FINDING THE LINKS BETWEEN SOCIAL MEDIA USE, FALSE SELF, SOCIAL COMPARISON AND INTERPERSONAL RELATIONSHIPS

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Abstract

The aim of the present study was to find the impact social media use exert on false self as well as interpersonal relationships. Along with it social comparison served as a moderator between the link of social media use and false self. A student sample (N=375) was gathered from University of Peshawar, comprising 18-35 years of age, with a mean of 23.6. The Social Networking Time Use Scale (SONTUS; Olufadi, 2015), Iowa-Netherlands Comparison Orientation Measure (Gibbons & Buunk, 1999), Authenticity Scale (Wood et al., 2008), and Interpersonal Relationship Questionnaire (Callaghan, 2006) were applied on the sample. Results revealed that frequency of time spent on social media increased scores on false self as well as deteriorated interpersonal relationships. Results also indicated that social comparison did not serve as a moderator between the use of social media and false self. To buffer the impact social media is exerting on false self and interpersonal relationships, curriculum should be designed in a manner to include topics related to digital well-being. Similarly, face-to-face communication skills should be the focus of mental health professionals to maintain a balance between online and offline relationships.

Keywords: Social media use, False self, Interpersonal relationship, Social comparison

Introduction

Over recent years, social media platforms have experienced an extraordinary fame and widespread use (Hruska & Maresova, 2020). Social media sites including Facebook, Twitter, Instagram, and YouTube have garnered immense followings, engaging a global audience. Initially accessible to a select few, these digital platforms have now become integral to our daily lives, revolutionizing communication and fostering connections among people from diverse backgrounds and cultures (Rughwani, 2023). This virtual interconnectedness has engendered unparalleled feelings of belonging among individuals who may have never crossed paths in the physical world (Anderson & Auxier, 2021; Li et al., 2021). Statistical estimates indicate that by 2021, a staggering 3.09 billion people worldwide would be using social media (Zhao, 2021). A significant majority of the

population from America (81%) maintains active profiles on social media, with Instagram and YouTube boasting the largest user bases, each amassing a billion users (Himelein-Wachowiak et al., 2021).

Social media interactions often prompt individuals to engage in comparisons, leading to either upward or downward comparisons, wherein users assess themselves against those they consider unlucky or successful (Hwnag, 2019; Yoon et al., 2019). While downward comparisons can temporarily enhance a person's self-esteem, the constant comparison game on social media can foster intricate emotions like jealousy, anxiety, and an insistent need to compete to others' seemingly "perfect" lives (Alodia & Suryadi, 2021; Lee, 2022). With frequent exposure to flawless online personas of others and an instinct to compare oneself with them can lead to symptoms of depression (Meshi & Ellithorpe, 2021). The social comparison theory posits that individuals have natural desire to compare themselves to others as a means to judge their own self-esteem and societal standing (Lewis, 2021). In a contemporary age, where social media exerts is a stable source of influence, this concept of self-evaluation in relation to others becomes particularly pertinent. These platforms continually expose individuals to the successes and accomplishments of their peers, often presented alongside sensibly shaped personas that may not appropriately manifest the true picture of their lives. This exposure can trigger feelings of insecurity, inferiority, and a biased sense of self-worth and abilities (Smith, 2022; Teplinsky et al., 2023). Furthermore, it underscores the threats to mental security, satisfaction, and self-regard, as individuals combat with the pressures of relentless comparison (Alodia & Suryadi, 2021). Lastly, it highlights the role of social media platforms in shaping user interactions and promoting healthier digital relationships.

The invention of social media has provided the individuals a chance to create and manage virtual identities (Wellman et al., 2020), through different sites where people make and present personas that may differ from their real-life selves. This has given rise to the concept of the "False Self," a facade based on what the person wants to show to the world rather than the reality (Michikyan, 2020; Swaby, 2020). Although it may seem to give autonomy to the individuals struggling to express themselves in actual life, it may give rise to feelings of remoteness and discontent as individuals strive to live up to their fabricated identity (Alvesson & Einola, 2019; Baumeister, 2019).

Rooted in social psychology, the False Self-concept involves manifesting a fanciful or misleading aspect of oneself to others. This False Self mostly deviates significantly from one's genuine self and standards (Turel & Gil-Or, 2019). While using social media, individuals might get inclined to construct personas that are embroidered, augmented, or totally unreal to look more appealing or accomplished than reality (Amer & Obradovic, 2022). This proposed identity deviates significantly from their actual personality and real life experiences that disconnect their online and actual identities (Andalibi & Flood, 2021). On social networking sites, the False Self can be observed through the carefully crafted posts and photos to portray an image of satisfaction, accomplishments, and fame which may not align with their actual situations (Richter & Ye, 2023).

