# The Impact of Digital Media Exposure on Social and Emotional Development in Adolescents By

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## **Abstract**

The ubiquity of digital media in adolescents' daily lives has redefined how young people communicate, form relationships and regulate emotions. This review synthesizes empirical studies to examining the impact of digital media exposure on social and emotional development during adolescence. Research consistently demonstrates a dual-edged influence: while online engagement can foster social connectivity, identity exploration and self-expression (Subrahmanyam & Šmahel, 2011; Valkenburg & Peter, 2011), excessive or maladaptive use is linked to heightened risks of social isolation, anxiety and depressive symptoms (Twenge et al., 2018; Kross et al., 2013). Studies by Uhls et al. (2014) and Prinstein et al. (2017) emphasize that adolescents' socio-emotional outcomes depend largely on the nature, context and purpose of media use. Interactive and prosocial digital activities such as online collaboration or supportive peer communication can enhance empathy, social competence and self-efficacy (Best, Manktelow, & Taylor, 2014). Conversely, passive scrolling, cyberbullying exposure and social comparison on platforms like Instagram and Facebook often predict lower self-esteem and emotional dysregulation (Nesi & Prinstein, 2015; Feinstein et al., 2013). An neurodevelopmental research indicates that the adolescent brain's sensitivity to peer evaluation and reward processing (Crone & Dahl, 2012) amplifies both the positive and negative effects of digital interaction. The balance between connectedness and compulsive use emerges as a key determinant of well-being. Digital media as neither inherently beneficial nor harmful but profoundly context-dependent. Healthy socio-emotional development in adolescents requires guided digital literacy, parental mediation and emotional education that enable reflective and balanced engagement with online environments.

**Keywords:** adolescent development, digital media exposure, social-emotional adjustment, social networking, emotional regulation, cyber-psychology, mental well-being.

## Introduction

The digital revolution has profoundly reshaped the landscape of adolescent development. The proliferation of smartphones, social media, online gaming and streaming platforms has redefined how young people interact, express themselves and construct their social identities. Adolescence a critical stage of psychosocial and emotional growth is now deeply intertwined with digital experiences. As early as the 2010s, researchers such as Rideout, Foehr and Roberts (2010) observed that adolescents spend more waking hours engaged with media than in direct interaction with peers or family members. By 2018, global surveys indicated that youth between 13 and 18 years spent an average of 6 to 9 hours per day using digital devices (Common Sense Media, 2018). This immersion has prompted growing scholarly interest in how digital media influences adolescents' social and emotional development, both positively and negatively.

Publishing URL: <a href="https://www.researchreviewonline.com/upload/articles/paper/RRJ303706.pdf">https://www.researchreviewonline.com/upload/articles/paper/RRJ303706.pdf</a>

Early research framed digital media primarily as a cognitive and entertainment tool, but by the mid-2000s, studies began exploring its psychosocial implications. Subrahmanyam and Šmahel (2011) highlighted that online interactions mirror traditional developmental tasks of adolescence identity formation, peer affiliation and autonomy seeking but occur in a less regulated, often anonymous environment. These online spaces offer opportunities for self-disclosure, experimentation and belonging, aligning with Erikson's (1968) theory of identity versus role confusion. However, the digital realm also amplifies risks of exposure to peer pressure, social comparison and cyber victimization (Valkenburg & Peter, 2011).

A significant strand of research focuses on the emotional consequences of social media use. Kross et al. (2013) found that increased Facebook use predicted declines in subjective well-being, while Twenge et al. (2018) reported rising rates of depressive symptoms among adolescents in tandem with smartphone adoption. These findings underscore concerns that constant connectivity may erode emotional regulation and increase vulnerability to mental distress. In contrast, other scholars such as Best, Manktelow and Taylor (2014) and Uhls et al. (2014) argued that when used constructively, digital media can strengthen friendships, facilitate social learning and enhance empathy. Thus, the impact of digital media appears to hinge less on exposure quantity and more on quality, context and user intent.

