

The Effects of Social Media on Self-esteem

Alyazia Al AHBABI

College of Interdisciplinary Studies, Zayed University
Abu Dhabi, UAE

Alyazia Al TENEIJI

College of Interdisciplinary Studies, Zayed University
Abu Dhabi, UAE

Amira Al SHAER

College of Interdisciplinary Studies, Zayed University
Abu Dhabi, UAE

Ghaya Al JABERI

College of Interdisciplinary Studies, Zayed University
Abu Dhabi, UAE

Areej ELSAYARY

College of Interdisciplinary Studies, Zayed University
Abu Dhabi, UAE

ABSTRACT

This research project examines the impact of social media use on self-esteem among university students aged 18-25 in the United Arab Emirates, a country with one of the highest social media penetration rates globally. Utilizing an observational cross-sectional survey design, the study employed the Social Media Use Integration Scale and the Rosenberg Self-Esteem Scale to assess social media usage patterns and self-esteem levels. Analysis revealed a significant negative correlation between social media use and self-esteem, underscoring the complex nature of this relationship. The study acknowledges limitations such as reliance on self-reports and small sample sizes, suggesting future research should incorporate larger, more diverse samples and longitudinal designs to explore the enduring effects of social media on self-esteem. This research contributes to the broader goal of promoting well-being in the digital age, aligning with the United Nations' Sustainable Development Goals, and provides a foundation for further investigation into moderating factors that influence the relationship between social media use and self-esteem.

1. INTRODUCTION

In a world where "likes" and "followers" have become the new currency for validation, social media has become a stage where self-esteem takes the center spotlight. As humans, it is innate to compare ourselves to others, whether consciously or unconsciously [1]. This innate drive to compare exists both online and offline. With these comparisons, we evaluate our achievements, skills, personalities, and emotions, influencing how we perceive ourselves. Research shows spending more time on Facebook and Instagram increases social comparison and links it to lower self-esteem and higher social anxiety [1].

According to Orth & Robins [2], self-esteem refers to an individual's overall subjective emotional evaluation of their worth or value. Jan et al. [3] further note that self-esteem comprises two factors - self-respect and self-confidence and develops substantially during adolescence as young people's sense of identity solidifies through social experiences and relationships. It plays a crucial role in shaping our mental well-being and influencing our confidence, resilience, and overall satisfaction with life [4]. As online platforms where young people share aspects of their lives with the public continue to thrive, gaining an understanding of the relationship between social media use and self-esteem becomes increasingly important. Marciano & Viswanath [5] note that "social media engagement has become a regular daily habit for many adolescents and emerging adults" (p. 1). However, frequent usage may negatively impact well-being.

In the United Arab Emirates, studying the effects of social media on self-esteem is an especially relevant topic, as a recent report declared the country a global leader in social media use, ranking as the number one social media capital in the world with a score of 9.55/10 [6]. This demonstrates how high and commonplace the use of social media is here. As a developing nation with a very young population and the highest social media penetration rates worldwide [6], there is a critical need to understand the impacts this level of usage might be having on Emirati youth. The 3rd United Nations' Sustainable Development Goals are centered on ensuring healthy lives and promoting overall well-being for all. Previous studies have shown that there is a relationship between large amounts of social media use and anxiety, self-esteem, and body image. With over 90% of Emiratis actively online [6] potentially engaging in comparing their lives to those they view online, the overall well-being of the population is at risk. As the global leader in social media usage, it is

important to understand how platforms may be influencing mental health and self-esteem in order to support these objectives [7]. Additionally, this research would directly contribute to advancing several of the United Nations' Sustainable Development Goals, particularly Goal 3, which aims to ensure healthy lives and promote well-being for all at all ages [8]. With social networking so ingrained in daily life, gathering insight into its relationship to aspects of well-being like anxiety, body image, and self-confidence would prove valuable for developing targeted strategies in line with the UAE's national vision and global priorities.

