# Parenting With Chinese Characteristics in the Digital Age: **Chinese Parents' Perspectives and Parental Mediation of** Children's Media Use

# CECILIA YUXI ZHOU\* University of Massachusetts Amherst, USA

This study explores parental views of early adolescents' media use and parental mediation among urban middle-class families in mainland China through a sociocultural perspective. By interviewing 18 Chinese parents, this research found that parents' concerns with media, such as children's eyesight, Internet addiction, and learning outcomes, align with the public discourse, shaped by the parenting philosophy and sociocultural priorities in contemporary Chinese families. Chinese parents tend to develop mediation strategies related to these concerns and refer to restrictive mediation in the context of Chinese quan parenting, a combination of control/demand and warmth/sacrifice, which provides a more nuanced perspective on restrictive mediation in terms of its actual practices. The research adds to the theory of parental mediation and highlights the need to study culturally specific parental perspectives and mediation to understand children's media experiences. Further implications are discussed.

Keywords: China, children's media use, the Internet, parental mediation

Media, including both traditional media such as TV and new media technology such as smart devices, are significant parts of children's lives in China. China has the largest population of children viewing TV worldwide, and children's Internet usage is increasing (Cheung, 2016). The 2019 and 2020 National Report on Internet Usage among Youth conducted by China Internet Network Information Center (CNNIC) found that among young people, access to the Internet increased from 93.1% in 2019 to 94.9% in 2020, and ownership of digital devices also increased from 74% in 2019 to 82.9% in 2020 (China Internet Network Information Center, 2020, 2021). Chinese children are spending more time online while engaging in various activities, such as online learning (e.g., doing schoolwork or attending extracurricular classes using online platforms), listening to music, playing games, and communicating (China Internet Network Information Center, 2020, 2021).

The household is the primary location where young people use media. However, empirical research about how parents perceive and mediate children's media use has mostly been conducted in Western settings (Jordan & Prendella, 2019). The overrepresentation of research participants from certain geographic regions might influence what the research community considers typical and important in the socially

Cecillia Yuxi Zhou: yuxizhou@umass.edu

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significant area of the negotiation of media use within familial contexts. Moreover, within the body of research in China related to parental mediation, children, and media, most research uses survey methodology (Zhang, 2016; Zhang & Zhu, 2016) and does not fully explore the social and cultural context of the research participants.

Addressing this need for research, I conducted semi-structured interviews with urban middle-class Chinese parents whose children are preadolescents to understand how Chinese families see and integrate media, especially digital media, in children's lives. Understanding parental mediation as a socially contextualized practice highlights the diversity and malleability of the practice.

#### **Parental Mediation in Western Contexts**

Primarily rooted in the psychological media effects tradition, parental mediation describes how parents manage and regulate their children's media use (Lemish, 2007). Previous research identified three types of parental mediation: Co-using/viewing, which refers to parents remaining present when children engage with the medium without commenting on the content; restrictive mediation, which refers to how parents restrict children's media usage including time, content, or use viewing as a reward or punishment; and active mediation, which refers to parents actively discussing the media content with children while the latter engage with it (Lemish, 2007). The three forms of mediation originated in studies of parental mediation of television, yet similar mediation strategies are also found in parents' mediation of Internet and digital media, with some additional new strategies employed by the parents due to the different functions offered by new communication technologies (Livingstone & Helsper, 2008).

Parental mediation has been shown to influence the outcomes of children's media use. A meta-analysis of 57 prior studies on parental mediation found that restrictive and active mediation both show small but significant relationships with lower media use as well as lower levels of aggression, substance use, and sexual behavior among children (Collier et al., 2016). Restrictive mediation of Internet use is associated with lower online risks, such as being exposed to commercial, sexual, violent, and other inappropriate content, but at the costs of increasing family conflict (Beyens & Beullens, 2017) and reducing children's online opportunities related to learning, participating in society, creating and expressing oneself, connecting with other people, and constructing one's identity (Cabello-Hutt, Cabello, & Claro, 2018; Livingstone, Lemish et al., 2017). On the other hand, co-use and active parental mediation have both been positively associated with online opportunities experienced by children (Cabello-Hutt et al., 2018). The effectiveness of various parental mediation strategies may be different, depending on the children's background.

Critics of parental mediation theory point out that, first, it tends to assume parents are rational individuals who make decisions out of intentional awareness of the outcomes of media. Second, it tends to imply universality across different social contexts regarding parents' practice and the outcomes for children (Clark, 2011, 2013). Culture, family values, and traditions can shape parental mediation. Helsper, Kalmus, Hasebrink, Ságvári, and de Haan (2013) found that parents from most Central and Southern European countries, Ireland and the United Kingdom tend to prefer restrictive mediation whereas parents from Northern Europe lean more toward active mediation. Clark (2013) studied families

of different social classes in the United States and highlighted how parents of upper-income and lower-income families have different values, subsequently influencing how families integrate media use. Parent's perceptions of media can also shape parental mediation. Lauricella and Cingel (2020) studied U.S. parents of children aged eight to 18 years (N = 1,819) and found that parents see both positive and negative outcomes of children's media use, and their attitudes are strongly related to children's and adolescents' media use. Parents' perceptions of the negative influence of the Internet and their children's low self-control are significant predictors of restrictive mediation (Lee, 2013). Similarly, Jeffery (2021) conducted qualitative research with Australian parents and found that parents negotiate the tension between benefits and harm brought by mediating what they perceive as positive and negative exposure to digital media. In this sense, media are not a force that shape family lives but part of the cultural milieu into which children are socialized. Parental mediation and its influence on children's online opportunities and risks can vary depending on the social and cultural contexts in which parents and children are situated.

## **Contemporary Chinese Parenting**

While most research on parental mediation has been conducted in the Western context, there is a need to understand how Chinese parents perceive and mediate children's media use in the context of Chinese parenting and culture. In Asian societies such as China, Japan, South Korea, and Singapore, the child-rearing philosophy is heavily influenced by Confucian philosophies (Chao, 1994; Wu, 2017). Compared with the current Western child-rearing ideology, which can be more child-centered and permissive, the Chinese parent-child relationship can be more hierarchical, focusing on producing children who are self-controlled, hardworking, and obedient to parents, teachers, and elders following the cultural norm of filial piety (Chao, 1994; Lim, 2020; Wu, 2013). Other social forces also influence contemporary Chinese parenting in the context of China's transition from "a state to market economy, the implementation of the one-child policy in 1979, the rapid marketization, privatization, urbanization, modernization and globalization" (Kim, Brown & Fong, 2017, p. 3). Chinese parenting ideologies and practices exhibit considerable diversity, emphasizing the importance of precise descriptions of situated complexities without assuming that all Chinese families adhere exclusively to the teachings of Confucianism.

