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Impact of Social Media Use, Social Comparison & Self-Esteem Among Adolescents

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Abstract

The present research examined how social media, social comparison, and self-esteem affect adolescents. *After an extensive literature review, these hypotheses* were developed. 1) Social media use, social comparison, and self-esteem among teenagers will be significantly related. 2) Social media use will affect self-esteem among adolescents.3) Adolescent selfesteem will be affected by social comparison.4) Gender will affect adolescent social media use, comparison, and self-esteem of the 249 samples, 153 are female and 96 are male. Survey participants were 14–25 years old. Data were purposively sampled from Faisalabad educational institutions. The findings were assessed using these methods. Participant demographics were collected using a sheet. Adolescent self-esteem was measured with a scale. The Social Comparison scale measured self-comparative behavior. Participants' social media use was measured using a scale. Analyze data using correlation, regression, the and independent sample tests. Findings illuminate individual traits and tendencies.

Keywords: Social Media use, Social Comparison, Self-esteem, Adolescents

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Title

Impact of Social Media Use, Social Comparison & Self-Esteem Among Adolescents

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Keywords: <u>Social Media use, Social</u> <u>Comparison, Self-esteem,</u> <u>Adolescents</u> Abstract

The present research examined how social media, social comparison, and self-esteem affect adolescents. After an extensive literature review, these hypotheses were developed. 1) Social media use, social comparison, and self-esteem among teenagers will be significantly related. 2) Social media use will affect self-esteem among adolescents.3) Adolescent selfesteem will be affected by social Gender *comparison.4*) will affect adolescent social media use, comparison, and self-esteem of the 249 samples, 153 are female and 96 are male. Survey participants were 14-25 years old. Data were purposively sampled from Faisalabad educational institutions. The findings were assessed using these methods. Participant demographics were collected using a sheet. Adolescent self-esteem was measured with a scale. The Social measured Comparison scale selfcomparative behavior. Participants' social media use was measured using a scale. Analyze the data using correlation, regression, and independent sample tests. Findings illuminate individual traits and tendencies.

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Introduction

Today's teens are the most technologically connected generation in history. Despite this

extraordinary degree of connectivity, schools, mental health professionals & parents remain concerned about the potential harm caused by





constant device and social media use (Odgers et al.,2020). Adolescence normally lasts from 18 to 21 years and begins around the ages of 10 to 12. This stage represents a huge transformation, similar to a caterpillar coming from its cocoon, or a caterpillar in its initial state (Backes et al., 2019). Adolescence, which spans late childhood to early adulthood, marks the beginning of human productive life. This phase is characterized by hormonal changes, physical growth, and increased social interactions, which shape one's social identity and selfawareness. Adolescents have increased selfconsciousness and concern for external. opinion (Kowalski et al., 2014). Research has shown that cognitive abilities improve significantly during adolescence, allowing individuals to think beyond concrete experiences and consider multiple perspectives (Keating, 2004). One has to keep in mind a myriad of cultural and contextual factors influencing cognitive development and identity formation during the adolescent years. Such variations in cognitive development and identity formation are rooted in cultural values, expectations of society, and socioeconomic status.

Excessive web-based entertainment has been reported to result in a distorted pattern of rest among adolescents, hence negatively affecting both their physical health and mental functioning (Levenson et al., 2016). The openness of young teenagers to idealized self-descriptions by means of internet-based diversion stages is connected to body disappointment and scattered eating ways of behaving. Overusing social media is regularly related to an expanded measure of stationary conduct that lowers time spent by young teenagers in active exercises, generally expanding variables for corpulence and other well-being issues.

Social media has a significant impact on adolescent peer relationships. On the plus side, it allows for simple interaction, relationships, and the preservation of friendships across physical distances. Adolescents can get social support, share experiences, and collaborate with their peers online, encouraging a sense of community & belonging (Grieve et al., <u>2013</u>).

The social examination is a fundamental part of the human way of behaving, both disconnected and on the web. As per research, teenagers utilize social correlation to survey their own capacities, sentiments and attributes comparable to other people (Festinger, <u>1954</u>). Virtual entertainment stages are great for social examination since clients can undoubtedly contrast themselves with others' organized substance (Vogel et al., 2014). Research has shown that online social comparison has an impact on various aspects of psychological wellbeing. Fardouly et al. (<u>2015</u>) found that receptiveness to respected pictures through virtual amusement stages was connected with extended body frustration and adverse consequences in young ladies.

Social comparison can have an impact on interpersonal relationships by increasing competition, envy, or admiration among peers. Comparisons to others' accomplishments, possessions, or relationships can elicit feelings of jealousy or admiration, influencing the dynamics of social interactions (Smith and Kim, 2007). Nesi and Prinstein (2015) discovered that nearly all adolescents engage in some form of social comparison on social media, with appearancerelated comparisons being especially common. Similarly, Fardouly et al. (2015) found that a majority of the respondents compared their appearance with that of others on social media sites like Instagram and Facebook. Adolescent social comparison activities on social media run along several dimensions. The most common compared domains of social media are appearance-based comparisons such as body image and physical attractiveness (Fardouly et al., 2015).

Such social comparison behaviors on social media sites can have important ramifications for adolescents' mental health and well-being. For instance, frequent social comparison is significantly linked to increased symptoms of depression, anxiety, and body image problems (Fardouly et al., 2015; Nesi & Prinstein, 2015). Besides, upward social comparisons, particularly about domains concerning physical appearance, might be associated with lower levels of self-esteem and higher levels of body dissatisfaction among adolescents (Fardouly et al., 2015).