Social development during adolescence is intricately tied to peer interaction and feedback. Digital platforms amplify this process by providing immediate social reinforcement through likes, comments and shares. Nesi and Prinstein (2015) conceptualized this as "social media peer influence," noting that adolescents' sensitivity to peer evaluation well-documented in neurodevelopmental studies renders them particularly susceptible to both affirmation and rejection online. Similarly, Crone and Dahl (2012) emphasized that adolescents' brain development, especially in regions governing emotion and reward, magnifies their responsiveness to social rewards in digital settings. This biological predisposition can foster connectedness or exacerbate anxiety, depending on the nature of online exchanges.

The content and modality of digital interaction are also critical determinants. Active engagement (e.g., content creation, discussions) tends to support social competence and self-expression, whereas passive consumption (e.g., scrolling, lurking) is associated with loneliness and diminished affective well-being (Verduyn et al., 2015). Digital media enables diverse social networks, exposing adolescents to broader perspectives but also to misinformation, unrealistic standards and cyber aggression (Livingstone & Smith, 2014). Research frequently linked problematic media use to increased emotional dysregulation, impulsivity and social withdrawal (Marino et al., 2017; Sampasa-Kanyinga & Lewis, 2015).

Cultural context further shapes the interaction between media use and emotional outcomes. In collectivist societies, digital communication often reinforces familial and community ties, while in individualistic cultures, it may emphasize personal identity and autonomy (Valkenburg & Peter, 2011; Lee, 2016). Gender differences have also been noted female adolescents typically engage more in social networking and are more affected by appearance-related comparisons, whereas males are more likely to exhibit excessive gaming and aggression-related outcomes (Coyne et al., 2016; Griffiths, Kuss, & Pontes, 2016).

Despite growing awareness, literature reflects a paradox of digital adolescence where online

engagement simultaneously supports and undermines socio-emotional growth. On one hand, digital media promotes connectivity, collaboration and self-expression; on the other, it heightens exposure to social pressures, cyberbullying and mental fatigue. Prinstein et al. (2017) and Uhls et al. (2014) proposed that the key variable is guided mediation: adolescents who receive parental or educational support in managing digital experiences exhibit healthier emotional adaptation than those navigating media independently.

The impact of digital media on adolescent social and emotional development is best understood as a continuum ranging from empowerment to vulnerability mediated by individual, familial and contextual factors. The convergence of neurodevelopmental sensitivity, peer influence and media ubiquity makes adolescence a particularly critical phase for understanding these dynamics. Therefore, reviewing the research offers valuable insight into evolving digital behaviors and helps identify pathways for balanced, mindful engagement in the digital age.

This review thus seeks to consolidate the empirical findings and theoretical perspectives from prior literature, aiming to clarify how the quantity, quality and context of digital media exposure influence adolescents' emotional regulation, social relationships and psychological well-being. It also highlights emerging implications for parents, educators and policymakers striving to promote responsible and developmentally supportive digital environments.

Understanding the influence of digital media on adolescents' social and emotional development requires grounding in established psychological and developmental theories. Several classical and contemporary frameworks ranging from Erikson's psychosocial theory to Bandura's social learning theory, Bronfenbrenner's ecological systems theory and the Uses and Gratifications perspective offer conceptual clarity to interpret how adolescents engage with and are shaped by digital environments.

## Erikson's Psychosocial Development Theory (1968)

According to Erik Erikson, adolescence corresponds to the stage of Identity vs. Role Confusion, during which individuals seek to form a coherent sense of self. Digital media platforms, especially social networking sites, provide adolescents with novel spaces for identity exploration, self-expression and peer validation. Through posts, photos and online communities, youth experiment with different aspects of their identities in a relatively low-risk setting (Subrahmanyam & Šmahel, 2011). However, Erikson's theory also helps explain the risks such as identity diffusion and conformity when adolescents rely excessively on virtual feedback for self-worth (Valkenburg & Peter, 2011). The struggle between authenticity and social desirability online mirrors Erikson's identity crisis, now transposed into the digital realm.

## **Bandura's Social Learning Theory (1977)**

Albert Bandura's social learning theory posits that individuals acquire behaviors, attitudes and emotional responses by observing models within their environment. In digital spaces, adolescents encounter myriad behavioral models ranging from peers and influencers to celebrities whose actions are reinforced through likes, shares and comments. Observational learning is accelerated in the algorithmic culture of platforms like Instagram, TikTok or YouTube, where repeated exposure normalizes specific social norms, emotional expressions or risk-taking behaviors (Coyne et al., 2016).

