

## What Internet Digitalization Brings to Early Childhood in Family Education in China?

Liya Yu<sup>1</sup>, Hanina Halimatusaadia Hamsan<sup>2</sup>, Sarjit Singh  
Darshan Singh<sup>2</sup>, Longyue Cheng<sup>3</sup>

<sup>1</sup>Institute for Social Science Studies, Universiti Putra Malaysia, 43400 UPM Serdang Selangor Malaysia, <sup>2</sup>Department of Social and Development Science, Faculty of Human Ecology, Universiti Putra Malaysia, 43400 UPM Serdang Selangor Malaysia, <sup>3</sup>Faculty of Forestry and Environment, Universiti Putra Malaysia, 43400 UPM Serdang Selangor Malaysia

Corresponding Author Email: GS66267@student.upm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v14-i5/21722>

DOI:10.6007/IJARBSS/v14-i5/21722

**Published Date:** 25 May 2024

### Abstract

The Internet digital time has been arriving as a result of advances in social science and technology, impacting all facets of Chinese people's life, including early childhood education and family education. The early childhood family education field has experienced significant growth in both scope and quality due to the widespread influence of the Internet. Additionally, family-school interaction has played a greater role in the early childhood education process. Real issues have, however, been progressively brought about by young children's lack of judgement and self-control in the digital age, their vulnerability to physical health issues, and their parents' lack of genuine communication with them. By examining the advantages and drawbacks of the digital Internet in the early childhood education, we propose strategies to create a healthy digital living environment, reasonably plan the time for children to use the Internet, and organically connect online and offline communication, so as to improve the effectiveness of early childhood family education and better promote the healthy growth of children.

**Keywords:** Internet digitalization, Childhood Education, Family Education, Distance Learning

### Introduction

#### Continuous changes in early childhood family education brought about by internet digitalization

"We know that the infantile period is one of the most important periods of life BEAVER (2009), what habits, speech, skills, thoughts, attitudes, emotions, all have to lay a foundation in this period Rahman Prasetyo (2020), if the foundation is not solidly laid, then a sound personality will not be easily formed." ("Family Factors and the Educational Success of Children," 2014). A child's family is their first school, their parents' words and deeds have an implicit impact on the character, habits, will, and other areas of their education, mostly through family

education. A happy and healthy home environment is essential for early children's development VanderVen (2008), and family education is a crucial component of that development (Birch & Davison, 2001). These days, information technology has advanced significantly. Its widespread use has ushered in a new era of digital civilization for humanity as well as a completely new way of thinking about early childhood education in families. People's relationships have grown closer as a result of the widespread use of digital technology and the Internet (Dabbous et al., 2023). Additionally, the interactive communication and involvement of the digital era has increased the diversity of early childhood education's work (Carolan et al., 2021). In order to keep up with the times, it is very important to think about how to achieve more efficient early childhood family education through the application of digital information.

**(i) A flip-flopping shift in the traditional educational attitudes to early children**

In traditional early childhood family education, there is insufficient awareness of family education, and most parents believe that kindergarten is the place where young children are educated. Parents often think that kindergartens have special teachers to educate their children, and it is enough for their children to acquire knowledge from kindergartens, often ignoring the importance of family education (Helmerhorst et al., 2019). With the advent of the digital age and digital technology surrounding every aspect of our lives, parents are gradually realizing that their children live in a different era from that of their own early childhood, and that the traditional concepts of family education need to be changed in order to keep up with the development and demands of the times (Pölzl-Stefanec, 2021). More parents are willing to take the initiative to get in touch with digital technology and try to apply it to their children's family education, give better play to the strengths and advantages of family education, and better connect and interact with school education, thus better promoting early childhood family education and enabling children to grow up more healthily.

**(ii) Intelligent, vary and engaging means of internet technology for family education**

Traditional Chinese family education relies entirely on the knowledge reserve and cultural level of parents, and it is difficult to realise a good family education atmosphere and provide a good education environment for families with low cultural level of parents. In addition, traditional early childhood family education is in a single form and lacks novelty, which makes it difficult to arouse the interest of young children who have difficulty in concentrating on their studies. With the use of digital technology, the use of technology in early childhood family education is becoming more and more rich, no longer just a single traditional way, the new elements of digital integration, family education has become less boring (Miškeljin & Sharmahd, 2018). The diversification of technical means, so that young children's horizons become more open, stimulate the exploration ability of young children, and at the same time can relieve the pressure of some parents in family education, and even drive parents to take the initiative to learn knowledge and skills, young children in the growth of the same time, drive the parents to grow together.

