

Appearance-Anxiety Communication on Social Media Platforms among Adolescents

Xinshu Wu

Christ the King Diocesan High School, Lubbock, USA
wumiley5@gmail.com

Abstract. Social media has become an important environment in which adolescents encounter, compare, and evaluate appearance-related information. This paper examines how appearance-anxiety communication is produced and reinforced on visually oriented social media platforms and how it affects adolescents' psychological well-being and behavior. A literature analysis method was used to synthesize ten recent peer-reviewed studies on social comparison, idealized beauty content, algorithmic recommendation, self-objectification, body dissatisfaction, eating-related behaviors, and protective interventions. The findings indicate that appearance anxiety is shaped less by screen time alone than by repeated exposure to idealized and appearance-focused content, personalized recommendation systems, social comparison, and the internalization of beauty standards. These processes are associated with lower body esteem, body dissatisfaction, depressive and social anxiety symptoms, unhealthy weight-control behaviors, and increased management of online self-presentation. Effects vary across gender, age, weight status, and levels of social support and resilience. The reviewed evidence further suggests that media literacy, protective filtering, social support, and platform-level changes may reduce risk. Overall, appearance anxiety should be understood as a multi-level communication process involving users, social environments, and platform design.

Keywords: Appearance anxiety, adolescents, social media, body image, social comparison

1. Introduction

Social media has become deeply integrated into adolescents' everyday communication, entertainment, identity development, and peer interaction. At the same time, visually oriented platforms increasingly place appearance at the center of online participation through photographs, short videos, filters, likes, comments, and recommendation systems. Adolescence is a particularly important period for examining these processes because physical development, self-concept formation, and sensitivity to peer evaluation occur simultaneously. When idealized appearance messages are repeatedly encountered in this developmental context, they may influence how young users evaluate their bodies and how strongly they connect appearance with social worth.

Research on the communication of appearance anxiety is necessary to explore other reasons for people's unhappiness. Existing research has linked appearance-oriented digital experiences to body dissatisfaction, lower body self-esteem, self-objectification, social anxiety, depression, disordered

eating behavior, and excessive attention to self-presentation. Therefore, the problem is not with good or bad social media in general, but rather with how some types of content, interactions, and platform design create a favorable environment for the reproduction and spread of appearance standards. Understanding the above mechanisms can help families, schools, mental-health educators, and platforms develop more targeted responses.

Five related parts of this problem are presented in the paper. First, it studies how social comparison, idealized images, algorithmic recommendations, photo manipulation, and internalization increase body image anxiety. Secondly, it examines psychological problems such as body image disorders, low self-esteem, anxiety, depression, and social isolation. Third, it examines the behavior of dieting, disordered eating, and appearance-oriented self-presentation. Fourth, it presents various forms of vulnerability according to gender, age, body image, social support, and resilience. Finally, protection measures and possible countermeasures are introduced.

A review of previous studies was conducted. Ten recent peer-reviewed articles published between 2024 and 2026 were analyzed and compared. The selected studies include adolescent samples as well as some young-adult or university samples, providing relevant evidence about the mechanisms of appearance anxiety. Their methods include cross-sectional surveys, mediation and moderation analyses, a scoping review, and a randomized controlled trial protocol. Literature analysis is useful for this topic because it allows findings from different populations and research designs to be compared while identifying common mechanisms, outcomes, limitations, and possible intervention directions. The purpose of this paper is to explain how appearance-anxiety communication operates on social media, identify its main effects on young people, and summarize practical measures for reducing its negative effects.

2. Analysis

2.1. How social media platforms produce and reinforce appearance anxiety

The effect of social media on adolescents' appearance anxiety is not determined only by the amount of time users spend online. Current evidence suggests that the type of content adolescents encounter, how they interpret it, and the design of the platform may matter more. Visually focused platforms such as Instagram, TikTok, and RedNote center communication on photographs, short videos, filters, likes, and comments. Appearance therefore becomes something users repeatedly evaluate, modify, present, and compare.

One major mechanism is social comparison. Social comparison theory proposes that people evaluate themselves by comparing their qualities with those of others. On social media, these comparisons often become upward comparisons because users are exposed to selected, edited, and idealized images. Ji et al. found that both upward and parallel body comparison were positively associated with body dissatisfaction among young Chinese women using TikTok [1]. Internalization of ideal beauty mediated 58.3% of the association between upward comparison and body dissatisfaction and 65.8% of the association for parallel comparison. This suggests that comparison becomes especially harmful when external beauty standards are gradually adopted as personal standards.

Algorithmic platforms may intensify this process. TikTok's "For You" system can repeatedly recommend appearance-related content after users interact with posts about beauty, fitness, dieting, or bodies. Ji et al. describe this as a dense comparison environment involving both celebrities and peers. Unlike traditional media, social media combines continuous exposure, interaction, and personalization, making certain beauty standards appear common and socially rewarded [1].

