

Parental Phubbing and Children's Electronic Media Use

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In this digital age, where parental attention is often diverted by digital engagement, the phenomenon of “parental phubbing,” defined as parents ignoring their children in favor of mobile devices, is scrutinized for its potential impact on child development.

Keywords: young children ; phubbing ; electronic media ; parent–child conflict ; emotion regulation

1. Introduction

In today's digital age, especially in the aftermath of the coronavirus disease 2019 (COVID-19) pandemic, the behavior of parental phubbing has become alarmingly pervasive, raising profound concerns about its detrimental impact on children's psychological and emotional well-being. Parental phubbing refers to parents excessively diverting their attention to electronic devices and neglecting face-to-face interactions with their children ^{[1][2][3][4]}. This behavior has become seamlessly integrated into our daily lives as information technology continues to advance at an unprecedented rate ^[5]. A study by Blackman found that parents, on average, dedicate between 0.5–7.5 h to mobile device use daily, with up to 5 h spent on this behavior in their children's presence ^[6]. Moreover, 65% of mothers have acknowledged technology as a source of distraction during critical parent–child interactions ^[7]. The post-pandemic era brought with it unique challenges: as measures like self-quarantine were enforced to curb the spread of COVID-19, individuals spent more time at home, inadvertently leading to increased exposure to electronic devices ^[8]. Trott et al. conducted a systematic review and meta-analysis, identifying a significant surge in adult screen time during the pandemic, with a daily increase averaging 1 h more than pre-pandemic levels ^[9]. Similarly, a study by Alheneidi et al. during the COVID-19 lockdown period reported that more than half of the 593 participants spent at least 6 h per day online, with 31.5% exceeding 8 h. The ramifications of this behavior are alarming ^[10]. Overexposure to parental phubbing can induce feelings of neglect in children and contribute to developing insecure attachments ^[11], potentially leading to aversions to intimate relationships later in life ^[12]. A telling observation by Vanden Abeele et al. highlighted that parents engrossed in mobile phones were five times less likely to attend to their children's attention-seeking gestures than when not using phones ^[12]. Given the gravity of these findings, there is an imperative need for scholars and professionals to delve deeper into this phenomenon, aiming to devise strategies to mitigate its adverse effects.

As the post-pandemic era unfolds, children's electronic media use, which encompasses not only traditional platforms like television and DVDs but also extends to mobile phones, computers, tablets, and various forms of interactive and streaming services ^[13], has seen a significant uptick ^[9], reflecting a broader societal shift toward digital media. This epoch, characterized by a move toward digital platforms for educational and recreational purposes, has intensified the prevalence of electronic media use among children. As delineated by Geng et al., the inception of electronic media interaction among children occurs at a tender average age of 2.45 years, underscoring a trend where younger cohorts are progressively engaging with such media ^[14]. Bar a negligible fraction, nearly all children in the studied cohorts had prior exposure to electronic media, accentuating its ingrained nature in their daily lives. The consequences of children's extensive electronic media exposure are far-reaching, affecting multiple dimensions of child development. Early and frequent engagement with electronic media has been linked to impairments in executive function ^[15]. This pervasive interaction with electronic media has also been linked to the emergence of internalizing problems, with symptoms such as depression and anxiety ^{[14][16][17]} ^[18]. Additionally, this exposure can adversely affect social development in later life stages ^{[19][20][21]}. A specific aspect of electronic media use, problematic video gaming, has been associated with neurophysiological changes in minors, particularly in the prefrontal cortex and striatum, which may compromise cognitive control ^[22]. Importantly, these effects are more common in younger children ^[23]. In light of these findings, there is an urgent need to emphasize the importance of informed parental guidance. Such guidance is essential for creating a digital environment that supports the holistic development of children in an evolving digital world.

2. Parental Phubbing and Children's Electronic Media Use

Numerous studies have demonstrated that parental phubbing is associated with elevated levels of electronic media use among children; for instance, Wang et al. found that parental phubbing contributed to increased electronic media engagement in young children [24]. Zhou et al. similarly uncovered a significant positive correlation between parental phubbing and children's Internet gaming addiction in a study involving 1021 Chinese children and their parents [2]. Further corroborating these findings, Zhao et al. conducted research during the COVID-19 pandemic that confirmed this positive association [8]. Finally, a review by McDaniel on the effects of parental phubbing on child development complemented these findings, indicating that children who perceive their parents as consistently engaged with electronic devices tend to use their phones more and are more likely to experience depression, thus further emphasizing the potential consequences of parental phubbing on children's electronic media use [25].