One aspect of Chinese parenting is the concept of *guan* (to train/to govern/to control/to discipline), which is characterized by a high level of parental control and governance as well as support, sacrifice, involvement, and care (Chao, 1994). While previous research in Western countries on parenting control and its outcomes tends to agree that children suffer psychologically when parents exert control over them through intrusion, pressure, and domination, there is less consensus among families in East Asia or with East Asian heritage (Pomerantz & Wang, 2009). With their cultural norms emphasizing filial piety and orientation toward collectivism, such parenting can be perceived by children in East Asian culture as an expression of care and warmth instead of an infringement of personal autonomy (Lim, 2020).

Concern over children's academic achievement is another aspect of Chinese parenting (Lim, 2020; Wu, 2013). Chinese parents are often willing to sacrifice their own economic and personal well-being to

provide direct and indirect support to ensure their children's academic success (Wu, 2013). Confucian philosophies believe that humans can and should be devoted to self-improvement, which shapes parenting norms that exert control to ensure children's academic success (Wang & Supple, 2010; Wu, 2013). The Imperial Examination system (587 AD–1905 AD) was established in feudal China based on this idea and selected talented individuals for civil services, motivating families to invest heavily in educating their children for social mobility, wealth, and power (Feng, 1999). Though this belief was discouraged during the Maoist government, which focused on promoting destratification, it was revived in the post-Mao government and further strengthened by the one-child policy (Fong, 2004). Therefore, the current emphasis on education in contemporary Chinese parenting is the result of a combination of factors, including Confucianism, socioeconomic democratization, the empowerment of women due to the communist revolution, and the meritocratic ideologies of the capitalist world (Fong, 2004).

# Chinese Parents' Perceptions of Media and Parental Mediation

As stated in the previous section, there is a great emphasis on academic achievement among parents with Chinese cultural backgrounds (Lim, 2020; Wu, 2013). Previous research in the United States and China does show that there is a negative relationship between screen time and children's academic performance, depending on the types of content, children's age, as well as socioeconomic status (Comstock & Scharrer, 2007; Jiang, 2014; Schmidt & Vandewater, 2008; Yan et al., 2017). Chinese parents have conflicting views about the effectiveness of media in improving learning due to Confucius' belief that learners should be diligent and exert effort in learning (M. F. He et al., 2010). Some Chinese parents value media for cultural and language learning (Hao, 2023). However, some Chinese parents hold negative views of learning online and consider traditional learning settings better in creating the learning atmosphere and outcomes (Dong, Cao & Li, 2020). Nonetheless, Wu and colleagues (2014) found that Chinese parents of preschoolers tend to use digital media to support their children's learning, compared with European parents with children aged zero to eight years who rarely use digital media to support education goals (Chaudron et al., 2015).

In addition to conflicting views on learning outcomes through media, the China Internet Network Information Center report (2021) reported that 82% of Chinese parents are concerned about harm to eyesight or, more specifically, myopia caused by children's time spent online; 70% are concerned about children being exposed to harmful messages; 66% are concerned about Internet addiction; and 60% are worried that children are spending less time engaging in offline activities. Chinese parents are also highly aware of the potential risks children might encounter while using social media, including identity theft, pornographic content, privacy violations, online fraud, and cyberbullying (Zhang, 2020).

Limited research on Chinese parents' mediation and outcomes found that Chinese parents tend to use both active and restrictive mediation and rarely use co-viewing or co-use, and the majority of parents expressed a high demand for help from social institutions in guiding children's social media use (Zhang, 2020). CNNIC's national reports suggested that discussion about Internet use at home is somewhat lacking in mainland China due to parents' lack of Internet knowledge and skills (China Internet Network Information Center, 2020, 2021). In a more recent meta-analysis of previous 52 empirical studies examining parental mediation's effect in reducing harm from media in several global contexts,

Chen and Shi (2019) found that the effectiveness of parental mediation is moderated by culture, with the effectiveness of active mediation being significantly higher in Eastern than in Western countries. This points to the need to study the differences in parental mediation and effectiveness in the Eastern cultural context in cross-cultural settings.

Based on the current literature, further qualitative research is needed to examine how Chinese parents' perception of media and technology is related to parental mediation strategy. The current research asks the following questions: What are middle-class Chinese parents' perspectives on their children's media use? What are their experiences of integrating media, especially digital devices, in family lives? How do they mediate children's media use and why?

#### Method

I conducted semi-structured, in-depth interviews with 18 Chinese urban middle-class parents with preadolescent children aged between 10 and 12 years. In-depth interviews provide opportunities for mutual discovery, understanding, reflection, and explanation and are thus suitable for this research as it considers parental mediation as a socially contextualized practice (Tracy, 2013). Preadolescence is a transitional period during which children still display parental dependence but also become more independent (Francis, Scholten, Granic, Lougheed, & Hollenstein, 2021). It is the peak stage when most Chinese children begin to own their first mobile phone and engage with media technology in diverse ways such as entertainment, communication, and learning (Zhang, 2016).

The research was carried out from November 2020 to February 2021, following the conclusion of the final lockdown in China in June 2020. I recruited my participants through snowball sampling strategy, starting from people that I know who have preadolescent children to their contact circles that fit the criteria. The research was approved by the Institutional Review Board office, and consent forms were sent to the potential participants.

The research consisted of two parts: A survey followed by an interview. The survey was adapted and translated from the 2019 Common Sense Media Census Report (Rideout & Robb, 2019) and was used to obtain demographic information and information about the child's media access and usage to prompt conversation during the interview. Among all participants, only one parent was male, whereas the others were all female. Most parents recruited were living in urban areas in Beijing, with one living in Tianjin, a city next to Beijing. The parents worked in areas such as medicine and pharmaceutical science, engineering, journalism, energy science, and information technology (IT), which can be broadly defined as middle class in China (Zhou & Qin, 2010). Thirteen interviewees identified the gender of their child as female and five as male.

Parents in all participating families reported that their children have access to media and smart devices at home, meaning they either own the devices or can use them through their parents (Table 1). The majority have access to TV and computers, 13 of 18 own tablets, eight own smartphones, and nine own smartwatches.

Table 1. Children's Access to and Ownership of Media Devices at Home.

