Online Risks and Smartphone Addiction in Children: Adaptation of Parental Control Measures

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ABSTRACT

This paper aims to assess various perspectives and studies to identify the dimensions of parental control strategies with regard to online risks posed by the increasing usage of new media by parents and children in households, including addiction. It also explores the effectiveness of internet monitoring software to curb problematic internet usage and safeguard their children online. This paper suggests various measures and examines their effectiveness in curbing problematic internet usage and tacking addiction.

Keywords: New Media, Online Risk, Addiction, Parental Control, Software, Etc.

INTRODUCTION

The investigation into the internet and social media utilization among young consumers is progressively gaining significance within academic discourse. Twenge et al. (2015) conducted a comprehensive analysis spanning the years 1976 to 2014, focusing on adolescents' media engagement, noting a notable demographic shift among those born after 1995, who constitute the initial cohort to experience their entire adolescence amidst the proliferation of smartphones.

Concurrently, this demographic, identified as Generation Z (individuals born post-1997), emerges as the largest demographic segment poised to shape future consumer trends (Sterling, 2017). Notably, this cohort exhibits a discernible trend of heightened online activity coupled with diminished face-to-face interactions with peers. Clement (2015) underscores this trend, affirming adolescents' profound connectivity in the digital realm, with a notable preference for mobile devices in their online engagements. This inclination towards digital connectivity is underscored by statistics revealing widespread access to technological devices among American adolescents, with 88% possessing regular access to laptop computers and over 93% possessing smartphones (Clement, 2015). Crucially, this phenomenon extends beyond national boundaries, encompassing developing nations like India, as digital technology penetrates an increasing number of households, thereby shaping global patterns of adolescent engagement with the digital sphere.

The technology scenario has always been changing with the times. The digital technology is appearing as a crucial element that works and give shape to various dimensions of the groups and society and the individuals. Many communication and social scientists viewed that the digital technology, especially the new media is proving to be prime mover of change in the field. Fast growth of ICT tends to highlights the importance that affect the outcome relating to the social behavior of the users/audience. The great departure in communication/media technology happened from face-to-face human interaction to the very remote, indirect and complex communication.

The family unit serves as the primary locus of a child's developmental journey, with parents assuming the pivotal role of initial educators. Within this familial context, children derive essential stimuli for physical, socio-emotional, and intellectual growth, alongside assimilating cultural norms and value systems, thereby shaping their emerging personalities (Petani, 2007). However, the advent of new media technologies has ushered in a plethora of adverse effects, notwithstanding its apparent advantages.

Contemporary familial dynamics often witness a decline in immediate and emotionally rich interactions, supplanted by what is termed as "virtual relationships" - characterized by communication through electronic mediums such as telephones, text messages, emails, and television consumption, among others. Consequently, sentiments of warmth, empathy, and reciprocal support are relegated to the periphery of familial interactions. Moreover, the proliferation of new media has introduced a host of pressing issues into the sanctum of the household, including cyber-bullying, exposure to inappropriate content, online harassment, and predatory behavior, thus subjecting young children to potential victimization within the ostensibly secure confines of their bedrooms.

Thus, it becomes even more imperative to understand how these technologies are impacting the dynamics between children and parents with regard to new media consumption. This study seeks to unravel the complex relationship between online risks, smartphone addiction and parental control by analyzing various perspectives and dimensions.

Research Method adopted

This is a descriptive, exploratory study which examines various theoretical perspectives and quantitative data to understand the online risk and addiction as a fallout of the ever-increasing internet-based technology usage in the household, cross-culturally, especially for children.

The Family-Technology Intersection

In contrast to the traditional mass media paradigm, where recipients (readers, listeners, and TV viewers) passively absorbed content transmitted by media outlets, the landscape of new media exhibits distinct characteristics. New media users function as both producers and consumers, actively generating and consuming cultural content on computer screens. This duality imbues them with a sense of agency or actorship, endowed with social and cultural psychological attributes shaped by their interactions in both the digital and real worlds. Consequently, these actors, conditioned by their engagement with new media mechanics, manifest distinct behaviors that are contextualized within their social milieu, notably within the family sphere, reflecting the effects of new media.