2. LITERATURE REVIEW

When studying the impact that social media has on self-esteem, Social Cognitive Theory provides a useful framework. LaMorte [9] explains that Social Cognitive Theory was developed by Albert Bandura to explain human learning and behavior. At its root, the theory proposes that portions of an individual's knowledge acquisition and behavior can come from observation of and interaction with others within social, environmental, and psychological contexts. When applied to social media usage, people may model behaviors and form perceptions of norms based on what they see from others online [9]. This theory underscores that individuals learn not solely from their personal experiences but also through observing and imitating others [10]. For example, through social comparison on platforms, users could come to evaluate themselves based on heavily curated representations they observe [1]. Exposure to seemingly perfect highlight reels may diminish how positively they view their own lives and capabilities through observational learning processes as outlined by Social Cognitive Theory [11]. The relationship between social media usage and self-esteem has been the subject of extensive research, with various theories and perspectives contributing to understanding this dynamic interaction. Building upon previous research, studies conducted over the past few decades have explored the impact of social media on individuals' beliefs and overall well-being, with a particular focus on young adults. Notably, these studies, such as those conducted by Steinsbekk et al. [12], have revealed that self-perceived physical appearance significantly influences overall self-esteem among young adults. Moreover, further research has shown a significant connection between social media use and decreased self-esteem, particularly among young adult females. Studies conducted by researchers at Facebook found that exposure to overly positive portrayals of peers' lives on the platform led to greater social comparison [1]. Furthermore, Dr. Hamlet from the Child Mind Institute notes that constant viewing of curated, potentially photoshopped photos on friends' and influencers' accounts can negatively impact self-confidence in teenage girls [15]. These studies provide support for how Social Cognitive Theory can help explain relationships between social media use and self-esteem. According to Social Cognitive Theory, human learning and behavior are influenced by observing and interacting with others [11]. Additional studies have found that greater Facebook usage is correlated with lower reported self-esteem and life satisfaction, partially explained by a tendency towards upward

social comparisons on the platform [13]. Along with this, according to Jan et al. [3], when people view the profiles of others while using Facebook, envy begins to spark towards those who appear superior or better off than them. He also found that Facebook is often used to learn about and judge others based on cues from their profiles. This can lead to upward social comparisons that make individuals feel inferior due to appearing less privileged than the lives of others shown online. Such negative feelings stemming from social comparisons directly impact users' self-esteem levels [3]. Excessive social media engagement has also been tied to spending less time offline and building confidence through meaningful activities and connections [15]. Another study specifically examining Instagram usage linked viewing peers' seemingly "ideal" lifestyles with worse depression and body image in teen girls [14]. This previous empirical work and application of Social Cognitive Theory justify further investigating relationships between social media usage patterns, social comparison processes, and impacts on self-esteem among young adults.

3. METHODOLOGY

This study adopts an observational design to investigate the relationship between social media use and self-esteem over time. Respondents will be asked to complete questionnaires on a bi-monthly basis. As an observational study, the design is non-experimental; participants are not exposed to manipulated conditions by researchers. Rather, the researcher observes and collects data on existing behaviors, attitudes, and experiences as they naturally occur [16]. This investigation employs an observational cross-sectional design. Cross-sectional studies collect data on exposures and outcomes from a population at a single point in time [18]. In this case, self-reported social media usage and self-esteem data will be collected via bi-monthly questionnaires, but each assessment represents a distinct snapshot of their social media usage and self-esteem levels at that particular time. This allows researchers to monitor how social media exposures, as they naturally vary, may impact changes in self-esteem outcomes within the cohort over time. Unlike experimental designs, exposures are not actively manipulated by researchers [18]. In summary, while this study uses an observational methodology of repeated surveys, its cross-sectional design strengthens the ability to assess how social media may influence self-esteem.

Target population

A sampling method will recruit university students aged 18-25, as emerging adulthood is optimal for exploring social media's potential impacts on developing self-esteem. The late teens through mid-twenties period involve important identity development. This occurs alongside widespread social media use for social interaction [19]. That is why universities provide access to students experiencing parallel transitions because they contain the majority of young adults with different backgrounds, ethnicities, religions, and genders.

Sampling

The study recruited participants using a voluntary response sampling method. A recruitment announcement was posted in several randomly selected university student groups on social media, inviting students aged 18-25 to participate. Those who voluntarily chose to complete the online survey (N=75). Around 200 usable responses were expected based on typical response rates for this type of sampling, but the final sample size could have varied depending on the response rate. Murairwa [20] noted that voluntary response sampling involved passively soliciting participants from the population of interest rather than actively forcing their inclusion through randomized selection. This type of non-probability sampling relied on self-selection to form the sample.

Instrument

The survey was divided into multiple sections. The first section gathered background information by asking participants demographic questions such as age and gender. These questions served as covariates and provided important contextual information.