	Access	Ow	Own			
	Yes	No	Yes	No		
TV	17	1	1	17		
Tablet	14	4	13	5		
Smartphone	16	2	8	10		
Game	2	16	1	17		
E-reader	6	12	2	16		
Computer	16	2	2	16		
Virtual reality (VR)	1	17	0	18		
Smartwatch	10	8	9	9		
Others	0	18	0	18		

Most of them (16 of 18) do not have access to a game console at home. The parents reported that their children use media and mobile devices to study, use social media, read, and play mobile games most frequently (Table 2). They also reported that their children listen to music, watch TV, watch videos online, and shop online sometimes.

Table 2. Children's Media Usage at Home.

		Ca.	<del>•••••</del>		<u> </u>	<i></i>	•					
	Every day or At Least		At Least Once			•			<u> </u>			
	Almost E	veryday	Once	a Week	a M	lonth	S	eldom	Ne	ever	Don't	Know
Use smart devices or	13	72%	2	11%	0	0%	3	17%	0	0%	0	0%
computers to study												
Use social media	10	56%	4	22%	0	0%	4	22%	0	0%	0	0%
Read for enjoyment	9	50%	4	22%	1	6%	3	17%	1	6%	0	0%
Play mobile games	7	39%	7	39%	0	0%	3	17%	1	6%	0	0%
Listen to music	5	28%	9	50%	0	0%	3	17%	1	0%	0	0%
Watch TV	4	22%	8	44%	1	6%	4	22%	1	6%	0	0%
Watch videos online	3	17%	8	44%	2	11%	5	28%	0	0%	0	0%
Shop or browse for things	1	6%	5	28%	0	0%	11	61%	1	6%	0	0%
he/she wants to buy online												
Play computer games	0	0%	4	22%	0	0%	7	39%	7	39%	0	0%
Play video games on game	0	0%	0	0%	0	0%	5	28%	13	72%	1	6%
console												
Use a VR headset	0	0%	0	0%	0	0%	2	11%	15	83%	1	6%

After the participants filled out the survey, I conducted interviews with the participants in Mandarin remotely using WeChat call. The interviews were audio recorded and began with conversations of parents' child-rearing philosophy, followed by parents' perspectives on and mediation strategies for children's media use. During the interviews, I was aware that parents might feel pressured to say certain things due to their perception of "good parenting." I made sure that parents' perspectives were respected by emphasizing that

I wanted to learn from them without inserting my opinions. The interview was transcribed and analyzed in Chinese using NVivo. Key themes and quotes were translated back into English. All interviewers' names were replaced by pseudonyms, using their initials to protect their identities. Inductive thematic analysis using constant comparison method inspired by grounded theory was conducted to identify descriptive codes to parents' perspectives, which allow the data to speak for themselves (Glaser & Strauss, 2017). Following this step, descriptive codes were combined into higher-level codes that highlight the connection between parents' perspectives and the sociocultural context.

During the data analysis, I was reflexive of my identity as a researcher who grew up in an urban middle-class Chinese family with life experiences in both Chinese and North American cultural contexts. On the one hand, my background provided me with an in-depth understanding of the social and cultural context these parents live in and helped build trust and rapport during the research process. On the other hand, I recognized that it might influence my interpretation of the data. To reduce my own bias in data analysis and keep the research as transparent as possible, I presented the themes and my interpretations to the parents I interviewed for their suggestions.

#### **Findings and Discussion**

Based on my conversations with these Chinese parents, the analysis revealed three themes: Reflection of public discourse on concerns over Internet addiction and myopia; the pursuit/disruption of learning; and parental mediation with *guan* parenting.

### Reflection of Public Discourse on Concerns Over Internet Addiction and Myopia

Addiction to digital devices was the most pressing concern among all parents interviewed in the current study. This concern was shared across differing levels of parents' perceived screen time, including both the entertainment and educational media use, of their children. Most parents (13 of 18) said their children's media use was within 30 minutes to 1 hour per day during the week. One parent estimated 1 to 2 hours and another parent estimated more than two hours per day. The other three parents said they could not tell but they felt their children's screen time was long. This perceived screen time, which is, even by some parents' admission, unlikely to be entirely accurate, is significantly less than the reported average entertainment screen time children have in the United States, which was 4:44 hours per day in 2019 and 5:33 hours per day in 2021 (Rideout & Robb, 2019; Rideout, Peebles, Mann, & Robb, 2022). Despite this, all Chinese parents in this study were concerned about addiction and its negative consequences. ZHR said, "She uses my phone to play games, and it's addictive. I read many articles before that say if you want to ruin a child, just give her a phone." YD talked about his daughter using an iPad:

I'm worried about her becoming obsessed with it. It will continue to go downhill, more and more obsessed, more and more addicted . . . This might be because I saw some children, or young adults, like around 20 years old, spend all day long doing nothing but playing games. I'm worried that she will become someone like them.

The concern over Internet addiction is heavily circulated in the Chinese public discourse and is viewed as a national issue of public health (Lee, 2020; Rao, 2019). In the newly amended Minor Protection

Law, parents, schools, and social institutions are all required to take preventive measures to stop young people's Internet addiction (State Administration for Market Regulation, 2020). In July 2023, the government proposed a regulation, not yet implemented, known as the "minor mode," aiming to restrict screen time for noneducational and utility apps to 1 hour per day for children aged eight to 16 years (Zhuang & Zhao, 2023). Parents are also recommended to increase their Internet knowledge and skills to guide their children's Internet use and effectively prevent Internet addiction (State Administration for Market Regulation, 2020). Furthermore, attempts at the medicalization of Internet addiction initiated by professionals can be seen from the establishment of Internet-addiction treatment centers and proposals of diagnostic criteria in China (Rao, 2019).

The second biggest concern parents (16 of 18) had was children's eyesight. Parents mostly blamed time spent with digital devices for the worsening of children's eyesight. This, most likely, was especially the case because the timing of this research was after the lifting of the COVID-19 pandemic national lockdown in China. Many homework and extracurricular classes were conducted online during the lockdown, which exacerbated children's eyesight issues. HLY said,

In September when school started again (in person), her eyesight worsened so much that she couldn't see the blackboard clearly. I took her to the hospital to have a checkup. There were many children (having the same problem) there. It's because she had many (online) classes, and she also had to submit many assignments online. Everything is dependent on the Internet, that's why her eyesight worsened.

JE, who works in the IT industry, says, "First of all, they (referring to children) are still young, if they stare at digital devices for a long time, it is not good for their eyes."