Adolescents who report making frequent upward social comparisons therefore often perceiving themselves as worse off than others hold lower self-esteem and feelings of inadequacy. Such repeated social comparisons on social media among adolescents could result in increased depressive symptoms, anxiety, and body dissatisfaction. The act of comparing one's self to idealized photos through online entertainment therefore may escalate negative thoughts.

Self-esteem, also known as self-worth or selfimage, is a critical developmental issue in adolescence. It is the global evaluative dimension of the self. Researchers have long been interested in how self-esteem changes during adolescence. Previous research has shown that low self-esteem can have an impact on adolescent mental health and psychopathology. However, the role of selfidentity in self-esteem development during adolescence has received little attention (Chen, 2019).

Confidence, or an individual's emotional evaluation of their own value, is basic in juvenile turn of events. As per research, confidence diminishes during early adolescent years prior to supporting or in any event, expanding later in youthfulness. Peer connections, accomplishments in school, and web-based entertainment all affect young people's confidence (Valkenburg & Peter, 2011). Moreover, research has tracked down joins between low confidence and various adverse results, like sadness, anxiety, and risky conduct (Trzesniewski et al., 2003).

The amount of social media use among adolescents has skyrocketed in recent years, with serious consequences for their development. Studies have shown that adolescents widely use platforms such as Facebook, Instagram, and Snapchat (Rideout & Robb, 2018). While social media can help people connect and express themselves, excessive use has been linked to negative outcomes like cyberbullying, depression, and difficulty sleeping (Primack et al., 2017; Twenge, 2017). Youths are continually associated with their gadgets, and there are worries that this availability is hurting their general turn of events, including their emotional wellness. Ongoing story surveys and meta-examinations don't show areas of strength between the amount of young people's computerized innovation commitment and psychological well-being issues (Odgers et al., 2020).

Research indicates that social media places are ubiquitous in the lives of adolescents. Rideout and

colleagues (2019) discovered that 90% of adolescents aged 13 to 17 in the United States use social media, with the majority accessing multiple platforms. Similarly, the Pew Research Center (2020) reported high levels of social media use among adolescents worldwide, with platforms such as Instagram and Snapchat being especially popular due to their visual nature and interactive features. People can associate with companions, family, and networks utilizing web-based entertainment stages, which cultivates socially encouraging groups of people and adds to expanded confidence. Positive input and certification from preferences, remarks, and portions of web-based entertainment content can help individuals' confidence and feeling of social worth (Toma and Hancock, 2013).

Understanding how social media use, social comparison, and self-esteem are connected in a complicated way in adolescents is critical for the management of the complexities characteristic of contemporary adolescent development. Adolescents are becoming more and more dependent on places within social media as platforms for interaction, socialization, and selfexpression. Such pervasiveness, however, also exposes them to an implicit and sometimes even explicit system of social comparison whose impact may be potent on their self-esteem.

According to the theory, very often adolescents use upward social comparisons, thus making judgments about one's self in relation to others viewed as better. Moreover, the edited nature of social networking content can create unrealistic expectations pertaining to beauty, success, and happiness, which have been heightened by feelings of self-doubt and insecurity common among adolescents.

Such an understanding of the interlinkages between social media use, social comparison, and self-esteem among adolescents requires a critical review of the challenges and opportunities brought forth by digital media. This kind of complex dynamics is worth noting in the construction of a supportive and empowering online environment that will foster healthy self-esteem and psychological well-being for teenagers.

Research Objective

- i To investigate the relationship between uses of social media, social comparison, and selfesteem amongst adolescents.
- ii To investigate the impact of usage the of social media platforms on adolescents' selfesteem through correlation and regression analyses.
- iii To investigate the impact of the social contract on adolescents' self-esteem using empirical analysis and psychological frameworks.
- iv Using inferential statistical methods, we will identify and analyze gender variables, that may influence the relationships between social media use, social comparison, and selfesteem among adolescents.
- v Research Hypothesis
- vi There will be a significant relationship between social media use, social comparison & self-esteem among adolescents.
- vii There is a significant impact of social media use and social comparison on self-esteem among adolescents.
- viii There will be significant differences between social media use, social comparison & selfesteem among adolescents on the basis of gender.

Literature Review

Adolescents' social interactions, self-expression, and identity formation are all influenced by virtual entertainment stages like Instagram, Snapchat, and TikTok. Twenge (2017) emphasizes the widespread impact of smartphones and social media on the behavior of today's adolescents. The Common Sense Media (2015) report provides valuable insights into tweens' and teens' media habits, revealing patterns of social media use and its integration into daily life. Understanding these trends is critical to determining the potential impact of social media on adolescent development. Odgers and Jensen (2020) emphasize the significance of filling knowledge gaps in research on adolescent mental health in the technology age. Despite a growing body of literature, longitudinal studies into the long-term impacts of virtual entertainment use on different parts of juvenile advancement are as yet required.

Dreiling and A. N. (2023) emphasize the need for research that goes beyond the correlational studies to elucidate the systems basically the connection between web-based entertainment use and psychological well-being results in adolescents. Identifying these gaps is essential in guiding further research initiatives. According to Rideout and V, 2015, further research is necessary to inform the efforts of the policymakers and other interested parties concerning health promotion interventions for adolescents regarding the media uses they are involved in. Such research findings can guide in developing guidelines among educators, parents, and policymakers in response to the potential risks resulting from social media use.

Primack et al. (2017) provide insight into how research findings can be used to inform public health campaigns and educational efforts related to issues of social isolation and loneliness in adolescents. Through synthesis, stakeholders can come up with focused interventions to mitigate the negative effects of social media on the development of adolescents.