The second section focused on measuring social media usage as the independent variable (IV). It consisted of 3 items utilizing the Social Media Use Integration Scale (SMUI) [21]. Participants rated their integration of platforms like Facebook and Instagram into their daily routines using a 5-point Likert scale. The third section of the survey assessed self-esteem using the Rosenberg Self-Esteem Scale (RSES) [22]. By incorporating this 10-point Likert scale, the survey captured the varying levels of intensity in social comparisons on social media platforms, providing insights into how individuals perceive and engage in these comparisons and how they relate to their self-esteem. By combining the validated RSES items with the SMUI items focusing on social media comparisons, this section aimed to comprehensively capture the relationship between self-esteem and online social comparisons.

The survey was pre-tested on 10 college students to evaluate question wording, flow, and length. Based on feedback, two additional demographic questions were added to better account for potentially relevant variables like prior mental health issues. In addition, minor wording changes were made to two SMUI items for clarity. Finally, the survey structure was revised to intersperse demographic questions, which were originally grouped all at the beginning to maintain participant engagement rather than throughout. These revisions aimed to strengthen the validity and reliability of responses obtained in the full study.

Procedure

The procedure involved administering an online cross-sectional survey to assess social media usage, self-esteem, and other relevant variables. Interested students were recruited through WhatsApp announcements explaining the brief study and voluntary participation. Upon providing informed consent, participants were informed that they could withdraw at any time without penalty if they chose not to continue. Volunteers

completed a one-time anonymous survey containing relevant measures. The approximately 10-question survey took 8-10 minutes to complete. No incentives were offered due to the brief, one-time nature of participation.

The survey sections will measure social media usage (independent variable - IV), self-esteem (dependent variable - DV), and potentially relevant covariates like mental health history, comprehensively assessing variables relevant to testing the proposed hypothesis. The survey measures social media use (IV) using the 4-item Social Media Use Integration scale (SMUI) [21], as conducted by Maree, adapted from previous research that assessed the integration of various social media platforms into daily routines using a 5-point Likert scale. Self-esteem (DV) was measured using the widely validated 5-item Rosenberg Self-Esteem scale (RSES) [22], a brief measure of global self-worth using a 10-point Likert scale that has demonstrated high validity and reliability across diverse populations. This design provides an empirically rigorous approach to evaluate the hypothesis that increased social media use predicts lower self-esteem.

Survey responses were collected and stored anonymously through a secure online platform to protect confidentiality. Given the study design, which involved collecting self-report data at a single time point only, statistical analysis employed independent samples t-tests and correlational analyses to evaluate relationships between social media usage as the independent variable and self-esteem as the dependent variable, helping to address the research question regarding their potential association.

4. HYPOTHESIS & QUESTION

- **Research question:** What are the effects of social media use on the self-esteem of young adults?
- **Hypothesis:** There is a significant negative correlation between social media and self-esteem among young adults.

The independent variable is social media use (the amount of time spent daily on social media sites represented as hourly ranges), which will be collected by having participants track and report their usage over the study period. The dependent variable is self-esteem measured using a validated self-esteem scale administered at regular intervals, which will be measured at the beginning of the study and periodically after to detect any changes that occur corresponding to levels of the independent variable, social media use. The control variables will include age and the presence of pre-existing mental health conditions that may also impact self-esteem.

5. FIGURES AND TABLES

Age	Self-esteem levels	2	3	4	5	6	7	8	9	10	Grand Total
18	1				2	7	4	5	5	1	26
19			2	3	2	3	2	4	6	2	24
20					1		1	1			3
21					3	2	2	2			9
23				1				1			2
24					1			1	1	10	4
25					1		3	2		4	7
Grand Total	1	0	2	6	15	9	13	16	8	17	75

Table 1 - Relationship Between Age and Self-Esteem Levels

The cross-tabulation table shows the distribution of participant age and self-esteem scores from the survey data. Along with this, it provides insight into the relationships that will be explored through further statistical tests.. A total of 75 participants are represented in the table. This cross-tabulation analysis allows us to examine patterns in the data, such as if and how self-esteem may vary across different age groups.