Bandura's Social Learning Theory is a foundational framework for exploring the relation between parental phubbing and children's electronic media use [26]. This theory emphasizes observational learning as the primary mechanism through which children adopt behaviors, suggesting that children not only witness but also internalize the norms and values associated with electronic device usage. The concept of "vicarious reinforcement" adds depth to this theory, positing that children are likelier to mimic behaviors that they perceive as rewarding for their parents. Complementing this, Attachment Theory, initially developed by Bowlby and later expanded by Ainsworth, introduces an emotional perspective [27]. This theory posits that disruptions in the emotional bonds between caregivers and children, such as those caused by parental phubbing, can lead to emotional and behavioral challenges, prompting children to seek solace in electronic media. Adding a cognitive layer to this discussion, the Technology Acceptance Model posits that technology adoption is influenced by two primary factors: perceived ease of use and usefulness [28]. In the context of parental phubbing, when children see their parents frequently interacting with electronic devices, they may view these devices as both user-friendly and beneficial, increasing their propensity to engage with electronic media. Taken together, Social Learning Theory, Attachment Theory, and the Technology Acceptance Model offer a comprehensive theoretical framework that elucidates the various mechanisms—from behavioral imitation and emotional coping strategies to cognitive attitudes—that influence the impact of parental phubbing on children's electronic media use.

3. The Mediating Role of Parent–Child Conflict

Parent–child conflict facilitates the development of negative parent–child relationships—specifically, the continuance of psychological conflicts or external opposing behaviors between parents and children due to cognitive, emotional, and behavioral incompatibilities [29][30][31][32]. Attachment theory posits that a positive attachment bond with caregivers fosters cognitive and emotional growth, while avoidant attachment may lead to social adjustment difficulties [27]. The effects of parental behaviors inevitably transfer to children's feelings through interactions and are expressed through the latter's external behaviors. Individuals who develop insecure attachments often struggle to trust their parents, generalizing this feeling to others [33]. Such generalized feelings of mistrust can lead to a tendency to withdraw from interpersonal interactions, resulting in social adjustment problems [34][35]. Electronic media's anonymity and other features can dissolve the low trust experienced by avoidant-attached individuals, subsequently increasing their usage of electronic media [2]. Based on this theory, parent–child conflict may mediate the association between family environment (e.g., parental phubbing) and children's use of electronic media.

Phubbing behavior by parents can lead to conflict with their children. During interactions, frequent parental phubbing behaviors may result in lower-quality communication, neglect of the children's needs, and the formation of emotional distance [4][11][17][36][37]. Technology interference between parents and children indicates that high levels of electronic media exposure can disrupt communication with other family members, hindering the formation of a positive parent–child relationship [7]. Radesky et al. also underlined that parents addicted to electronic media often perceive their children's interaction needs as intrusive [38]. Consequently, they are more likely to respond hostilely and exhibit more apathetic behaviors. Furthermore, Informal Social Control theory emphasizes that an indifferent, distant family atmosphere may amplify an individual's negative emotions [39]. Therefore, parents' high-frequency phubbing may significantly trigger parent–child conflict.

Parent–child conflict predicts children's electronic media use [2][40][41][42]. Studies have shown that a close parent–child relationship, characterized by emotional warmth, can reduce a child's need to seek a sense of belonging in the virtual world [10][29]. In contrast, poor parent–child relationships can lead to feelings of parental rejection and social exclusion [43]. Individuals in such relationships may avoid close relationships and seek to escape loneliness through virtual worlds [10][44]. Furthermore, individuals with insecure attachments often struggle to trust others and may avoid real-world contact [34].

4. The Moderating Role of Children's Emotion Regulation

In the pathway from parental phubbing through parent–child conflict to young children's electronic media use, children's emotion regulation may be a moderating variable. Numerous scholars have argued that, aside from home environment factors such as parental behavior, children's factors, including emotion regulation, are significantly associated with parent–child relationships ^{[45][46]}. Strelau posited that intra-individual variability significantly impacts sensory stimuli, thereby causing inter-individual differences in the perception of stimulus intensity ^[47]. In simpler terms, different individuals perceive the same stimulus with varying intensity levels due to dissimilarities in their regulatory mechanisms. The Integrated Model of Emotion Processes and Cognition in Social Information Processing also indicates that the individual's emotional processes influence an individual's processing of social information in a particular situation ^[48].

Emotion regulation refers to an individual's dynamic processing of the occurrence, experience, and expression of their emotions ^{[49][50][51][52]}. It plays a crucial role in how individuals process and respond to harmful stimuli, such as parental phubbing. Individuals with emotional difficulties tend to be more affected by adverse events, which can amplify their negative impact ^{[53][54]}. This heightened sensitivity can lead to more challenges and difficulties in parenting, potentially increasing the frequency of harsh parenting practices and punishment ^{[49][55]}. Such practices can intensify conflicts between parent and child, subsequently deteriorating the parent–child relationship ^[56]. In contrast, individuals with positive emotion regulation may experience more favorable affective feelings and employ more adaptive strategies to reduce stimulus intensity in the face of negative stimuli ^{[57][58]}, contributing to secure parent–child attachments ^[59].

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