

Social Networking Sites and Women's Psychological Well-Being: Perspectives on Objectification and Social Comparison

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Abstract: Social networking sites (SNS) have dramatically shifted the way people communicate, leading to the proliferation of related studies and widespread questions about their effects on people's emotional lives. Understanding the influence of SNS in assisting individuals to self-regulate their use of online social platforms constitutes a key focus of research in this area. A large body of studies, particularly those focused on women, have found increasingly compelling evidence of the negative effects of SNS use, including diminished self-esteem, undermined self-concept, and body image dissatisfaction. Given the fragmented results of current research and the lack of systematic integration, the present study aims to understand, construct, and investigate the effects of SNS usage on women's psychological well-being from the perspectives of self-objectification and social comparison, while reviewing several recent findings through the lens of the proposed framework. Additionally, self-compassion could act as an effective moderating factor that buffers the deleterious impact of SNS for women. Future research should employ more sophisticated methods to capture these complexities in order to gain a greater grasp of this area.

Keywords: Social Networking Sites, Objectification, Social Comparison, Well-Being, Self-Compassion

1. Introduction

Social networking sites (SNS), such as Facebook and Instagram, have become extremely popular in recent years. Three of the most widely used social media platforms, Facebook, Instagram, and Twitter, are used by about 5.7 billion individuals to exchange and consume information as of July 2024. [1]. Social networking sites' explosive expansion has greatly satisfied users' demands for social contact and self-expression. [2] and has enabled content sharing as well as the maintenance of close friendships. Over the past decade, a body of studies has suggested that regular SNS use has been linked to psychological well-being in both positive and negative ways [3]. The widespread presence of SNS has turned this into a crucial and timely area of research, carrying potential implications for both personal well-being and broader public health concerns.

Self-objectification, as introduced by Fredrickson and Roberts, posits that individuals—particularly women—may internalize an observer's perspective on their own bodies. According to objectification theory, sexual objectification occurs when the female body is viewed as merely

something to be examined [4]. These phenomena occur in a variety of interpersonal interactions, such as social gatherings. Nowadays, high amounts of objectifying imagery are now frequently featured on SNS [5], which could greatly enrich users' online sexual objectification experiences and inadvertently trigger their process of self-objectification [6]. In the age of artificial intelligence, there is nothing to be gained by objectifying people and ignoring their uniqueness as human beings; we need to be grounded in the human being itself rather than in the attributes of the human being as an object. However, the adverse influence of SNS use on women often arises and is exacerbated by self-objectification, and several studies find that SNS use is associated with greater self-objectification [7], which in turn leads to body shame and disordered eating [8], and has detrimental effects on women's well-being, self-esteem, cognitive performance, emotional and physical well-being, and personal growth [9-12]. Therefore, investigating how SNS use affects women's mental health from a self-objectification standpoint is essential.

Upward social comparison on SNS refers to the process in which individuals compare their attributes with those of others who appear to have better looks, skills, wealth, or social standing, as observed through online content [13]. Several studies have indicated a positive correlation between the frequency of social media use and upward social comparison, with the latter significantly predicting depressive tendencies [14-16]. Upward social comparison has also been confirmed to be associated with self-esteem and body shame through complex mechanisms [17,18]. Thus, several studies have suggested that the troubling consequences of SNS could be generated through upward social comparison. As a psychological phenomenon that occurs frequently in interpersonal interactions, exploring the adverse impact of SNS from the perspective of upward comparison to understand the nuanced mechanisms is necessary.

Thus far, an increasing number of researchers have focused on the detrimental effects of SNS usage on women's psychological well-being, and have conducted a series of cross-sectional and empirical studies to explore this issue. Although certain theoretical and empirical results have been achieved, these research findings are relatively fragmented and somewhat mixed [3]. Meanwhile, self-objectification and social comparison are not only negative outcomes of SNS use, which in turn, can have harmful implications for individuals' mental health, so it is pivotal to consider the subject matter from the perspective of self-objectification and social comparison. However, little review has systematically sorted out the complex mechanisms of influence in this way. In light of this, the present review, based on previous research and the latest findings, summarizes the impact of SNS use on women's psychological well-being structurally and further analyzes the internal mechanisms of this impact from the perspectives of self-objectification and upward social comparison. Additionally, the paper also points out the limitations in existing research and proposes valuable insights and directions for future research. This comprehensive review can not only help subsequent researchers grasp the multifaceted impact of SNS use on individual psychological development but also provide theoretical guidance and suggestions for improving women's mental health.