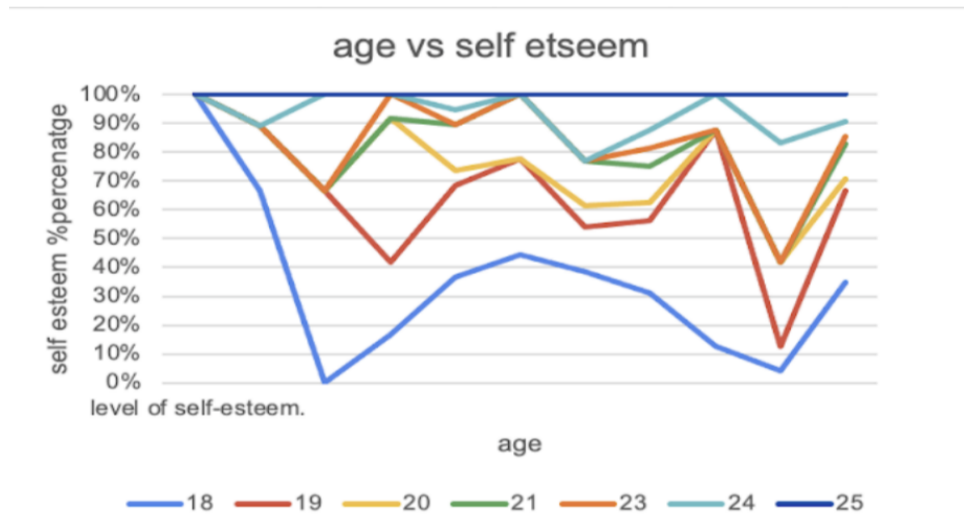


Figure 1 - Association Between Age and Self-Esteem Levels

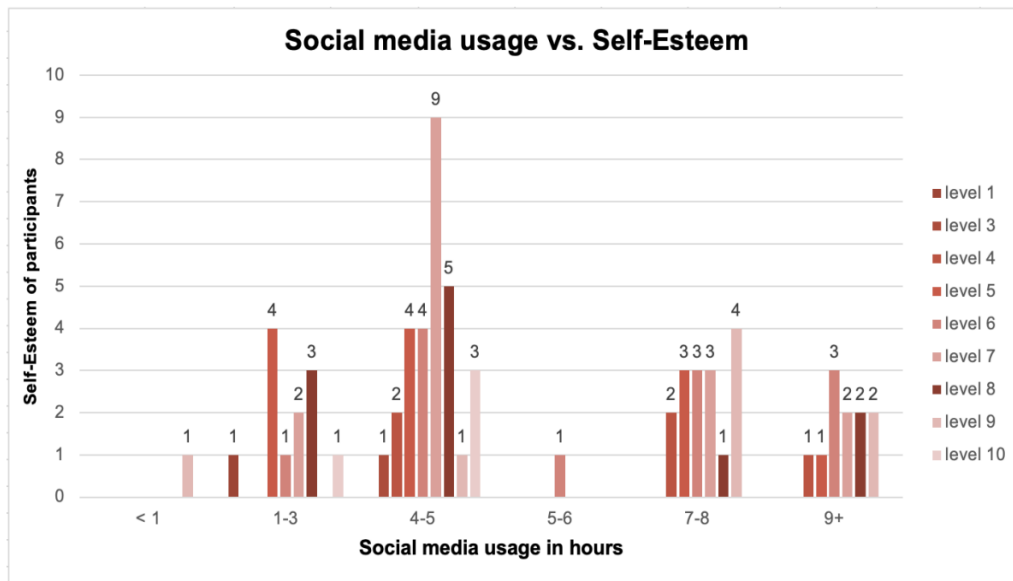


Figure 2 - Relationship Between Social Media Usage and Self-Esteem Scores

The line graph in Figure 1 illustrates the relationship between age and self-esteem among the participants. As portrayed on the graph, there were no participants in the survey aged 22. The y-axis represents the percentage of self-esteem scores within each

age category. This pattern provides initial insight into how self-perceptions of worth may develop over this life stage, with older participants generally reporting higher self-esteem than their younger counterparts.

	Self-esteem levels									
Social media usage	1	3	4	5	6	7	8	9	10	Grand Total
< 1								1	5	5
1-3	1			4	1	2	3		1	12
4-5		1	1	4	4	8	5	1	3	28
5-6			1							1
7-8		1	2	3	3	3	1	4		17
9+		2	1	1	3	3	2			15
Grand Total	1	4	5	12	12	16	11	6	9	75

Table 2 - Correlation Between Social Media Usage and Self-Esteem Scores

Table 2 is a cross-tabulation table that provides insight into the relationship between social media usage and self-esteem for each participant in the survey. The rows contain the different levels of daily social media usage, ranging from less than 1 hour to more than 9 hours. The columns represent self-esteem scores on a scale of 1 to 10. Each cell shows the number of participants who reported a specific combination of social media usage and self-esteem level.

