DIGITAL PARENTING: WHY THE CHINESE EXPERIENCE MATTERS

When conducting fieldwork for this book, we travelled to Hangzhou, China, in 2019, the year before the world would be overturned by the COVID-19 pandemic. We were blissfully unaware that an epochal event was around the corner and immersed ourselves in the city's famed tech-friendly environment, juxtaposed against its legendary historical opulence. Often referred to as the Silicon Valley of China (Zhang, 2018), the capital city of Zhejiang province is home to several leading technology companies including online retail behemoth Alibaba, ride hailing and delivery pioneer *Didi Chuxing*, as well as internet, video game, and music streaming giant NetEase. These relatively youthful innovations are woven into the city's centuries-old landscape with iconic landmarks such as West Lake, *Leifeng* Pagoda, and the Tomb of General *Yue Fei*.

Amidst this blend of ancient and modern, the entire city of Hangzhou has emerged as a veritable testbed for technological innovations that residents and visitors frequently encounter as they go about their everyday lives. Facial recognition is used for routine payments in stores big and small and malls boast of smart maps tracking human congestion to guide the movement of patrons. These temples to consumerism are also peppered with new-fangled technological diversions that attract teens and young families alike. There are photo booths featuring giant touchscreens for printing instant selfies with snazzy filters that parents and kids rambunctiously jostle over. Another draw is vending machines selling chocolate – three-dimensional (3D)-printed in a Pokémon character of your choice – right before your eyes. Besides such entertaining wares, technologically enabled conveniences such as public smartphone chargers and shared bicycles and cars can be easily accessed on street corners, activated through mobile phone apps. It was in this techno-centric,

techno-optimistic environment that we first commenced our research on Chinese families' use of technology in parenting.

DIGITAL PARENTING WITH CHINESE CHARACTERISTICS

The critical role technology plays in parenting in Chinese households is best illuminated (literally) by a popular study lamp known as the Dali deng (powerful lamp). Developed by ByteDance, the parent company running popular social media platforms such as TikTok and its Chinese counterpart Douyin, this lamp was introduced as a reliable and capable study companion for children (Lim, 2021). Beyond its basic functionality as a lamp, the Dali deng is equipped with two integrated cameras - one directly facing the child and another positioned above the seated child. These cameras enable parents to keep a vigilant eye on their children remotely, whether they are at the office, the mall, or even in a different country altogether (Chen, 2021a). In instances where parents are occupied and unable to provide direct supervision, they have the option to enlist someone else to monitor or tutor their children through the lamp's phone-sized screen. Notably, this intelligent lamp is capable of providing educational guidance itself, leveraging artificial intelligence to assist with maths problems, recite Chinese poems, and pronounce English words. The range of services is expanding, with additional features and academic subjects in the development pipeline (Lim, 2021). Children also have the ability to upload videos of their homework for parental review, as well as record video responses to interactive quizzes that can be shared with other Dali customers (Chen, 2021a).

This voice-activated device combines the features of lamps, smartphones, home assistants, and social media. Higher-priced models include additional features like identifying poor posture. If the device detects the child hunching over, it triggers a voice alert, takes photos of the child, and retains these images for up to three days, allowing parents to review them at their convenience. Despite the substantial price of USD120, ByteDance successfully sold 10,000 units of the lamp in its initial month of release. Additionally, the Chinese tech giant Tencent was in the process of developing its own version. This telling example illustrates key aspects of Chinese children's lives and the parenting practices surrounding them. In China, academic achievement of children is a household priority, and parents invest considerable resources to bolster these academic pursuits. Any technological innovation that can boost educational accomplishments is welcomed and actively incorporated into their parenting practices. Indeed, with technology encroaching into virtually every facet

of society, Chinese families have incorporated digital devices and services in their everyday routines as our subsequent chapters will reveal. Significantly, as households domesticate technology, integrating it into their daily lives to meet their demands and desires, they embrace the advantages and conveniences it brings but grapple with managing the associated costs and drawbacks. For Chinese parents, technology is unequivocally both a blessing and a curse.

Indeed, what had principally motivated our study are rising concerns that technology has intensified Chinese parents' responsibility for their children's educational endeavours. Exemplifying this growing unease is an incident involving a father who was kicked out of a school chat group after he had complained about his Primary 3 child's homework (Yan, 2023). On the evening of 17 March 2023, his child's form teacher had informed the parent-teacher group on popular Chinese social media app WeChat that all students should watch an educational programme and submit a report of around 300 Chinese characters thereafter. Whereas several parents sought clarifications from the teacher on the assignment, the father instead lamented in the group: 'Parents have been assigned homework again', only to be removed from the group within 20 minutes.