Similar to their concern about addiction, parents' concern about myopia also corresponds with the prevalence and concern of myopia among children, especially in urban settings in mainland China (Dong et al., 2017; M. He et al., 2015; Pan, Dirani, Cheng, Wong, & Saw, 2015). In 2018, President Xi Jinping declared the prevalence of myopia among increasingly younger children as a big problem concerning the future of the country and the necessity of interventional action ("Most 12- to 14- Year-Olds in China Are Short-Sighted," 2020). Myopia rates in East Asian populations such as the Chinese, Japanese, and South Korean people are much higher than in the European populations. Chinese adolescents in urban areas have reported rates as high as 67%, and this continues to grow (Dong et al., 2017; M. He et al., 2015; Pan et al., 2015). Lifestyle factors such as time spent outdoors and the use of digital devices could be important factors in such rates (Foreman et al., 2021; M. He et al., 2015). Consistent with Livingstone and colleagues' research (2015), parents' perspectives of children's media use are grounded in the specific context they live in and influenced by the public discourse on child development.

## The Pursuit/Disruption of Learning

Chinese parenting priority is heavily geared toward striving for academic success and learning due to the influence of Confucianism, the one-child policy, and the integration into the capitalist world system (Fong, 2004; Lim, 2020; Wang & Supple, 2010; Wu, 2013). Chinese parents are likely to use media to support educational goals for their children (Wu et al., 2014). This is reflected in the current study in two

ways. First, in the pre-interview survey, 13 of 18 parents reported that their children use media to study every day or almost every day. Second, parents believe that the benefit of media would be maximized if children use media and digital devices for academic achievement, learning hobbies, and broadening their horizons. For example, HLY said, "Her dad wants to teach her programming, or have more access to content related to, like Mathematics Olympiad . . . It might be helpful for her study." ZHR said, "Sometimes I think what she learned in school might be a bit difficult for her, so she needs to find additional information online. I let her use it when she needs it." ZW also said, "There are videos on natural science or some other aspects of science. She is quite interested in these videos. I think it's a convenient way of learning."

A few parents also mentioned that the media are helpful for their children's hobbies. YY said her child likes watching videos on cooking: "After she watches it, she cooks for us sometimes. She also tells me sometimes how I should do my make-up. I think it's quite fun. She probably learned all of it online." HN, whose son likes Lego, thinks the media help him become better at his hobby: "The Lego videos, although most of them are product reviews or a form of advertisement, help him to accomplish more difficult Lego sets, so that's one benefit of the media."

Media can also present a broader world to children and help them to learn about society. On this benefit, LL thinks that media can help her child "get access to some new ideas, and more diverse opinions on social issues"; one example she mentioned is videos about children in rural China: "She can see that those (poor) children can endure hardship and still work hard under severe circumstances." LL thinks this can inspire her child to study harder, returning to the parenting priority of ensuring children's academic success.

In the current study, most parents had initially bought digital devices to facilitate their children's learning. However, they expressed concern about media's disruption of their children's learning and academic performance as they explore the entertainment aspect of media. YD said,

There are too many temptations on the iPad, like video streaming or short video apps. She's always watching TikTok, and she can't focus. She can't focus on finishing one thing from the beginning to the end and overcoming difficulties in the process, this is a real problem.

HLY also said, "When she turns on the iPad, she can see those games. She's always thinking that she will play the games behind my back after she finishes her homework, and so she can't focus on her work."

During the interviews, however, some parents indicated that they no longer see academic achievement as the sole definition of an ideal child, which might seem contradictory to the current theme. This only means that parents have an awareness of the harm caused by overemphasizing academic excellence and overlooking physical and mental well-being, which is indicated by one parent's reflection: "I would rather have a child who is mentally and physically healthy than a child who's *Youxiu* (excellent academically) but has a twisted mind." Moreover, for some parents, whether their children can have a successful and happy life depends on forming good habits of self-discipline, which is perceived as the condition that leads to good results, no matter what the result is. "I really emphasize the importance of habit, I said to her, if you did well in the process, how bad can the result be." Another parent also said, "I

do take his grades seriously, but I consider his academic learning in the domain of habit," meaning that what is important is study habits rather than their outcomes.

The present concern echoes previous research findings on the media's impact on learning and academic achievement. A review of older studies indicated a negative relationship between time spent on television and academic performance in the United States, especially for children of higher socioeconomic status (Comstock & Scharrer, 2007; Schmidt & Vandewater, 2008). Similarly, studies in China showed leisure screen time use (e.g., watching television, browsing social media websites, playing games) is negatively associated with academic performance among adolescents (Jiang, 2014; Yan et al., 2017).

Parents' perspectives on how media might enhance or disrupt learning are likely to be not only shaped by parents' cultural understanding of learning due to the Confucian tradition (Dong, Cao & Li, 2020; M. F. He et al., 2010) but also be understood in terms of the increasing social inequality in China amid rapid social changes (Chiang, 2022; Fong, 2004). Confucianism expects learners to make significant effort, self-regulate, be diligent, and persevere (M. F. He et al., 2010). In addition, the intense education competition and the fear of downward mobility if one fails academically can create serious concerns for parents (Chiang, 2022; Li, 2023). The distraction that digital devices bring makes it harder for a child to become self-disciplined, which is not only an essential quality for the ideal personhood in Confucius culture (Lim, 2020) but also seen as harmful for a middle-class child to succeed in the Chinese test-intensive education system and elite competition both domestically and globally and, subsequently, harmful for the future status of the child and the family (Chiang, 2022; Fong, 2004).

## Parental Mediation With Guan Parenting

Of the three types of mediation strategies, co-use, restrictive, and active mediation (Lemish, 2007), in the current study, restrictive mediation of access and time is the most common among parents (17 of 18), followed by active mediation (10 of 18) of media content. Co-use/co-view is only mentioned by two parents.

Parents' mediation strategies are closely related to their main concerns about Internet addiction, myopia, and influence on learning. Parents developed specific rules to promote eye health when using screens, such as restricting time or choosing a bigger screen. "We consider using TV as the first choice because the TV screen is big, so it puts less burden on the eyes; if there's no TV, then iPad, the last choice is smartphone," said ZW. She also reported that she sometimes sits next to her child while her child is using a smartphone and monitors the distance between the phone and her eyes: "I just don't want her to hold the phone too close. I'm there to control the distance." YY also said, "I'd rather she watches TV than iPad." PHY set rules for how much time her child should spend while using digital devices:

She can watch TV on weekends. But after each episode of animation, she should stand next to the window and look outside to rest her eyes, then she can continue to watch TV. The time limit is around 30 minutes for each viewing session. I told her that she should rest her eyes every 30 minutes even when watching movies.

