

Meta-Analysis of the Associations between Digital Parenting and Children's Positive Digital Well-being Outcomes

Research Overview

As children engage more extensively with digital technologies, parents play a crucial role in managing their digital use to foster positive digital well-being. This study reports findings from a meta-analysis examining the relationship between different forms of digital parenting and children's positive digital well-being.

Purpose of Study

This study aims to investigate how digital parenting practices relate to children's positive digital well-being outcomes. Drawing on findings from a broader meta-analysis, it focuses specifically on benefits such as digital literacy, resilience, and privacy protection -- areas often overlooked in research that emphasizes risk mitigation. Understanding these positive associations is crucial for policymakers and educators aiming to support parents in fostering equitable digital opportunities and participation.

Digital parenting refers to diverse strategies parents use to manage and guide children's digital engagement. This study categorizes digital parenting into positive mediation (facilitation through discussion, encouragement, instruction, or intervention), negative mediation (restriction or monitoring via rules, filtering, or surveillance), and co-use (parental presence during children's digital activities).

Digital well-being is broadly defined as psychosocial and physical outcomes of technology use. It reflects a balance between opportunities (e.g., development of digital skills, self-efficacy, and resilience) and risks (e.g., privacy invasion and harmful online encounters). This study emphasizes the role of parenting practices in strengthening the positive dimensions of children's digital experiences.

Research Methods

This study employed a three-level meta-analysis to synthesize associations between digital parenting and children's digital well-being. This approach enabled the examination of variance at three levels: individual effect sizes (level 1), multiple effect sizes within studies (level 2), and differences between studies (level 3). The full meta-analysis included 639 effect sizes from 88 primary studies, of which 87 focused specifically on positive digital well-being

outcomes. The analytic process comprised four stages: study identification, study selection, coding, and effect size calculation.

Study Identification

A team of four researchers systematically searched eight databases (e.g., Communication & Mass Media Complete, ERIC, Web of Science) for empirical studies published up to October 2024. Three sets of keywords targeting digital parenting, child age groups, and digital well-being outcomes were combined using Boolean operators. Manual searches supplemented the database search, yielding 11,565 records.

Study Selection

After title and abstract screening, 11,239 studies were excluded, leaving 326 for full-text review. An additional 238 were removed based on predefined inclusion and exclusion criteria, resulting in 88 eligible primary studies. The full selection process is summarized in the PRISMA diagram.

Coding

A structured coding scheme captured study characteristics, types of digital parenting, categories of digital well-being outcomes, effect sizes, and contextual variables (e.g., children's grade level, sex, parents' sex, geographical region). Methodological features such as data sources and research design were also coded.

Calculation of Effect Sizes

Effect sizes were standardized to Fisher's z and weighted by inverse variance using the *metafor* package in R. Results were converted back to Pearson's r . Four sets of analyses examined overall associations, moderation effects by digital parenting types, contextual variables, and methodological variables.

Results and Discussion

The three-level meta-analysis showed that most variance in effect sizes occurred between studies (82.65%), with smaller proportions at the effect-size level (2.43%) and within studies (14.93%). Overall, digital parenting was not significantly associated with children's positive digital well-being ($r = .10$, $p = .10$) or digital use ($r = .03$, $p = .34$), but significant heterogeneity indicated the need for moderator analyses.

Meta-regression revealed that positive mediation showed stronger associations with positive digital well-being than negative mediation or co-use. Contextual moderator analysis indicated stronger associations for boys than girls, and weaker associations in North American samples compared to South American ones. No significant moderation effects were found for children's grade levels, parents' sex, or other regions. In addition, methodological moderator analysis showed that child-reported (as compared to parent-reported) digital parenting data yielded larger associations, whereas child-reported well-being data yielded smaller associations. No other methodological variables significantly moderated the associations.

This study highlights the proactive role of digital parenting in children's digital development. This perspective extends beyond harm prevention to the cultivation of digital skills, information literacy, privacy awareness, and digital self-concepts. Positive mediation emerged as the most influential form, underscoring the developmental value of parental warmth, support, and open communication. Moderator analyses revealed stronger associations for boys, which possibly reflects gendered socialization that fosters boys' digital confidence. Surprisingly, no moderating effects were found for children's grade level, which contradicts previous findings that digital parenting benefits younger children more than adolescents. This puzzle warrants further unpacking to understand whether age is less influential than previously thought, or whether existing measurement tools fail to capture subtle nuances in developmental responsiveness.

Keywords

Digital parenting; Digital well-being; Parental mediation; Meta-analysis; Positive outcomes