

IMPACT OF TIKTOK AND INSTAGRAM ON ADOLESCENT BODY IMAGE

**A Literature Review: The Impact of TikTok and Instagram on
Adolescents' Body Image, Self-Esteem, Disordered Eating Behavior,
and Social Media Addiction**

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Abstract

Social media platforms have become integral to the daily lives of adolescents in the United States. Many studies have revealed a negative correlation between social media use and body image perceptions among adolescents. Some studies fail to distinguish different social media platforms, treating them as identical despite their unique features and target audiences. However, each platform's specific algorithm and culture impact user behavior and content consumption differently. This literature review aims to directly compare how TikTok and Instagram differ in their effects on adolescents' body image and mental health.

PubMed and Internet web pages were used as search engines. After reviewing 68 articles, 18 articles published or posted on websites within the last 10 years were summarized in this paper. Eight articles focused on the impact of social media on adolescents' body image, self-esteem, and eating disorders. Two articles focused on social media addiction prevalence in the adolescent population and interventions to be considered for social media harm reduction. Eight articles provided background information on the general topic.

The current literature indicates a troubling correlation between excessive TikTok and Instagram use and heightened body dissatisfaction, with many users reporting pressure to conform to idealized beauty standards perpetuated by online content. Interventions and recommendations to combat the negative effects of social media on adolescents are also discussed.

Keywords: *Body image, TikTok, Instagram, self-esteem, eating disorders, social media addiction*

Introduction

Over the past decade, social media has evolved from a simple networking tool into a dynamic, algorithm-driven platform that shapes trends, influences opinions, and drives global conversations. Teenagers ages 13 to 18 years spend an average of eight hours and 39 minutes of screen media daily (Rideout et al., 2022). The total amount of screen media daily increases from seven hours and twenty-two minutes to eight hours and thirty-nine minutes from 2019 to 2021, resulting in an increase of one hour and seventeen minutes in two years (Rideout et al., 2022). The top five social media sites used by teenagers ages 13 to 18 years are YouTube (83%), Instagram (70%), TikTok (68%), Snapchat (64%), and Facebook (40%) (Rideout et al., 2022).

Social media is a digital platform that facilitates online interaction and content sharing among users. The first social media platforms began appearing in the late 1990s and early 2000s, such as MySpace and LinkedIn (Ortiz-Ospina, 2019). However, social media did not take off until 2004 when MySpace was one of the first social media platforms to achieve a million monthly active users. This event is often considered the start of social media as we know it today (Ortiz-Ospina, 2019). Social media has evolved into a variety of tools and networks, such as Facebook, Instagram, Twitter, and TikTok, where individuals create profiles, post updates, and connect with others globally.

TikTok primarily targets Gen Z (born between 1997-2012), though it has rapidly expanded its reach to include Millennials (born between 1981-1996) and even older demographics (Geiger, 2024; Team, 2024). Known for its short-form video content, TikTok attracts users who enjoy dynamic, interactive, and “viral” content (D’Souza, 2024). Its algorithm thrives on personalized recommendations, making it appealing to those looking for entertainment, trends, and creative self-expression. The platform’s format encourages quick, engaging interactions and allows users to explore a wide range of interests, from dance challenges to do-it-yourself (DIY) hacks (D’Souza, 2024).

Instagram, on the other hand, has a broader audience, including Millennials, Gen Z, and even older users (Agarwal, 2024). Initially popular for its photo-sharing capabilities, Instagram has evolved to include Stories, Reels, and IGTV, blending visual content with features that support both personal and professional use. The platform appeals to those interested in visual storytelling, influencer culture, and lifestyle content. It serves as a space for users to share curated moments, follow celebrities and influencers, and explore interests ranging from fashion and beauty to travel and food (Moreau, 2024).

