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SOCIAL COMPARISON ORIENTATION AND MENTAL HEALTH AMONG YOUNG ADULTS: THE MEDIATING ROLE OF SELF-CONCEPT

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ABSTRACT

The study examined the impact of social comparison orientation on young adults' mental health and further investigated the mediating role of self-concept. A sample of 300 University students (Male=150, Female=150) between the range of 20-30 years completed self-report measures of social comparison orientation, mental health inventory and self-concept clarity. Correlational analysis revealed a significant moderate positive relationship between social comparison orientation and mental health (r = .45, p<.01). Regression analysis demonstrated that social comparison orientation predicted mental health (B = -.328, p< .01), explaining 10.7% of the variance. Mediation analysis revealed that indirect effect of social comparison orientation on mental health was found to be significant (B = -0.4074, 95% CI [-0.5679, -0.2585]), which in turn, confirming that self-concept mediates the relationship between social comparison orientation and mental health. Significant results suggesting to plan interventions focused at building strong and stable self-concept.

INTRODUCTION

In this digital era, people are more concerned about how they present their lives on social media whether it be physical appearance, achievements and personalities. Peers scrolling through social media come across these highlighted images, videos and reels and often find them in the state of comparing their lives, making self-evaluations. Young adults, a demographic which is deeply affected and indulged in such comparisons as they are in the phase of identity formation and life transitions (Arnett, 2000), how these comparisons turn into mental health issues is particularly significant (Sharma, Sanghvi, & Churi, 2022)

Social comparison orientation (SCO), is the inclination in humans to compare themselves with others, this innate tendency is linked to certain mental health outcomes (Buunk & Gibbons, 2007). Numerous researches have explored the link between social comparison orientation and mental health and there exist mixed findings about this relationship, some argue that these comparisons are healthy in a way that it provides the room for self-improvement and growth, on the other hand, some researchers conclude that comparisons with others have negative effects including anxiety, low self-worth and depression (Nesi & Prinstein, 2015; Feinstein et al., 2013). A study specifically targeting a social media platform, Instagram, using the sample of young adults found that upward social comparisons predict declined life satisfaction and heightened level of feeling inadequate (Liu et al., 2023). Similarly, a recent study found that algorithm-driven reinforcement of aspirational content on digital platforms resulted in intensified psychological effect of social comparisons orientation (Shin & Kim., 2024).

The comparisons operate in two dimensions ultimately resulting in two different mental health effects. One is comparing themselves with the ones who are more physically attractive and achieved more than you in their lives, being not similar to them evokes the feeling of inferiority which leads to stress, anxiety and depression. The other is downward social comparison, when you come across the profiles of those who are less attractive than you and achieved less than you, it boosts your self-esteem and you feel satisfied (Gerber et al., 2018; Wheeler & Miyake, 1992). For young adults who are experiencing life transitions and forming identity, these comparisons make them more vulnerable to mental health issues (Arnett, 2000).

The present study is an attempt to investigate the impact of social comparison orientation on mental health among young adults. Furthermore, it seeks to examine how self-concept mediates the relationship between social comparison orientation and mental health.

Festinger (1954) first established the concept of social comparison. It is human natural tendency to compare their abilities and traits with the significant others. Engaging in such comparisons is due to the reason that humans do not have any parameter for self-assessment so they compare themselves to measure about where do they stand. These comparisons are of two dimensions. Either comparing with those who are better than you in abilities and achievements referred as upward social comparison or comparison with those who are less capable and achieved less in life than you referred as downward social comparison. Gibbons and Buunk (1999) developed the concept of social comparison orientation (SCO), a measure that how often people engage in this comparison and how much they get affected by them. There exists both positive and negative effects of these social comparisons (Buunk & Gibbons, 2007).

Self-discrepancy theory (Higgins, 1987) underlies to understand the mechanism how social comparison and mental health relates. According to this theory, there are three types of self in an individual, the actual self (who one believes they are), the ideal self (who one wants to be), and the ought self (who one believes they should be). Gap between these different selves can often create anxiety, feeling of discontentment and guilt. Individuals compare themselves with those peers who are doing better in life in comparison, and find discrepancy between actual self and desired self. This theory highlights the mediating role of self-concept in the relationship between social comparison and mental health.