The Self-Esteem Improvement Hypothesis suggests that people log on to virtual entertainment in order to improve their self-esteem by searching for positive feedback and approval from others, as explained by Toma and Hancock, 2013. Teenagers might take part in exercises, for example, posting photographs, complimenting sharing achievements, and amassing preferences and remarks to support their confidence (Valkenburg and Peter, 2011). Be that as it may, the quest for confidence through web-based entertainment can likewise blow up, as young people might encounter pessimistic input, cyberbullying, or social correlation, prompting lower confidence and mental trouble (Tiggemann & Slater, 2014).

With the advent of social media platforms, the dynamics of social comparison have evolved significantly. Social media provides individuals with constant access to curated representations of others' lives, often highlighting their achievements, experiences, and appearances. Consequently, users may engage in upward social comparison more frequently, leading to heightened concerns about self-presentation & self-worth (Vogel et al., <u>2014</u>). Numerous studies have linked heavy social media



use to lower self-esteem and increased feelings of inadequacy, particularly between adolescents and young adults (Fardouly et al., <u>2015</u>; Kircaburun & Griffiths, <u>2018</u>).

Health psychology investigated the processes of downward comparison as a way people cope with illness or disability. Such downward comparisons were associated with feelings of gratitude and compassion toward others experiencing hardship in interpersonal relationships.

The Self-Evaluation Maintenance Theory, introduced by Abraham Tesser in 1988, details how an individual maintains self-evaluation with respect to interpersonal relationships and performance comparisons. The theory offers the hypothesis that one desires to have high selfevaluation, but at the same time, a close other doing better than one in a relevant domain may present a threat. According to the Self-Evaluation Maintenance Theory, people are aroused to maintain positive self-evaluations but experience threats when the close other outperforms them in a domain that is personally relevant. In closest relationships, research has documented how people manage envy and admiration of a close friend or family member achieving success in a shared domain. SEM theory has also been applied to organizational behavior when describing how individuals cope with performance discrepancies and avert associated negative self-evaluations in competitive work environments. In this way, Webbased entertainment stages open doors for people to associate with others, get social help, and keep up with connections-factors that can add to sensations of belongingness and self-esteem.

Good cooperation, online entertainment, and peer approval can help in increasing confidence, especially for persons who feel socially disengaged or reduced. Social media provides the platform in which an individual has control over the shaping of his or her digital identity, thereby allowing one to portray himself or herself in a positive light, thus boosting one's self-esteem. Additionally, it is proposed that by manipulating the presented self through selective self-presentation and sharing of positive experiences, and through seeking affirmation from others, the self-image is boosted, thus sustaining an individual's self-esteem. Individuals tend to selectively present positive aspects of themselves on social media, filtering out negative experiences and emotions, which can contribute to inflated self-esteem (Toma & Hancock, <u>2013</u>). The feedback individuals receive from peers on social media, such as likes, comments, and shares, can serve as a source of validation and reinforcement, influencing self-esteem (Vogel et al., <u>2014</u>).

Virtual entertainment clients will generally introduce admired variants of themselves, specifically sharing positive encounters and achievements while discarding negative parts of their lives (Toma and Hancock, 2013). This self-show can add to friendly particular examination, as people contrast their own lives with the organized and frequently decorated depictions of others via virtual entertainment. Web-based entertainment stages give clients quantifiable criticism as preferences, remarks, and offers, which can act as signs of social endorsement and ubiquity (Vogel et al., 2014). Exploration proposes that continuous commitment to social examination via online entertainment is related to lower confidence and decreased abstract prosperity (Vogel et al., 2014). Social correlation via web-based entertainment has been connected to raised degrees of gloom, uneasiness, and mental pain (Kross et al., 2013). Contrasting oneself horribly with others can compound gloomy feelings and subvert emotional wellness, especially among weak populaces like teenagers and youthful grown-ups. Self-perception Concerns: Web-based entertainment use is related to self-perception concerns and confused eating ways of behaving, especially among ladies and young ladies (Tiggemann &Slater, 2013).

Research Methodology

The research employed a quantitative, crosssectional, and correlational study approach to analyze the impact of social media use, social comparison, and self-esteem among adolescents. The current quantitative research design is based on a cross-sectional research design. The sample size was 249 used for the current study. The sample was collected from adolescents (early adolescents and late adolescents). The group of adolescents consisted of 96 males and 153 females. Purposive sampling, a nonprobability sampling method, was employed to select individuals. G Power 3.1 is a general power analysis program applied in studies to determine sample size and estimate power. The sample size was computed using an effect size of 0.5, a statistical power level of.95, an alpha error probability level of 0.05. G power version 3.1 resulted, in the minimum sample for the study being 115. However, data were collected from 249 respondents that exceeded the minimum required sample which includes 96 males and 153 females.

Inclusive Criteria

- Late adolescents aged 16 to 21 years old.
- Willingness to participate in the study.
- Consent is obtained from participants or their guardians, if applicable.
- Have social media accounts

Exclusive Criteria

- Individuals who do not fall within the specified age range.
- Individuals who are unable or unwilling to provide informed consent.
- Exclusion of individuals with severe cognitive or developmental disabilities, if their conditions hinder their ability to participate effectively.
- Don't have social media accounts

Instruments

The questionnaire consists of five components; therefore, respondents will have to spend roughly 15-20 minutes completing the questionnaire. The five portions included Part 1 (informed consent), Part 2 (demographic sheets), Part 3 (self-esteem scale) and Part 4 (social media use scale), Part 5(social comparison scale).

Demographics Sheet

First and foremost, you are required to complete a demographic form. Demographics sheets contain information regarding age and gender, education level, current status, number of family members, marital status, current residence, family structure, ethical background, number of personal use devices, and platform use the most.

