An Exploratory Study on Chinese Preteens' Internet Use and Parental Mediation during the COVID-19 Pandemic

Yanqiong Zhang  
Department of Information Management, Peking University, Beijing, 100871 China  
zhangyanqiong@pku.edu.cn

Jianhao Tang  
Department of Information Management, Peking University, Beijing, 100871 China  
a1104054175@pku.edu.cn

Pengyi Zhang  
Department of Information Management, Peking University, Beijing, 100871 China  
pengyi@pku.edu.cn

ABSTRACT
The COVID-19 pandemic has led to the closure of schools around the world. When children study online, parents are concerned about the impact of increased screen time on their children's physical and mental health. This poster reports results from a qualitative study of Chinese preteens' Internet use and parental mediation during the COVID-19 pandemic. Through interviews with eight parents of primary school students aged from 10 to 12, we found several problems with preteens' Internet use, posing challenges for parental mediation. Parents have adopted stricter restrictive mediation strategies to reduce the impact of Internet addiction and implemented co-use strategies to help preteens adapt to online learning.

KEYWORDS
Parental mediation; Internet use; COVID-19; Preteens; China.

INTRODUCTION AND RELATED WORK
The COVID-19 pandemic has led to global school closures and forced children to learn online. Along with online classes, patterns of children's Internet use have changed. Their screen time increased significantly and outdoor activities decreased remarkably (Zhao et al., 2020). Surveys show that overuse of the Internet seems to be common during the COVID-19 pandemic with children and adolescents, being the most vulnerable to problematic Internet use (PIU) (Islam et al., 2020). PIU includes excessive or uncontrolled attention to Internet access, impulsiveness, and addictive behavior (Mamun & Griffiths, 2019). Therefore, parents are faced with increased challenges to help with children's online learning (Garbe et al., 2020) and mediate their Internet use (Dong et al., 2020; Zhao et al., 2020).

Parents take various measures to limit their children's use of digital devices. In general, parents manage their children's Internet access through positive mediation, restrictive mediation, and co-use strategies (Austin et al., 1990). Studies have shown that children's attitudes towards social networks and risk perception are strongly influenced by parents (Kristianto, 2017), so parental mediation can effectively reduce the online risks that children may face (Kim & Davis, 2017; Livingstone, 2012). Among them, positive mediation is significantly negatively correlated with problematic Internet use (PIU) (Chandrima et al., 2020). It involves persuasion, which changes children's attitude towards mobile phone self-control through the communication process, leading to changes in children's behavior (Fu et al., 2020). During the epidemic, experts also emphasized the importance of monitoring and regulating children's behavior, encouraging parents to actively participate in their children's online activities (Király et al., 2020).

Preteens aged 10-12 are in the transition period from childhood to adolescence, when the relationship between parents and preteens will gradually change from the unilateral authority relationship of parents to the give-and-take relationship of negotiation and compromise (Collins & Steinberg, 2007; Kim & Davis, 2017). Preteens often have mobile phones, smartwatches, and other social devices (CNNIC, 2020), and they have strong learning and exploration ability when using these network devices. Therefore, parents of preteens are more likely to take measures to mediate their children's Internet use. In this poster, we present an exploratory interview study to understand the challenges that parents faced in guiding and mediating preteens' Internet use during the COVID-19 pandemic. We interviewed eight Chinese parents whose children are between the ages of 10 to 12. We aim to answer the following research questions:

RQ1: What challenges did parents encounter in mediating their preteens' Internet use during the COVID-19 pandemic? RQ2: What strategies did parents employ to guide and mediate their children's Internet use?

METHODS
We recruited parents of children aged between 10 and 12 years old. Since this research was conducted during the COVID-19 pandemic, we were not able to conduct face-to-face interviews and all interviews were conducted online.
through video-conferencing. The eight interviewees were recruited through an online questionnaire and then through snowball sampling. We collected three types of information through a background survey: the demographic information of parents and preteens, the characteristics of preteens' Internet use, and parental mediation strategies.