Parents referred to *guan* parenting when discussing restrictive mediation, in which they used words like *guan/guankong/kongzhi* that share similar meanings. Since raising self-controlled and self-disciplined children is a parental priority in Chinese societies (Lan, Scrimin, & Moscardino, 2019; Lim, 2020), addiction to digital devices is in direct conflict with this priority. Many parents perceived their children as having low self-control at this age and consequently being more vulnerable than adults to addiction, thus the parents had to *guan* their children's media use. WW said, "I have to *guan* him. He has no self-control. At first, I usually just remind him of the time, but now I forbid him from playing games on smartphones." Parents expressed that they are likely not to *guan* their children once their children have more self-control and when they get older: "When I cannot guan her, and when she has more self-control, then she can do it of her free will," said ZHR.

Though these Chinese parents did mention concerns with inappropriate media content, such as violence and pornographic content, and employ active mediation to manage the content their children are exposed to, they typically conveyed less anxiety about the media effect of content compared with screen time, even when actively prompted during interviews. Moreover, some parents suggested that restricting media access and time is a better way to minimize the potential negative influence of media content. "First of all, you should try to avoid exposing him to these things as much as possible," said JE. ZHR also said,

I've been thinking about issues with media and the Internet since I had my child. It has both benefits and harm. I want to try my best to avoid her being exposed to it while she is still young, while I can still guan her.

Excessive media consumption can have significant negative effects on children's development, such as delayed social-emotional development (Gou & Perceval, 2023); emotional, behavioral, and peer problems (Dredge & Chen, 2020; Guo et al., 2021); family conflicts (Chi, Hong, & Chen, 2020; Dredge & Chen, 2020); and decrease in academic performance (Jiang, 2014). Restrictive mediation has proven beneficial, showing greater effectiveness than active mediation in reducing screen time in both Eastern and Western contexts (Chen & Shi, 2019; Lee, 2013). It is also positively associated with children's cognitive and social development, as well as adaptive functioning (Gou & Perceval, 2023; Hu, Johnson, & Wu, 2018). While potentially addressing Chinese parents' concerns about myopia and academic achievement, its effectiveness in mitigating Internet addiction has generated mixed results in different East Asian regions (Chang et al., 2011; Lee, 2013; Lee, Lee, & Lee, & Lee, 2016).

Studies in Western countries suggest that restrictive mediation can create family conflict and defiant behavior among children and adolescents (Beyens & Beullens, 2017; White, Rasmussen, & King, 2015), whereas co-use of the Internet can improve family climate (Festl & Gniewosz, 2019). However, in the Chinese family context, where the parent-child relationship is more hierarchical and *guan* parenting can be perceived as an expression of care and warmth instead of solely control (Chao, 1994; Lim, 2020; Wu, 2013), restrictive mediation may not mean bad parent-child relationship. *Guan* parenting blends both parental control/governance and support/accommodation/sacrifice, which may generate different parental mediation behaviors and consequences. For example, one of the most restrictive parents in the current study, ZHR, who created an almost media-less household with no TV and thus sacrificed her own leisure TV viewing, passionately discussed with me the support she gave for her daughter's various pursuits such as

drawing and reading. This blend of parental control and support is not captured in the current classification of parental mediation. The interviews with Chinese parents to examine their parental mediation strategies as socially and culturally contextualized practices have highlighted restrictive mediation under Chinese *guan* parenting, providing a more nuanced and indigenous understanding of parental mediation theory.

#### Conclusion

This study revealed Chinese parents' concerns about their children's Internet addiction, myopia, and learning in terms of their media use, shaped by public discourse and cultural and social priorities emphasizing self-discipline and academic achievement. Parents' concerns were shown to influence their relatively restrictive mediation strategies. This restriction of media use is understood under Chinese *guan* parenting, a type of parenting that combines both demand/control and sacrifice/support, shedding new light on the implications of restrictive mediation in addressing negative media effects and shaping parent-child relationships in the Chinese context.

Similar to previous research, this study highlighted that parents' perspectives align with a broader public discourse (Hasebrink, Livingstone, Haddon, & Ólafsson, 2009; Lemish, 2007; Livingstone & Helsper, 2008), focusing on the danger of Internet addiction and the prevalence of myopia in China (Foreman et al., 2021; He et al., 2015; Lee, 2020; State Administration for Market Regulation, 2020). These are complicated phenomena, involving many factors such as intensive schooling, academic competition, an increasingly sedentary lifestyle, and challenges to mental well-being, which need further exploration and discussion. Blaming media use as the primary cause of Internet addiction and myopia can be viewed as a form of media panic (Drotner, 1992), in which concerns about broader issues in Chinese society, such as education inequality, are transferred to children's use of digital devices. Thus, future research should continue to explore these topics to get a more accurate and in-depth understanding instead of foregrounding media and technology.

Moreover, this study highlighted the role of social and cultural background in shaping parents' perceptions and mediation strategies. Parents from urban middle-class Chinese families want media as part of "concerted cultivation," a style of parenting that encourages children to be involved in organized activities that maximize children's development of their talents (Lareau, 2011). In addition, influenced by Confucian philosophy, Chinese parents emphasize academic success, self-improvement, and self-control (Lim, 2020; Pomerantz & Wang, 2009; Wu, 2013). These social and cultural factors manifest in the current study as parents prefer their children to use media as a productive tool for education and self-development instead of unstructured playtime, which is similar to Clark's (2013) findings with U.S. middle-class parents. However, unlike Clark's (2013) findings where U.S. middle-class families adopt an ethic of expressive empowerment in their family communication, Chinese parents do not particularly emphasize their children's self-expression and autonomy due to the more hierarchical parent-child relationship and *guan* parenting strategy in Chinese culture, which is rather restrictive and top-down.

Young people's engagement with media can be highly productive for learning, increasing critical awareness of media and technical expertise, engaging with friendships, self-exploration, and identity construction (Clark, 2013; Ito, 2019). Previous research suggests that restrictive mediation can reduce

children's online risks but at the cost of children's online opportunities and family climate (Beyens & Beullens, 2017; Cabello-Hutt et al., 2018; Livingstone, Ólafsson et al., 2017). However, restrictive mediation may be considered not only as controlling children's media use but also as encompassing parental support for alternative activities, which is not captured in the current conceptualization of parental mediation. Moreover, it may not be perceived by Chinese children as an infringement of their autonomy due to the cultural norms of filial piety and orientation toward collectivism (Lim, 2020).