Rosenberg self-esteem scale

The Rosenberg Self-Esteem Scale is a psychological

instrument with the primary purpose of measuring an individual's self-esteem and self-worth. it was developed by Morris Rosenberg in 1965. The RSES uses a Likert-type scale to measure responses. The standard version of the RSES is a 10-item scale with items answered on a 4-point Likert scale:(Strongly Agree, Agree, Disagree, Strongly Disagree) The scores range from 0 to 30, with higher scores indicating higher self-esteem. The scale has demonstrated strong validity and reliability, making it a widely accepted tool for assessing selfesteem in psychological research and clinical practice. The RSES typically shows high internal consistency, with Cronbach's alpha values often reported around 0.77 to 0.88, indicating good reliability.

Social comparison scale

Gibbons and Bunk developed the Social Comparison Scale (SCS), which is a frequently used tool in psychological research to assess individuals' tendencies to engage in social comparison. It was introduced by researchers Gibbons and Bunk in the 1990s and is designed to measure social comparison across various domains, including appearance, abilities, and achievements. The scale has been influential in investigating the role of social comparison in different contexts, including related to body image, those academic achievement, and overall life satisfaction.

Social Media Use Scale (SMUS)

The Social Comparison Scale was devised by Gibbons and Bunk and is among the various standard tools within the purview of psychological studies that go toward measuring people's tendencies for social comparison. It was introduced by researchers Gibbons and Bunk in the 1990s, and this scale is intended to measure comparison with others across a wide range of domains pertaining to appearance, abilities, and achievements. It has had a great influence on investigating the role that social comparison plays in various contexts related to body image, academic achievement, and general life satisfaction.

Social Media Use Scale: SMUS

The Social Media Use Scale allows measuring the degree to which a user utilizes social media and



thus core functions are focused on measuring the frequency and purpose of the time spent. This instrument was developed by Alison B. Tuck & Renee J. Thompson in 2017. The scale is used by researchers and practitioners with the aim of knowing patterns, motivations, and quantity of social media use. It helps in research on digital behavior and online interactions and their possible impacts on different aspects of well-being. The scale's specific version may include a variable number of items, typically ranging from 10 to 30 or more, depending on the comprehensiveness of the assessment desired. In the Social Comparison Scale, responses are collected using a Likert-type scale.

The scale format may vary slightly but usually follows a 7-point Likert scale for each item: Much Less Than Me, Less Than Me, Slightly Less Than Me, Same as Me, Slightly, More Than Me, More Than Me, Much More Than Me. Participants respond to this 7-point scale where they compare themselves to others on a number of different attributes. RSES usually exhibits high internal reliability, where Cronbach's alpha is often reported to be about 0.77-0.88. This Alpha value supports good reliability. The researchers in the process opt for the version of the scale that best fits their research purpose and for which the required version is validated.

Procedure

The purpose of this study is to investigate how social media exposure influences social comparison and self-esteem in adolescents, providing insights for promoting healthier digital behaviors and positive self-concept. Both males and females were equally selected and the Sample was recruited from schools, colleges, and universities from early

Table 1

Demographic characteristics of the research participants(*n*=249)

adolescents and late adolescents under age 13-25. All participants in this research assured that all information provided by them will be kept secure and confidential. The data was collected physically by using different scales which include Rosenberg's self-esteem scale to measure the self-esteem. Social comparison scale to assess individuals' tendencies to engage in social comparison. Social media use scale) to measure the total time spent on social media and which type of content affects his mental health.

The data was collected individually. Statistical Analysis

The analysis was performed using statistical software for social sciences. First, descriptive statistics were performed to determine the demographic characteristics of the research participants. Descriptive statistics are used to measure variables. Scale reliability was assessed using reliability analyses. To check the correlation among variables Pearson correlation was computed. Multiple regression analysis computed the relationship between one dependent variable and two independent variables. To assess whether there are significant differences in means across multiple groups t-tests were used.

Results

The participant's data was examined using a statistical computer program called the Statistical Package for Social Sciences Version 21 (SPSS-21). The demographic factors were analyzed together with the frequency and percentages to provide a thorough picture of the study participants, and the results are shown in the table below.

Variables	Categories	F	0/0
Age	16-17	114	45.8
	18-19	69	27.7
	20-21	66	26.5
Gender	Male	96	38.6
	Female	153	61.4
Marital status	Single	235	94.4

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Variables	Categories	F	%
	Married	12	4.8
	Divorced	2	0.8
Family Structure	Nuclear	153	61.4
	Joint	96	38.2
Social accounts	1	34	13.7
	2	74	29.7
	3	46	18.5
	4	43	17.3
	5	28	11.2
	6	24	9.6

Table 1, which is shown herein, gives an instructive picture of the demographic features of the research participants, who numbered a significant two hundred and fifty-one (n=249).

Table 2

Variable Descriptive Statistics (n=249)

	Mean	Std. Deviation	Skewness	Kurtosis
SMUS	37.1325	22.22907	2.245	5.053
SCS	33.4378	5.23915	0.387	1.184
SES	15.7952	2.03057	226	684

Table 2 presents the descriptive statistics for the key variables used in this study, including Social Media Use Scale (SMUS), Social Comparison Scale (SCS), and Self-Esteem Scale (SES). The table includes the mean, standard deviation, skewness, and kurtosis for each variable based on data collected from 249 participants. Social Media Use Scale (SMUS) The Mean average score for social media use among participants is 37.13. This indicates the central tendency of social media use within the sample. The standard deviation of 22.23 suggests high variability in social media use, indicating that participants' usage levels vary widely. The skewness value of 2.245 indicates a positively skewed distribution, meaning that most participants have lower social media use scores, with fewer participants reporting very high usage. The kurtosis value of 5.053 suggests a leptokurtic distribution, indicating that the data have a higher peak and heavier tails than a normal distribution. Social Comparison Scale (SCS) The Mean average score for social comparison among participants is 33.44. This provides a measure of the central

tendency of social comparison behaviors within the sample.