Figure 2 shows the relationship between social media usage and self-esteem among participants. Social media usage is categorized by the number of hours spent per day, ranging from less than 1 hour to more than 9 hours. Self-esteem is rated on a scale of 1 to 10. Each color bin represents a different rating, as shown in the legend on the right side. The y-axis displays the number of participants who chose that particular self-esteem rating.

Variable	Mean	Standard deviation (SD)	N
Social media usage	5.39333	2.58542345	75
Self-Esteem level	6.48	1.968398993	75
After Limiting Social media	6.72	2.01051291	75
Correlation Coefficient	-0.203559923		

Table 3 - Self-Esteem Scores Before and After Limiting Social Media Usage

In Table 3, the means of each variable are presented as well and the variables are: social media usage, self-esteem level, and self-esteem level after limiting social media. With the correlation coefficient, the strength and direction of the relationship between social media usage and self-esteem are shown. The mean represents the average value, while the standard deviation represents the dispersion of scores around the mean, and N represents the number of participants included in the analysis. Furthermore, the correlation coefficient indicates the degree of association between social media usage and self-esteem. A positive correlation coefficient suggests a positive relationship, a negative correlation coefficient suggests a negative relationship and a value close to zero suggests a weak or no relationship (Mukaka, 2012).

6. RESULTS

This section provides a detailed analysis of the relationships between social media usage, age, and self-esteem among young adults aged 18-25. The findings contribute to our understanding of well-being and digital life, offering insights into the intricate

dynamics of self-esteem development in the context of social media engagement. Table 3 consolidates the descriptive statistics and correlation coefficients for social media usage and self-esteem variables. The mean, standard deviation, and sample size are presented for social media usage, self-esteem level, and self-esteem level after limiting social media.

Age and Self-Esteem

The examination of self-esteem levels across various age groups, as presented in Table 1, reveals a nuanced pattern. Notable variation in self-esteem levels is observed, indicating a gradual increase from age 18 to 25, especially in moderate to high self-esteem levels (6, 8, and 10). The highest reported self-esteem percentage (33.33%) signifies a positive self-perception among a significant proportion of individuals. This trend aligns with the observation that self-esteem generally rises with age, as evidenced by higher counts in the older age groups (7, 8, 9, and 10). Conversely, individuals aged 18 stand out with the lowest self-esteem, supported by a relatively low percentage of 3.85%. The visual representation in Figure 1 reinforces these trends, offering a clear depiction of the inverse relationship between age and self-esteem. The line graph underscores that individuals aged 18 exhibit the lowest self-esteem, and as age progresses towards 25, there is a discernible and gradual ascent in self-esteem. The majority of participants, across all age groups, report moderate to high levels of self-esteem, affirming a prevalent positive self-perception. Fluctuations in self-esteem levels between adjacent age groups are evident, potentially influenced by personal development, life experiences, and social influences.

Social Media Usage and Self-Esteem

Table 2 provides an overview of the distribution of social media usage among participants. A considerable number of participants (N= 41) spent a moderate amount of time on social media, as indicated by the highest count in the "4-5" hour category, suggesting a substantial role of social media in their lives. The combined analysis of social media usage and self-esteem, integrating the descriptive narrative, structured table, and visual representation in Figure 2, provides a comprehensive understanding of the intricate dynamics between these two variables. With a correlation coefficient of -0.2, it is evident that a decrease in self-esteem corresponds to increased social media usage. On average, approximately 42.67% of individuals with higher social media engagement reported lower self-esteem. It is noteworthy that participants with a moderate amount of social media engagement (4-5 hours) reported higher self-esteem than those spending more than 9 hours on social media. This observation suggests a potential association between maintaining a balanced approach to social media usage and higher self-esteem levels.