**(iii) Rich, comprehensive and accurate scientific resources for early childhood family education**

In traditional family education, the content of parental education for young children basically focuses on intellectual and moral education, with less involvement in other aspects of teaching content. With the advent of the digital age, parents learn more and more about

parenting through various platforms, and communication between parents about parenting has become closer, which makes the teaching content richer. Parents' focus is not only on intellectual and moral education, but also involves various aspects such as hygiene education, group education and emotional education. Marín-Suelves et al (2022) thinks parents pay more attention to good hygiene habits of young children to avoid them getting sick, believing that only with a strong body can children live and study happily and pursue a series of meaningful things. *"Information technology has changed the way people live, and digital socialization is an important element."* Parents believe that how to use digital resources to improve their social skills and better integrate into school and social environments, and education in the area of children's conformity in the context of the digital age is also important. Due to the emergence of more media platforms in our lives, parents learn more about the negative news about the serious consequences of children's psychological problems, more and more knowledge about mental health, and more and more attention is paid to the emotional health of young children Dabbous et al (2023), and the content of early childhood family education has become richer.

## **I. The positive influence of Internet digitalization for early childhood in family education**

### **(i) Improving the quality of family education for young children**

In traditional family education, whether the family education of children is good or bad often depends on the cultural quality of parents. Many parents, when their young children encounter learning difficulties, often show that they are unable to do so and can only turn to their teachers for help. Nowadays, with the increasing popularity of digital technology, when young children encounter learning difficulties, they can use the Internet to get help and play a supplementary teaching role in their learning (Barnett & Jung, 2020). For example, if a child is learning English and the parent's speaking level does not play a positive role in the child's pronunciation, then the child can be guided by some digital products, and the child can learn by reading along with the standard pronunciation. In other knowledge learning, parents can make use of many digital products and platforms, but also can guide children to search the Internet related knowledge, making online teaching become a powerful assistant for learning (Marín-Suelves et al., 2022). Thus, it solves the problem of traditional early childhood family education, especially in the case of parents busy with work to the older generation to raise Belova (2022), significantly improve the efficiency of early childhood learning, so that the quality of family education to improve the overall.

### **(ii) Broadening the breadth of early childhood family education**

In the past, in early childhood family education, there was a very single means of teaching, and most parents used their own experience to give direct explanations and education. However, the cultural and intellectual qualities of many parents were not high, so their education of their children would sometimes be misleading (Erdreich, 2021). With the rapid development of information technology, it is possible for parents to make use of various digital technologies or platforms to provide all-round education to their children, not only in terms of knowledge, but also in terms of social behaviours, physiological health, emotional management, choice of interests, and so on. It can not only make up for the shortcomings of traditional teaching methods, make up for the single content of teaching, but also create a more vivid, lively, image of the teaching situation, so that young children's interest in learning is stimulated, the development of thinking is promoted, creativity and exploration and so on to better cultivate (Renner, 2023). Digitalization has made the means of teaching young

children's families increasingly rich, with a trend towards unlimited expansion of educational content and a wider and wider range of fields, broadening the scope of family education for young children, promoting the continuous accumulation of knowledge in all aspects of young children, and enabling young children to become more fully developed people without being limited by the content and form of education.

**(iii) Enhancing the effectiveness of home-school interaction in early childhood education**

Nowadays, the rapid breakthrough of information technology is constantly reshaping the shape of education, and parent-teacher conferences are no longer the only way of communication between home and school. In the context of digitalization, schools focus on strengthening the construction of digital platforms to promote the in-depth integration of information science and technology and education and teaching, and strive to build a bridge for home-school co-education in the new era. Through the construction of a new platform for home-school co-education, family education can play a better role, form a synergy of home-school co-education, and make children grow up more healthily with a more scientific approach to education. Raden Sri Martini Meilanie et al (2022) believes that, with the support of modern information technology, parents of young children and teachers, and parents of young children can speak freely through the network wisdom platform, interactive exchanges on issues of early childhood development and education, and discuss education methods and parenting experience. Parents can also use the platform to keep abreast of their children's learning situation and learning content, and access kindergarten educational resources, and then carry out family education in a targeted manner. In this way, the phenomena of traditional closed family education, inappropriate family education methods and backward education concepts due to intergenerational education can be effectively improved, and positive interaction between home and school can be achieved, so that targeted family education for young children can be better carried out.