Furthermore, people may get dependent on exterior approval and appreciation from the virtual friends circle. Consequently, they construct identities rooted in external validation instead of personal standards and beliefs (Biwer et al., 2021). Frequent usage of social media can distort one's sense of identity, as individuals mostly present a fabricated picture of their lives. The distortion of their identity can significantly impact on one's mental wellbeing, by living under a constant pressure to keep up to their False Self with and combating the apparently flawless lives of other virtual personas (Amer & Obradovic, 2022). This pressure can even cast amplified anxiety, self-esteem problems, and a disengagement from their authentic self.

The culture of evaluation and rivalry fostered by the False Self can have broader societal repercussions (Knoll et al., 2022). Recent surveys report that about 90% of individuals felt insecurity because of comparisons via social media (Hjetland et al., 2021). Additionally, the ratio of respondents (75%) adopting False Self to fit in with the virtual online world is also increasing (Dinh & Lee, 2022). These findings underscore the impact False Self is creating on psychological distress in a contemporary society.

The recent emergence of social media has transformed how people establish and sustain relationships. Interpersonal relationships serve as the foundation of social interaction, profoundly impacting our feelings of belonging and well-being (Wentzel & Skinner, 2022). Social networking platforms have facilitated connections with individuals from across the globe, offering convenience and accessibility (Ortiz-Ospina & Roser, 2023). However, they have also presented difficulties to interpersonal forces (Jennings et al., 2021). Social media allows people to a fabricated version of themselves to others (Jacobson, 2020), by selectively sharing best part, achievements, and pleasant life experiences while concealing hardships, setbacks, and weaknesses (Turel & Gil-Or, 2019). This enlarges the gap between one's online persona and authentic self, as individuals feel pressured to keep a facade of excellence to get approval from friends (Biwer et al., 2021).

Extravagant online identities heighten the risk of regret and cynicism in relationships. Presenting a false version of oneself fosters unrealistic expectations, leading to diminished confidence and emotional closeness when the dissonance between the online and actual persona becomes clear (Winstone et al., 2021). Moreover, evaluation apprehension or rejection may deter people to present their real selves that result in missing an authentic association and open dialogue (Altuwairiqi et al., 2019). Communication via use of social media lacks the subtleties of expressions, language of body, and other nonverbal cues (Winstone et al., 2021), making it challenging to accurately interpret the emotions and intentions behind written words. This limitation often results in confusion and potential conflicts (Wang & Ruiz, 2021), as individuals struggle to decipher the true meaning of messages.

Furthermore, social media exposes people to unrealistic standards of beauty and lifestyles (Ando et al., 2021), contributing to feelings of disconnection as individuals perceive themselves as unable to measure up to the idealized images presented. Social media can induce a paradoxical sense of virtual togetherness combined with feelings of isolation and inadequacy (Ahuja & Banerjee, 2021).

To navigate the challenges of current digital time, users must strike a balance in their usage of social media websites and cultivate authenticity in online relationships (Carpenter & Harvey, 2019). Embracing vulnerability and sharing both feats and impediments can foster connections based on empathy and understanding (Luo & Hancock, 2020). Encouraging genuine communication, in a digital realm, can bridge the gap between the elegant online image and the authentic individual, enhancing the depth and quality of relationships. An intelligent use of social media platforms has the potential to make our online interactions positive and meaningful (Allington et al., 2021).

Rationale

In today's digital landscape, relentless exposure to pictures and updates from other individuals' lives through the pervasive reach of social media has given rise to pervasive feelings of inadequacy, negative feelings and constant comparison of self. In a bid to assimilate into their online social networks, individuals often construct a persona that diverges from their authentic selves, driven by the unceasing nature of these comparisons. The present research topic assumes paramount importance due to the potential negative implications of developing a false self on self-esteem of individuals, interpersonal relationships, and well-being. Whereas existing research has delved into the impact of usage of social media on false self-presentation, there remains room for innovative approaches, such as exploring the influence of social media use on the formation of a false self and its subsequent effects on interpersonal relationships, along with the potential moderating role of social comparison in the relationship between use of social media and the emergence of a false self. Moreover, the specific mechanisms of social media through which it contributes to the formation of a false self and its consequential effects on relationships have not been comprehensively explored. Notably, there is a dearth of indigenous studies addressing the nexus between use of social media and the false self-phenomenon. The majority of prior research has predominantly focused on cultures of West, where individualism and expression of self-hold significant value, potentially resulting in distinct patterns of social media behavior. In contrast, Pakistan's cultural context places a premium on family and community values, with individuals expected to adhere to societal norms. These substantial differences in cultural context are likely to exert a profound influence on the