A broader review by García-Gutiérrez et al. supports this view. Across 81 studies involving 19,947 participants, emotional valence, degree of idealization, and the appearance-focused or stigmatizing nature of content predicted body-image outcomes more consistently than exposure duration [2]. The review also distinguishes passive use, such as scrolling through images, from active behaviors such as posting selfies, editing photographs, monitoring feedback, and seeking reassurance. These behaviors may reinforce self-objectification and dependence on external validation, while algorithms repeatedly return users to appearance-salient content.

Photo editing is another part of this cycle. Sun et al. surveyed 1,236 female social media users in mainland China and found that exposure to appearance-related content was positively associated with perceived effects on appearance anxiety and selfie-editing behavior [3]. Editing photographs, using beauty filters, and repeatedly viewing polished images can normalize digitally enhanced appearances and narrow users' ideas of what is acceptable or attractive.

Internalization explains why repeated exposure can become psychologically meaningful. Bi et al. found that internalization of media appearance ideals significantly predicted eating-disorder tendencies among 1,523 Chinese adolescents and was associated with lower body esteem and greater body-image disturbance [4]. Together, these studies suggest a communication cycle: social media spreads idealized images, algorithms repeat them, users compare themselves with others, and interactive practices such as posting and editing help turn external beauty messages into personal standards of self-evaluation.

2.2. Psychological effects

One of the most consistent consequences of appearance-focused social media engagement is body dissatisfaction, or negative thoughts and feelings caused by a perceived gap between actual and ideal appearance. Adolescence may be especially sensitive because physical development occurs at the same time that peer approval and identity become increasingly important.

Kvardova et al. studied 885 adolescents aged 15-19 and examined appearance-related social media activity, body esteem, and self-objectification [5]. Appearance activity included both interacting with appearance-related posts and browsing similar content shared by peers. Their study is important because it includes both girls and boys and focuses directly on adolescents. The authors link reduced body esteem and increased self-objectification with anxiety, depressive symptoms, body shame, unhealthy weight-control behaviors, binge eating, and eating disorders.

The reasons may not be related to appearance. Liang and others studied 12,695 secondary school students in China and found that the use of the Internet was positively associated with depression; anxiety about social evaluation and body image partially mediated this relationship [6]. The effects of men and women were different; overweight girls were more likely. Therefore, appearance anxiety may be one of the psychological reasons for increased distress following exposure to online environments.

Appearance Problems Can Harm One's Social Life. Chang and his colleagues studied 1,255 college students in China to find that appearance anxiety is associated with loneliness via interpersonal sensitivity and social anxiety [7]. Although the sample in this paper is older than that of the adolescent group, the results can still provide a reference; when people are more conscious of others' perceptions of their appearance, they may feel anxious about social judgment and become withdrawn from life.

Based on self-discrepancy theory and social comparison theory, these results can be interpreted. There is a risk of emotional damage because of the distance between one's actual self and the ideal self, and continuous comparison may lead to unrealistic demands on oneself. Appearance-oriented

communication will thus affect people's sense of self-worth, self-esteem, and emotional health, as well as their social life.

2.3. Behavioral effects

Appearance anxiety can also translate into behavior. One important outcome is unhealthy dieting or disordered eating. Bi et al. found that internalization of media appearance ideals positively predicted eating-disorder tendencies among Chinese adolescents [4]. Body esteem and body-image disturbance mediated this association, suggesting that media ideals may first change body evaluation and then increase the risk of unhealthy eating attitudes or behaviors.

These effects can occur at a young age. Cimino and others studied 232 girls aged 9-10 to compare those with problematic Instagram use to those without it [8]. The problem-using group was more worried about being thin, experienced more emotional ups and downs, and increased in withdrawal; thus, the authors found that excessive use of Instagram was associated with greater body dissatisfaction. A single study suggests that appearance-focused digital experiences may alter body attitudes for young people before traditional adolescence. A cross-sectional study cannot determine whether the use of Instagram causes dissatisfaction or whether girls with pre-existing body image issues are more likely to use it excessively.

Problematic social media use is also associated with social appearance anxiety. Polat and Taplak studied 756 adolescents aged 15-17 and found a moderate positive correlation between social media addiction and social appearance anxiety [9]. Both were also positively related to alexithymia, or difficulty identifying and expressing emotions.

Behavioral effects also include self-presentation management. Posting, deleting, filtering, retaking, and editing selfies can become ways of reducing the perceived gap between actual appearance and socially preferred appearance. García-Gutiérrez et al. found that filtered selfies and beauty-related engagement were associated in some studies with greater interest in cosmetic procedures, while self-objectification repeatedly appeared as a mechanism linking appearance-focused content with later outcomes [2]. Thus, dieting, photo editing, and social withdrawal can all be understood as responses to increasing pressure to make appearance a measure of social and personal worth.