The study's findings support the hypothesis that a significant negative correlation exists between social media usage and self-esteem among young adults aged 18-25. The analysis reveals an inverse relationship between age and self-esteem, indicating a general increase in self-esteem as age progresses. Simultaneously, the data underscores a negative association

between social media engagement and self-esteem, suggesting that higher levels of social media usage correlate with lower self-esteem on average. While acknowledging the complexity of this relationship and recognizing age-specific nuances, these results contribute valuable insights into the intricate dynamics of self-esteem development in the digital age. The study highlights the need for ongoing investigations to validate these trends and to consider individual differences, content consumption, and diverse experiences that play pivotal roles in shaping self-esteem among young adults in the context of social media use. These findings are essential for informing interventions and strategies aimed at promoting positive digital well-being in this demographic.

7. DISCUSSION

The results of the study provide mixed support for the hypothesis that higher social media use is significantly correlated with lower self-esteem among young adults. Previous literature highlighted in the review suggested potential detrimental effects. In particular, past research found social media negatively impacted self-esteem in young adult females specifically [12]. Studies by Facebook researchers also demonstrated that exposure to seemingly positive portrayals of peers' lives on social media led to greater social comparison and lower reported self-esteem [1]. These prior findings align with the proposed hypothesis, indicating social media use may indeed negatively influence self-perception. The present study's results from Figure 1 partially support this relationship. Specifically, studies by Orth and Robins (2014) as well as Jan et al. (2017) found that self-esteem tends to increase substantially during emerging adulthood as identity develops. Consistent with this, the current study found The graph shows Participants aged 18 showed low self-esteem levels, while those aged 19 showed slightly higher self-esteem. Self-esteem levels increased further for participants in the 20-21 age range, with the highest levels observed for participants aged 23-24 [12]. These findings suggest that self-esteem may fluctuate throughout the young adult years. This preliminary evidence tentatively aligns with predictions. However, it is important to note that increasing self-esteem with age does not directly prove the influence of social media usage. Other factors, such as natural maturation, could explain this pattern [12]. Therefore, the graph showing the relationship between age and self-esteem levels, while informative, does not alone establish a causal link between social media use and self-esteem. Along with this the results from the study's data analysis in Table 3, including the correlation coefficient of -0.2035, indicate a weak negative correlation between social media use and self-esteem. This finding suggests that while a negative correlation was observed between social media usage and self-esteem, supporting the hypothesis that a relationship exists, the relatively weak magnitude of the correlation coefficient indicates the relationship is not as robust as initially hypothesized. Specifically, the small correlation value implies that social media usage alone accounts for only a minor portion of the variation seen in self-esteem scores, with other unmeasured factors likely having a stronger influence. Larger correlation values would have been necessary

to imply a strong or moderate dominance of social media on self-esteem levels. The negative correlation coefficient supports the hypothesis and aligns with previous research that has found links between greater social media use and lower self-esteem (Bergagna & Tartaglia, 2018). These findings are consistent with the theorized relationship suggested by Social Cognitive Theory and the studies discussed in the introduction. Also, the table results provide additional support for the hypothesis. The mean self-esteem level for participants after limiting social media usage (mean = 6.72, SD = 2.010) is higher than the mean self-esteem level for participants overall (mean = 6.48, SD = 1.968). This suggests that reducing social media usage may have a positive impact on self-esteem. The mean shock media usage score (mean = 5.393, SD = 2.585) also indicates that participants reported moderate levels of exposure to shocking or distressing media content (Jan et al., 2017). Figure 2 similarly showed decreasing self-esteem corresponding to increasing social media hours. These findings are consistent with the theory and studies discussed in the introduction. Therefore, taken together the mixed quantitative and qualitative findings collectively suggested higher social media usage is associated with lower reported self-esteem levels among young adults.

8. LIMITATIONS

The study faced several limitations that should be acknowledged. For example, while we aimed to recruit a sample of 200 university students, we only obtained responses from 75 participants, making the sample size relatively small. This limited our statistical power to detect possible effects. As an observational study relying entirely on self-reported data, we could only examine associations and not determine causality, as experimental manipulation was not possible. Our use of voluntary response sampling also introduced potential self-selection bias, since the study relied on self-report measures for both social media use and self-esteem. Self-report measures are subject to biases, such as social desirability and recall bias. The use of objective measures, such as behavioral observations or physiological indicators, could provide a more objective assessment of social media use and its effects on self-esteem as the sample may have overrepresented more engaged students and not fully captured the target population. Another limitation was the cross-sectional design, providing only a snapshot rather than potential long-term changes. As a cross-sectional rather than cohort study, it could not assess impacts over an extended period. The short duration limited the examination's long-term influences on outcomes. Additionally, self-report measures are subject to biases like social desirability influencing portrayals. Rather than subjective self-assessments alone, employing objective behavioral observations of actual engagement or physiological indicators may have provided a more holistic perspective to account for responses being skewed positive. Alongside this, the results suggest that the relationship between social media use and self-esteem is complex and may vary depending on other factors. Future research should consider incorporating additional variables, such as personality and family factors, and social support was also not able to be controlled for.

