Rethinking Parental Control: Teen Agency in Mobile Technology and Digital Well-Being

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This position paper examines existing literature on digital well-being, with a particular focus on research related to teens' digital well-being within the Human-Computer Interaction (HCI) community. While many parental control applications aim to regulate teens' technology use, they often fail to provide teens with the agency to make their own decisions. This paper explores potential ways to foster teen engagement in parent-teen relationships and enable them to take greater control over their digital well-being. As a short case study, we examine current parental control approaches on YouTube and propose potential future design improvements.

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1 Introduction

Surveys of teens in the United States have found a positive impact of digital technology, including staying in touch with friends and family, fostering social connections with people who share similar interests, receiving peer support, and learning new things [3, 4]. This positive impact is also supported by another study that examines teens' relationship with technology and reveals that technology is perceived by teens as an integral part of their daily lives. It also highlights its positive influence on their personal development, ability to acquire knowledge, and creative thinking skills [9].

However, despite these benefits, a growing number of literature address the negative aspects of mobile technology, including its impact on mental health and physical health [1, 10]. For example, Adorjan and Ricciardelli [1] conducted a study with 115 Canadian teens to explore their experiences and perceptions of smartphone and

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social media addiction. Their findings suggest that while teens recognize how recommendation systems and platform design features influence their behavior, they often feel a decreased sense of agency in resisting these forces. George and Odgers [10] examined seven commonly expressed concerns regarding the impact of mobile technologies on adolescent development. Their study found that excessive device use contributes to disrupted sleep patterns among adolescents.

Research in HCI have typically focused on the role of parents and their approaches to regulating and guiding adolescents' technology use [6, 7, 12, 13, 18, 26]. Some of these studies have identified challenges in the parent-teen relationship when it comes to regulating teen mobile usage. To improve teens' digital well-being, various approaches have been explored, such as limiting screen time for mobile technology use [6, 18].

Parental control is a common approach for regulating and guiding teens' technology use; however, one major challenge with this approach is the tension created between parents and teens [6, 7, 12]. There is still little research on how parents and teens can adopt a collaborative approach to benefit both parties. This is especially important for teens as they grow up and undergo not only the physical and physiological changes associated with puberty but also the development of a sense of agency during this stage of life [21, 23].

This position paper explores potential ways to shift the focus from traditional parental controls to finding collaborative ways that allow parents and teens to jointly manage screen time challenges, while gradually scaffolding teen autonomy within the parent-teen relationship. It also aims to involve parents, researchers, designers, and other practitioners in the workshop to discuss how we should design parental control applications that could contribute to teens' digital well-being.

2 Background and Related Work

Prior research has examined the role of parental control in managing teen digital well-being with a focus on its impact on parent-teen relationships. While these studies provide insights into current strategies, they also highlight the tensions from restrictive approaches that limit teens' agency over their technology use.

2.1 Prior Work and Challenges in the Parent-Teen Relationship

Past research has identified ways that screen time management can be a source of considerable tension in parent-teen relationships. For example, Alelyani et al. [2] analyzed reviews of 52 parental control apps from the Google Play Store to compare feedback from parents and children. Their findings highlight that parental control apps mediate complex tensions between parents and children and offer insights into the need for more balanced and user-centered design. Similarly, Ghosh et al. [11] conducted a qualitative analysis of reviews of 37 mobile online safety apps written by children (ages 8–19). Their study argues that parents impose asymmetric power dynamics when they control and monitor their children's online behaviors, leading to negative impacts in parent-child relationships and children perceiving safety apps as overly restrictive and invasive of their privacy. Additionally, Kawas et al. [14] explored the tensions and needs between tweens and their parents through *NatureCollections*, a mobile application designed to connect children with nature. Their study found that parental concerns about screen time shaped tweens' experiences with the app and influenced how families negotiated screen-time and technology-use tensions.