The eight participants were parents of primary school students in grade four to grade six from four provinces in China (Anhui, Beijing, Chongqing, and Hunan). All participants developed strategies to adopt their children to online learning during the school closures and adopted a series of mediation strategies during the COVID-19 pandemic. The participants included seven mothers and one father, aged from 36 to 50, all of whom have college degrees and above.

Semi-structured interviews were used to collect data. The interviews lasted from 30 minutes to more than one hour and were recorded. Interview questions are shown in Table 1. We transcribed the interviews and conducted qualitative coding of the data, looking for patterns and themes related to our research questions.

| Patterns in Preteens' Internet Use | Challenges for Parents | Parental mediation |
|-----------------------------------|------------------------|--------------------|
| What does your child usually do online? | What are the changes in his internet usage during the epidemic? | How do you mediation your child’s Internet use? |
| How long does he usually spend online? | What challenges do you face in mediating your child's Internet use? | What adjustments did you make? |
| How often does he use the Internet? | What aspects of the network are you still worried about? | How effective these methods have been? |

Table 1. Interview Questions

**FINDINGS**

**Increased screen and Internet use during the COVID-19 pandemic.** As learning moves from offline to online, preteens had to rely on digital devices to study. To meet the learning needs of children, while taking into account their remote work, parents provided personal devices to their children often for their exclusive use. Online courses undoubtedly significantly increased the time preteens spend on the Internet. The preteens of the interviewed family took at least 2-4 hours of online lessons on a working day. In addition, preteens' online entertainment time had also increased. Due to the inability to go out and the reduction of family outdoor activities, parents believe that “children also need to relax through digital devices to cope with stress” (Participant F4), allowing children to use the Internet for entertainment. As Participant M5 said: Before the epidemic, the (child’s) use of the Internet was not very strong, but now it seems to be accustomed to it. More challenges for parental mediation. Longer screen time had a negative impact. More than half of the parents reported that their children were more dependent on the Internet. For example, participant M5 said: (the child) has been completely immersed in the smartphone, whether it is eating, sleeping, or going to the toilet, the smartphone cannot be separated from his hand. This has increased the pressure of parental mediation, a mother (Participant M6) even stated that her child's Internet addiction has reached an uncontrollable level. Three-quarters of the preteens from the interviewed families suffered from myopia or advanced degrees. The distractions of online learning are also an issue of concern to parents. Three parents found their children distracted during online classes and secretly switched screens to play games. However, parents still need to complete their work and have to struggle to find a balance between work and taking care of their children.

**Stricter mediation strategies and rules.** When asked about the changes during the COVID-19 pandemic, all the interviewed parents mentioned that they spent more time and energy mediating children’s internet use. For preteens who had little self-control over the Internet, parents strengthened restrictive mediation, restricting children's device access, duration of use, and types of activities. It was accompanied by a lot of preaching and even the use of force. One mother thought that although she did not want to be too strict with her children, she had to do so to achieve results (Participant M3). A parent cooperated with teachers to cancel children's online check-in tasks and cut off all access to smartphones (Participant M2). Two parents adopted the co-use strategy to accompany their children to learn online. When preteens took online classes, they sat on the side while working on their tasks, or studied with preteens to improve their learning efficiency and helped the children to adapt to the online learning model.

**CONCLUSION AND DISCUSSION**

Through interviews with parents, this study investigated the impact of the COVID-19 pandemic on preteens' Internet use and parental mediation in China. Due to the closures of schools and more demand for online learning, preteens showed increased Internet use and addictions. Parents have adopted stricter restrictive mediation strategies to reduce the impact of Internet addiction and implemented co-use strategies to help preteens adapt to online learning.

The relationship between children and preteens and the Internet is a long-term issue. Parental mediation cannot be done once and for all. How to transition from parental mediation to preteens' self-moderation is worthy of further consideration. Schools and related APP designers are also obliged to consider the needs of parental mediation and cooperate to ensure that children live in harmony with the Internet.
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