utilization of social media and its impact on the development of a false self. Furthermore, gender differences represent an unexplored dimension in the context of social media's influence on the false self. Investigating how social media affects males and females differently is a crucial facet that necessitates examination. Consequently, there is a compelling need to investigate the implications of social media's impact on the false self within the Pakistani cultural milieu.

Conceptual Frame work
The proposed conceptual framework posits that use of social media, considered an independent variable, can exert an influence on the emergence of a false self and the dynamics of interpersonal relationships, which are considered dependent variables. Within this framework, social comparison is introduced as a moderator between use of social media and the development of a false self. The rationale behind this proposition lies in the idea that increased exposure to social media platforms amplifies opportunities for social comparison, which, in turn, can catalyze the emergence of a false self and subsequently have detrimental effects on interpersonal relationships.
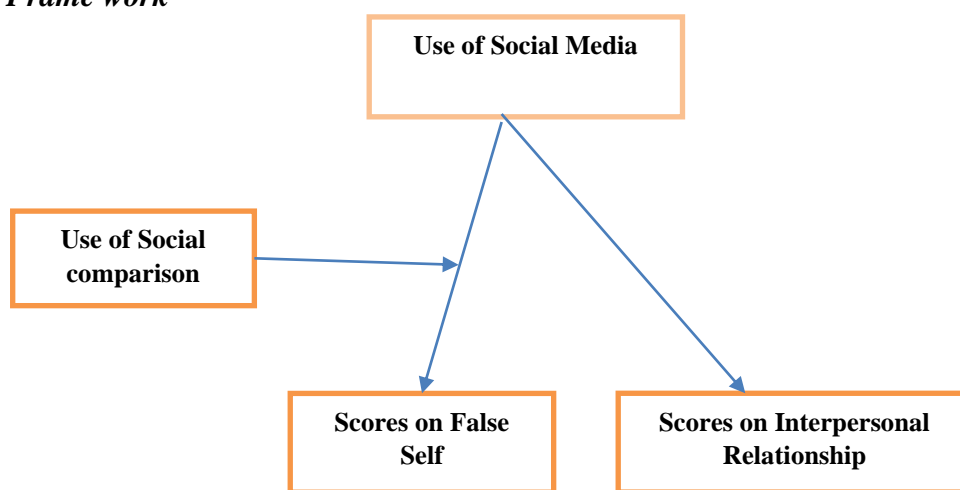
Conceptual Frame work

Figure 1

Objective
1. To examine the impact of social media usage on false self and interpersonal relationship.
2. To study the role of social comparison as a mediator between social media use and false self.

Hypotheses
1. Social media use will have an impact on false self.
2. Heavy use of social media will increase problems in interpersonal relationships.
3. The relationship between social media use and false self will be moderated by Social comparison.

Sample
For this study, the participant pool consisted of students enrolled at the University of Peshawar across various academic programs, spanning from Bachelor's (BS) to Doctoral (PhD) levels. The age range of the sampled participants ranged from 18 to 35 years. To determine an appropriate sample size from the total student population of 16,000, the Cochran formula was applied, resulting in the selection of 375 participants, comprising 188 males and 187 females. Employing a random selection method known as the fishbowl technique, two departments were chosen from each of the university's six faculties. These departments included Philosophy, English and Applied Linguistics, Arabic, Urdu, Environmental Science, Botany, Journalism and Mass Communication, Library and Information Science, Statistics, Computer Science, Economics, and Sociology. Individual

participants from the selected departments were subsequently approached using the convenience sampling method. Inclusion criteria mandated that participants possess a smartphone with active social networking site accounts and at least an intermediate level of education.

Instrument
The research employed the following instruments in conjunction with a form of consent and a demographic information sheet:

Demographic Information Sheet
A demographic information sheet was devised to collect data regarding participants' age, gender, education status, and the duration of their social media usage.