As research on teen digital well-being continues to grow, there is an ongoing discussion about the dominant force of parental control and its potential to harm parent-teen relationships [24]. A qualitative feature analysis of 75 Android mobile apps Wisniewski et al. [24] found that the majority (89%) of the features identified supported parental control over teen self-regulation (11%). As teens mature both physically and mentally, we argue that parental control should not be the primary method for managing their screen time. Instead, future research on teen mobile technology usage should focus on fostering teen agency. For example, Magee et al. [17] examined teens' perceptions of their everyday technology use and the factors influencing their behaviors, which highlighted

teens' capacity to manage their own technology use and emphasized the need for more opportunities to support their agency. Additionally, research in HCI should develop more granular approaches that provide customized experiences tailored to different age groups. A 2022 study by the Pew Research Center found that smartphone access among teens varies by age, with 98% of 15- to 17-year-olds having access to a smartphone compared to 91% of 13- to 14-year-olds [23]. Given these differences in usage patterns across age groups, the HCI community should explore age-specific design strategies to better support teens' diverse needs and digital well-being.

2.2 Research and Industry Approaches to Teen Digital Well-Being

Current research in HCI explores various approaches to help people manage their screen time in line with their goals and values. For example, Lukoff et al. [15] implemented *SwitchTube*, which introduced the Adaptable Commitment Interface, allowing users to shift their attention to their desired interface when watching YouTube videos based on their commitment to focus. Their findings suggest that the mechanisms enabled by *SwitchTube* provide users with a greater sense of agency, satisfaction, and alignment with their goals. Davis et al. [8] focus on this issue specifically in adolescents and their struggles with using social media intentionally. They developed *Locus*, an application designed to shape adolescents' entry experiences into social media apps by prompting them to reflect on their intentions both before opening an app and at the end of the day. Their results provide evidence that teens have the potential to develop self-regulation skills and engage in more intentional social media use.

Tech companies have introduced teen-specific features to enhance digital safety, but these measures often prioritize parental control over teen agency. For example, Meta announced the introduction of teen accounts on Instagram last year, which include several protective features such as private accounts, messaging restrictions, sensitive content restrictions, and time limit reminders [19]. While these features provide teens with a safer Instagram experience, those under 16 require parental permission to modify any built-in protections to make their experience less restrictive, limiting their agency. Similarly, YouTube offers a child-focused platform called YouTube Kids, designed for children aged 4 to 12 [27]. This version of YouTube limits certain *attention-capturing design patterns* present in the regular YouTube platform, such as ads and infinite scrolling [16, 20]. However, despite these efforts, these platforms primarily focus on giving parents control rather than empowering children and teens to manage their own screen time. Therefore, we propose a more customizable parental control system that balances parental guidance with teen autonomy, which will be discussed in the following section.

3 Beyond Existing Solutions

Companies have introduced features that protect teens from over-consuming content while giving parents greater control over their teens' digital technology use. For example, YouTube has implemented features that allow children aged 9 and older to explore regular YouTube instead of YouTube Kids [27]. To support this transition, YouTube introduced supervised experiences for pre-teens (under 13) and teens (13+), allowing them to use regular YouTube with different levels of parental control.

Our discussion focuses on children and teens aged 9 and older who use YouTube's supervised experiences. This age group is particularly crucial, as teens develop their understanding of the world, form their values, and shape their perspectives on life while transitioning into adolescence [22, 25]. YouTube's current approach is to divide teens' viewing experience into three categories: *Explore*, *Explore More*, and *Most of YouTube* as shown in Figure 1. *Explore* is designed for families transitioning from YouTube Kids to a wider range of content on YouTube, offering videos that generally align with content ratings for viewers aged 9 and up. *Explore More* is designed for children ready to access a wider selection of YouTube content, including everything in *Explore* plus an even broader range of videos generally aligned with content ratings for viewers aged 13 and up. *Most of YouTube* is for children who are ready to explore a vast range of content, including videos for older teens, while excluding 18+ content and other videos that are inappropriate for supervised experiences. However, these modes lack customization options