Irate, he took screenshots of the chat group and posted them on his WeChat account that was visible to other parents and teachers (Yan, 2023). This triggered an angry phone call from the form teacher who demanded to know why he had shared the screenshots so openly. The father then recounted the entire incident in a video taken in front of the school gate, which he posted online for public viewing. It quickly went viral and led to an investigation into the incident by the Qinyang Education Bureau of Henan province. His video practically ignited a firestorm of debate across China, with many parents empathising with him and venting fervidly about the practice of making parents directly accountable to teachers for their children's homework.

This increasingly avid use of digital platforms for education-related communication among parents of all socioeconomic brackets is in fact a notable trend in Chinese society. Schools across elementary and high school have adopted home-school conferencing and class management apps such as Ding-Talk, *Yiqixue*, and *Banji youhua dashi* for teachers to communicate with parents so as to better involve them in overseeing their children's studies and homework. Home-school conferencing refers to communication between educators and parents concerning their children and is considered a fundamental aspect of parental involvement in education today. It encompasses both individualised communication between teachers and parents about their children specifically, as well as broader communication addressing general school or class information. Whereas teachers previously relied on face-to-face meetings

and phone calls to engage parents on their children's academic progress or disciplinary concerns, the increased prevalence of online communication has significantly technologised home-school conferencing (Stright & Yeo, 2014).

Education technology or edtech platforms now have home-school conferencing features built in for enhanced parent-teacher communication. These edtech platforms offer various functionalities such as lesson schedules, tools for managing homework, notifications, online courses, and shared drives for uploading learning materials and assignments. Extensively utilised by both primary and secondary schoolteachers as well as parents in urban China, the frequent use of these apps enables effective, immediate communication between parents and teachers. This helps teachers to provide timely feedback on students' academic performance and to share daily instructions with parents to guide their children in their studies. Parents are required to respond to these requests while staying informed about their children's educational progress and achievements. A good example is the Home-School Communication System, known as *Xiaoxuntong*, extensively employed in schools throughout China's Guangdong province (Cheng, 2015). Teachers utilise mass messaging in the system to publicly praise students with commendable academic achievements while criticising those who perform inadequately: 'Xiao Mui improved a lot in the Maths exam; while Xiao Tian and Xiao Ming received a "fail" grade' (Cheng 2015, p. 122).

In addition to these specialised home-school conferencing applications, another notable trend involves parent chat groups on WeChat, China's fore-most social media app (see Chapter 2 for information on WeChat's market share, user base, features, and applications). For instance, educational institutions in Chongqing mandated the establishment of official WeChat accounts to facilitate teacher–parent and teacher–student communication at all levels, from kindergarten to middle school (Sun, 2016). These chats extend beyond mere announcements and reminders, serving as crucial platforms for teachers to oversee and assess students' homework submissions. Teachers have been known to phone students to remind them of midnight submission deadlines, while sending simultaneous notifications to parents to enlist their support for timely completion of assignments (Sun, 2016). The incessant barrage of homework reminders to both parents and children has reportedly caused parents so much stress that some resort to muting these notifications.

These WeChat groups that can include teachers, one or both parents, and even grandparents are an entire ecosystem unto themselves with their own norms, linguistic codes, and applications. Schools leverage them for administrative tasks such as circulating official notices and collecting fees for uniforms and meals. Parents use them to seek anything from last-minute

requests for information, to the sharing of photographs taken during school activities, to assistance for challenging homework assignments. Regardless of the varied purposes to which these chats are put, parents invest considerable energy in responding to messages and requests that flood phones with intensity (Peng, 2023). As an American father who had enrolled his twins in Chengdu Experimental Primary School wryly observed:

On the first day of class, I counted forty-nine beeps from the WeChat group. There were seventy messages on the second day. Day Three clocked in at two hundred and thirty-seven – an average of one beep every six minutes for twenty-four hours. That was also the day that I figured out how to mute the alerts on WeChat. (Hessler, 2023)

Nevertheless, however tiresome the chats could be, parents can ill afford to tune out. Yet another American parent who had enrolled her son in a Chinese elementary school in Shanghai lamented, 'A parent's reply to a teacher's WeChat message was expected to be immediate, if not instantaneous, and keeping up with this daily flow of information was part of my job' (Chu, 2017, p. 35).