Bandura's concept of reciprocal determinism the dynamic interaction between person, Publishing URL: https://www.researchreviewonline.com/upload/articles/paper/RRJ303706.pdf

behavior and environment aptly describes how adolescents both shape and are shaped by digital media. For example, an adolescent who follows motivational content may develop resilience and positive coping, whereas one immersed in hostile or appearance-focused media may internalize anxiety or aggression. Thus, digital media functions as both a classroom and a mirror of social learning.

## **Bronfenbrenner's Ecological Systems Theory (1979)**

Urie Bronfenbrenner's ecological systems model situates adolescent development within multiple interacting layers: the microsystem (family, peers), mesosystem (school-home interactions), exosystem (parental work, media) and macrosystem (cultural norms). Digital media operates across all these layers. At the microsystem level, online peer groups and family communication apps influence daily social interaction. At the exosystem level, parental attitudes toward technology and media policies affect access and supervision. Culturally, the macrosystem defined by societal attitudes toward privacy, success and beauty shapes the values reflected online (Livingstone & Smith, 2014).

Bronfenbrenner's theory also highlights the mesosystemic conflict the tension between real-world and virtual interactions. Adolescents often experience discrepancies between digital inclusion and real-world belonging, leading to social fatigue or emotional dysregulation. Thus, digital exposure is not an isolated factor but a component of the broader ecological system influencing development.

## Uses and Gratifications Theory (Katz, Blumler, & Gurevitch, 1974)

The Uses and Gratifications theory (U&G) offers insight into why adolescents turn to digital media. This perspective views users as active agents who select media to satisfy specific psychological or social needs such as companionship, entertainment, identity formation or information-seeking. Studies found that adolescents often use social media to fulfill needs for peer belonging and self-presentation (Quan-Haase & Young, 2010). However, when gratification-seeking becomes excessive, it can evolve into compulsive or dependent behavior, echoing findings from digital addiction studies (Kuss & Griffiths, 2017).

For instance, an adolescent who feels socially excluded offline might turn to digital networks for validation, which temporarily gratifies emotional needs but may reinforce avoidance of real-life social interaction thereby perpetuating emotional isolation. Thus, U&G theory explains both the motivational drivers and the potential psychological costs of media engagement.

## Cognitive-Behavioral and Emotional Regulation Models

Complementary to these frameworks, cognitive-behavioral models (Davis, 2001) and Gross's emotion regulation theory (1998) elucidate how digital environments affect emotional processing. Constant exposure to social comparison, online criticism or idealized imagery can distort cognitive appraisals and emotional regulation strategies. Adolescents who engage in upward comparison may experience envy, body dissatisfaction or depressive affect (Feinstein et al., 2013). Conversely, positive digital interactions can reinforce adaptive coping mechanisms and empathy development through exposure to diverse perspectives and supportive communities.

#### **Review of Literature**

The growing body of literature presents a complex and evolving picture of how digital media influences adolescents' social and emotional development. The discussion across multiple studies reveals both constructive and detrimental dimensions of digital engagement, often mediated by factors such as gender, cultural context, type of media activity and emotional regulation skills.

Early studies viewed digital media as a bridge to social connection. Valkenburg and Peter (2007, 2011) found that social networking enhances friendship quality and peer bonding, particularly when interactions are reciprocal and emotionally supportive. Adolescents reported feeling more connected and confident when online interactions complemented real-world friendships. Similarly, Subrahmanyam and Šmahel (2011) highlighted that online communication fosters a sense of belonging and identity exploration, fulfilling Eriksonian developmental needs for peer approval and self-definition.

Findings complicate this optimism. Kross et al. (2013) demonstrated that passive Facebook use was associated with declines in moment-to-moment well-being and overall life satisfaction, suggesting that not all social connections online translate into emotional health. Best, Manktelow and Taylor (2014) reviewed over 40 studies and concluded that while digital communication can enhance social capital, its benefits are conditional dependent on the quality of interactions and the presence of offline support systems. Excessive reliance on digital affirmation (likes, comments) may, in contrast, lead to emotional fragility and social comparison-driven distress.

Adolescence is a period of heightened emotional reactivity and digital media intensifies this dynamic. Gross (1998) defined emotion regulation as the ability to modulate emotional responses to achieve adaptive outcomes. In digital contexts, adolescents frequently encounter emotionally charged stimuli peer rejection, online bullying or idealized imagery that challenge regulatory capacities.