Social Networking Time Use Scale (SONTUS)
To gauge usage of social media, the Social Networking Time Use Scale (SONTUS, Olufadi, 2015) was employed. This instrument is a 29 item 11-point Likert scale, ranging from 1 to 11. Scoring of the test involved adding the responses for each item, with higher scores indicating more extensive use of social networking sites. The scale demonstrated reliability with Cronbach's Alphas α .92 and concurrent validity, as well as internal consistency with a value of .84 (Olufadi, 2016).

Iowa-Netherlands Comparison Orientation Measure (INCOM)
For assessing social comparisons, the Iowa-Netherlands Comparison Orientation Measure (INCOM, Gibbons & Buunk, 1999) was employed. This is an 11 item 5-point scale ranging from 1 to 5. Scoring of the test involve adding the responses to each item, with high scores indicating a greater inclination for social comparisons. The scale exhibited high reliability (∞ .83). This scale is validated against body dissatisfaction and Upward and Downward Social Comparison Scale. It yielded a positive correlation of 0.38 and 0.45 with the scales respectively (Gibbons & Buunk, 1999).

Authenticity Scale
To measure the false self, the Authenticity Scale (Wood et al., 2008) consisting of 12 items was utilized. This response options ranged from 1 to 7. Total scores were obtained by adding the responses, where high scores on the scale show a greater degree of authenticity. Scores on Authenticity scale can vary between 10 to 70. The scale demonstrated high reliability (∞ .82) and displayed construct, criterion, and discriminant validity, showing positive correlations (with self-esteem, purpose of life, and over all well-being (Wood et al., 2008).

Interpersonal Relationship Questionnaire – Short Form
To assess interpersonal relationships, the Interpersonal Relationship Questionnaire (Callaghan, 2006) in its short form consisting of 32 items was administered where some of the items (16, 17, 18, 19, 23, 25, and 27) were reverse coded. Participants responded on a 6-point scale, ranging from 1 to 6. Scores were determined by summing the responses, with higher scores indicative of more issues in interpersonal relationships. This measure exhibited reliability with a Cronbach's alpha of ∞ .94 and demonstrated good construct validity by distinguishing various interpersonal aspects, including support from social circle, style of attachment, perceived stress level, and mental health (Williams et al., 2018).

Procedure
The research design employed in the present study combined elements of correlational and causal comparative approaches. Data collection encompassed six faculties of University of Peshawar with a total of 12 departments randomly selected through fishbowl technique. Subsequently, students from these departments were conveniently selected as participants. Informed consent was initially obtained from all participants, outlining the study's purpose, potential benefits, and participants'

rights. Participants' information was kept confidential. Data was securely stored, accessible only to the researcher and the supervisor. Questionnaires were administered individually to participants, and any queries were addressed. Participants were thanked for their cooperation upon completion of the survey.

Results

Table 1: *Mean, Standard Deviation, Range and Cronbach Alpha of Social Networking Scale, Social Comparison, Authenticity Scale and Interpersonal Relationship Scale scales*

Scales	M	SD	Range	Cronbach's α
SNS	141.42	50.18	29- 290	.92
SC	31.39	5.52	16- 46	.72
Auth Scale	49.59	12.22	12-84	.76
Inteper Rel Scale	108.47	19.25	56-162	.81

Note. SMS=Social Networking Scale, SC= Social Comparison, Auth=Authenticity scale, Inter Rel=Interpersonal Relationship Scale

Table 1 shows psychometric properties of the scales The Cronbach's α value for for all the scales is above .70 which suggest high internal consistency, proving the reliability of the scales.

Table 2: *Simple Regression Analysis showing the impact of social media use on false self (N=375)*

Variable	B	B	SE
Constant	38.11***		1.79
Social media use	.08***	.33	.01
R^2	.11		

Note: ***P<.001

Table 2 shows the significant impact (p <.001) of use of Social Media on False-self explaining 11% of the variance in false self (B= .33)

Table 3: *Simple Regression Analysis showing the impact of social media use on interpersonal relationship (N = 375)*

Variable	B	B	SE
Constant	86.65***		2.73
Social Media Use	.15***	.40	.02
R^2	.16		

Note: ***P<.001

Table 3 shows the significant impact (p < .001) of use of Social Media on interpersonal relationship with 0.16% of the variation explained in interpersonal relationship (B= .40)

Table 4: *Moderation analysis of social comparison between the relationship of social media use and false self*

Variable	Model 1			Model 2		
	B	B	SE	B	B	SE
Constant	49.59***		.58	49.58***		.59
SMU	3.43***	.28***	.59	3.44***	.28***	.60
SC	2.89***	.23***	.59	2.89***	.24***	.60
SMU x SC				.02	.00	.53
R^2	.16			.16		
ΔR^2				.00		

Note. N = 375.SMU=Social Media Use, SC= Social Comparison, ***P<.001.