As these media reports and first-person accounts suggest, parent-parent communication in these WeChat groups has also heightened competition among parents, fostering an environment driven by self-indulgence and self-aggrandisement. Parents openly flaunt their children's achievements on these platforms and ingratiate themselves with teachers to earn preferential treatment (Lim & Wang, 2024), becoming effectively 'flattering groups' where parents strategically curry favour with teachers (Yuan, 2020). For example, instead of sending a private message to a teacher to express appreciation for her tutelage, a parent may send a message to the entire group of parents and the teacher in order to publicly praise her for helping the child win a competition. In doing so, the parent forges positive social capital with the teacher, while glorifying the child's triumph, although possibly earning the ire and resentment of other parents (Lim & Wang, 2024).

These chat groups have also been used for disseminating motivational messages, promoting products, and even gifting digital money to teachers through virtual red envelopes (Zhu, 2023). Consequently, the Chinese authorities sought to establish guidelines to prohibit commercial activities and ban the public disclosure of students' academic achievements (Cheng, 2015) albeit with uneven conformance and enforcement as media reports strongly suggest. Although efforts by Chinese parents to sharpen their children's competitive edge through gifts for teachers are not new, the publicness of such chat

groups has distinctly raised the stakes for parent-teacher communication and made the performative dimension of parenting significantly more pronounced (Lim & Wang, 2024).

As the preceding discussion shows, the digital parenting burden of Chinese parents is substantial. The empirical evidence we have gathered for this book comprising 80 interviews with 60 Chinese parents in Beijing and Hangzhou before and during the COVID-19 pandemic captures how they appropriate technology as they raise their children and steer them towards academic achievement. In our subsequent chapters, we will chart how these digitally enabled parenting practices have intensified even as parents bear the weight of social aspirations in their quest for academic excellence. We also capture how Chinese parents navigated the rocky terrains of children's online learning during the pandemic lockdowns, feeling both supported but also overwhelmed from being ceaselessly connected via always-on, always available digital platforms.

FAMILY LIFE AND PARENTING PRIORITIES IN CHINA

To fully appreciate why digital parenting responsibilities so consume the energies of Chinese parents, it is important to foreground our analysis with an exposition into the family life and priorities of urban Chinese households with schoolgoing children. Although China is a sprawling country with a population of over 1.4 billion spread across 22 provinces, generalising about the nature of childhood and family life is difficult. Nevertheless, for urban families, the country's integration into the global market economy has led to a 'growing commercialisation and standardisation of Chinese childhood' (Naftali, 2016, p. 3).

It has been observed that parentocracy – avid parental investment in child rearing – has become the prevailing trend in urban China (Meng, 2020), significantly transforming the role of parents and home-school interaction (Lyu & Zhong, 2023). The country's cultural lingo has also caught up with this intensifying shift, with terms like 'mompetition' or *pinma* (competitive mothering) (Xiong, 2018; Xu, 2017), 'wolf father', *jiwa jiazhang* (pushy parents)', and 'scientific parenting' reflecting Chinese parents' proactive involvement in children's education. So lofty is this parenting mission that it has been described as the 'moral project of Chinese childrearing' (Xu, 2017, p. 2), inextricably linked with 'the long history in China of parents finding existential meaning in the success of their children' (Kipnis, 1997, p. 215). The societal expectations pinned on the parenting endeavour have thus translated into

heightened parental involvement in caregiving and significant investments in their education and overall development (Gu, 2021; Jankowiak & Moore, 2017; Short et al., 2001).

Research in other parts of the world suggests similar trends, and the growing belief in the pivotal role of parents in shaping children's identity and future has been termed parental determinism (Faircloth, 2014). The shift towards parental determinism and the exaggerated perception of childhood vulnerability have been criticised for fostering too heavy a reliance on parents to shape children's development and discounts their resilience, instead encouraging and legitimising excessive parental involvement (Furedi, 2008). Consequently, parenting has become overly burdensome, and couples are thus discouraged from having children. Over time, the concept of parental determinism appears to have become more entrenched, and the societal belief in the fundamental influence of parents on a child's development is increasingly accepted without questioning (Furedi, 2002).

