

## The Impact of Emotional Regulation and Smartphone Dependency on Adolescent Psychological Well-Being in Post-Family Disruption Contexts

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### Key Words:

emotional regulation,  
smartphone  
dependency,  
psychological well-  
being, adolescents,  
family disruption

**Abstract:** Adolescence is a critical developmental stage marked by significant emotional, psychological, and social changes. Adolescents who experience family disruption, such as parental divorce or prolonged conflict, are particularly vulnerable to psychological distress. In recent years, increased smartphone dependency has emerged as a coping mechanism among adolescents, potentially influencing their emotional regulation and overall psychological well-being. This study aims to examine the impact of emotional regulation and smartphone dependency on adolescent psychological well-being within post-family disruption contexts. Using a quantitative approach, data were collected from adolescents aged 13–18 years who experienced family disruption. Emotional regulation, smartphone dependency, and psychological well-being were measured using standardized psychological scales. The findings indicate that emotional regulation has a significant positive effect on psychological well-being, while smartphone dependency shows a negative association. Moreover, emotional regulation partially mediates the relationship between smartphone dependency and psychological well-being. These results highlight the importance of strengthening emotional regulation skills to mitigate the adverse psychological effects of excessive smartphone use among adolescents from disrupted family backgrounds. The study contributes to the growing body of psychological research by integrating emotional and digital behavioral factors within a vulnerable adolescent population and offers practical implications for psychological interventions and family-based counseling programs.

### Introduction

Adolescence represents a transitional period characterized by rapid biological maturation, identity exploration, and heightened emotional sensitivity. During this phase, adolescents face increasing demands to regulate emotions while adapting to complex social and familial environments. Previous studies emphasize that emotional regulation plays a central role in

adolescent psychological well-being, influencing stress management, interpersonal relationships, and mental health outcomes (Gross, 2015; Santrock, 2016).

Family structure is a critical environmental factor in adolescent development. Family disruption, including divorce, separation, or chronic parental conflict, often leads to emotional insecurity, reduced parental support, and increased psychological vulnerability among adolescents (Amato, 2010). Adolescents from disrupted families tend to experience higher levels of anxiety, depressive symptoms, and emotional instability compared to those from intact families (Lansford, 2018). These conditions place additional demands on adolescents' emotional regulation capacities.

In parallel with these challenges, smartphone use has become an integral part of adolescents' daily lives. While smartphones provide access to information, social connection, and entertainment, excessive use may result in smartphone dependency, characterized by compulsive behavior, emotional reliance, and impaired self-control (Kwon et al., 2013). Research indicates that adolescents experiencing emotional distress are more likely to develop maladaptive smartphone use patterns as a form of emotional escape or coping strategy (Elhai et al., 2017).

Smartphone dependency has been associated with various negative psychological outcomes, including sleep disturbances, increased stress, reduced emotional awareness, and lower psychological well-being (Twenge, 2019). For adolescents from post-family disruption contexts, smartphones may function as both a social support substitute and an avoidance mechanism, potentially exacerbating emotional dysregulation rather than alleviating distress (Horwood & Anglim, 2019).

Emotional regulation serves as a key psychological mechanism that may buffer the negative effects of smartphone dependency. Adolescents with strong emotional regulation skills are better equipped to manage negative emotions, reduce impulsive behaviors, and maintain psychological well-being despite environmental stressors (Aldao et al., 2016). Conversely, poor emotional regulation may intensify reliance on digital media as a coping tool, leading to problematic smartphone use and declining mental health.

Despite growing research on smartphone dependency and adolescent mental health, limited studies have specifically examined the interaction between emotional regulation and smartphone dependency among adolescents experiencing family disruption. This gap is significant, as family-related stress may uniquely shape adolescents' emotional processes and technology use behaviors. Therefore, this study seeks to analyze the impact of emotional regulation and smartphone dependency on adolescent psychological well-being within post-

family disruption contexts. By addressing this research gap, the study aims to provide empirical evidence that can inform psychological interventions, educational policies, and family counseling practices targeting vulnerable adolescent populations.

## Research Methods

**Research Design** This study employed a quantitative correlational research design to examine the relationships between emotional regulation, smartphone dependency, and adolescent psychological well-being in post-family disruption contexts. A correlational approach was considered appropriate because it allows for the analysis of predictive relationships among psychological variables without manipulating participants' conditions (Creswell, 2014). The study also tested the mediating role of emotional regulation in the relationship between smartphone dependency and psychological well-being.

**Participants** The participants consisted of adolescents aged 13–18 years who had experienced family disruption, including parental divorce, separation, or prolonged parental conflict. Participants were recruited using a purposive sampling technique (Palinkas et al., 2015). Inclusion criteria required participants to (1) live in a post-family disruption environment for at least one year and (2) use a smartphone daily. Adolescents with diagnosed severe psychiatric disorders were excluded to reduce potential confounding effects.