This could contribute to the development of more nuanced theories and interventions. Lastly, since the study only involved university students, generalizing beyond this group should be limited.

While this research provided preliminary insights into the relationship between social media use and self-esteem, the relatively small sample size obtained, observational design, sampling methodology, study duration, and reliance on self-reports introduced limitations that stronger research designs could help address to advance our understanding. Control of potential confounding variables and determination of causality particularly warrant attention in future work.

9. CONCLUSIONS

Based on the study's results, some conclusions can be drawn that support the hypothesized relationship between social media usage and self-esteem among young adults aged 18-25. Specifically, the identified negative correlation between social media use and self-esteem levels, alongside the noted elevation in self-esteem scores when restricting social media, corresponds with earlier research on social comparison processes and well-being indicators. However, it is essential to acknowledge certain considerations. Firstly, the observed negative correlation was weak, suggesting social media use is likely not the sole determining contributor to self-esteem. Other individual variables, such as age and personality traits, may also influence self-esteem development. Additionally, the data indicated a natural increase in self-esteem with age among the participants, as illustrated in Figure 1, implying that self-esteem is shaped by various contextual and maturational processes beyond just social media usage. While the overall findings tentatively suggest that greater usage may be negatively associated with self-esteem during this life stage, it's essential to recognize the multifaceted nature of these relationships. Furthermore, as a preliminary study, causal claims cannot be made due to limitations in design. More robust longitudinal research is still needed to fully understand these complex relationships over time. In summary, while the results provide preliminary support for the hypothesis, future work is needed to comprehensively understand how social media may interact with other developmental factors to influence self-esteem in emerging adulthood. These findings hold significance as they elucidate the intricate relationship between social media usage, self-esteem, and age. The results highlight how age plays a role in shaping an individual's perception of self-esteem, with older individuals generally exhibiting higher self-esteem which we have discovered along the way. Moreover, individuals who spend less time on social media tend to report higher self-esteem than those who invest more hours in online activities. This research is crucial as it addresses the hypothesis asserting a significant negative correlation between social media and self-esteem among young adults, a hypothesis substantiated by the observed negative correlation. In conclusion, it can be inferred that social media usage, self-esteem, and age are interconnected factors influencing how young adults perceive their self-esteem in the digital age.

10. REFERENCES

- [1] S. Laplante, "How social media can crush your self-esteem," The Conversation, January 9, 2022. Available: <https://theconversation.com/how-social-media-can-crush-your-self-esteem-174009#:~:text=Research%20shows%20that%20the%20more.>
- [2] U. Orth & R. W. Robins, "The Development of Self-Esteem," Current Directions in Psychological Science, vol. 23, no. 5, pp. 381–387, 2014. <https://doi.org/10.1177/0963721414547414>.
- [3] M. Jan, S. A. Soomro & N. Ahmad, "Impact of Social Media on Self-Esteem," European Scientific Journal, ESJ, vol. 13, no. 23, pp. 329–341, 2017. <https://doi.org/10.19044/esj.2017.v13n23p329>.
- [4] K. Cherry, "How Social Comparison Theory Influences Our Views on Ourselves," Verywell Mind, September 20, 2020. <https://www.verywellmind.com/what-is-the-social-comparison-process-2795872#:~:text=The%20social%20comparison%20process%20involves.>
- [5] L. Marciano & K. Viswanath, "Social media use and adolescents' well-being: A note on flourishing," Frontiers in Psychology, vol. 14, 2023. <https://doi.org/10.3389/fpsyg.2023.1092109>.
- [6] N. Pandey, "UAE Is The Global Leader In Social Media: Report," NDTV.com, May 9, 2023. Available: <https://www.ndtv.com/feature/uae-is-the-global-leader-in-social-media-report-4018999#>.
- [7] UAE National Committee on SDGs, "UAE and the 2030 agenda for sustainable development: Excellence in implementation," 7th ed., Federal Competitiveness & Statistics Authority, 2017. In National Committee on Sustainable Development Goals. Available: [https://sustainabledevelopment.un.org/content/documents/20161UAE SDGs Report Full English.pdf](https://sustainabledevelopment.un.org/content/documents/20161UAE%20SDGs%20Report%20Full%20English.pdf).
- [8] United Nations, "Goal 3: Ensure Healthy Lives and Promote well-being for All at All Ages," United Nations Sustainable Development Goals; United Nations, 2023. Available: <https://www.un.org/sustainabledevelopment/health/>.
- [9] W. LaMorte, "The Social Cognitive Theory," Boston University School of Public Health, November 3, 2022. Available: <https://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories5.html>.
- [10] M. J. McCormick, "Self-Efficacy and Leadership Effectiveness: Applying Social Cognitive Theory to Leadership," Journal of Leadership Studies, vol. 8, no. 1, pp. 22–33, 2001. <https://doi.org/10.1177/107179190100800102>.
- [11] A. Bandura, "Human agency in social cognitive theory," American Psychologist, vol. 44, no. 9, pp. 1175–1184, 1989. <https://doi.org/10.1037/0003-066x.44.9.1175>.
- [12] S. Steinsbekk, L. Wichstrøm, F. Stenseng, J. Nesi, B. W. Hygen & V. Skalická, "The impact of social media use on appearance self-esteem from childhood to adolescence – A 3-wave community study," Computers in Human Behavior, vol. 114, 106528, 2021. <https://doi.org/10.1016/j.chb.2020.106528>.