The relationship between social comparison orientation and mental health has been the focus of numerous studies (Fox & Moreland, 2015; Nesi & Prinstein, 2015; Feinstein et al., 2013; Liu et al., 2023; Shin & Kim, 2024) and still the mixed findings leave the matter open. This study attempts to further understand the relationship between these two constructs and explore the mechanism behind the relationship of social comparison orientation and mental health. Additionally, a large number of studies kept investigating a specific demographic of adolescents and a significant demographic of young adults' being unexplored. However, much literature exists on the impact of social comparison orientation on mental health among young adults but there is limited research conducted on the role of individual's personality factors such as self-concept which can mediate the direct impact of these two constructs.

Much literature addressing the findings on adolescents and young adults (Nesi & Prinstein, 2015; Appel et al., 2016; Vogel et al., 2014) but there is a limited study available for adult population (Seabrook et al., 2016; Verduyn et al., 2017). Notably, social media usage vary by different social media platforms as evidence suggests that young adults are more likely to use Instagram and Snapchat while older adults are more into using Facebook and YouTube (Auxier & Anderson, 2021). It is also found that motives behind using social media platforms vary by different age groups. Young adults use these platforms more for presentation of self, whereas older adults use them for enjoyment, connecting with close social ties and reduced loneliness (Pew Research Center, 2019). The motivation or intent for using social media by different age groups has different implications. Younger adults are more at risk for negative consequences of social comparison (Fardouly et al, 2015; Tiggemann & Slater, 2014). On the contrary, older adults feel psychologically better after getting socially connected with their social capital online (Chopik, 2016).

Self-concept has two components one is self-esteem and the other is self-efficacy. Self-concept

can be negative or positive. Low self-esteem and low self-efficacy lead to overall negative perception of an individual whereas high self-esteem and high self-efficacy results in appositive self-concept. The relationship between social comparison orientation and mental health is mediated by self-concept. People with a positive self-concept get motivated and inspired by others' achievements and successes rather than feeling distressed while on the other hand people having negative self-concept engages in upward comparison, start doing negative self-evaluations due to which a feeling of anxiety and self-criticism evokes in themselves. The psychological effect of social comparison orientation on mental health is mediated by self-concept. A study by Moon, Kim, and Park **(2025)** provided the evidence that upward social comparison does not negatively affect those who have a clear and strong sense of self-concept. Self-acceptance plays a significant role in creating a clear, strong and positive self-concept. The findings from a study conducted by Ruan et al, (2023) suggests that people who have high level of self-acceptance are able to mitigate the adverse effects of social comparison and show tendencies of psychological resilience.

Recent research has investigated the relationship between social comparison orientation and self-concept. A study conducted on a sample of young adults who were social media users having high level of social comparison orientations were found to have low levels of self-esteem and an increased level of self-doubt (Lee & Song, 2022). A recent literature sheds light on personality trait such as high self-efficacy and resilience which acts a moderator between social comparison and its negative psychological effects. A positive and strong self-concept in an individual can mitigate the negative psychological consequences which occur due to excessive social comparisons (Yuan et al, 2025). Furthermore, interventions for enhancing self-compassion and cognitive restructuring can help to reduce the detrimental psychological effects of social comparisons on self-concept and contributing to enhanced emotional and psychological wellness in young adults **(Kishimoto et al, 2025)**.

Hypotheses

1. There will be a relationship between social comparison orientation and young adults' mental health.
2. Social comparison orientation will have a significant influence on young adults' mental health.
3. Self-concept will mediate the relationship between social comparison orientation and mental health.

Methodology

Participants

The sample of the study includes 300 young adults (male and female both) specifically between the age range of 20-30 years. Demographic information of the participants include age, gender, socio-economic status, present academic level, average hours of daily usage of social networking sites. Participants were selected through convenient sampling technique from different universities of Karachi. Written informed consent form was given to participants to see the willingness of participation in the study with the assurance of confidentiality of the data.

Inclusion Criteria

Participants must be young male and female adults whose age ranging between 20-30 years. Participants must be Pakistani and currently enrolled student in any public or private sector University within Pakistan. They must have active usage of social networking sites (Minimum usage of 1hour per day). They must be able to comprehend English language.

Exclusion Criteria

Individuals below 20 years and above 30 years of age were excluded. Students not currently enrolled in any public and private sector University were not the part of the study. Individuals who used social networking sites irregularly were also excluded.