In China, this emergence of parental determinism and parentocracy has been attributed to China's introduction of the one-child policy in the late 1970s that morphed into a universal two-child policy in 2015 and, subsequently, a three-child policy in June 2021 (Zhai et al., 2014). During the one-child policy era, most families were restricted to having only one child, with limited exceptions granted for two or three children based on specific criteria such as ethnicity, health, socioeconomic status, and geographical factors including rural/urban distinctions (Peng, 1997). The one-child policy saw a rise in 4-2-1 families, comprising four older people (paternal and maternal grandparents), two parents, and only one child (Jankowiak & Moore, 2017; Long et al., 2021). These children are colloquially referred to as the *Xiao Huangdi* (Little Emperors) in public and scholarly discourse due to the inordinate attention, care, and investments bestowed upon them by their families (Wang et al., 2009).

Indeed, with only one or a few children, Chinese families have become especially focussed on ensuring the quality of their children's upbringing. Chinese grandparents too, scarred by the deprivation they experienced during the Cultural Revolution, are particularly determined to confer every advantage on their grandchildren (Naftali, 2016). Hence, advertisements for products and services targeted at infants and children exploit this very sentiment by exhorting parents and other caregivers with the message: 'Don't let your kids lose from the beginning' (Yu, 2014, p. 123). Whereas under Maoist ideology, child rearing was heavily influenced by the state, the prevailing notion today is that individual families can determine parenting outcomes through consumption. Indeed, for Chinese society, it is 'important for parents to feel

that they have tried everything possible to ensure a fair chance for their only child' (Kuan, 2015, p. 183). Children have become a market segment in their own right and corporations conduct market research, even engaging experts to develop child-centric products while marketing campaigns equate consumption with good parenting (Yu, 2014). With this concerted shift towards parental determinism powered by consumerism, coupled with the quest for social mobility, contemporary Chinese families have never been more deeply invested in their children's academic endeavours.

The country's rigidly standardised pathways of academic progression have unyielding standards and impose considerable stress on parents and children alike, along the child's entire educational journey. At the preschool stage, five- and six-year-olds compete for the best urban primary schools by taking entrance tests and fielding interviews (Chu, 2017). The next major milestone to clear is the National High School Entrance Exam or *zhongkao*. Although 16–18 million students sit the *zhongkao*, fewer than 8 million will be accepted into academic high schools that qualify them to take the *gaokao* exam for entry into university (Chu, 2017), of which elite institutions such as Peking, Tsinghua, and Fudan Universities are especially coveted (Ryan, 2019). Chinese parents' eagerness to involve themselves in their children's academic endeavours is therefore understandable considering such fierce competition in the *gaokao* race.

Indeed, the stakes involved in the *gaokao* are overwhelmingly high. An intense multiple-choice exam taken over three days, it is heavily reliant on memorisation and is a 'terrible source of anxiety' (Rocca, 2015, p. 68), with most students spending 13 or 14 hours a day preparing for it during their final year in school. As Ash (2016, p. 31) recounted of a schoolgirl's 'coming of age' experience:

When Xiaoxiao started middle school, everything changed. Her dolls were taken away, TV was restricted and the fruit storeroom she played in became off bounds. The shift was so sudden that Xiaoxiao remembers thinking she was being punished for an unknown crime. Overnight, the pampering she was used to transformed into the true legacy of the only-child generation: crippling study pressure. Early childhood is a protected time, but the fairy tale crumbles as soon as you are old enough to hit the books twelve hours a day.

For a sense of the collective anxieties surrounding the *gaokao*, consider how various consumer brands have launched campaigns to boost students' morale during the critical period (Jarrett, 2023). Food delivery company *Meituan* offered practical support through its 'errand-running' service, delivering

snacks, beverages, and daily necessities within an hour to meet exam takers' needs, even reminding them to pack their identification cards, stationery, and medication for the exam. To foster in exam takers a sense of shared struggle thereby relieving feelings of isolation, *Douyin* introduced 'Solutions to the *gaokao*', featuring pep talks from speakers who have successfully passed the exam. Notable figures, such as Peng Kaiping from Tsinghua University, addressed concerns about life after passing the exam, while others, like Wang Huyi, shared their experiences of taking the exam multiple times without being accepted into their dream schools (Jarrett, 2023). Several other brands, including dairy company *Yili*, consumer electronics giant *Meizu*, and even fast-food chain KFC, have promoted special offers or released advertisements specifically designed to uplift exam takers' spirits. Indeed, the *gaokao* is viewed as an onerous undertaking that necessitates enhanced additional support, with some families hiring '*gaokao* nannies' for personal tutoring and to handle cooking and cleaning tasks in the lead-up to the test.

