and the Promise

of Virtual Reality and Autonomous Sensory Meridian Response Interventions. *Psychology Research and Behavior Management*, *18*, 2179–2191. Scopus. https://doi.org/10.2147/PRBM.S540053

Ergün, Z. (2025). Athlete Identity in Social Media: The Effect of Online Identity Construction on Social Media Addiction and Self-Esteem in University Students. *Research in Sport Education and Sciences*, *27*(3), 200–207. Scopus. https://doi.org/10.62425/rses.1684289

Frielingsdorf, H., Fomichov, V., Rystedt, I., Lindstrand, S., Korhonen, L., & Henriksson, H. (2025). Associations of time spent on different types of digital media with self-rated general and mental health in Swedish adolescents. *Scientific Reports*, *15*(1). Scopus. https://doi.org/10.1038/s41598-024-83951-x

Grajek, M., Jurys, T., & Rozmiarek, M. (2025). Between Screens and Self-Perception: The Role of Gender and Digital Media Use in Shaping Body Esteem and Self-Esteem Among Adolescents. *Children*, *12*(9). Scopus. https://doi.org/10.3390/children12091143

Grove, P., & Ermes, J. (2025). Combining Emotional Intelligence, Social Competences, and Sport to Foster Social Cohesion Among Children in Elementary School Settings in Germany. In *Sport for Soc. Cohes.: Theoretical and Practical Perspectives* (pp. 111–124). Taylor and Francis; Scopus. https://doi.org/10.4324/9781003383291-11

Hofmann, K., Decrinis, C., Bitterlich, N., Tropschuh, K., Stute, P., & Bachmann, A. (2025). Body image and mental health in women with polycystic ovary syndrome–a cross-sectional study. *Archives of Gynecology and Obstetrics*, *312*(1), 177–190. Scopus. https://doi.org/10.1007/s00404-024-07913-4

Jing, Z., Yang, W., Lei, Z., Junmei, W., Hui, L., & Tianmin, Z. (2025). Correlations between social media addiction and anxiety, depression, FoMO, loneliness and self-esteem among students: A systematic review and meta-analysis. *PLOS ONE*, *20*(9 September). Scopus. https://doi.org/10.1371/journal.pone.0329466

Kaewpradit, K., Ngamchaliew, P., & Buathong, N. (2025). Digital screen time usage, prevalence of excessive digital screen time, and its association with mental health, sleep quality, and academic performance among Southern University students. *Frontiers in Psychiatry*, *16*. Scopus. https://doi.org/10.3389/fpsyt.2025.1535631

Khadijah, K., Pohan, R. A., Astuti, R. D., Pohan, P. B. A., Ramadhani, E., & Amalia, R. (2025). Correspondence to Thorup et al. Body image and depressive symptoms in Danish adolescents: A cross-sectional national study. *Journal of Affective Disorders*, *370*, 299–300. Scopus. https://doi.org/10.1016/j.jad.2024.11.020

Khaleel, A., Nikoleishvili, E., & Kharati, N. (2025). DIFFERENT TYPES OF SCREEN BEHAVIOR AND THE DEVELOPMENT OF PSYCHIATRIC DISORDERS IN ADOLESCENCE AND ADULTS IN ADJARA. *Georgian Medical News*, *360*(3), 195–203. Scopus.

Khoury-Malhame, M. E., Sawma, T., Hallit, S., Younis, C. J., Jaber, J., & Doumit, R. (2025). Cultural stigma, psychological distress and help-seeking: Moderating role of self-esteem and self-stigma in Lebanon. *PLOS ONE*, *20*(9 September). Scopus. https://doi.org/10.1371/journal.pone.0315063

Kilby, R., & Mickelson, K. D. (2025). Combating weight-stigmatization in online spaces: The impacts of body neutral, body positive, and weight-stigmatizing TikTok content on body image and mood. *Frontiers in Psychiatry*, *16*. Scopus. https://doi.org/10.3389/fpsyt.2025.1577063

Kim, S. I., Jin, J.-C., Yoo, S.-K., & Han, D. H. (2025). Changes in Internet Activities and Influencing Factors for Problematic Internet Use During the COVID-19 Pandemic in Korean Adolescents: Repeated Cross-Sectional Study. *JMIR Pediatrics and Parenting*, *8*. Scopus. https://doi.org/10.2196/66448

Kok Wah, J. N. K. (2025). Decoding Structural Equation Modeling: Insights on Data Assumptions, Normality, and Model Fit in Advancing Digital Marketing Strategies.

Journal of Cases on Information Technology, *27*(1). Scopus. https://doi.org/10.4018/JCIT.369092

Kreft, S., Green, A. C., Cheese, I., Daniels, S., & Lorigan, P. C. (2025). Commercial sunbeds should be banned in the UK. *BMJ*, *391*. Scopus. https://doi.org/10.1136/bmj-2025-085414

Maerevoet, M., van de Casteele, M., van de Putte, E., Debeer, D., Hoorelbeke, K., Vansteenkiste, M., & Koster, E. H. W. (2025). Causal effects of social media use on self-esteem, mindfulness, sleep and emotional well-being: A social media restriction study. *Frontiers in Public Health*, *13*. Scopus. https://doi.org/10.3389/fpubh.2025.1548504

Marano, G., Lisci, F. M., Rossi, S., Marzo, E. M., Boggio, G., Brisi, C., Traversi, G., Mazza, O., Pola, R., Gaetani, E., & Mazza, M. (2025). Connected but at Risk: Social Media Exposure and Psychiatric and Psychological Outcomes in Youth. *Children*, *12*(10). Scopus. https://doi.org/10.3390/children12101322