Measures

Social Comparison Orientation

The Iowa Netherlands Comparison Orientation scale (INCOM) is a self-report measure of social comparison. The scale consists of 11 items and assess how often people compare themselves with others ("I often compare myself with others with respect to what I have accomplished in life"). Items are arranged on a 5-point Likert scales and pertain to how much an individual agrees or disagrees with the statement, 1 (I strongly disagree strongly) to 5 (I strongly agree. It is also

stipulated that people with higher scores on the INCOM will have more comparison orientation behaviors than those with a lower score. Typical reliabilities for the INCOM scale are around .83 (Gibbons & Buunk, 1999).

Mental Health Inventory (MHI-18)

The MHI-18 is a short version of original Mental Health Inventory which is consisted of 38 items developed during the National Health Insurance Study (Veit & Ware, 1983). This scale was found to be reliable and valid (Sherbourne, Hays, Ordway, Dimatteo & Kravitz, 192; Veit & Ware, 1983). Also, the 18-items short version is highly correlated with the original version and can be used depending on the purpose of study. The MHI-18 evaluate the respondents on a 6-point Likert scale ranging from 1= All of the time to 6= None of the time. First raw scores will be generated and then these scores will be converted into mean scores that will produce a new final score. The scale examines mental health on four different subscales named as anxiety, depression, behavioral control and positive affect. The total of these four subscales is the total mental health score of each participant.

Self-Concept Clarity Scale

Self-concept Clarity scale consisted of 12 items and used to measure the participant's self-concept clarity where individuals report high scores indicating a strong self-concept and low scores indicating weak sense of self-concept. It is measured on 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For example, "I spend a lot of time wondering about what kind of person I really am" and "My beliefs about myself seem to change very frequently". The scale has two reverse-scored items as well. Numerous translations of this scale have been done for different languages and it has been adapted for different cultures such as German, Polish, Slovak, Korean, Japanese and Persian (Stucke, 2002; Suszek et al., 2018; Fickova, 1999; Kim, 1998; Tokunaga & Horiuchi, 2012; Razian et al., 2019; Matto & Realo, 2001), in fact this scale is the most widely used scale (Suszek et al., 2018). This scale was found to have good Cronbach alpha reliability ($\alpha = 0.86$) and excellent test-retest reliability over a four to five months interval (Campbell et al., 1996). This scale has been administered to both on general population and clinical sample and demonstrated good psychometric characteristics (Diehl & Hay, 2011; Lodi-Smith & Roberts, 2010; Cicero et al., 2013; Cicero, 2020; Usborne & Taylor, 2010; Bigler et al., 2001; Evans et al., 2015).

Procedure

This cross-sectional study is aimed at assessing the impact of social comparison orientation in social networking sites on mental health of young adults. Survey method was employed for data collection. Participants of the study were recruited from different universities in Karachi whose age range lies between 20-30 years. Convenient sampling technique was used to select participants. A question was asked first "do you use any social networking site?", if the answer was in affirmation, then informed consent form was given to them. After completing this prerequisite procedure to get the willingness of the participant to collect data, demographic sheet along with measures of social comparison orientation, mental health and self-concept clarity was provided. The average time for filling up the set of questionnaires was ten minutes; however, participants were not given any time constraint. The data collection was done in group setting. After collecting data, all the scores on questionnaires were entered in SPSS version 27, scoring was done in the manner instructed by the developer of the questionnaire. First, data was analyzed through descriptive statistics which includes mean and standard deviation, then inferential analyses were established which includes Pearson Moment correlation, regression analysis and mediation analysis by using Hayes PROCESS Macro to determine the role of mediating variable. Results were tabulated and interpreted.

Results

Table I

Demographic Characteristics of the Participants

Demographic Variable	Category/Statistic	Frequency (N)	Percentage (%)
Gender	Male	150	50.0
	Female	150	50.0
Socio-Economic Status	Low	8	2.7
	Middle	287	95.7
	High	5	1.7
Present Academic Level	Undergraduate	172	57.3
	Graduate	108	36.0
	Postgraduate	20	6.7
Average Hours of Daily Usage	< 2 hours	40	20.0
	2–4 hours	80	40.0
	> 4 hours	80	40.0

Note: This table shows the demographic characteristics of the participants (N = 300) with equal distribution of male and female (M = 150, F =150). The majority of the participants were from middle socio-economic status (95.7%). Majority of the participants were at undergraduate level (57.3%), followed by graduate (36%) and postgraduate (6.7%). Mostly participants' daily usage of social networking sites was 2-4 hours (40%) and more than 4 hours (40%), while 20% were using less than 2 hours.