The standard deviation of 5.24 indicates moderate variability in social comparison scores among participants. The skewness value of 0.387 suggests a slight positive skew, indicating a relatively symmetrical distribution with a small tendency towards higher social comparison scores. The kurtosis value of 1.184 indicates a distribution that is slightly more peaked than the normal distribution. Self-Esteem Scale (SES) Mean average self-esteem score among participants is 15.80, reflecting the central tendency of self-esteem levels within the sample. The standard deviation of 2.03 suggests relatively low variability in self-esteem scores, indicating that most participants have similar levels of self-esteem.

The skewness value of -0.226 indicates a slight negative skew, suggesting that most participants have self-esteem scores slightly above the average. The kurtosis value of -0.684 suggests a platykurtic distribution, indicating that the data are more flat and have lighter tails than a normal distribution.

Table 3

Scale's Reliability Analysis (N=249)

Variables	No. of items	Alpha Coefficient
Self Esteem Scale	10	.845
Social Media Use Scale	17	.924
Social Comparison Scale	11	.764

The social media use, social comparison, and selfesteem reliability data are shown in Table 3. The self-esteem measure's reliability coefficient is precisely 0.845, falling within the acceptable ranges given by relevant guidelines and standards. The Social Comparison scale, on the other hand, has an incredible 0.763 reliability coefficient, while the Social Media Use scale has a 0.924 reliability coefficient, which puts it in the excellent category. Likewise, the father of the parents forms the dependability coefficient.

Hypothesis 1

There is be significant relationship between social media use, social comparison & self-esteem among adolescents.

Table 3

Correlation between social media use, Social Comparison, and Self-esteem.

Variables	Social media use	Social comparison	Self Esteem	
Social media use	-	-	-	
Social Comparison Scale	.268**	-	-	
Self Esteem Scale	199**	130*	-	

Note: ** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Table 4 displays the Pearson correlation coefficients for the three major research variables: social media usage, social comparison, and self-esteem. The associations between these variables in the sample of 249 youths are clarified by the correlations. The table includes notes on correlation values, statistical significance, and significance levels. The social comparison & social media usage has a correlation value of $r = 0.268^{**}$. P is not more than 0.01. Social comparison & social media use are substantially positively connected. This implies that higher levels of social media use among teens are positively connected with social comparison. The positive coefficient suggests that using social media increases the tendency to compare oneself to others. Social media usage and self-esteem have a connection value of $r = -0.199^{**}$. There is a substantial negative correlation between using social media and self-esteem (significance: p < 0.01). This implies that teens with lower levels of self-esteem are those who use social media more often. The negative coefficient indicates that there is a tendency for self-esteem to decrease as social media use increases. $R = -0.130^*$ is the correlation coefficient between social comparison and selfesteem. There is a significant negative correlation between social comparison and self-esteem (significance: p < 0.05). This suggests that higher levels of social comparison are associated with lower levels of self-esteem. The negative coefficient indicates that as the propensity to compare oneself to others increases, self-esteem tends to decrease. Degrees of Importance P < 0.01 indicates a very substantial degree of statistical significance. Pvalues below 0.01 signify very significant findings. P < 0.05 indicates a significant level of statistical significance. While still statistically significant, results with p-values less than 0.05 are not as significant as those with p < 0.01.

Hypothesis 2

There is a significant impact of social media use and social comparison on self-esteem among adolescents.

Table 5

Summary of Multiple Regression Analysis with social media use and social comparison as a predictor in self-esteem.

Predictor	В	SE	R ²	F	В	Т	р	95% CI
Constant	17.470	0.817	0.046	5.94		21.388	.000	[15.861, 19.079]
SMUS	-0.016	0.006			-0.177	-2.743	.007	[-0.028, - 0.005]

dependent variable: self-esteem

independent variable: social media use & social comparison

Table 5 showed that social media use has a negative and statistically significant impact on self-esteem (β = -0.177, p = .007, 95% CI [-0.028, -0.005]), indicating that higher levels of social media use were associated with lower self-esteem. However, social comparison (SCS) did not show a significant effect on self-esteem (β = -0.083, p = .201, 95% CI [-0.081, (0.017]). The overall model was significant (F=5.94, p < .001), suggesting that social media use plays a more substantial role than social comparison in influencing self-esteem among adolescents.

Hypothesis 3:

There will be significant differences between social media use, social comparison, and self-esteem among adolescents based on gender.

Table 6

The comparison of Social media use, Social Comparison, self-esteem among Adolescents (girls, boys) (N=260)

Variable	Male		Female	95%CI				
	n = 96		n = 153					
	М	SD	М	SD	t	p	LL	UL
Social Media Use	40.0625	26.712	35.2941	18.74619	1.653	.100	91241	10.4491
Social Comparison	33.333	4.33994	33.503	5.744	249	.804	-1.5160	1.17619
Self Esteem	15.8125	2.1779	15.784	1.9369	.106	.915	49359	.54996

Table 6 presents the means & standard deviations of perceived stress, homesickness, and depression scores, along with the differences between male and female students. The table includes the number of male and female participants (n), mean (M), standard deviation (SD), t-values, p-values & 95% confidence intervals (CI) for each variable. Variables are Social Media Use which indicates the average score of social media use among male and female students, Social Comparison which represents the average score of social comparison among male and female students and Self-Esteem which shows the average self-esteem score among male and female students. 95% CI (Confidence Interval) provides the range within which the true difference between male and female scores is likely

to fall, with 95% confidence. Male students (M=40.0625, SD=26.712) reported higher social media use compared to female students (M=35.2941, SD=18.74619).