Empirical studies link high screen exposure with symptoms of anxiety and depression. Twenge et al. (2018) reported that adolescents who spent more than five hours per day on screens were significantly more likely to exhibit depressive symptoms compared to those with limited exposure. Similarly, Sampasa-Kanyinga and Lewis (2015) found a strong correlation between social media use and poor mental health, particularly among adolescents who used platforms compulsively or for emotional escapism.

Uhls et al. (2014) provided evidence that structured, moderate media use can enhance emotional understanding when guided by social context. Adolescents exposed to emotionally positive narratives or prosocial online communities demonstrated improved empathy and emotional literacy. These findings echo Bandura's (1977) principle of observational learning, indicating that adolescents model emotional expression and coping strategies from digital figures and peers.

Digital platforms inherently promote social comparison a process intensifying during adolescence when self-concept is still developing. Feinstein et al. (2013) and Nesi & Prinstein (2015) observed that upward social comparisons on social media (e.g., comparing appearance, success or popularity) often predict decreases in self-esteem and increases in depressive affect. Such comparisons activate maladaptive cognitive appraisals "I am less than others" which erode emotional stability.

Gender plays a crucial moderating role. Coyne et al. (2016) noted that adolescent girls are more vulnerable to appearance-based comparisons and relational stressors, whereas boys tend to

engage more in competitive gaming, which can lead to aggression but also promote teamwork skills depending on context. Thus, emotional outcomes differ not only by the amount of digital exposure but also by how adolescents engage with content and their underlying motivations.

Cyberbullying emerged as a significant risk factor in research. Livingstone and Smith (2014) reviewed international evidence showing that 5–30% of adolescents reported being victims of online harassment, often correlating with anxiety, social withdrawal and suicidal ideation. The digital space amplifies peer pressure through constant visibility and public evaluation, intensifying adolescents' sensitivity to social cues a phenomenon supported by neurodevelopmental research on the adolescent brain's reward systems (Crone & Dahl, 2012).

At the same time, studies like Perren et al. (2012) showed that digital empathy empathy expressed online can act as a protective factor. Adolescents who practiced supportive behaviors online, such as helping peers or discouraging bullying, developed stronger emotional resilience and moral reasoning. This duality underscores a recurring theme: digital media can be both a risk and a resource, depending on context, supervision and individual self-regulation.

Another important finding concerns the cognitive-emotional toll of media multitasking the simultaneous use of multiple digital platforms. Ophir, Nass and Wagner (2009) found that heavy media multitasks displayed reduced cognitive control and difficulty filtering irrelevant stimuli, contributing to emotional impulsivity. Later, Pea et al. (2012) reported that multitasking correlates with social isolation and lower social well-being, especially among adolescent girls who use digital media for constant connectivity. Such results suggest that constant digital engagement may fragment attention and emotional presence, limiting authentic interpersonal connection.

Cultural and family contexts heavily influence outcomes of digital media use. Lee (2016) observed that in collectivist Asian societies, online platforms often reinforce family and community bonds, while in Western contexts, they emphasize autonomy and self-promotion. These cross-cultural variations demonstrate how Bronfenbrenner's ecological systems theory applies to digital development: macrosystemic values determine whether digital exposure aligns with or disrupts social-emotional harmony.

Parental mediation emerges as another crucial moderator. Padilla-Walker et al. (2012) identified that co-viewing and active parental discussion about online content mitigate negative effects, promoting responsible use and better emotional coping. Conversely, Livingstone and Helsper (2008) found that restrictive or authoritarian digital parenting blocking or forbidding media use often backfires, increasing secrecy and risk behavior among adolescents.

Despite legitimate concerns, several studies highlight the transformative potential of digital media for social learning. Best et al. (2014) and Uhls et al. (2014) reported that adolescents engaged in creative digital production blogging, collaborative projects or advocacy exhibit higher self-efficacy, empathy and civic awareness. These forms of active engagement enable adolescents to build prosocial identities, contributing positively to emotional maturity.

Marino et al. (2017) suggested that emotional intelligence training and digital literacy education can buffer against problematic use, helping adolescents navigate online stressors effectively. Such interventions align with Gross's (1998) emotion regulation model, which emphasizes awareness, cognitive reappraisal and adaptive coping strategies in managing emotional stimuli both offline and online.