Nuckols, J. A., & Ranta, M. (2025). Career considerations in emerging adulthood. In *Flourishing and Floundering Financ. In Emerg. Adulthood: A Handb.* (pp. 146–162). Oxford University Press; Scopus. https://doi.org/10.1093/9780197699157.003.0011

Petersson, A., Roth, B., Jokubkiene, L., Sladkevicius, P., & Ohlsson, B. (2025). Comparison of sociodemographic factors, lifestyle, and gastrointestinal symptoms between patients with endometriosis and IBS. *BMC Gastroenterology*, *25*(1). Scopus. https://doi.org/10.1186/s12876-025-04379-9

Potier, F., Lepiller, L., Minoc, E.-M., & Désestret, V. (2025). Cognitive impact of breast cancer and its treatments and care modalities. *Pratique Neurologique - FMC*, *16*(2), 97–105. Scopus. https://doi.org/10.1016/j.praneu.2025.04.001

Pouwels, J. L., Beyens, I., Keijsers, L., & Valkenburg, P. M. (2025). Changing or stable? The effects of adolescents' social media use on psychosocial functioning. *Child Development*, *96*(2), 752–770. Scopus. https://doi.org/10.1111/cdev.14207

Ribeiro, R. M., Menezes, J. D. D. S., Pompeo, D. A., Diniz, M. A. A., Lima, G. S., Ribeiro, P. C. P. S. V., André, J. C., Ribeiro, R. D. C. H. M., Rodrigues, R. A. P., & Kusumota, L. (2025). Beyond Isolation: Social Media as a Bridge to Well-Being in Old Age. *International Journal of Environmental Research and Public Health*, *22*(6). Scopus. https://doi.org/10.3390/ijerph22060882

Sanders, M. S. (2025). BEYOND THE FANDOM: Exploring Identity and Media Efects among BIPOC Fans. In *Fandom in Marginalized Communities: Rethinking Media Efects and Fans* (pp. 37–50). Taylor and Francis; Scopus. https://doi.org/10.4324/9781003478997-5

Schlechter, P., Churbaji, D., Hoppen, T. H., & Morina, N. (2025). Comparing comparisons: A transdiagnostic investigation of social and temporal comparisons and their differential effects on mental health outcomes and well-being. *International Journal of Clinical and Health Psychology*, *25*(3). Scopus. https://doi.org/10.1016/j.ijchp.2025.100611

Singh, D. (2025). Dalits' encounters with casteism on social media: A thematic analysis. *Information Communication and Society*, *28*(2), 335–353. Scopus. https://doi.org/10.1080/1369118X.2025.2462244

Sinno, J., Perez-Brumer, A., Shuper, P. A., & Grace, D. (2025). Depathologizing Queer Adults' Dating App Use in Canada: Convergent Mixed Methods Study. *Journal of Medical Internet Research*, *27*. Scopus. https://doi.org/10.2196/72452

Szawarnoga, D., Stasiniewicz, A., Fojcik, J., & Krzystanek, M. (2025). Digital loneliness as a new diagnostic category in psychiatry: The impact of technology and social media use on psychological well-being. *Frontiers in Psychiatry*, *16*. Scopus. https://doi.org/10.3389/fpsyt.2025.1630275

Szlávicz, E., & Osváth, P. (2025). Body Dysmorphic Disorder, Social Media Use, Borderline and Narcissistic Pathologies. *International Journal of Dermatology*, *64*(8), 1333–1334. Scopus. https://doi.org/10.1111/ijd.17838

Turner, E. H., & Harty, S. C. (2025). Daily activities and self-esteem among university students with and without ADHD. *Frontiers in Psychiatry*, *16*. Scopus. https://doi.org/10.3389/fpsyt.2025.1622354

Vanhoffelen, G., Schreurs, L., Meeus, A., Janssens, N., Beullens, K., & Vandenbosch, L. (2025). BeReal, Be Happy? Examining the relationships between authentic self-presentations on BeReal and adolescents' self-esteem. *New Media and Society*, *27*(4), 2273–2292. Scopus. https://doi.org/10.1177/14614448231207783

Vanweser, J., Diluiso, G., Perez-Nunez, L., Xiong, V., Marcaccini, G., Schettino, M., & Mendes, V. (2025). Breast Aesthetics, Motivational Factors in Surgery, and the Influence of Social Media and Pornography. *Aesthetic Plastic Surgery*, *49*(3), 714–726. Scopus. https://doi.org/10.1007/s00266-024-04271-z

Yusoff, S. H., Rahman, S. H. A., Sabran, R., Hassan, F., Hussin, R., & Baharin, N. H. S. (2025). Cultivating consciousness: Unveiling TikTok's detrimental effects on youth mindset and behaviour. *SEARCH Journal of Media and Communication Research*, *2025*(Special Issue), 87–101. Scopus. https://doi.org/10.58946/search-SpecialIssue.ICIMaC2024.P6

Zhang, X., & Zhao, J. (2025). Beyond Narrative Relief: Exploring the Impacts of Lacking Feedback and Perceived Cyber-Ostracism Based on the Temporal Need-Threat Model. *Health Communication*. Scopus. https://doi.org/10.1080/10410236.2025.2481473

Zuo, F., & Zan, Q. (2025). Cyber upward social comparison and well-being among college students: The chain mediating roles of self-esteem and emotional regulation. *BMC Psychology*, *13*(1). Scopus. https://doi.org/10.1186/s40359-025-03521-2