The difference was statistically significant (t=1.653, p=.100), with a confidence interval ranging from -0.91241 to 10.44917. There was a slight difference in social comparison scores between male (M=33.333, SD=4.33994) and female (M=33.503, SD=5.744) students, but it was not statistically significant (t=-0.249, p=0.804), with a confidence interval ranging from -1.5160 to 1.17619. Male (M=15.8125, SD=2.1779) and female (M=15.784, SD=1.9369) students showed similar self-esteem scores, with no statistically significant difference observed (t=0.106, p=0.915), and a

confidence interval ranging from -0.49359 to 0.54996. Male students tend to have higher social media use compared to female students. There is no significant difference in social comparison scores between female & male students. Both male and female students exhibit similar levels of self-esteem.

Discussion

Social media comparisons have an impact on adolescents' self-esteem. According to Festinger's social comparison theory (1954), people assess who they are in light of other people. Our results on the frequency of upward comparisons (comparing oneself to peers who seem to be in better situations) are consistent with studies conducted bv Valkenburg et al. (2016), which indicated that teenagers who often make upward comparisons on social media had lower levels of life satisfaction and self-esteem. However, as shown by (Gibbons & bunk, 2017), downward comparisons (that is, concentrating on people who seem to be in poorer shape) may provide a brief lift. It is essential to comprehend the kind, frequency, and effects of these diametrically opposed social comparisons on self-esteem.

The study also showed how social comparisons of teenage self-esteem are done on social media. Festinger's social comparison theory indicates that an individual assesses who they are relative to other individuals. This essay shows that teenagers can use social media as a place to compare peers, which would then adversely affect their selfesteem.

In a very different but related study, Valkenburg et al. showed in 2016 that the frequent appearance of upward comparisons on social media was associated with poor life satisfaction and low self-esteem among teenagers. Our results on the frequency of upward social comparisons – focused on peers who seem to be better off – are in line with their findings. This could thus impact one's self-esteem with feelings of inadequacy and dissatisfaction with one's own life due to the constant exposure to the apparently perfect lifestyles that are on display on social media. To determine mechanisms that appropriately aid teenagers in maintaining a positive sense of selfesteem in this digitally connected modern environment, themes, rates, and affective responses to these contrasting social comparisons need to be understood.

Several studies support this potential linkage

A study by Van den Berg et al. (2018) found that the more teenagers reported using social media, the higher their social comparison and the worse their self-esteem. This is in line with the cultivation idea, which holds that frequent exposure to wildly exaggerated representations on social media might foster insufficiency in viewers. However, it has been suggested that social media usage may feed appearance anxiety, especially in teenagers who feel pressure to project themselves as perfect and well-groomed in their online image. These findings suggest that social media use may result in lowered self-esteem through a variety of mechanisms; this is an area that needs further research. Earlier research studies have found that excessive social media use has negative impacts on self-esteem. The results clearly show a negative association, which supports this.

This is further theoretically supported by social comparison theory, in that teenagers are markedly comparing their lives to idealized representations that they meet online, thus reducing their self-It is for that matter that research has worth shown women to be more likely to engage in and be affected by social comparison, therefore Goulding the gender differences observed in this study. This would mean that treatments targeted to reduce the negative effects of social media on wellbeing will have to be approached differently between men and women. Furthermore, Przybylski et al. (2013) mentioned that the pressure to always show a perfectly groomed image online may exaggerate concerns about one's appearance and cause negative effects on self-esteem. This pressure could result from the urge to seek online media validation or the fear of social rejection. Most who importantly, insecure teenagers feel compelled to project an image of perfection could become more anxious and less worthy if they think that there is a difference between being online and offline.

Results of the study that social media usage & social comparison impacted women more than

men were in line with other findings in studies, which revealed that women are more likely to take part in social comparison as compared to men and are impacted by it (Tiggemann & Slater, <u>2014</u>). This clearly shows that there is a need for gender-based interventions to reduce the adverse impacts of social media. Family type distribution indicates that a majority of the participants belonged to nuclear families. "Since nuclear home teenagers may differ in their social dynamics and support networks from those living in joint households, this could affect the extent and impact of social media usage" (Livingstone & Helsper <u>2008</u>, p. 12).

The reliability coefficient of the Self-esteem Scale was 0.845, indicating a relatively reliable instrument for measuring teen self-esteem. This result is consistence with other research using equivalent self-esteem questionnaires that had similar reliability coefficients. The satisfactory reliability of the scale indicated that it is able to reflect different participants' levels of self-esteem exactly throughout the study and lay a strong basis for future research about the relationship between self-esteem & social comparison and social media usage. This research also presented a case of the impact of social comparisons on the self-esteem of teenagers on social media. Festinger's 1954 social comparison theory states that people evaluate themselves based on other people. Going by this reasoning, then, teenagers may use social media as a platform for comparison with their peers, and therefore, this may have a negative effect on their self-esteem.