Table 4 shows social comparison as a moderator between use of social media and false self. The R^2 value of .16 in Model 1, depicted 16% of variation in false sel. It showed that both social media use and social comparison together positively predicted false self (β = .28 & β = .23, p < .001

respectively). In Model 2, there was no significant change in the beta values whereas the ΔR^2 value of .00 showed 0% change in variance of model 1 and model 2 where ΔF is also non-significant the results show that social comparison did not serve as a moderator between use of social media and false self.

Figure 1
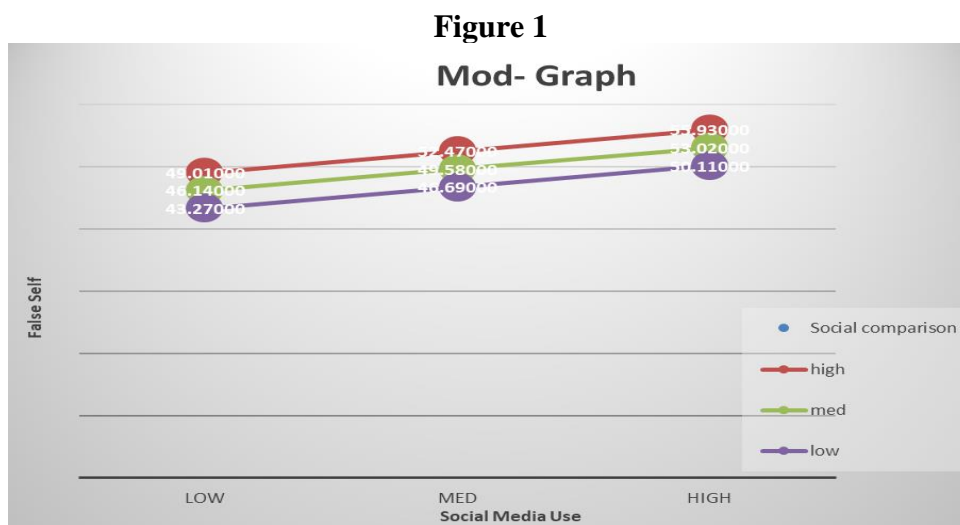
Mod-Graph showing no significant Moderating impact of Social Comparison between Social Media Use and False self

Discussion

In present study, the researcher investigated the impact of use of social media on the development of a false self, its influence on interpersonal relationships, and the potential moderating role of social comparison. The reliability of the scales used in the research indicated alpha coefficients exceeding .70, confirming their appropriateness for this study (Taber, 2018).

The first hypothesis posited a significant association between excessive social media use and the development of a false self. The research results supported this hypothesis, revealing that individuals who scored high on usage of social media also scored high on the false self-phenomena. This finding underscores the influence of social media on the construction of a false self. Additional studies indicated that extravert's individuals tend to have attention-grabbing profile photos, while those individual who have higher self-efficacy rating had large friend circle. Moreover, research found that a substantial portion of profiles on platforms like Twitter and Tumblr contain inaccurate information regarding age, gender, occupation and other details of users (Devito et al., 2017). Furthermore, another study reported that a significant proportion of users on Tumblr and Twitter misrepresented themselves through false images (Fox & Rooney, 2015). It was also observed that spending excessive time on social media sites was associated with lower self-esteem, depression, and false self-presentation. These findings of present research highlight the need for further exploration into the implications of social media use.

Theoretical perspectives from scholars i.e. Goffman (1959) and Bandura (1986) argue that individuals in social interactions often portray themselves differently, frequently in an inauthentic manner. This concept "impression management," proposes that individuals have a tendency to portray themselves favorably, sometimes at the expense of their true selves. Current theory laid a foundational framework for understanding the impact of use of social media on its users. Additionally, Gil-Or's (2015) study revealed that users who score less on self-worth and trait of authenticity were prone to show a false self on Facebook, indicating that one's upbringing and attachment style can influence their online self-presentation. Furthermore, Michikyan (2015) reported that emerging adults with a less coherent sense of self and lower self-esteem were more inclined to present a false self on Facebook rather than their real or ideal selves. This suggests that

some individuals utilize social media to project a distorted version of them to achieve desired results.