- [13] E. Bergagna & S. Tartaglia, "Self-esteem, Social comparison, and Facebook Use," *Europe's Journal of Psychology*, vol. 14, no. 4, pp. 831–845, 2018. <https://doi.org/10.5964/ejop.v14i4.1592>.
- [14] F. Pedalino & A.-L. Camerini, "Instagram Use and Body Dissatisfaction: The Mediating Role of Upward Social Comparison with Peers and Influencers among Young Females," *International Journal of Environmental Research and Public Health*, vol. 19, no. 3, 1543, 2022. <https://doi.org/10.3390/ijerph19031543>.
- [15] S. Auld, "Social media and low self-esteem," ACC Blog, November 4, 2019. Available: <https://www.acc.edu.au/blog/social-media-low-self-esteem/#:~:text=While%20social%20media%20may%20help>.
- [16] L. Gordis, "Epidemiology E-Book," Elsevier Health Sciences, 2014. In Google Books.
- [17] M. T. Maree, "The Social Media Use Integration Scale: Toward Reliability and Validity," *International Journal of Human-Computer Interaction*, vol. 33, no. 12, pp. 963–972, 2017. <https://doi.org/10.1080/10447318.2017.1301041>.
- [18] M. S. Setia, "Methodology Series Module 3: Cross-sectional Studies," *Indian Journal of Dermatology*, vol. 61, no. 3, pp. 261–264, 2016. NCBI. <https://doi.org/10.4103/0019-5154.182410>.
- [19] A. Orben, L. Tomova & S.-J. Blakemore, "The effects of social deprivation on adolescent development and mental health," *The Lancet Child & Adolescent Health*, vol. 4, no. 8, pp. 634–640, 2020. [https://doi.org/10.1016/s2352-4642\(20\)30186-3](https://doi.org/10.1016/s2352-4642(20)30186-3).
- [20] S. Murairwa, "Voluntary Sampling Design," *International Journal of Advanced Research in Management and Social Sciences*, February 2015. Available: https://www.researchgate.net/publication/340000298_VOLUNTARY_SAMPLING_DESIGN.
- [21] Jenkins-Guarnieri, M. A., Wright, S. L., & Johnson, B. (2013). Development and validation of a social media use integration scale. *Psychology of Popular Media Culture*, 2(1), 38–50. <https://doi.org/10.1037/a0030277>.
- [22] Rosenberg, M. (1965). ROSENBERG SELF-ESTEEM SCALE. In fetzer.org. https://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Self_Measures_for_Self-Esteem_ROSENBERG_SELF-ESTEEM.pdf.
- [23] Mukaka, M. M. (2012). Statistics corner: A guide to appropriate use of correlation coefficient in medical research. *Malawi Medical Journal: The Journal of Medical Association of Malawi*, 24(3), 69–71.