Amid rapid social change, increased levels of inequality, and intense education competition (Chiang, 2022), restrictive mediation may be inevitable or even essential to safeguard children's potential in China. Therefore, a more contextual understanding of how parental mediation is practiced and perceived and how it influences family climate in different sociocultural contexts is needed to provide more effective framings of parental mediation and study its effectiveness in maximizing online opportunities and minimizing online risks for children. Researchers must strive for precision in describing what opportunities and risks mean for children they study instead of assuming opportunity is the same for everyone.

### **Limitations and Implications**

The current research has several limitations. First, children's perspectives are missing from the current research since only parents were interviewed. Previous research suggested that parents and children have different perspectives in terms of children's motivation to use media (Varga & Topić, 2022). Future studies should incorporate children's perspectives to highlight young people's agency and fully understand the outcomes of parental mediation in families. Moreover, since the participants in the current study are mainly from a first-tier cosmopolitan city (Beijing), where educational resources are more concentrated than in other cities and rural areas, the findings are limited to the particular context of this study. Future studies should include families from more diverse backgrounds, such as families from second- or third-tier cities and rural areas, working-class or migrant families, and ethnic minorities. Lastly, a few parents mentioned without prompting that government regulations of media content are a reason to feel less worried about their children's exposure to harmful media content. This was not pursued in the current research due to the sensitive nature of this topic and the validity of findings given that only a few parents raised the issue. However, government regulations and censorship are important factors to consider when studying Chinese children's media use in future studies.

Despite the limitations, this study provides several implications. First, social institutions such as schools, nongovernmental organizations, and government agencies should support parents in increasing their digital skills and critical awareness so that they can become role models for their children in terms of media use. Restrictive mediation has its own merits since it is straightforward, easy to implement, and does not require parents to have extensive knowledge; yet its effectiveness can reduce when children grow older (Shin, 2015). Thus, strategies for parents to engage in active mediation should also be provided to increase parents' confidence in having conversations with children. Moreover, since families' incorporation of media and technology is deeply situated in their social and cultural contexts, it is necessary to change the discourse of how Chinese parents perceive the relationships among children, media, and society to truly transform their mediation strategies. Thus, merely providing parents with parental mediation tips and technical skills is not enough. More critical discussion among the public on this issue is needed. Lastly, social institutions

should provide children with media literacy education that addresses the concerns parents mentioned in the current research. Only by situating media education in the local context can it be fully embraced by children and parents, which in turn can help them adjust to the opportunities and challenges media bring.

#### References

- Beyens, I., & Beullens, K. (2017). Parent-child conflict about children's tablet use: The role of parental mediation. New Media & Society, 19(12), 2075–2093. doi:10.1177/1461444816655099
- Cabello-Hutt, T., Cabello, P., & Claro, M. (2018). Online opportunities and risks for children and adolescents: The role of digital skills, age, gender and parental mediation in Brazil. *New Media & Society*, 20(7), 2411–2431. doi:10.1177/1461444817724168
- Chang, C.-S., Liu, E. Z.-F., Lee, C.-Y., Chen, N.-S., Hu, D.-C., & Lin, C.-H. (2011). Developing and validating a Media Literacy Self-Evaluation Scale (MLSS) for elementary school students. *Turkish Online Journal of Educational Technology-TOJET*, 10(2), 63–71.
- Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development*, 65(4), 1111–1119. doi:10.2307/1131308
- Chaudron, S., Plowman, L., Beutel, M. E., Černikova, M., Navarette, V. D., Dreier, M., Fletcher-Watson, B.,
  . . . Wölfling, K. (2015). *Young children (0-8) and digital technology—EU report*. Publications
  Office of the European Union. Retrieved from
  https://www.research.ed.ac.uk/en/publications/young-children-0-8-and-digital-technology-eu-report
- Chen, L., & Shi, J. (2019). Reducing harm from media: A meta-analysis of parental mediation. *Journalism & Mass Communication Quarterly*, 96(1), 173–193. doi:10.1177/1077699018754908
- Cheung, C.-K. (2016). Media literacy education in China. Singapore: Springer.
- Chi, X., Hong, X., & Chen, X. (2020). Profiles and sociodemographic correlates of Internet addiction in early adolescents in southern China. *Addictive Behaviors, 106*, 106385. doi:10.1016/j.addbeh.2020.106385
- Chiang, Y.-L. (2022). Study gods: How the new Chinese elite prepare for global competition. Princeton, NJ: Princeton University Press.
- Clark, L. S. (2011). Parental mediation theory for the digital age. *Communication Theory (1050-3293),* 21(4), 323–343. doi:10.1111/j.1468-2885.2011.01391.x

- Clark, L. S. (2013). *The parent app: Understanding families in the digital age*. New York: NY: Oxford University Press.
- China Internet Network Information Center. (2020). 2019 national report on Internet usage among minors. Beijing, China: China Internet Network Information Center.
- China Internet Network Information Center. (2021). 2020 national report on Internet usage among youth.

  Beijing, China: China Internet Network Information Center.
- Collier, K. M., Coyne, S. M., Rasmussen, E. E., Hawkins, A. J., Padilla-Walker, L. M., Erickson, S. E., & Memmott-Elison, M. K. (2016). Does parental mediation of media influence child outcomes? A meta-analysis on media time, aggression, substance use, and sexual behavior. *Developmental Psychology*, 52(5), 798–812. doi:10.1037/dev0000108
- Comstock, G., & Scharrer, E. (2007). Media and the American child. Burlington, MA: Elsevier.
- Dong, C., Cao, S., & Li, H. (2020). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, 118, 105440. https://doi.org/10.1016/j.childyouth.2020.105440
- Dong, Y. H., Liu, H. B., Wang, Z. H., Xu, R. B., Yang, Z. P., & Ma, J. (2017). The epidemic status and secular trends of myopia prevalence for Chinese children and adolescents aged 7-18 years from 2005 to 2014. Zhonghua yu fang yi xue za zhi [Chinese Journal of Preventive Medicine], 51(4), 285–289. doi:10.3760/cma.j.issn.0253-9624.2017.04.002
- Dredge, R., & Chen, S. (2020). Chinese online gamers versus nongamers: A difference in social media use and associated well-being and relational outcomes? *Psychology in the Schools, 57*(9), 1457–1474. doi:10.1002/pits.22418
- Drotner, K. (1992). Modernity and media panics. In M. Skovmand & K. Schrøder (Eds.), *Media cultures:* Reappraising transnational media (1st ed., pp. 42–62). London, UK: Routledge.
- Feng, Y. (1999). National college entrance examinations: The dynamics of political centralism in China's elite education. *Journal of Education*, 181(1), 39–57. doi:10.1177/002205749918100104
- Festl, R., & Gniewosz, G. (2019). Role of mothers' and fathers' Internet parenting for family climate. *Journal of Social and Personal Relationships, 36*(6), 1764–1784. doi:10.1177/0265407518771753
- Fong, V. L. (2004). *Only hope: Coming of age under China's one-child policy*. Stanford, CA: Stanford University Press.