Table II

Descriptive Statistics

Variable	Mean (M)	Standard Deviation (SD)	Range
Age (years)	22.48	3.353	20–30
Average Hours of SNS Usage	4.17	1.960	1–8

Note. This table represents the mean, standard deviation and range for age and average daily hours of usage of social networking sites of participants (N = 300). The average age was 22.48 years with SD = 3.35 AND age range from 20-30 years. Whereas, average hours of social networking sites usage were 4.17 with SD = 1.960, Range = 1-8 hours.

Table III

Pearson Correlations Between Social Comparison Orientation and Mental Health

Variable	1	2
1. Social Comparison Orientation	-	r=.45**
2. Mental Health	r=.45**	-

Note. N = 300, r = .45, p < .01, the correlation between social comparison orientation and mental health is significant moderate positive correlation, indicating higher social comparison scores are related to higher mental health (depression, anxiety) scores.

Table IV

Model Summary for Regression Analysis

Model	R	R^2	Adjusted R^2	F	df	p
Model 1	0.328	0.107	0.104	35.879	298	< .001

Table V

Regression Coefficients Predicting Mental Health

Predictor Variable	B	SE B	β	t	p
Social Comparison Orientation	-0.785	0.131	-0.328	-5.990	< .001
Constant	86.333	4.739	-	18.216	< .001

Note. Table IV and V represents that the regression model was statistically significant, F (298) =35.879, p<.001 and explained 10.7% of the variance in mental health (R^2=0.107). The unstandardized regression coefficient (B) indicated that higher levels of social comparison orientation were associated with poorer mental health outcomes (B=-0.785, SE=0.131, t= -5.990, p<.001). The standardized coefficient (β= -0.328) suggests a moderate effect size.

Table VI

Standardized Regression Coefficients and Indirect Effects for the Mediation Model

Path	B	SE	t	95% CI (LL, UL)	Result
Direct Effects					
SCO → MH (total effect, *c*)	-0.3778	0.1359	-2.78	[-0.6452, -0.1103]	Significant
SCO → SCC (*a*)	0.5512	0.0653	8.44	[0.4227, 0.6796]	Significant
SCC → MH (*b*)	-0.7391	0.1083	-6.82	[-0.9523, -0.5260]	Significant
Indirect Effect					
SCO → SCC → MH (*ab*)	-0.4074	0.0809	–	[-0.5679, -0.2585]	Significant

Note. *N* = 299. SCO = Social Comparison Orientation; SCC = Self-Concept Clarity; MH = Mental Health. The indirect effect was tested using bootstrapping. Confidence intervals that do not include zero indicate a significant indirect effect. All paths reported are unstandardized coefficients. The results support a full mediation model in which the relationship between SCO and MH is mediated by SCC.

Discussion

The present study investigated relationship between social comparison orientation and mental health, the influence of social comparison orientation on mental health of young adults and further explored the mediating role of self-concept in the relationship between social comparison orientation (SCO) and mental health (MH). Significant moderate positive relationship was found between social comparison orientation and mental health, showing that individuals high in social comparison representing poorer mental health (e.g., more symptoms of anxiety, depression, etc.). The findings revealed that young adults experiencing higher levels of social comparison orientation will be suffering from poor mental health outcomes (β = -0.3778, p < .001), Similarly, an empirical study was found with the results suggesting links between frequent social comparisons specifically upward social comparison and increased psychological distress (Appel et al., 2016; Vogel et al., 2014).

Mediation analysis revealed that total effect of social comparison orientation on mental health found to be significant (B =-0.3778, SE = 0.1359, t = -2.78, 95% CI [-0.6452, -0.1103] which clearly indicates that individuals with high levels of social comparisons will experience poor mental health outcomes. The direct effect of social comparison orientation on self-concept clarity was found to be positive and statistically significant (*B* = 0.5512, *SE* = 0.0653, *t* = 8.44, 95% CI [0.4227, 0.6796]), which seems counterintuitive. However, this finding is aligned by Guo, Lei and Zhang (2024), explaining the reflective and adaptive comparison strategy by inspiring those we admire. Some individuals use social comparison to reflect and strengthen their sense of identity. Higher social comparison orientation leads to weak and low self-concept which further results in poor mental health (B = -0.7391, p < .001). The indirect effect of social comparison orientation on mental health was also found to be significant (*B* = -0.4074, *SE* = 0.0809, 95% CI [-0.5679, -0.2585]), suggesting

self-concept as a partial mediator between the relationship of social comparison orientation and mental health.