Both TikTok and Instagram leverage visual and interactive elements to engage users, but TikTok’s emphasis on viral trends and short videos contrasts with Instagram’s focus on curated aesthetics and diverse content formats (D’Souza, 2024; Moreau, 2024). This distinction helps each platform attract and retain its specific audience while continuing to evolve with changing digital behaviors and preferences. This literature review aims to directly compare how TikTok and Instagram differ in the impact of body image among adolescents.

Impact of Instagram and TikTok on Self-Esteem, Eating Disorders, and Beauty Ideals

Body image, the perception and attitudes individuals hold toward their bodies, is a complex and deeply personal aspect of human experience that social media can influence (Rush, 2024). Instagram features a wide array of seemingly genuine images, many of which promote idealized body standards. Physical appearance is highly emphasized on the platform, and research shows that adolescents and young people often experience distress, dissatisfaction with their bodies, and pressure to attain a perfect look, particularly when faced with thin-ideal images (Pedalino et al., 2022).

Instagram has a profound impact on teen body image, often shaping perceptions and self-esteem through its emphasis on visual content and curated aesthetics (Chang et al., 2019). In a study spanning 6 months, the authors evaluated the associations between adolescent girls' various types of Instagram selfie practices and their body esteem (Chang et al., 2019). Fifty-two percent (303 out of 580) of girls aged 12-18 years from three secondary schools in Singapore and Instagram users who posted selfies had completed the survey. Based on the survey results, the practice of browsing content on Instagram was observed to be associated with low body esteem due to peer comparison to self-image. On the other hand, posting selfies on Instagram resulted in high body esteem. The editing practice was not associated with any impact on body esteem (Chang et al., 2019). Although the study had a small sample size and was conducted in a short time frame, the findings from this study suggested that constant exposure to perfect appearances on Instagram postings can lead to unrealistic comparisons, as teens may measure their bodies against these often unattainable standards. The results from this study will also help to increase society's awareness of Instagram behaviors and their association with body esteem, which can be considered to be used as part of body image education for adolescents.

TikTok has significantly influenced teen body image, shaping perceptions and self-esteem through its unique blend of viral content and visual culture (Knight, 2023). TikTok videos that present unrealistic portrayals of physical appearance can negatively impact young women's body perceptions, with the effects potentially being more pronounced if the content is viewed as unedited and natural (Knight, 2023). The promotion of these beauty ideals can result in various eating disorders like anorexia nervosa and bulimia nervosa, both of which are highly unhealthy methods of weight loss (Aparicio-Martinez et al., 2019). *Anorexia* is an intense fear of gaining weight and consists of a severely restricted diet (Mayo Clinic, 2024). It can lead to major health complications such as fatigue, low blood sugar, thinning hair, a slowed heart rate, and death. *Bulimia* is an intense fear of gaining weight and restricting caloric intake to control body weight; its methods consist of binge eating and purging afterward (Mayo Clinic, 2024).

A study conducted by Pruccoli and colleagues evaluated the use of TikTok among children and adolescents with eating disorders at a third-level public Italian center during the SRS-VoV-2 pandemic, a contagious virus that causes COVID-19 (Pruccoli et al., 2022). From January to February 2021, a paper survey was conducted for three weeks. Eighty-six percent (78 out of 91) of the participants completed the survey. The majority were female (93.6%) with a mean age of 14.5 ± 2.1 years. The mean use of TikTok per day was 1.4 ± 1 hours. Diet was the

most viewed category on TikTok (21.8%). In addition, 26.9% of participants reported a significant change in their daily lives, and 3.8% described themselves as victims of body shaming (Pruccoli et al., 2022). The findings showed the trend toward potential harm in adolescents with the use of TikTok due to the constant exposure to body-shaming and portrayal of unrealistic ideals that may lead to the development of eating disorders. This is similar to the findings of a study spanning three years, in which researchers observed that adolescents aged 14 and 15 who internalized idealized body shapes portrayed in the media experienced negative emotions about their appearance, which subsequently correlated with unhealthy eating behaviors (Mental Health Foundation, 2023). According to a survey by the Mental Health Foundation, 25% of young people (13% male, 37% female) reported that celebrity images in the media led them to feel concerned about their body image. Additionally, 19% of adolescents (10% male, 28% female) stated that TV shows have contributed to their body image concerns. Social media significantly shapes perceptions and concerns about physical appearance in today's digital age, highlighting its profound impact on body image (Mental Health Foundation, 2023).