2. Literature Review

2.1. Overview

In the 2000s, the advent and rapid expansion of social networking sites have significantly transformed global communication methods [19]. Considering the profound effects of SNS, it is not unexpected that a body of research has been dedicated to comprehending the influence of these media on individuals' mental health and well-being. Early studies in this area were dominated by self-report and cross-sectional studies [20], and some have found that SNS use negatively predicts individuals' well-being [21]. As findings on the topic evolved, scholars began to use experiments, which can explore causal associations, to study SNS usage and mental health [22]. Some studies have found that

SNS usage can impact body image and social comparison processes, potentially exerting a detrimental impact on self-esteem among college women [23]. An increasing number of recent studies have shown that SNS use is associated with self-objectification, upward social comparison, and well-being [17,24], and that, for women in particular, passive SNS use significantly affects their self-esteem, life satisfaction, and interpersonal interactions [25-27].

Specifically, numerous studies have demonstrated that several media-based online activities, such as taking selfies, passive browsing, and online self-presentation, are significantly related to negative emotional well-being, body shame, self-objectification, and undermined positive affect during social interaction, especially among women [24,25,28,29]. Fox and Moreland identified five themes of Facebook stressors: managing inappropriate or annoying content, feeling tethered to the platform, perceived lack of privacy and control, social comparison and jealousy, and relationship tension and conflict [2]. Results from focus groups with 44 adult Facebook users demonstrated that, while users often experience negative emotions, they are still driven to check out the site frequently out of fear of missing out and relationship maintenance demands. The study also revealed that Facebook's features, such as visibility, connectivity, and persistence, highlight the dark sides of passive SNS use by encouraging network members to constantly compare themselves to one another, which can lead to feelings of jealousy, anxiety, and other undesirable emotions. This relationship remained significant after controlling for various types of usage including active or passive Facebook use and direct social interactions. Study 1 employed an experimental design in which participants were randomly assigned to actively or passively use Facebook in a laboratory setting, followed by assessments of their affective well-being. Study 2 employed a longitudinal field method using experience-sampling techniques, texting participants five times a day for six days to assess their real-time affective well-being, envy, and Facebook usage. Verduyn and his colleagues found that over time, passive Facebook use resulted in a reduction in emotional well-being, with envy as a pivotal mediating factor [30].

2.2. Mediating Role of Self-objectification

Several studies have provided valuable insights from the perspective of self-objectification to investigate the topic. The concept of sexual objectification refers to the process by which women's bodies and sexual functions are divested of their subjectivity and reduced to an instrumental existence, or are seen as representative of their entire being. As mentioned earlier, females engaging in communication and sharing self-portraits on SNS are often subjected to sexual objectification and appearance-focused scrutiny by others [31]. This extends real-world comments and evaluations of physical appearance into the digital realm [32], resulting in an inundation of SNS comments that sexually objectify the body. These comments encourage women to define their identities and values in terms of appearance, emphasizing the body's 'appearance features' rather than its 'ability attributes' [33]. Considerable research has confirmed that exposure to online self-objectifying information, as well as specific SNS behaviors such as taking selfies or online interpersonal sexual objectification experiences, increases women's level of self-objectification [26,27], which in turn diminishes self-esteem, body image, and emotional well-being [12,28,34,35]. For instance, Brasil et al. used a cross-sectional design and examined data from 939 undergraduate students to investigate the relationships between drives for leanness, muscularity, and thinness, body shame, surveillance, and social media appearance-related preoccupation (SMARP), as well as the moderating influence of gender [25]. The findings showed that the indirect effect of SMARP on demand for thinness was much stronger for women, and that surveillance strongly mediated the favorable relationships between SMARP and drive for leanness for both men and women [25]. This demonstrates that social media consume, obsession with appearance-related online behaviors in particular, may negatively impact body image through increased body surveillance and shame, particularly for women [25]. Moreover, Cheng et al.

explored how women's self-objectification influences their perceptions of peer selfies using four experiments (N = 801). Correlational studies 1a and 1b revealed a positive relationship between unfavorable views regarding peer selfies and female self-objectification [29]. By manipulating state self-objectification, experimental studies 2 and 3 demonstrated a causal link. They demonstrated how perceived attention-seeking motives mediated the tendency for women with high levels of self-objectification to negatively characterize other women's selfies. Interestingly, the findings hold true for both moderately attractive or averagely attractive targets when it comes to selfie replies to extremely gorgeous women, indicating that negative online self-presentation results in poorer interpersonal connections [29].