**II. Issues with digitalization of the Internet in early childhood family education**

**(i) Early-age children's lack of discernment and self-control in the digital environment**

The impact of digitalization is two-sided, it brings many positive effects to early childhood family education, but of course there are also many practical problems. In the face of the overwhelming amount of information on the Internet, young children almost have no discernment when they use digital platforms to acquire knowledge, and it is difficult for young children to distinguish between good and bad behaviours when some violent games or information on bad behaviours are disseminated to them. This is likely to bring some difficulties to the family education of young children, and the emergence of bad actions such as being impolite, speaking uncivilized language, and even hitting others. At the same time, modern media are not subject to user constraints, and although this makes young children communicate more with the outside world, which has a certain positive impact on the development of social skills, early-age children are highly susceptible to addiction due to their lack of self-control, which also has a huge impact on their development. Modern families with the development of digitalization, while the overall material conditions are also improving, most young children may have their own electronic products, most of which will have the conditions to use mobile phones, tablet computers, phone watches, etc., which maintains contact with the outside world, but due to the children's own poor self-control and other characteristics, they are very susceptible to the impact of the network and indulged in it can

not be self-control, which produces an Adverse effects, which is extremely unfavourable to the healthy growth and comprehensive development of young children.

**(ii) The impact on physical health of young infants**

Digital technology can visualise and concretise abstract knowledge, provide us with colorful learning resources, stimulate young children's interest and enthusiasm in exploring knowledge, and improve the teaching efficiency of home education. At the same time, it can free parents from the distress of early childhood education, reduce the pressure of the child's parents in education, and bring vitality and vigour to early childhood family education, but at the same time, there are also some problems. Young children can get vivid and intuitive perceptual understanding in the learning process, due to the digital education equipment are mostly mobile phones, tablets, TV, computers and other electronic products, coupled with young children's schools will also be used for multimedia teaching, these electronic products themselves are also radiation, if not controlled the use of time and frequency, will bring negative impact on the physical health of young children, especially in terms of vision, on the healthy growth of children is obviously not conducive. This is obviously unfavorable to the healthy growth of children.

**(iii) The decline in genuine communication between young children and their parents.**

Now that our country has completed the fight against poverty and built a moderately affluent society in all aspects, the living standard of families is becoming more and more substantial, and the digital products at home are also diverse. Digital products can be found everywhere in every home. The ever-changing digital products have indeed enriched people's lives, but at the same time, they have also brought about many negative impacts. I still remember the advertisement slogan: "*Swim virtually, don't forget real communication*". It is a graphic representation of the fact that with the rapid development of science and technology, family members have become more and more attached to digital products or platforms, and real communication among family members has diminished. When parents return home from work, they may already be playing with their mobile phones, and when children come back from school or outdoor activities, they also want to play with their mobile phones and tablets, etc. Renner (2023) thinks family members may swim in the virtual world anytime, anywhere, experiencing the freshness and fun brought by various digital products, and even communication between parents and children has to rely on digital platforms, even if everyone is living under one roof. Obviously, a new issue has emerged in family education, which is the lack of real communication between parents and their children, which is detrimental to the development of the mental health of children, as well as to the emotional communication between parents and children.