To put it differently, according to Valkenburg et al., 2016, frequent upward comparisons on social media are related to poorer life satisfaction and self-esteem in teenagers. Our results with regard to the frequency of upward social comparisons, focusing on peers who seem to be better off, are in line with their findings. There has been previous evidence pointing to excessive social media use tainting one's self-esteem. The results explicitly express the negative relationship, thus supporting this. This is also theoretically supported by social comparison theory since teenagers tend to compare their lives with what they see idealized online, and this diminishes their self-worth. Research has indicated that women are more likely to engage in and be affected by social comparison, which the results of this study reflect. This suggests that interventions aimed at reducing the negative effects of social media may have to be genderspecific for men and women.

In this respect, previous research has found that It has been found in several research studies that the relationship between self-esteem and the use of social media sites can be mediated by social comparison. In this study, grounded on the theoretical framework postulated by Festinger, 1954, of the social comparison theory, it was found that frequent comparison to others on social media reported a reduced level of self-esteem among teenagers. The result contributes to the research by Feinstein et al. (2013), which established that social comparison through social networking sites is a Sure Path toward aggravating low self-esteem and inferiority complex attacks.

The result of the study that social media usage and social comparison had a greater impact on women than on men tallies with prior studies showing that women are more likely to engage in social comparison and be influenced by it in comparison to men. In this research, the reliability coefficient for the Self-esteem Scale suggests that the instrument is reasonably consistent for the measurement of self-esteem of teenagers. This is based on many studies with equivalent self-esteem questionnaires that generated a similar coefficient of reliability. It means that the scale will be able to precisely indicate changes in the levels of selfesteem among participants at the beginning and end of the study, thus providing a very good foundation for further research into the relationship between self-esteem and social comparison and social media usage.

Conclusion

The research has illuminated the intertwined association between teenage social media, social comparison, and self-esteem. Key among its findings is that it further sets out to advance our understanding of the interactions between social comparison, gender dynamics, and the mental health implications that run, in reinforcement, in prior so many researches of the field on the negative effects of social media use on teenage selfesteem. A more complete picture of adolescent mental health in the digital age can be obtained by contrasting these findings with related studies.



Development of treatments and support plans that are focused on the aims can enable the achievement of adolescent aspirations.

The conclusions that the study draws on the validity of Social Comparison and the Self-Esteem & Social Media Use scales highlight that these are very reliable and robust assessment instruments. These valid measures provided a solid starting point from which to ascertain fragile relationships between teenage social media use, social comparison, and self-esteem. More importantly, the excellent reliability of the Social Media Use Scale has underscored how urgently further study and effective treatments are needed to address the psychological effects of social media on youth. Most importantly, this research has been able to supply key insights into complex dynamics surrounding teenage social media usage, social comparison, and self-esteem through careful analysis of the nine tables of data and findings. These results emphasize several things that have gone a long way in improving our knowledge of teenage mental health in the digital era. In fact, further analysis of the data within the responses revealed strong connections between social media usage & self-esteem, elaborating on the same point that increased use of social media platforms correlates with reduced levels of self-esteem among teenagers.

Especially, one of the striking findings was that predictive was the social media use and the social comparison; this reflects the need for focused interventions that seek to reduce the negative consequences of such practices. It is in this spirit that stakeholders can come together to cultivate digital mental health in teenagers through evidence-informed approaches to positive selfconcept, healthy social media engagement, and support networks.

Recommendations

Conduct longitudinal research on the relationship between social media, peer comparison usage, and adolescents' self-esteem. In doing so, it would clarify temporal dynamics and perhaps some of the causal chains underlying these links.

Include subjects of different categories in age, economic classes, and cultural backgrounds to increase the sample size and diversity. To improve the validity of the results and triangulate data from many sources, use mixed-methods methodologies. Richer insights into the experiences and perspectives of teenagers may be obtained by combining quantitative surveys with qualitative observations or interviews.

Examine how teenagers' self-esteem and mental health are shaped by contextual elements such as family dynamics, peer connections, and cultural influences.

References

Backes, E. P., Bonnie, R. J., & National Academies of Sciences, Engineering, and Medicine. (2019).
Adolescent Development. In *The Promise of Adolescence: Realizing Opportunity for All Youth*, 29(2), 145-150.
Google Scholar Worldcat Fulltext

Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. Organizational Behavior and Human Decision Processes, 102(1), 3–21. https://doi.org/10.1016/j.obhdp.2006.09.007 Google Scholar Worldcat Fulltext

- Chen, K. (2019). Self-Identity and Self-Esteem during Different Stages of Adolescence: The Function of Identity Importance and Identity Firmness. *Chinese Journal of Guidance & Counseling*, 55, 27–57. <u>https://doi.org/10.3966/172851862019050055002</u> <u>Google Scholar Worldcat Fulltext</u>
- Dreiling, A. N. (2023). Social Media and Adolescents' and Young Adults' Mental Health. *SACAD: John Heinrichs Scholarly and Creative Activity Days*, 2023(2023), 66. <u>10.58809/AWUR6100</u> <u>Google Scholar Worldcat Fulltext</u>
- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image*, 13, 38– 45. <u>https://doi.org/10.1016/j.bodyim.2014.12.002</u> <u>Google Scholar</u> <u>Worldcat</u> <u>Fulltext</u>
- Feinstein, B. A., Hershenberg, R., Bhatia, V., Latack, J. A., Meuwly, N., & Davila, J. (2013). Negative social comparison on Facebook and depressive symptoms: Rumination as a mechanism. *Psychology of Popular Media Culture*, 2(3), 161–170. https://doi.org/10.1037/a0033111
 <u>Google Scholar Worldcat Fulltext</u>
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. <u>https://doi.org/10.1177/001872675400700202</u> Google Scholar Worldcat Fulltext
- Grieve, R., Indian, M., Witteveen, K., Tolan, G. A., & Marrington, J. (2013). Face-to-face or Facebook: Can social connectedness be derived online? *Computers in Human Behavior*, 29(3), 604–609. <u>https://doi.org/10.1016/j.chb.2012.11.017</u> <u>Google Scholar Worldcat Fulltext</u>
- Keating, D. P. (2004). Cognitive and brain development. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of*

adolescent psychology (pp. 45–84). John Wiley & Sons Inc.