2.3. Mediating Role of Social Comparison

Another pivotal factor is social comparison, which describes how people evaluate their own opinions and skills by comparing them to those of others [36]. Impression management theory posits that individuals have a propensity to present an idealized self-image to others [37] and tend to selectively display positive information related to themselves on social networking sites, excluding negative aspects [38]. Consequently, the “idealized” and “positive” information presented on social networks tends to promote upward social comparison among users [15]. Upward social comparison on SNS refers to the process where individuals compare their attributes with those of others who seem to have better looks, skills, wealth, or social standing, as observed through online content [13]. Several studies have indicated a positive correlation between the frequency of SNS use and upward social comparison, with the latter significantly predicting depressive tendencies and body shame [14-16,18]. Researchers looked into the reciprocal relationships between adolescents' body dissatisfaction, passive Facebook use, and Facebook comparison in one study that used a two-wave panel design. The study, which was based on the tripartite influence model and social comparison theory, discovered that girls who are more discontented with their physical appearance are more prone to compare how they look on Facebook, which exacerbates their body dissatisfaction. [39]. Hanna et al. also examined the mediating roles of social comparison and self-objectification in the relationship between Facebook use and psychological well-being, based on social comparison theory and objectification theory [17]. Participants completed surveys assessing Facebook usage, social comparison, self-objectification, and well-being. The study found that both social comparison and self-objectification constitutes key elements in Facebook use and lower self-esteem, poorer mental health, and greater body dissatisfaction, emphasizing the detrimental consequences of SNS use and the mediation functions of self-objectification and social comparison [17].

2.4. Moderating Role of self-compassion

Researchers have not only focused on the negative aspects of SNS use but also delved deeper into the moderating mechanisms. Self-compassion is the act of reacting to oneself in a supportive and caring way when going through difficult experiences. [40,41], potentially be a vital safeguard against the ways that SNS harm women. Numerous studies have shown that self-compassion is negatively correlated with body dissatisfaction and body shame [42]. The latter is often caused by women's passive browsing of social networking sites or objectifying experiences. Self-compassion can buffer or even reverse these adverse effects, improving female mental health by fostering greater perceived body acceptance[43]. Individuals who have high level of self-compassion are less likely to notice discrepancies in their own when engaging in body talk on social networking sites. As a result, they experience relatively less body shame [44]. Additionally, passive SNS use has been shown to weaken self-concept clarity through upward social comparison [45], whereas self-compassion could serve as a protective and ameliorative factor. One study manipulated levels of self-compassion through a

writing task and found that self-compassion could enhance self-concept clarity and openness to self-change, potentially helping to transform negative feelings [46]. Although fragmentation, the abundance of information on social networking sites, the flood of information about others, and the frequency of social comparisons can expose individuals to a multiplicity of possibilities for people and ideas—thereby increasing the risk that self-concepts will not be integrated—boosting self-compassion could help individuals retain self-concept clarity and improve emotion regulation and psychological well-being [46,47].

3. Discussion

Researchers, in their quest to explore the effects of SNS use on women's psychological health, have conducted extensive studies and explored numerous findings involving various mediators and moderators. We examine two critical pathways through which SNS use affects women's mental health: self-objectification and upward social comparison.

Social networking sites play an integral part in daily life, enabling communication and interaction. However, they also inadvertently increase women's experiences of online sexual objectification. Increased media consumption significantly predicts higher levels of self-objectification [48], which plays a pivotal role in this mechanism. Current literature overwhelmingly suggests that high levels of self-objectification are detrimental, with individuals prone to adopting an external perspective for self-surveillance, placing undue emphasis on appearance and triggering a cascade of adverse outcomes. Like selfie behaviors, interactions with self-objectification and sexual objectification experiences can significantly impact women's interpersonal communication and social cognitive perceptions [29]. Moreover, reducing women to objects valued primarily for their appearance is highly detrimental to their personal growth. In an era dominated by artificial intelligence, only by finding the meaning and uniqueness of being human can one consistently pursue and realize their ideals.

Upward social comparison is also a key mediator of the negative effects of SNS use on women; most researchers have arrived at consistent conclusions. Engaging in upward social comparisons on SNS with individuals who excel on social media platforms can lead to feelings of envy, distress [49-51], a sense of meaninglessness [52], and dissatisfaction with one's own body [53-54]. Through the facilitation of appearance-based comparisons and the internalization of cultural beauty standards, the level of social media activity and its emphasis on physical appearance both contribute to body dissatisfaction in young women and teenagers [55].

It is worth noting that self-objectification and negative social comparisons create a cycle of reciprocal interactions, forming a mutually reinforcing vicious relationship. Women who exhibit a high degree of self-objectification are prone to prioritize their physical attractiveness to a significant degree [56], which makes them frequently compare their looks to those of other women [57]. Engaging in appearance comparisons can increase self-objectification and ultimately lead to aggressive online behavior [58], undermining the quality of relationships in social interactions. This suggests that the more time young women spend on platforms like Facebook, the more they may absorb the ideals of beauty set forth by society and evaluate themselves against others' appearances, particularly peers. This can lead to heightened concerns about body image and potentially aggressive online behaviors. These dynamics underscore the complex interplay between self-objectification, social comparison, and their impact on interpersonal relations and social cognition among women during SNS use. Importantly, adverse SNS use not only negatively affects women's psychological constructs, but also reinforces both sides of this cycle, deteriorating the level of self-objectification and the inclination to engage in upward comparisons, thereby exacerbating the vicious cycle. This can significantly impact women's cognitive and psychological well-being.