Over the years, national efforts have been made to mitigate the stress of the gaokao. In 1988, 2000, and 2010, the Chinese government launched multiple rounds of campaigns known as 'Reducing the Study Load' (jianfu) with the aim of alleviating excessive academic pressure on young students (Yochim, 2018). Consequently, there was a substantial reduction in school hours, an increased need for parental involvement and technological support in completing homework, as well as growing emphasis on students' overall 'quality' (suzhi) in school admissions and evaluations. This broader evaluation of quality encompassed both academic achievements and extracurricular engagements (Yochim, 2018). These educational policy changes have further shifted the burden of responsibility for children's development from public schools to individual families and parents. Household expenditure has risen sharply for children's out-of-school education via after-school classes or private tutoring, with parents spending much more on out-of-school classes that are academic related than interest based (Chi & Qian, 2016).

In July 2021, China announced a rather extreme 'double reduction' (shuangjian) policy (Xue & Li, 2023), ostensibly aimed at easing students' academic load and lowering parents' expenditure on extra tuition (Chen, 2021b). This government intervention virtually disrupted the USD300 billion tuition industry overnight with government officials taking steps to restrict online tutoring. It comprised rules such as forbidding online education providers from teaching core curriculum subjects, banning classes on weekends and public holidays, and imposing limits on the fees charged by edtech companies (Lim & Wang, 2021a). Despite initial claims of success, illegal tutoring has actually thrived, with around 3,000 firms found to be secretly operating

in the second quarter of 2022 because parents are still prepared to pay for such illegal services (Ye, 2022). Although the ministry of education has exhorted schools to discourage families from engaging such private tutoring services, media reports indicate that parents continue to do so because they remain insecure and anxious about their children's academic performance (Ye, 2022). Rather than alleviate the academic pressure on students and address the growing disparity between affluent and underprivileged families therefore, evidence suggests that the tuition ban has triggered a surge in online tuition which has in turn exacerbated inequalities (Zhao et al., 2024). Well-off families can afford better devices, superior online education programmes, and provide better guidance as parents are more digitally literate, thus widening digital inequalities with less affluent households.

It is against this chequered landscape of societal expectations, parental aspirations, and children's exertions that digital parenting in China is undertaken, imbricated by the oppressive demands on academic achievement. Technological tools are marshalled to ensure that parents and children do not lose sight of any educational tasks, and children's device use that undermines academic performance is also closely monitored.

WHY THE CHINESE EXPERIENCE MATTERS

Of course, parenting and digital parenting are by no means unique to China, and many insights from these urban Chinese families' experiences can be distilled for parents elsewhere. In many ways, middle-class parents from different countries share a multitude of desires, aspirations, and anxieties that bear distinctive local characteristics but also bind them to their global counterparts (Heiman et al., 2012). From Hangzhou to Helsinki, Bangalore to Brooklyn, parents principally wish to see their children grow up to lead happy, prosperous lives, and view themselves as key architects who pave their children's paths towards personal fulfilment and professional success.

The degree to which parenting can shape these outcomes has long been a subject of societal and academic interest. In the face of modernisation and societal transformation, families have evolved and so too has parenting. Investigations into the evolution of parenting offer a nuanced sociological backdrop, laying the foundation for a multifaceted understanding of parenting. Within this expansive landscape, various Western-originated notions like intensive parenting, concerted cultivation, paranoid parenting, parenting out of control and transcendent parenting intersect with and inform the discourse around parenting, finding resonance in the Chinese experience. Over time, the trope of

parental determinism has elevated the role of parents, deeming their influence paramount in shaping the trajectory of their children's lives. The concept of intensive parenting, first proposed by Sharon Hays in her landmark work The Cultural Contradictions of Motherhood (1996), continues to hold relevance today. This approach is characterised by a child-centric focus, expert guidance, emotional investment, labour-intensive efforts, and significant financial commitment. Hays argues that intensive parenting has become a cultural script, a normative standard that imposes considerable pressure on parents to adhere to lofty and unyielding expectations. Annette Lareau (2003) enriched the discussion with a sharpened focus on socioeconomic differences in parenting by introducing the concept of 'concerted cultivation' in Unequal Childhoods: Race, Class, and Family Life. She highlighted how middle-class parents deftly navigate educational systems, endowing their children with significant advantage. They also have the wherewithal to nurture their children to be more confident and assertive of their rights and to adopt speech and behaviour that helps them strategically embed themselves within social networks and institutions. In contrast, poor and working-class parents simply lack the resources or know-how to grant their children similar privileges, be they material or symbolic.