- Foreman, J., Salim, A. T., Praveen, A., Fonseka, D., Ting, D. S. W., Guang He, M., . . . Dirani, M. (2021). Association between digital smart device use and myopia: A systematic review and meta-analysis. *The Lancet Digital Health*, 3(12), e806–e818. doi:10.1016/S2589-7500(21)00135-7
- Francis, K., Scholten, H., Granic, I., Lougheed, J., & Hollenstein, T. (2021). Insights about screen-use conflict from discussions between mothers and pre-adolescents: A thematic analysis.

  International Journal of Environmental Research and Public Health, 18(4686), 4686.

  doi:10.3390/ijerph18094686
- Glaser, B. G., & Strauss, A. L. (2017). *The discovery of grounded theory: Strategies for qualitative* research (1st ed.). New York, NY: Routledge.
- Gou, H., & Perceval, G. (2023). Does digital media use increase risk of social-emotional delay for Chinese preschoolers? *Journal of Children and Media, 17*(1), 1–16. doi:10.1080/17482798.2022.2118141
- Guo, L., Shi, G., Du, X., Wang, W., Guo, Y., & Lu, C. (2021). Associations of emotional and behavioral problems with Internet use among Chinese young adults: The role of academic performance. *Journal of Affective Disorders*, 287, 214–221. doi:10.1016/j.jad.2021.03.050
- Hao, L. (2023). Chopsticks and clothes: Chinese heritage parents' perspectives on young children's technology use as a tool for language and cultural learning. *Literacy*, 57(1), 28–39. doi:10.1111/lit.12312
- Hasebrink, U., Livingstone, S., Haddon, L., & Ólafsson, K. (2009, June). Comparing children's online opportunities and risks across Europe: Cross-national comparisons for EU Kids Online, 2nd edition [Monograph]. EU Kids Online. Retrieved from https://eprints.lse.ac.uk/24368/1/D3.2\_Report-Cross\_national\_comparisons-2nd-edition.pdf
- He, M. F., Lee, J. C.-K., Wang, J., Canh, L. V., Chew, P., So, K., ... Sung, M.-C. (2010). Learners and learning in Sinic societies. In Y. Zhao, J. Lei, G. Li, M. He, K. Okano, N. Megahed, ... H. Ramanathan (Eds.), *Handbook of Asian Education* (1st ed.). New York, NY: Routledge.
- He, M., Xiang, F., Zeng, Y., Mai, J., Chen, Q., Zhang, J., . . . Morgan, I. G. (2015). Effect of time spent outdoors at school on the development of myopia among children in China: A randomized clinical trial. *JAMA*, *314*(11), 1142–1148. doi:10.1001/jama.2015.10803
- Helsper, E. J., Kalmus, V., Hasebrink, U., Ságvári, B., & de Haan, J. (2013). *Country classification:*Opportunities, risks, harm and parental mediation [Monograph]. EU Kids Online, The London School of Economics and Political Science. Retrieved from https://eprints.lse.ac.uk/52023/1/Helsper\_Country\_classification\_opportunities\_2013.pdf

- Hu, B., Johnson, G., & Wu, H. (2018). Screen time relationship of Chinese parents and their children. Children and Youth Services Review, 94, 659–669. https://doi.org/10.1016/j.childyouth.2018.09.008
- Ito, A. (2019). Digital China: A fourth industrial revolution with Chinese characteristics? *Asia-Pacific Review*, 26(2), 50–75. doi:10.1080/13439006.2019.1691836
- Jeffery, C. P. (2021). Parenting in the digital age: Between socio-biological and socio-technological development. *New Media & Society*, 23(5), 1045–1062. doi:10.1177/1461444820908606
- Jiang, Q. (2014). Internet addiction among young people in China: Internet connectedness, online gaming, and academic performance decrement. *Internet Research*, 24(1), 2–20. doi:10.1108/IntR-01-2013-0004
- Jordan, A., & Prendella, K. (2019). The invisible children of media research. *Journal of Children and Media,* 13(2), 235–240. doi:10.1080/17482798.2019.1591662
- Kim, S. W., Brown, K. E., & Fong, V. L. (2017). Chinese individualisms: Childrearing aspirations for the next generation of middle-class Chinese citizens. *Ethos*, *45*(3), 342–366.
- Lan, X., Scrimin, S., & Moscardino, U. (2019). Perceived parental guan and school adjustment among Chinese early adolescents: The moderating role of interdependent self-construal. *Journal of Adolescence*, 71(1), 18–27. doi:10.1016/j.adolescence.2018.12.003
- Lareau, A. (2011). Unequal childhoods: Class, race, and family Life. Berkeley: University of California Press.
- Lauricella, A. R., & Cingel, D. P. (2020). Parental influence on youth media use. *Journal of Child and Family Studies*, *29*(7), 1927–1937. doi:10.1007/s10826-020-01724-2
- Lee, A. Y. L. (2020). The development of media literacy in Chinese societies. In D. Frau-Meigs, S. Kotilainen, M. Pathak-Shelat, M. Hoechsmann, & S. Poyntz (Eds.), *The handbook of media education research* (1st ed., pp. 309–325). Hoboken, NJ: John Wiley & Sons, Ltd. doi:10.1002/9781119166900.ch29
- Lee, S.-J. (2013). Parental restrictive mediation of children's Internet use: Effective for what and for whom? *New Media & Society, 15*(4), 466–481. doi:10.1177/1461444812452412
- Lee, S.-J., Lee, C., & Lee, C. (2016). Smartphone addiction and application usage in Korean adolescents: Effects of mediation strategies. *Social Behavior and Personality: An International Journal, 44*(9), 1525–1534. doi:10.2224/sbp.2016.44.9.1525
- Lemish, D. (2007). Children and television: A global perspective (1st ed.). Malden, MA: Wiley-Blackwell.