2.4. Differences in vulnerability

Social media does not affect all adolescents equally. Gender, age, body perception, social support, use patterns, and individual psychological characteristics can change the strength of its effects.

Liang et al. found that girls were more sensitive than boys to associations between internet exposure and appearance and body anxiety, with overweight girls showing the strongest vulnerability [6]. Stronger cultural pressure on girls to meet standards involving thinness, skin, and attractiveness may partly explain this pattern. However, boys are also affected. Kvardova et al. found appearance-related social media activity relevant to body-image concerns for both girls and boys [5]. The specific ideal may differ - thinness may be emphasized more for girls and muscularity more for boys - but both can create unrealistic expectations.

Age also matters. Cimino et al. found body-related concerns among girls aged 9-10, suggesting that younger users can encounter these pressures before they have fully developed the media-literacy skills needed to recognize editing, selective self-presentation, commercial influence, and algorithmic curation [8].

Protective factors may reduce some negative effects. Bi et al. found that social support moderated the relationship between body-image disturbance and eating-disorder tendencies, suggesting that family, peers, and schools can help buffer harmful outcomes [4]. At the same time, Kvardova et al. found that resilience to media ideals did not operate as a simple protective factor [5]. Some results suggested that resilience may partly develop after prior exposure to appearance-related difficulties. Vulnerability and resilience therefore should be understood as dynamic rather than fixed categories.

3. Protective strategies and possible interventions

Because appearance anxiety develops through several levels of communication, intervention should involve more than simply reducing screen time. Current research points to media literacy, critical filtering, social support, and platform-level changes.

Media literacy can teach adolescents that social media content is selected, edited, filtered, commercially influenced, and algorithmically curated. García-Gutiérrez et al. found that media-literacy interventions, self-compassion, body-neutrality content, and brief social-media breaks produced modest improvements in body satisfaction and mood across the reviewed literature [2]. These strategies may help users question beauty ideals rather than automatically accept them.

Protective filtering is another possible strategy. Ji et al. found that it moderated the relationship between body comparison and body dissatisfaction; at high levels of protective filtering, the associations were no longer statistically significant [1]. Although their sample consisted of young adult women, the finding suggests that adolescent media education should focus on critical interpretation rather than trying to eliminate all comparison.

Social support is also important. Bi et al. recommend body-image education, stronger body esteem, digital media literacy, and support from families, schools, teachers, and peers [4]. Liu et al. provide another intervention model through the Body-Bright Program, a randomized controlled trial protocol for adolescents aged 15-19 using short animated stories, guided discussion, and diary writing [10]. Because the article is a study protocol, it does not yet prove that the program is effective, but it illustrates how digital media can be used as a preventive tool.

Finally, platforms themselves have responsibilities. Recommendation systems can repeatedly amplify appearance-focused content, while likes, comments, and filters intensify external evaluation. Possible platform-level responses include greater transparency around edited images, more user control over recommendations, reduced amplification of extreme dieting or appearance-stigmatizing content, and broader representation of realistic bodies.

Overall, appearance anxiety on social media is better understood as an interactive system involving idealized content, algorithmic repetition, social comparison, internalization, self-objectification, feedback, and individual vulnerability. Prevention therefore also needs to operate as a system involving adolescents, families, schools, and platforms.

4. Conclusion

This study finds that appearance anxiety on social media is produced through a combination of content, platform design, and users' psychological responses. Idealized and edited appearance content creates frequent opportunities for comparison, while personalized algorithms can repeat similar messages and make particular beauty standards appear normal and socially rewarded. Social comparison, internalization of beauty ideals, and self-objectification then connect these messages to body dissatisfaction and appearance anxiety. The reviewed studies further show that these processes are associated with lower body esteem, depressive and social anxiety symptoms, unhealthy dieting

and eating-related behaviors, intensive selfie editing, and social withdrawal. The strength of these effects varies by gender, age, weight status, social support, and individual resilience.

These findings have practical significance because they suggest that reducing appearance anxiety requires more than limiting screen time. Media-literacy education can help adolescents recognize editing, selective self-presentation, commercial influence, and algorithmic curation. Families, schools, teachers, and peers can provide social support and reinforce forms of self-worth that are not based mainly on appearance. Social media platforms can also reduce risk by giving users greater control over recommendations, limiting amplification of harmful appearance content, and promoting more realistic and diverse representations.

Future research should rely more heavily on longitudinal and experimental designs so that the direction of influence can be established more clearly. More studies should include boys, younger adolescents, and culturally diverse groups, and should distinguish between passive viewing, active self-presentation, and algorithmically repeated exposure. Research should also test whether media-literacy, protective-filtering, and platform-level interventions produce durable effects over time. A stronger combination of psychological, educational, and platform-based research will help explain not only why appearance anxiety develops online, but also how adolescents can be protected from its most harmful consequences.

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