Google Scholar Worldcat Fulltext

- Kircaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the Big Five of personality: The mediating role of self-liking. *Journal of Behavioral Addictions*, 7(1), 158–170. <u>https://doi.org/10.1556/2006.7.2018.15</u> <u>Google Scholar</u> <u>Worldcat</u> <u>Fulltext</u>
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. Psychological Bulletin, 140(4), 1073-1137. https://doi.org/10.1037/a0035618 Google Scholar Worldcat Fulltext
- Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., Shablack, H., Jonides, J., & Ybarra, O. (2013). Facebook use predicts declines in Subjective Well-Being in young adults. *PLoS ONE*, 8(8), e69841.

https://doi.org/10.1371/journal.pone.0069841 Google Scholar Worldcat Fulltext

- Levenson, J. C., Shensa, A., Sidani, J. E., Colditz, J. B., & Primack, B. A. (2016). The association between social media use and sleep disturbance among young adults. *Preventive Medicine*, *85*, 36–41. <u>https://doi.org/10.1016/j.ypmed.2016.01.001</u> <u>Google Scholar Worldcat Fulltext</u>
- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society*, 10(3), 393–411.
 <u>https://doi.org/10.1177/1461444808089415</u>
 <u>Google Scholar Worldcat Fulltext</u>
- Nesi, J., & Prinstein, M. J. (2015). Using Social Media for Social Comparison and Feedback-Seeking: Gender and Popularity Moderate Associations with Depressive Symptoms. *Journal of Abnormal Child Psychology*, 43(8), 1427–1438. <u>https://doi.org/10.1007/s10802-015-0020-0</u> <u>Google Scholar Worldcat Fulltext</u>
- Odgers, C. L., & Jensen, M. R. (2020). Adolescent development and growing divides in the digital age. Dialogues in Clinical Neuroscience, 22(2), 143– 149.

https://doi.org/10.31887/dcns.2020.22.2/codgers Google Scholar Worldcat Fulltext

Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. Y., Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social media use and perceived social isolation among young adults in the U.S. *American Journal of Preventive Medicine*, 53(1), 1–8. <u>https://doi.org/10.1016/j.amepre.2017.01.010</u> Google Scholar Worldcat Fulltext

- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841–1848. <u>https://doi.org/10.1016/j.chb.2013.02.014</u> <u>Google Scholar Worldcat Fulltext</u>
- Rideout, V., Peebles, A., Mann, S., & Robb, M. B. (2022). Common Sense Census: Media use by tweens and teens, 2021. San Francisco, CA: Common Sense. <u>Google Scholar</u> <u>Worldcat</u> <u>Fulltext</u>
- Rideout, V., & Robb, M. B. (2018). Social media, social life: Teens reveal their experiences. Common Sense Media,2(3), 43-49.
 Google Scholar Worldcat Fulltext
- Smith, R. H., & Kim, S. H. (2007). Comprehending envy. Psychological Bulletin, 133(1), 46–64. <u>https://doi.org/10.1037/0033-2909.133.1.46</u> <u>Google Scholar Worldcat Fulltext</u>
- Tesser, A. (1988). Toward a Self-Evaluation maintenance model of social behavior. In Advances in experimental social psychology (pp. 181–227). <u>https://doi.org/10.1016/s0065-2601(08)60227-0</u> <u>Google Scholar</u> <u>Worldcat</u> <u>Fulltext</u>
- Tiggemann, M., & Slater, A. (2013). NetGirls: The
Internet, Facebook, and body image concern in
adolescent girls. International Journal of Eating
Disorders, 46(6), 630-633.
https://doi.org/10.1002/eat.22141
Google Scholar
Worldcat
Fulltext

- Tiggemann, M., & Slater, A. (2014). NetGirls: The Internet, Facebook, and body image concern in adolescent girls. International Journal of Eating Disorders, 46(6), 630–633. <u>https://doi.org/10.1002/eat.22141</u> <u>Google Scholar Worldcat Fulltext</u>
- Toma, C. L., & Hancock, J. T. (2013). Self-Affirmation underlies Facebook use. *Personality and Social Psychology Bulletin, 39*(3), 321–331. <u>https://doi.org/10.1177/0146167212474694</u> <u>Google Scholar Worldcat Fulltext</u>
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). Stability of self-esteem across the life span. *Journal of Personality and Social Psychology*, 84(1), 205–220. <u>https://doi.org/10.1037/0022-3514.84.1.205</u> Google Scholar Worldcat Fulltext
- Twenge, J. M. (2017). *IGen: Why today's Super-Connected kids are growing up less rebellious, more tolerant, less happy--and completely unprepared for adulthood--and what that means for the rest of us.* <u>https://en.wikipedia.org/wiki/IGen_(book)</u> <u>Google Scholar Worldcat Fulltext</u>
- Valkenburg, P. M., & Peter, J. (2011). Online Communication among Adolescents: an Integrated model of its attraction, opportunities, and risks. Journal of Adolescent Health, 48(2), 121–127. <u>https://doi.org/10.1016/j.jadohealth.2010.08.020</u> <u>Google Scholar</u> Worldcat Fulltext
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3(4), 206–222. <u>https://doi.org/10.1037/ppm0000047</u>
 <u>Google Scholar</u> Worldcat Fulltext