**III. Strategies for the effective use of digitalization in early childhood family education**

**(i) Creating a healthy digital living environment.**

In the digital age, it is unrealistic for young children to be completely excluded from products or services of the digital age, such as the Internet, mobile phones, video games, etc., and there is a need for a timely digital transformation of family parenting styles. Since it is unavoidable, creating a healthy digital living environment for children should be the strategy that parents should actively think about and implement. Whether or not parents have a positive attitude towards digital life and whether or not they have the ability to live a healthy digital life affects the growth of young children in a digital life environment. Firstly, parents should empower

their children to participate in digital life. Digital life is opening up an era of universal participation. Whether it is younger children or middle-aged parents or grandparents, they are gradually coming into the digital life, and parents should pay attention to and encourage their children to participate in the digital life in the right way. Secondly, parents should guide young children's digital life. The virtual life puts the child's world in a big way, but no matter how skillful the child is in operation, their mind is not yet mature after all. They need parental guidance too much when exploring the world. Parents should be fully aware of the superiority of digitalization to early childhood family education, and in response to the real needs that exist in early childhood family education, they should guide their children to use digital technology, build family digitalization, and give full play to the pedagogical nature of digitalization, and reduce the entertaining nature of digitalization. Finally, parents should set a good example. In the process of growth of young children, although the judgement and self-control is not enough, the ability to imitate is particularly strong, in order to create a good digital family environment for children, parents themselves need to practice first, play a good role model for young children. The creation of a healthy digital living environment requires the joint discipline and compliance of family members in order to better promote the use of digitalization in early childhood family education.

#### **(ii) Reasonable planning of the time for young children to use the Internet**

Due to their young age and poor self-control, young children are curious about digital products, but they hardly realise that excessive use of electronic products may easily affect their health. If young children's digital devices are used for too long or too often, it is easy to cause adverse effects on their eyesight and physiology, leading to vision loss, inattention and memory loss. Of course, as a parent first of all to do a rational view of electronic devices, a ban will only make the child "mystified" electronic devices, more want to see what fun inside. In life, you can let the child contact with electronic devices, but parents need to limit the length of time. It is important to note that children's needs and abilities are different at different ages, and the amount of time should be set according to the child's developmental characteristics. For example, children under the age of 2 should try to avoid children's contact with electronic devices; for children between the ages of 2 and 5, try to let them watch only about forty minutes of high-quality programmes every day; children over the age of 5 can appropriately relax the time of contact with electronic devices as they grow older, but it should also be limited to less than one and a half hours. Of course, parents can plan the total time and time gaps more reasonably according to their children's learning needs. In conclusion, parents must control their children's online time, and also guide their children to make proper use of the Internet to learn knowledge, give full play to the advantages of digitization, avoid the negative impacts caused by digitization, and let their children learn happily and develop healthily. Parents should give full play to the strengths of digitalization as much as possible, avoid its weaknesses, and make better use of it in early childhood family education.

#### **(c) Organic convergence of online and offline communication**

Parents are good at balancing online and offline communication, neither offline as the only way, nor overly exclude online communication, to coordinate and unify the two, the parents and children's online and offline communication organically. For example, many children watch cartoons and play online games in order to have a common language with their buddies, parents should pay attention to their children's offline life in the interaction of

friends, to grasp the situation of young children's social circle. "Parents should enhance learning and take the initiative to strengthen interactive communication with children in the process of watching and using digital learning resources, and give full play to the effectiveness of the resources through participation and interactive sharing." [3] It is possible to participate and use online forms to create a common language with children, guide them to play games with learning value, and achieve learning knowledge in the midst of playing. Without rejecting online communication, young children are also more willing to accept parents' educational methods and ideas, and parents are more likely to persuade young children when conducting education. Of course, offline communication is obviously more important in digital life. Parents should change their ideology, be strict with themselves, and must be fully involved in education, as well as play a good supervisory role for their children. Never one-sidedly replace the company of young children with tablets, mobile phones, computers and other electronic devices. For example, in the family education of young children, more family outdoor activities can be organised, more family game activities can be carried out, and parents and young children can have heart-to-heart exchanges on an equal footing. In this series of activities, parents and young children's relationship to further close the distance, to achieve real communication, in order to better understand the child's physical and mental health conditions, timely detection of children's problems, to help children to solve problems together, to establish a good parent-child relationship, so as to better promote the effectiveness of early childhood family education.