Recent studies are in line with the findings of present study. Patel (2024) observed the negative correlation between self-concept and social comparison orientation explaining that individuals with a strong sense of self are not likely to engage in social comparisons. Additionally, Pasko and Arigo (2021) identified that individuals with high levels of social comparisons are likely to experience more negative emotions when they come across "fitspiration" posts on social media platforms, resulting in declined motivation and distorted self-perception.

Building upon Festinger's social comparison theory about how individuals compare themselves with others and Campbell's framework of self-concept clarity, how much individuals have clear understanding of self, clarifies the psychological mechanism works for mental health outcomes for young adults. Recent scholars explored this mechanism by suggesting that interplay between social comparison and self-concept contributes to irregular emotions, depressive symptoms and identity confusion. A recent study is aligned with the findings of present study which predicted lower self-concept due to fluctuations in online self-presentation, ultimately leads towards the high level of depression in adolescents and young adults (Wong & Hamza, 2025).

A number of scholars identified the self-esteem as a mediator between social comparison and mental health among adolescents and young adults (Liu et al., 2017; Wang et al., 2017; Lee, 2022; Hu, Liu, & Ma, 2022; Liu, Kvintova, & Vachova, 2025) but Weber et al., (2023) conducted a longitudinal study and argued the difference between self-concept clarity and self-esteem and determined that disruptions in self - concept predicts mental health instability more than the self-esteem in emerging adulthood. These studies collectively reflect the significant mediating role of self-concept in the relationship between social comparison and mental health outcomes particularly on social networking sites which is easily approachable for young adults use to do self-evaluations. Moreover, these studies provide insights for a contemporary understanding how mental health outcomes in young adults are shaped by social comparison and self-concept clarity.

The mediation effect of self-concept clarity can be understood in the light of self-discrepancy theory. There is an indirect path from social comparison orientation to mental health through self-concept clarity that suggests individuals who engage in social comparison find gaps in the existing and desired self, ultimately leading towards having the feeling of emotional dysregulation, anxiety, guilt, sadness and low self-esteem. Conversely, individuals with stable and strong self-concept perceive the comparison in a positive way, and use them as motivation, inspiration and self-growth. The empirical findings of the study align with this theory suggesting the protective role of stable self-concept in reducing the negative mental health outcomes in response to comparison.

Conclusion

The evidence supports the conclusion that self-concept serves as a mediator between social comparison orientation and mental health among young adults. Psychological harm due to social media use which ultimately leads to comparison can be prevented by cultivating a stable and coherent self-concept so that mental health of young adults cannot be compromised.

Implications

The implications of the study reinforce the significance of strengthening self-awareness and self- acceptance, which are the elements of self-concept construct. Interventions aimed at building up a strong and consistent sense of self can make individuals less effected by the detrimental outcomes of mental health. Also, digital literacy programs can provide the young adults to be aware and mindful regarding the unrealistic and curated self-presentations to get attention of others. In this way, they are less likely to become prey of these selective and algorithm-driven content which make them less contented in their lives. There is a dire need to take initiative to arrange interventions and digital literacy programs at its earliest. Due to the fact that Pew Research Center (2024) showed the negative impact of social media on mental health as 48% of teens reported social media has become detrimental to their mental health, specifically girls identified a negative impact on their

confidence and sleep due to social media use (Washington Post, 2025). Furthermore, a report of OECD declared a decreased well-being was observed in English teenage girls due to social media, cyberbullying and ideal body image (The Times, 2025).

Limitations

The study remains with some limitations. First, further investigations are needed to establish cause and effect relationship by using the experimental design as due to cross-sectional design the present study fails to infer in causal relationship. Second, the data collection method used in this study was based on survey which can also create the chance of errors in responses of participants such as social desirability bias and inaccurate perceived self.

This study is specifically conducted on a sample of young adults and the data were collected from different universities in Karachi, it is recommended that future researchers should explore these dynamics across different cultures and age groups to enhance the generalization. Moreover, role of gender can be examined in the SCO-SCC-MH pathway which will further generate deeper understanding of how gender moderate the relationship between social comparison orientation and mental health. Also, the present study has not considered the users of any specific social-media platform as different platforms may produce different mental health outcomes.

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