Prevalence of Social Media Addiction

Social media addiction is referred to as an unhealthy pattern of social media use, leading to significant dependency (Cheng et al., 2021). A meta-analysis of 49 studies that were published or posted on websites between January 2013 and December 2020 across 32 nations showed a pooled social media addiction prevalence of 24%. A subgroup analysis was also performed to estimate the social media addiction prevalence by geographical regions: Africa (37%), Asia (31%), Middle East (29%), Eastern/Southern Europe (20%), Latin/South America (18%), North America (15%), and Western/Northern Europe (8%) (Cheng et al., 2021). Although this study did not have a comparable group, it showed a trend of 1 in every 4 social media users being more likely to develop social media addiction. Africa and Asia are the regions with the highest estimated rate of social media addiction, suggesting that more opportunities and mitigated interventions are needed in these regions to reduce the likelihood of developing social media addiction.

Interventions

Social media, such as TikTok and Instagram, pose negative impacts on adolescents' body image, self-esteem, and disordered eating behaviors, as well as a tendency for developing social media addiction. Identifying interventions is important to reduce the potential harms associated with social media use in adolescents. In a review journal article by Mazzeo et al. (2024), interventions are shown to promote healthy social media use among adolescents. Media Health Literacy (MHL) is an intervention that educates adolescents to recognize and think critically about the content presented to them on social media. One of the examples for MHL is offering various educational classes at schools to discuss issues related to beauty ideals on social media, promote positive body image, embrace diverse body types, and practice self-compassion (Mazzeo et al., 2024).

Another intervention is a policy approach that puts an age restriction on social media use. The Children's Online Privacy Protection Act (COPPA) is a federal law in the United States requiring social media platforms to obtain parental consent prior to collecting or using personal information about children under the age of 13 (Mazzeo et al., 2024). However, it is difficult to verify users' age and proof of parental consent since they are not mandated when creating a social media account. The newly proposed California Age-Appropriate Design Code is intended to provide guidance and recommendations for age verification, but it has not been approved at the federal court yet (Mazzeo et al., 2024). On November 28, 2024, Australia has passed the law to ban social media use for children less the age of 16 (Mcguirk, 2024). However, it is too early to determine the effectiveness of this law at reducing harm caused by social media in children because social media platforms will need some time to develop a process for age restriction and monitor their compliance with the law. This also calls for additional studies to be conducted and evaluate its impacts before and after the enactment of the law before spreading it widely to other countries.

Conclusion

After reviewing the findings of all the studies included in this paper, it is reasonable to conclude that the negative impact of TikTok and Instagram is similar to other social media platforms on body image, self-esteem, and eating disorders. Negative impacts include heightened eating disorders, body dissatisfaction, lowered self-esteem, and social media addiction. In addition, a high prevalence of social media addiction was observed worldwide, calling for the crucial role of implementing interventions to reduce the harm associated with social media use among adolescents. There are no perfect strategies to mitigate the negative effects of social media because each intervention has its pros and cons (Mazzeo et al., 2024). Most of the studies evaluating the impact of TikTok and Instagram on adolescents' body image, self-esteem, and disordered eating behaviors were conducted in Europe and Asia. Therefore, additional studies are still needed to increase knowledge about the impact of TikTok and Instagram on adolescents who live in the United States. Additional evidence is also needed to support the type of interventions that can be utilized to reduce harms associated with social media to protect vulnerable populations, such as children and adolescents.

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