### **Conclusion**

With the development of society, digitalization has come into being, which is of great significance to the family education of young children. Digitalization is a double-edged sword. Parents of young children should accept the changes brought about by digitalization, analyse it carefully, keep pace with the times, and take advantage of digitalization to cultivate their children's digital literacy and creativity, so as to enable their children to better adapt to the social environment, thus laying a good foundation for their future growth. In addition, we should also see the negative impacts of digitalization, create a healthy digital living environment, plan the time for children to use the Internet, and strengthen communication with children, so as to achieve the purpose of building on their strengths and avoiding their weaknesses, thus further promoting the development of family and early childhood education, and allowing our children to grow up more healthily.

### **References**

- Barnett, W. S., & Jung, K. (2020). Understanding and responding to the pandemic's impacts on preschool education: What can we learn from last spring. *National Institute for Early Education Research ...*, July.
- BEAVER, B. (2009). Canine Social Behavior. In *Canine Behavior*. <https://doi.org/10.1016/b978-141605419-1.00004-3>
- Belova, E. S. (2022). Psychological Aspects of Using Digital Devices for the Development of Older Preschoolers with Signs of Giftedness. *RUDN Journal of Psychology and Pedagogics*, 19(4). <https://doi.org/10.22363/2313-1683-2022-19-4-649-669>
- Birch, L. L., & Davison, K. K. (2001). Family environmental factors influencing the developing behavioral controls of food intake and childhood overweight. *Pediatric Clinics of North America*, 48(4). [https://doi.org/10.1016/S0031-3955\(05\)70347-3](https://doi.org/10.1016/S0031-3955(05)70347-3)

- Carolan, P. L., Mclsaac, J. L. D., Richard, B., Turner, J., & McLean, C. (2021). Families' Experiences of a Universal Play-based Early Childhood Program in Nova Scotia: Implications for Policy and Practice. *Journal of Research in Childhood Education, 35*(4). <https://doi.org/10.1080/02568543.2020.1773588>
- Dabbous, A., Barakat, K. A., & Kraus, S. (2023). The impact of digitalization on entrepreneurial activity and sustainable competitiveness: A panel data analysis. *Technology in Society, 73*. <https://doi.org/10.1016/j.techsoc.2023.102224>
- Erdreich, L. (2021). Managing parent capital: Parent-teacher digital communication among early childhood educators. *Italian Journal of Sociology of Education, 13*(1). <https://doi.org/10.14658/pupj-ijse-2021-1-6>
- Family Factors and the Educational Success of Children. (2014). In *Family Factors and the Educational Success of Children*. <https://doi.org/10.4324/9781315877426>
- Helmerhorst, K. O. W., Colonnese, C., & Fukkink, R. G. (2019). Caregiver's Mind-Mindedness in Early Center-based Childcare. *Early Education and Development, 30*(7). <https://doi.org/10.1080/10409289.2019.1593076>
- Marín-Suelves, D., Becerra-Brito, C. V., & Rego-Agraso, L. (2022). Digital educational resources in early childhood education. *Digital Education Review, 41*. <https://doi.org/10.1344/DER.2022.41.44-64>
- Miškeljin, L., & Sharmahd, N. (2018). Diversity and diversification in ECEC practices: Considerations from Serbia. *European Journal of Education, 53*(2). <https://doi.org/10.1111/ejed.12266>
- Pözl-Stefanec, E. (2021). Challenges and barriers to Austrian early childhood educators' participation in online professional development programmes. *British Journal of Educational Technology, 52*(6). <https://doi.org/10.1111/bjet.13124>
- Raden Sri Martini Meilanie, Gunarti, W., & Yaumil Hassan, A. (2022). Parents' Perceptions of Children's School Readiness During and After the COVID-19 Pandemic. *JPUD - Jurnal Pendidikan Usia Dini, 16*(1). <https://doi.org/10.21009/jpud.161.11>
- Rahman Prasetyo, A. (2020). Early Childhood Physical, Cognitive, Socio-Emotional Development. *Golden Age: Jurnal Pendidikan Anak Usia Dini, 4*(2).
- Renner, I. (2023). Digitalization in early childhood intervention - experiences, opportunities, challenges. *Public Health Forum, 31*(2). <https://doi.org/10.1515/pubhef-2023-0019>
- VanderVen, K. (2008). Promoting positive development in early childhood: Building blocks for a successful start. In *The Search Institute series on developmentally attentive community and society*.