New media has become an integral component of the contemporary family environment, exerting a specific influence on family members. Parents emerge as inevitable socializers in the media realm, as underscored by the findings of Plowman et al. (2010), which emphasize the significant role of parental involvement in a child's development, surpassing the impact of the child's individual technology usage patterns. Further corroborating this notion, research by Ilišin (2003), Trstenjak (2006), Miliša (2007), and Miliša & Zloković (2008) underscores the imperative for parents to engage in discussions with their children about the media content they encounter. This proactive approach aims to aid children in discerning the significance and comprehending the moral implications of the media content they consume (Košir et al., 1999).

In contemporary times, children often find themselves in solitary media consumption situations, exposed to content unsuitable for their age or developmental stage, while simultaneously possessing greater proficiency with digital media tools than their parents. Consequently, parents may not always recognize the necessity of cautioning their children about inappropriate media content (Carlsson, 2006).

Subsequent investigations into parental engagement with children during technology use compared to non-technological activities have yielded noteworthy findings. Korat and Or (2010) discovered that parents exhibited reduced engagement with their children when reading using digital technology as opposed to traditional print media. Given the pervasive encouragement from researchers, educators, and society at large for parents to monitor and regulate their children's utilization of new technologies, such as the internet and smartphones, it becomes pertinent to assess the role of these technologies in the lives of parents and their consequential effects on children. Notably, as there is typically no external oversight while parents engage with communication technologies, the complexity of the parental role is further compounded.

An optimal parental approach necessitates intentional conversations aimed at aiding children in discerning the moral messages conveyed by the media content they encounter (Ilišin, 2003; Petani, 2007). Competent parents demonstrate sensitivity to their children's needs and possess the capacity to respond to them appropriately.

Regarding the role of technology in children's exposure to risk, Livingstone and Smith (2014) posit that despite the increasing prevalence of mobile and online technologies among children and youth, there is scant compelling evidence indicating a proportional rise in online risks. However, they contend that mobile and online risks are becoming increasingly intertwined with offline risks encountered by contemporary children. This assertion, supported by research conducted by Leung and Lee (2011), Livingstone and Smith (2014), and Morgan (2013), suggests that the incorporation of an online component into children's lives expands the contextual landscape within which they encounter social risks.

Online Risks and Parental Control

Current research trends focusing on the impact of technology on relationships and children, while showing positive momentum, often fall short in comprehensively evaluating its broader societal and familial implications. Primarily, the focus of technology research concerning people has been on vulnerable populations, particularly children at risk. Risks associated with child and adolescent technology use include cyberbullying, interactions with strangers, and exposure to sexual content, among others (Leung & Lee, 2011; Livingstone & Smith, 2014; Morgan, 2013). Despite efforts to understand how smartphones and new technologies influence parent-child relationships and the risks children face due to technology use, there has been a notable oversight regarding the reciprocal impact of parents' technology use on their children. In an era dominated by smartphones and rapid technology adoption, it appears we have neglected to fully consider how our own technology habits may affect our children.Moreover, research on other types of relationships, such as parent-parent relationships and their interaction with the social environment, has primarily focused on the positive aspects. For instance, Ozdamli and Yildiz (2014) found that parents view the use of mobile technologies to

enhance communication between school and family life positively, deeming it essential. Studies examining parent-child relationships and technology usage often concentrate on children's technology use and the mediating role parents play (Delen, Kaya, Ritter, & Sahin, 2015; Plowman et al., 2010; Valcke et al., 2010). Genc (2014) discovered that variations in parental monitoring of a child's technology use are influenced by parents' perceptions. Much of this research stems from concerns about the risks children face while using smartphones and other new technologies.

Addressing online risks is a significant contemporary concern, with cultural differences and demographics influencing parents' attitudes toward regulating children's internet use (De Morentin et al., 2014; Álvarez et al., 2013). However, research suggests that effective parental moderation and strategic integration of technology can mitigate or prevent the negative effects of problematic internet use (Shin, 2016; Anderson, 2016). Letheren et al. (2016) advocate for technology as an assistant and manager to which parents can delegate their children's protection. Software designed to protect children's online privacy and filter inappropriate content is increasingly popular. Parents can monitor their children's online activities using various software applications available for computers and smartphones, such as Bark, Net Nanny Parental Control, and Norton Family. While some of these applications are free, others come with upfront or subscription costs. Adoption of such parental monitoring software is on the rise, with a significant percentage of parents in the US already utilizing parental controls and monitoring tools to regulate their teens' online and mobile phone activities (Pew Research, 2016).