Beyond parents' own behaviours that accord with the shift towards parental determinism, scholars have also questioned broader societal shifts that encourage growing endorsement of parental over-involvement in children's lives. Frank Furedi's (2008) critique in Paranoid Parenting: Why Ignoring the Experts May Be Best for Your Child takes issue with the turn towards parental determinism, labelling it an unhealthy trend that fosters excessive parental interference. He also noted the emergence of a 'culture of paranoid parenting' where every aspect of a child's life is perceived as being fraught with risk, prompting parents to seek expert guidance extensively, and to monitor their children to an undesirable degree. Indeed, such concerns about 'hyperparenting' have prompted empirical assessments, with scholars like Ungar (2007, 2009) observing overprotective parenting trends in urban middle-class families. This phenomenon, despite the world being demonstrably safer in many ways, is attributed to parents' rising aspirations for children's success and perceptions of an increasingly dangerous world in which to raise them. Ungar argues that overprotective parenting may manifest in children internalising their parents' worries or even seek risk outside parental oversight. The notion of risk consciousness, articulated by Lee (2014), adds another layer to the discourse, framing children as vulnerable to various adverse possibilities. This perspective has gained momentum since the 1970s, driven by risk entrepreneurs who promote specific risks to sell their expertise, stoking parental anxieties about issues ranging from nutrition to online harms.

Indeed, risk perceptions in parenting have risen against the backdrop of growing technologisation and digitalisation of family life across the world, significantly influencing childcare practices. Numerous scholars have observed widespread use of digital technology by parents in their daily caregiving routines, including tasks such as checking on their children's wellbeing, maintaining online communication with their children, and managing various aspects of their children's education including seeking childcare information (Clark, 2013; Dworkin et al., 2018; Lim, 2020; Livingstone & Blum-Ross, 2020; Nelson, 2010). Margaret Nelson's (2010) *Parenting Out of Control* identified hyper-vigilance in American parents who actively use technological aids such as baby monitors, smartwatch trackers, and mobile phones to keep tabs on their children's wellbeing. Indeed, as the prevalence of dual-income families grows, leading to an increased reliance on external caregivers or institutions for childcare, a variety of technological advancements have emerged to give parents that sense of assurance (Lim, 2021).

In Lynn Schofield Clark's (2013) The Parent App: Understanding Families in the Digital Age, she noted how smartphones and their numerous applications play an increasingly crucial role in assisting parents in managing the daily activities of the family. However, these apparent aids pose more demands on parents, requiring them to continuously update and synchronise schedules among all family members. Through her emphasis on social class, she found a diverse range of family experiences in digital media usage, arguing that media use reinforces distinct parenting styles prevalent in the United States. Middle- and upper-class parenting tends to endorse an individualised, career-focussed 'expressive empowerment ethic', marked by restrictions on perceived 'time-wasting' media. These families encourage the use of digital tools for creative expression and scheduling, often delinked from social connections and some parents may even engage in 'helicopter parenting', by digitally surveilling their children in their rooms. On the other hand, lower-income parents exhibit less discrimination with media use, prioritising safety and keeping their children indoors. They uphold an 'ethic of respectful connectedness', expecting children to express appreciation for family bonds through their media choices, favouring family-oriented entertainment over individualised educational or expressive activities. She points out that parenting in the digital age entails a significant amount of emotional labour, where parents must delicately navigate the balance between involvement and interference.