**Instruments** Data were collected using standardized self-report questionnaires:

- **Emotional Regulation:** Measured using the Emotion Regulation Questionnaire (ERQ) developed by Gross and John (2003). It assesses cognitive reappraisal and expressive suppression.
- **Smartphone Dependency:** Assessed using the Smartphone Addiction Scale (SAS) developed by Kwon et al. (2013). Dimensions include daily-life disturbance, withdrawal, tolerance, and compulsive behavior.
- **Psychological Well-Being:** Measured using Ryff's Psychological Well-Being Scale (Ryff, 1989), covering self-acceptance, environmental mastery, positive relations, autonomy, purpose in life, and personal growth.

**Data Collection Procedure** Data collection was conducted after obtaining informed consent from participants and their guardians. Questionnaires were administered either online or in paper-based format. Participants were assured of confidentiality and anonymity (APA, 2020).

Data Analysis Descriptive statistics were used to summarize participant characteristics. Pearson correlation analysis examined relationships among variables. Multiple regression and mediation analysis (Baron & Kenny, 1986; Hayes, 2018) were performed to test the mediating role of emotional regulation. Significance was determined at  $p < .05$ .

Ethical Considerations Ethical approval was obtained from the institutional review board. Participants could withdraw at any time. Special attention was given to minimizing emotional risk for vulnerable adolescents (APA, 2020).

## Research Results

The regression analysis revealed that emotional regulation serves as a significant positive predictor of adolescent psychological well-being. The statistical data ( $\beta = 0.46$ ,  $t = 6.85$ ,  $p < .001$ ) indicates that adolescents possessing higher emotional regulation capabilities demonstrate superior psychological functioning. Conversely, the study confirmed that smartphone dependency has a substantial negative impact on psychological well-being. The results ( $\beta = -0.39$ ,  $t = -5.12$ ,  $p < .001$ ) suggest that higher levels of smartphone dependency are directly associated with significantly lower levels of reported well-being, highlighting the detrimental effect of excessive digital reliance on adolescent mental health.

Further analysis established a robust negative relationship between smartphone dependency and emotional regulation itself. The findings ( $\beta = -0.42$ ,  $t = -5.44$ ,  $p < .001$ ) demonstrate that adolescents who exhibit higher dependency on smartphones tend to have significantly lower emotional regulation capabilities. This inverse correlation implies that excessive smartphone usage is not merely a behavioral issue but is intrinsically linked to a deficit in the cognitive and emotional processes required to manage feelings effectively.

Finally, the mediation analysis provided evidence that emotional regulation functions as a partial mediating mechanism in the relationship between smartphone dependency and psychological well-being. Smartphone dependency was found to negatively predict emotional regulation ( $\beta = -0.42$ ), which in turn positively predicted well-being ( $\beta = 0.46$ ). The significant indirect effect ( $-0.19$ , 95% CI  $[-0.28, -0.11]$ ) confirms that part of the negative impact of smartphones on well-being occurs because digital dependency erodes emotional regulation skills. However, because the direct effect of smartphone dependency on well-being remained significant even with the mediator included ( $\beta = -0.21$ ,  $p < .01$ ), the mediation is considered partial, indicating that smartphone dependency harms well-being both directly and through the impairment of emotional regulation.

## Discussion

**Interpretation of Emotional Regulation Findings** The positive impact of emotional regulation on well-being supports emotion regulation theory (Gross, 2015). In post-family disruption contexts, this skill is critical. Family instability reduces emotional security (Amato, 2010; Lansford, 2018), but adolescents with effective regulation strategies can reappraise stressful experiences, thereby maintaining well-being (Aldao et al., 2016).

**Interpretation of Smartphone Dependency Findings** The negative impact of smartphone dependency aligns with findings that excessive use is linked to emotional distress (Kwon et al., 2013; Twenge, 2019). This supports the displacement and emotional avoidance hypotheses (Horwood & Anglim, 2019). In disrupted families, smartphone dependency often reflects maladaptive coping, where devices are used to escape discomfort rather than regulating emotions directly (Elhai et al., 2017).

**The Mechanism: Emotional Regulation as a Mediator** The study supports the emotional vulnerability model (Kwon et al., 2013). Continuous exposure to digital stimulation may weaken regulation skills (Twenge, 2019). The mediation analysis clarifies that excessive smartphone use diminishes emotional regulation, which in turn lowers well-being. However, since the mediation is partial, smartphone dependency also exerts a direct negative effect independent of regulation (Hayes, 2018).

**Contextual Interpretation: Post-Family Disruption** Family disruption amplifies emotional vulnerability. Within this context, smartphones function as emotional substitutes. Adolescents with insufficient regulation skills rely on phones for relief, undermining their well-being. Conversely, those with strong regulation demonstrate resilience despite family stressors

## Conclusion

**Theoretical Implications** This study extends psychological models by integrating emotional regulation and smartphone dependency within a post-family disruption framework. It confirms that emotional processes mediate the impact of digital behavior on mental health outcomes.

**Practical Recommendations** Practically, the findings suggest that interventions aimed at adolescents in disrupted families cannot solely focus on reducing smartphone use. Interventions must prioritize emotional regulation training to enhance psychological resilience (Ryff, 1989; APA, 2020). By strengthening emotional management skills, adolescents are better equipped to

handle family instability without resorting to maladaptive digital dependency.

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