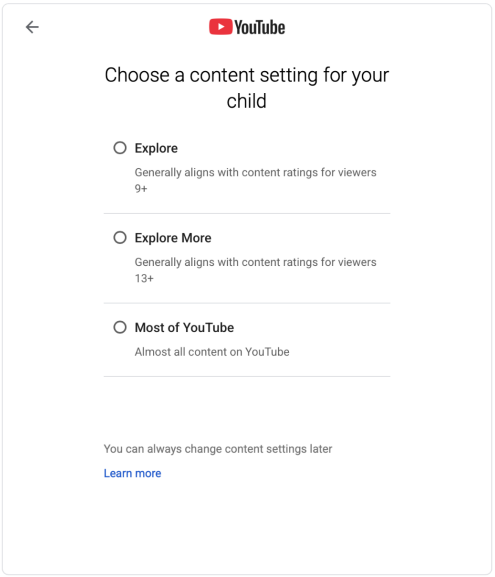

Fig. 1. YouTube provides parents with control over the content their child can access through three predefined modes, which rely solely on its automated systems to categorize videos based on YouTube's content policy (e.g., Adult Content, Violence and Weapons, Dangerous Content, Inappropriate Language, Sensitive Topics, etc.). However, these settings lack flexibility in addressing factors that parents and teens may want to customize for screen time management, such as setting usage limits based on time of day and customizing which tab features are visible on the main page. A more modular Family Center could offer greater customization, allowing parents and teens to collaboratively choose from a range of options that better suit their needs. [28]

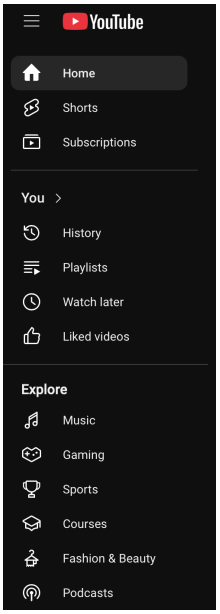

Fig. 2. This is the tab view of the *Explore* mode for pre-teens (under 13) in supervised experiences of YouTube. As shown in the screenshot, the tabs are fixed and cannot be customized. Future designs should consider making the main page tabs flexible and customizable, allowing families to adjust the experience based on their specific needs and preferences.

that can tailor to individual needs. For example, if a parent feels their 9-year-old is too young to watch YouTube Shorts (short-form videos of up to 60 seconds that autoplay in a continuous, vertical scrolling format), the current settings do not allow them to disable this feature, as seen in Figure 2. Additionally, while YouTube allows parents to remove certain channels from their child's account, it does not provide an option for parents to add channels they want their child to explore.

Therefore, we suggest providing more customization options that would make YouTube more accessible to different families with specific approaches to education for their teens. For example, the baseline interface could still limit certain attention-seeking patterns and have fewer features, but parents and teens should be able to include other features (such as Music, Gaming, Fashion and Beauty, and Podcasts) in the teen's YouTube experience if they are relevant to the teen's interests. Additionally, by considering factors such as location and time of day, parents could create different scenarios for teens to have access to certain types of content

during different time periods, such as educational videos during school hours and freedom to explore more entertainment-focused content after school.

Beyond the lack of customization in current parental controls, the current design of YouTube's family settings creates an asymmetric power dynamic between parents and teens. There is no dedicated space within the YouTube Family Center that allows teens to have a say in managing their own viewing experience. Prior research on co-designing risky topics with teens suggests that future designs should provide them with more agency over the system [5]. For instance, a more balanced approach could involve a system where both parents and teens answer a set of questions about their goals and values for screen time use. This input could then be processed through Artificial Intelligence (e.g., ChatGPT) to generate a suggested set of customized screen time rules that align with both parental concerns and teen agency.

One of the biggest challenges in teen mobile use is the lack of communication and transparency between parents and their children, which often negatively impacts the parent-teen relationship [24]. Research in HCI should focus more on designing systems that facilitate meaningful conversations between parents and teens and propose solutions that benefit both parties. For example, parents could have greater control over YouTube's features and content selection, while teens would gain a more focused experience and greater agency over their watch time. Such an approach could encourage self-regulation and help teens interact with YouTube more deliberately, rather than getting stuck in algorithm-driven recommendations.

4 Conclusion

In this position paper, we use YouTube's current approach on teens' experience as a case study to explore potential design implications that could increase agency over teen mobile technology usage beyond parental controls. Our discussion highlights the limitations of existing approaches and proposes potential alternative strategies that balance parental control with teen agency. We aim to contribute to discussions among designers, researchers, and practitioners through this paper and offer insights that can inform the development of such systems. Ultimately, our goal is to explore future directions that support teens to engage meaningfully in everyday social activities through their phones, such as texting friends, collaborating on school projects, and video calling family, while also having the agency to self-regulate their mobile technology use.

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