- Li, S. (2023). Education investment "rat race" in China: How income inequality shapes family investment in shadow education. *Asia Pacific Education Review*. Advance online publication. doi:10.1007/s12564-023-09852-2
- Lim, S. S. (2020). *Transcendent parenting: Raising children in the digital age*. New York, NY: Oxford University Press.
- Livingstone, S., & Helsper, E. J. (2008). Parental mediation of children's Internet use. *Journal of Broadcasting & Electronic Media*, 52(4), 581–599. doi:10.1080/08838150802437396
- Livingstone, S., Lemish, D., Lim, S. S., Bulger, M., Cabello, P., Claro, M., ... Wei, B. (2017). Global perspectives on children's digital opportunities: An emerging research and policy agenda. *Pediatrics*, *140*(Suppl. 2), S137–S141. doi:10.1542/peds.2016-1758S
- Livingstone, S., Mascheroni, G., Dreier, M., Chaudron, S., & Lage, K. (2015). How parents of young children manage digital devices at home: The role of income, education and parental style. London: LSE. Retrieved from LSE website: http://eprints.lse.ac.uk/63378/
- Livingstone, S., Ólafsson, K., Helsper, E. J., Lupiáñez-Villanueva, F., Veltri, G. A., & Folkvord, F. (2017).

  Maximizing opportunities and minimizing risks for children online: The role of digital skills in emerging strategies of parental mediation. *Journal of Communication*, 67(1), 82–105.

  doi:10.1111/jcom.12277
- Most 12- to 14- year-olds in China are short-sighted. (2020, January 18). *The Economist*. Retrieved from https://www.economist.com/china/2020/01/18/most-12-to-14-year-olds-in-china-are-short-sighted
- Pan, C.-W., Dirani, M., Cheng, C.-Y., Wong, T.-Y., & Saw, S.-M. (2015). The age-specific prevalence of myopia in Asia: A meta-analysis. *Optometry and Vision Science: Official Publication of the American Academy of Optometry*, *92*(3), 258–266. doi:10.1097/OPX.000000000000016
- Pomerantz, E. M., & Wang, Q. (2009). The role of parental control in children's development in Western and East Asian countries. *Current Directions in Psychological Science*, *18*(5), 285–289.
- Rao, Y. (2019). From Confucianism to psychology: Rebooting Internet addicts in China. *History of Psychology*, 22(4), 328–350. doi:10.1037/hop0000111
- Rideout, V., Peebles, A., Mann, S., & Robb, M. (2022). *The Common Sense Census: Media use by tweens and teens, 2021*. San Francisco, CA: Common Sense Media.
- Rideout, V., & Robb, M. (2019). *The Common Sense Census: Media use by tweens and teens, 2019*. San Francisco, CA: Common Sense Media.

- Schmidt, M. E., & Vandewater, E. A. (2008). Media and attention, cognition, and school achievement. *The Future of Children*, *18*(1), 63–85.
- Shin, W. (2015). Parental socialization of children's Internet use: A qualitative approach. *New Media & Society*, *17*(5), 649–665. doi:10.1177/1461444813516833
- State Administration for Market Regulation. (2020). *The People's Republic of China minor protection law*. Retrieved from https://www.gov.cn/xinwen/2020-10/18/content 5552113.htm
- Tracy, S. J. (2013). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. Chichester, UK: Wiley-Blackwell.
- Varga, V., & Topić, M. K. (2022). The children's motivation for digital technology use: Parents and children's perspective. *Primenjena Psihologija*, 15(3), Article 3. doi:10.19090/pp.v15i3.2378
- Wang, Y. C., & Supple, A. J. (2010). Parenting behaviors and adolescent psychosocial adjustment in China: An indigenous perspective. *Marriage & Family Review, 46*(6–7), 480–497. doi:10.1080/01494929.2010.528724
- White, S. R., Rasmussen, E. E., & King, A. J. (2015). Restrictive mediation and unintended effects: Serial multiple mediation analysis explaining the role of reactance in US adolescents. *Journal of Children and Media*, *9*(4), 510–527. doi:10.1080/17482798.2015.1088873
- Wu, C. S. T., Fowler, C., Lam, W. Y. Y., Wong, H. T., Wong, C. H. M., & Yuen Loke, A. (2014). Parenting approaches and digital technology use of preschool age children in a Chinese community. *Italian Journal of Pediatrics*, 40(1), 44. doi:10.1186/1824-7288-40-44
- Wu, M.-Y. (2013). The concept of guan in the Chinese parent-child relationship. In C.-C. Yi (Ed.), *The psychological well-being of East Asian youth* (pp. 29–49). Dordrecht, Netherlands: Springer.
- Wu, S. C. (2017, November). Chinese teachers' and parents' perspectives on learning through play. Paper presented at the WERA Focal Meeting & HKERA International Conference 2017 (WERA-HKERA 2017): Innovation, Reform and Education Change in a Contemporary World, The Education University of Hong Kong, Hong Kong, China.
- Yan, H., Zhang, R., Oniffrey, T. M., Chen, G., Wang, Y., Wu, Y., . . . Moore, J. B. (2017). Associations among screen time and unhealthy behaviors, academic performance, and well-being in Chinese adolescents. *International Journal of Environmental Research and Public Health, 14*(6), Article 6. doi:10.3390/ijerph14060596
- Zhang, H. (2016, November 3). Digital literacy and growth of children in urban China in the new media age. *Media & Information Literacy UNESCO*. Retrieved from https://milunesco.unaoc.org/milarticles/digital-literacy-and-growth-of-children-in-urban-china-in-the-new-media-age/

- Zhang, H., & Zhu, C. (2016). A study of digital media literacy of the 5th and 6th grade primary students in Beijing. *Asia-Pacific Education Researcher*, 25(4), 579–592.
- Zhang, Y. (2020). The study of parental monitoring on children's usage of social media. *Jiaoyu Wenhua Luntan*, 12(4), 93–100.
- Zhou, X., & Qin, Z. (2010). Globalization, social transformation, and the construction of China's middle class. In C. Li (Ed.), *China's emerging middle class: Beyond economic transformation* (pp. 84–103). Washington, DC: Brookings Institution Press. Retrieved from http://www.jstor.org/stable/10.7864/j.ctt6wpd8c.8
- Zhuang, Y., & Zhao, S. (2023, August 4). China wants children to spend less time on their smartphones. *The New York Times*. Retrieved from https://www.nytimes.com/2023/08/04/business/china-smartphone-minor-mode.html