As mobile communication flourished with technological advancements including the advent of the smartphone, digital parenting and parent–child connectivity has taken on additional dimensions as Sun Sun Lim (2020) argued

in Transcendent Parenting: Raising Children in the Digital Age. Through her study of digitally connected families in Singapore, she introduced the concept of transcendent parenting, not as a form of parenting in and of itself but as a parenting practice of the mobile age (Lim, 2020) that is enabled and exacerbated by mobile communication's growing ubiquity and taken for grantedness (Ling, 2012). She notes that transcendent parenting has three facets: Initially, parents aim to overcome the physical distance separating them from their children by leveraging the connectivity of mobile communication, ensuring their 24/7 availability for support and protection. Additionally, beyond overseeing their children, parents endeavour to socialise them, providing guidance for both online and offline interactions with peers and teachers. Observing the digital traces of their children's online interactions, albeit negotiating the child's desire for privacy, allows parents to gain insights into potential issues, offer advice, instil values, and nurture life skills. Face-to-face interactions may also spill over into the digital realm, as some parents use online platforms to resolve offline conflicts or advocate for their children in cases of perceived injustice. Consequently, parents must navigate seamlessly between various online and offline environments that their children transit through. Furthermore, beyond the direct connection facilitated by mobile communication, an increasing number of channels enable parents to interact with caregivers, teachers, and other parents. Platforms such as home-school conferencing apps, parent-parent chat groups, online gradebooks and homework helper apps necessitate and empower parents to actively participate in their children's educational endeavours. In this context, parents are intimately and extensively linked to their children's needs, regardless of whether their children are by their side or out of sight. Transcendent parenting is characterised by its defiance of temporal constraints, requiring parents to navigate parenting duties continuously, transcending the traditional boundaries of time and space. The utilisation of digital technology and media extends beyond the distinction between online and offline environments in childcare, resulting in parents being consistently accessible to their children and continuously involved in caregiving responsibilities (Lim, 2020).

In *Parenting for a Digital Future: How Hopes and Fears About Technology Shape Children's Lives*, Sonia Livingstone and Alicia Blum-Ross (2020) explore diverse families' interactions with digital technologies, delving into parents' perspectives and strategies in navigating their children's experiences with these technologies. The authors adopt the theoretical framework of the 'risk society', illustrating a shift in parenting practices within modern post-industrial society, characterised by the mobilisation of individual resources to prepare children for an uncertain future. Livingstone and Blum-Ross explore this mobilisation in the context of

an increasingly digitalised world with evolving digital jobs. Despite the subtitle suggesting hopes and fears about technology shaping children's lives, the authors posit that there is a shift towards hopes over fears in contemporary discourse. This shift aligns with structural changes in the postindustrial nation, particularly in education, where students are placed at the forefront of technological change through mainstream coding classes. In the face of pervasive and seemingly inevitable change, discussions about digital technology in families have moved beyond the simplistic 'screen time' debate. The authors argue that family approaches to digital technology now involve ongoing negotiations on how to maximise its benefits in various realms of life. While different social classes may not have distinct expectations for their children regarding digital technology, social, cultural, and economic capital contribute to significant disparities in how low income and high income families derive benefits from it. The authors highlight differences in the physical technological landscapes of working-class and middle-to-upper-class homes, encompassing not only the abundance of devices but also gaps in parental knowledge, experiences, and connections. These variances extend from the ability to regularly update devices to being able to afford the latest coding classes. In conclusion, the authors offer policy recommendations emphasising parents' active participation in designing, practising, and mediating digital environments.

Ultimately, this rich trove of research on parenting underscores the important position children occupy in their parents' lives. Although 'economically worthless', children are emotionally priceless and the considerable emotional investment parents pour into children becomes inseparable from parents' social and moral identities (Furedi, 2008; Zelizer, 1994). In the Chinese context, children's academic accomplishments are inextricably linked to parents' sense of self, making the emotional and resource commitments of parenting even more ponderous. The digitalisation of parenting in China has been met by families with equivocation, at once rich with bounteous gains yet deleterious with considerable costs. With China's remarkable technological prowess earning it the position of a global artificial intelligence (AI) superpower (Lee, 2018), its rapid digitalisation journey holds lessons for other societies going through similar transformations. The ascendance of Chinese technology companies including Alibaba, ByteDance, Tencent, and Shein has facilitated technologisation in all realms of life at an astounding speed and scale (Chen, 2022). There has been positive momentum in applying cutting-edge digital technology across various B2C sectors, particularly in education. Consequently, there is intense competition for educational technological innovations in the

country, with both parents and schools readily embracing or investing in applications that could enhance their children's learning experiences. As a result, China serves as a hub for some of the most advanced experiments in the implementation of educational technology (Feijóo et al., 2021). By scrutinising the Chinese experience, we can grasp and anticipate the implications of technologisation for family life, digital parenting, and child development and take a proactive stance towards managing them.