The second hypothesis proposed that more time spend on social media sites would lead to issues in interpersonal relationship. The research results corroborated this hypothesis, indicating that those people were likely to experience more challenges in their interpersonal relationships if they spent more time using social media. This could be attributed to the difficulties in effective communication online, which may lead to misunderstandings and inadvertent insensitivity or hurtful interactions. These findings align with prior research suggesting a negative correlation between excessive internet and social media use with reduced face-to-face interaction with others and decreased time spend with their families and friends. Findings of present research indicate that current digital media can either enhance or diminish the quality of offline friendships. While some studies suggest increased communication and deeper connections with friends, others report a decline in the quality of offline friendships due to reduced face-to-face interactions (Manago & Vaughn, 2015).

The Social Exchange Theory (SET) lends theoretical support to the hypothesis that increased social media use leads to interpersonal relationship issues. SET proposes that individuals engage in relationships to gain tangible or intangible benefits and may terminate or diminish relationships if the costs outweigh the benefits (Liu et al., 2016). When users engage more in social media activities, they are avoiding social activities in physical world and less likely to maintain relationships that are meaningful. This shift can result in decreased interpersonal relationship quality that will lead to tension and conflict.

The third hypothesis suggested the moderation of social comparison between use of social media and the development of a false self. However, the research results did not support this hypothesis, indicating that social comparison did not act as moderator between use of social media and the construction of a false self. As a result, the extent of social media use didn't significantly influence the degree of false-self depending on social comparison level with others. The value of R^2 demonstrated that predictor explained 16% of the change in the result, while the value of ΔR^2 0% indicated that between the two models there is no change in variance. Inclusively, this suggests that social comparison with others didn't have a significant impact on the relationship between use of social media and the development of a false self.

According to Uhlir (2016) frequent use of social media, especially individuals engaging in social comparison by watching self-enhancing posts, can develop depression. It also highlights the potential benefits of self-affirming behavior on social media, contrasting it with the potential harm caused by social comparison. Festinger's Social Comparison Theory (Kien, 2015) posits that individuals possess the tendency to compare themselves to others to judge their own opinions and abilities. As individuals compare themselves to similar or superior others that can either result in positive emotions (e.g., pride, self-confidence) or negative emotions (e.g., envy, depression) based on the outcomes of the comparison.

The findings manifested that social comparison was not a significant moderator between the use of social media and false self. This may be because the study participants did not encounter significant number of self- enriching posts or did not engage in frequent social comparison. Furthermore, it is possible that the participants were more motivated to affirm themselves than comparing themselves with others, which could explain the lack of support for the fourth hypothesis.

In light of these findings, policymakers should consider the possible consequences of social media use, particularly for susceptible people inclined towards comparisons with other and negative emotions. Social networking sites should also form systems with protections to guard susceptible users from probable damage related to social comparison. Additionally, users should be mindful of consequences of social media usage and exercise caution in online behavior.

Limitations

The current research employed a correlational/causal comparative research design, which does not establish causal relationships through true experiments. Secondly, study is susceptible to variables that are confounding, potentially affecting the actual associations between use of social media, false

self, and interpersonal relationships. Moreover, study was limited to university students, which may restrict its generalizability to other demographic groups, hindering the external validity of the results. The use of self-report measures may introduce self-report bias .Further the cross-sectional data collection may not be able to reflect the dynamic nature of use of social media, false self-construction, and relationship with others over time.

Suggestion
To address these limitations, several recommendations are offered:
1. Future research should incorporate experimental research by manipulating social media use as an independent variable to see its effects on false self and interpersonal relationships as dependent measure.
2. Qualitative methods, such as interviews and focus groups, should be employed to gain insights into the influence of confounding variables on social media use.
3. Research results should be compared across a broader and more diverse population to assess whether university students exhibit unique characteristics or reflect broader trends.
4. Collaboration with other institutions and diverse populations should be considered to enhance the external validity of future research.

Implication of the study
The findings of this research have practical implications:
- Digital well-being should be integrated into educational curricula to educate students about the potential hazards of excessive social media use and promote a realistic and healthy self-image in the digital realm.
- Mental health professionals can use these findings to develop interventions for individuals struggling with the negative effects of social media, emphasizing the significance of balancing both online and offline activities to enhance face-to-face communication.
- The study contributes to policy recommendations, academic knowledge, and practical interventions, potentially improving the lives of individuals in the digital age.

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