Smartphone Addiction and Parental Control
Smartphone addiction is characterized as a psychological state wherein mental and emotional well-being are compromised, leading to impairment in scholastic, occupational, and social interactions due to excessive smartphone usage (National Information Society Agency, NIA, 2011). This phenomenon poses a particular risk for children, as their brains are not fully developed until the age of 25, potentially resulting in negative implications for cognitive development (Hong et al., 2013).

The unregulated use of media raises concerns regarding its effects on individuals. Potter (2009) argues that different states of media exposure, namely automatic and transported, are associated with distinct information-processing tasks, ultimately influencing media effects. Individuals engaging in unregulated media use are unlikely to consciously monitor their media consumption, thus exhibiting diminished self-control. Consequently, they are more susceptible to the messages conveyed in media content.

The iPhone and similar smartphones have been labeled as addictive technologies, with survey-based research revealing that many individuals prioritize their smartphone over fundamental activities such as personal hygiene and social interactions. Empirical studies investigating smartphone addiction have reported varying prevalence rates, ranging from 0% to 38%, depending on the study methodology (Crowley S. J., Acebo C., Carskadon M. A., 2007). There is ongoing debate among researchers regarding the extent to which smartphone addiction is problematic, with some positing that mobile phone usage, while rewarding, may not necessarily lead to detrimental outcomes.

Previous research has identified psychological and physiological factors associated with smartphone addiction, with variations observed across age and gender demographics. Strategies such as perceived parental control and parental control software have been proposed to mitigate negative outcomes associated with smartphone addiction. However, there is limited empirical evidence demonstrating the effectiveness of these interventions.

Parental mediation, including restrictive mediation, instructive mediation, and co-viewing, has been suggested as a means to influence children's smartphone usage patterns (Valkenburg, Krcmar, Peeters, & Marseille, 1999). Additionally, parental monitoring has been linked to reduced Internet addiction among adolescents (Hwang & Jeong, 2015), highlighting the pivotal role of parental involvement in regulating technology use.

Research indicates that parental mediation can attenuate the effects of violent and sexual media content on children (Guo & Nathanson, 2011). Moreover, co-viewing of media fosters familial bonding and can serve as a platform for discussing media content. Communication styles within the family influence children's media consumption habits and their interest in educational programming (Austin, 1993; Chaffee & Tims, 1976). Furthermore, engaging in shared online activities as a family has been shown to reduce children's exposure to negative internet content, emphasizing the importance of family cohesion in navigating digital media environments.

CONCLUSIONS

Research on the multifaceted uses of communication technologies, including the internet and smartphones, among today's adult population underscores their pervasive influence on social and individual dynamics. Communication technology has emerged as a significant determinant of societal and individual behaviors, providing individuals with

unprecedented control over time and space. However, the commercialization of communication technologies has both positive and negative ramifications for society, impacting institutions, organizations, and individuals as social entities. The imperative to adopt technology for safeguarding children is increasingly recognized, driven by governmental warnings about the rise in cybercrimes.

With a balanced mediation strategy and appropriate tools, parental monitoring of screen time can offer mutual benefits for concerned parents and children, mitigating the adverse effects of exposure to inappropriate or hazardous online content and behaviors. Effective parental monitoring has been associated with a reduced risk of adolescent internet addiction (Lin, Lin, & Wu, 2009). The American Academy of Pediatrics (2013) advocates for the establishment of a family media use plan to regulate all forms of media consumption within the household.

Emerging evidence suggests that smartphone addiction is becoming a significant social issue, with psychological and physiological repercussions. The prevalence of smartphone addiction among children is on the rise, with females and teenagers being particularly vulnerable.

However, further research is needed to explore the relationship between smartphone use, depression, parental control, and sleep patterns. Some experts propose parental control software as a potential strategy to mitigate the negative consequences of smartphone addiction, although empirical research on its efficacy remains limited.

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