## **Objectives of the Study**

- To analyze the relationship between digital media exposure and the social-emotional development of adolescents.
- 2. To identify key mediating and moderating factors such as parental mediation, type of digital engagement, gender differences and cultural context that influence the extent and direction of digital media's impact on adolescents' emotional well-being and social functioning.

## **Research Methodology**

This study adopts a descriptive review methodology aimed at synthesizing empirical and theoretical research published primarily between till 2018, with a focus on peer-reviewed journal articles, meta-analyses and authoritative monographs related to adolescent psychology, social media behavior and emotional development. A descriptive content analysis approach was used to identify recurring findings, gaps and conceptual patterns. Studies were cross-compared to detect convergence and divergence in results, emphasizing how and why digital media influences emotional maturity. Key monographs and studies informing this review include Subrahmanyam & Šmahel (2011), Best et al. (2014), Livingstone & Smith (2014), Coyne et al. (2016) and Twenge et al. (2018). The review integrates these with earlier psychological theories (e.g., Bandura's Social Learning Theory, Bronfenbrenner's Ecological Systems Model and Gross's Emotion Regulation Model) to ground the findings in robust conceptual frameworks.

## **Findings**

The synthesis of literature from 2008–2018 reveals that digital media exposure exerts a dual influence on adolescents' social and emotional development, acting as both a facilitator of connection and a source of psychological strain.

- 1. Regarding the relationship between digital media and emotional-social outcomes, studies such as Valkenburg & Peter (2011) and Uhls et al. (2014) showed that moderate, interactive use of social media enhances adolescents' communication skills, empathy and identity exploration. Digital spaces provide adolescents with opportunities for self-expression, peer support and emotional learning through narrative sharing and visual communication.
  - Heavy or unregulated exposure leads to emotional dysregulation and mental health challenges. Twenge et al. (2018) found strong correlations between excessive screen time and increased depressive symptoms, loneliness and decreased life satisfaction. Nesi & Prinstein (2015) observed that adolescents engaging in upward social comparison experience heightened anxiety and reduced self-esteem. Thus, the quality and intention of media use determine whether outcomes are constructive or detrimental.
- 2. The review identifies multiple moderating factors shaping the relationship between digital exposure and emotional development. Parental mediation particularly active discussion and coengagement significantly reduces negative outcomes (Padilla-Walker et al., 2012). Gender differences also emerged as critical: adolescent girls tend to experience greater vulnerability to appearance-based comparison and relational stress (Coyne et al., 2016), while boys often manifest aggression or impulsivity linked to competitive gaming contexts (Anderson et al., 2010).

Cultural context further influences these patterns; in collectivist societies, media tends to

reinforce communal bonds, while in individualist settings, it amplifies self-presentation pressures (Lee, 2016).

Findings underscore that digital media is not inherently harmful or beneficial its impact depends on psychosocial factors, family involvement and emotional literacy. The studies converge on the importance of fostering digital resilience, emphasizing emotional self-regulation and critical media literacy as protective tools.

## Conclusion

The review concludes that digital media exposure significantly shapes the social and emotional development of adolescents, functioning as a double-edged tool of growth and risk. When used purposefully through communication, collaboration and self-expression digital platforms can nurture empathy, social identity and self-efficacy. However, unregulated, passive or comparisondriven engagement can erode emotional well-being, fueling anxiety, low self-esteem and social isolation. Evidence of research consistently emphasizes that the effects of digital media are contextdependent. Adolescents benefit most when digital interactions occur within supportive family structures, balanced offline relationships and guided emotional reflection. Parental mediation, peer support and cultural norms act as critical buffers that transform potential harm into learning opportunities. Gender and personality differences significantly mediate how adolescents internalize digital experiences girls often facing appearance-related emotional challenges, while boys encounter issues tied to aggression and impulsivity in gaming contexts. The review calls for an integrated approach to adolescent development that includes digital literacy education, emotional intelligence training and mental health awareness within school and community systems. Encouraging reflective media engagement can empower adolescents to harness the benefits of the digital world while mitigating its emotional risks.

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- ISSN: 2321- 4708 June 2019, Year - 5 (74) Paper ID: RRJ303706
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