Thus, the present review proposes a novel framework (Figure 1) that captures the intricate dynamics between self-objectification and upward social comparison as mediators of the impact of SNS use on women's psychological health, underscoring the reciprocal interactions and mutual reinforcement between these two constructs, which exacerbate the negative effects on women's cognitive and psychological well-being. We suggest that self-objectification, characterized by an increased focus on one's physical attributes and the internalization of external beauty standards, primes individuals for upward social comparison. Upward social comparison, fueled by the curated and often idealized content on SNS, can intensify self-objectification. This is in line with findings that social media engagement, with its emphasis on physical appearance, contributes to body dissatisfaction through appearance-based comparisons and internalizing societal beauty standards [55]. The framework suggests that women who engage in SNS-based interactions are more inclined to be caught in the adverse cycle, trapped in a constant state of comparison and objectification that is difficult to escape, especially within the pervasive environment of SNS. We therefore offer a nuanced understanding of the psychological mechanisms through which SNS usage affects women's mental health, highlighting the need for interventions that address both self-objectification and upward social comparison to mitigate their adverse effects on women's well-being.

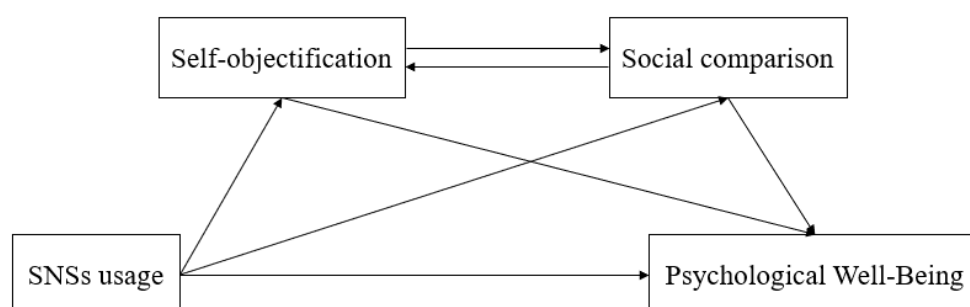


Figure 1: The Integrated Framework

4. Conclusion

To conclude, based on the summary of previous studies, this paper proposes two pathways through which social networking site use negatively impacts women's psychological well-being: self-objectification and upward social comparisons. It also suggests the moderating role of self-compassion. Both pathways may damage women's mental health by lowering self-esteem, inducing body shame and jealousy, and disrupting interpersonal interactions. However, self-compassion may serve as a strong buffer against these harmful effects.

Although research on SNS use in the field of cyberpsychology has made great progress, there is still room for improvement and further development. First, despite the current trend in the field toward moving away from cross-sectional methodologies, very few studies have used longitudinal tracking or experimental approaches to explore the impact of SNS use. Therefore, there is a need for more robust methodologies that go beyond those relying solely on questionnaire data collection.

Future research could adopt the ecological momentary assessment (EMA) method, which accurately reflects the long-term effects of media messages on female emotional lives in natural settings through continuous assessment at multiple time points.

Second, some studies have found that Objectification Theory only partially applies to Chinese individuals. Social media use correlates with restrained eating through self-objectification, but not with body satisfaction. This suggests the importance of cultural context, as well as the potential roles of self-compassion and masculinity in shaping these relationships. Furthermore, much evidence

suggests that culture and social norms are closely related to objectification in women [59]. Future research is expected to consider cultural and ethnic factors in the context of SNS use and mental health, providing a more comprehensive overview of objectification on social networking sites. Third, few studies have considered both self-objectification and social comparison, or explored their interactions. Future research could systematically examine the mechanisms at play in SNS use in conjunction with the two perspectives proposed in this review. Fourth, the narrow age range of female participants in most current studies limits the ability to reveal the full picture. Additionally, in recent years, an increasing number of males have shown high levels of self-objectification [60]. Future studies should consider the issue of gender differences and expand the age range of participants.

In conclusion, empirical research and the development of online technologies should work together to improve individuals' mental health and well-being. We hope that future research will provide scientific guidance to help people overcome social network addiction, self-objectification, and negative social comparisons, and develop healthy self-perceptions through rational and positive self-representation.

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