

# An Exploration Of Chinese Parental Attitudes Toward The Digital Play Practices Of Children Aged Between 3 And 6 Years Old

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## Abstract

With the development of Internet information technology and communication technology in the 20<sup>th</sup> century, the rapid popularization of mobile terminals such as mobile phones, tablet. Mobile applications emerge in an endless stream, constantly changing and enriching our lifestyle. Mobile applications are popular with children because they integrate various and vivid means of digital media information expression. The aim of this study is to explore the attitudes of Chinese parents towards the digital play practices for children aged 3-6, and to find out the views of Chinese parents on the positive and negative effects of children's digital play practices, as well as the challenges Chinese parents have with regard to their children's digital play practices.

**Keywords:** digital play practice, young children, parental attitudes

## 1. Introduction

In recent years, the emergence of tablets and smartphones has expanded the scope of children's exposure to digital technology (Lim and Toh 2022). The popularization of digital technology has changed children's leisure activities, that is, from traditional games to digital games gradually. Edwards (2011) quoted the play theory of Vygotsky (1980) as the main activity of children's cognitive and imaginative development in

the study of digital play. She pointed out that digital play is not a low-level play mode, it provides more play opportunities for children. However, early childhood educators believed that the increasing participation of young children in digital technology may lead to a decline in the quality of early childhood games (Marklund and Dunkels 2016). In fact, digital play may be a new way of playing which is consistent with the contemporary society. It is a high-tech space for interaction

and learning, but it is inconsistent with the current concept of play and learning concepts of most people (Dias et al. 2016; Marklund and Dunkels 2016; Lauricella et al. 2015). Whether digital play can be applied to children's life has always been a controversial issue. Therefore, digital play has become a new topic of educational research.

### 1.1 The definition of digital play

The advent of the digital age is changing the available resources of play and developing different types of play (Bird and Edwards 2015; Herr-Stephenson et al. 2013; Marsh and Bishop 2014; Brooker, Blaise and Edwards 2014). Digital play is considered as a new category of play. There are three ways to distinguish digital play. The first way is that based on existing play, which measure the effectiveness of digital activities called play (Fromberg and Bergen 2012; Verenikina and Kervin 2011). The second way is that it depends how children to play, that means if the children have different views between traditional play and digital play, another type of play will be considered (Bergen 2012; Silvern 2006). The last one focuses more on the background of the children and understands the digital play as a kind of play that refers to technology (Stephen et al. 2008). Digital play is different from the traditional play. Specifically, digital play usually is defined a play which using technology to play (Marsh et al. 2016). Although giving a specific definition for digital play as a challenge, Nevski and Siibak (2016) defined digital play as all activities performed by

young children on the touch screen. In this research, digital play mainly refers to a series of virtual games through technology by children.

### 1.2 The debates surrounding digital play practices

In the age of science and technology, digital play provides more imaginative space for young children. Traditional play is no longer considered to be the highest quality to play (Marsh et al. 2016). In addition, virtual digital play plays an important role in the construction of children's knowledge, because it provides more opportunities for colorful exploration, experiment and operation. These digital plays contribute to the development of children's imagination and creativity, which play an important role in children's cognitive, social and emotional development (Verenikina et al. 2016). Well-designed digital play can provide extensive, interesting and interactive experiences for young children and promote their development of learning and cognitive and the ability of skill building and social activities (Lieberman et al. 2009). Another important reason is that when children play digital play, they participate in a series of play behaviors at the same time. Verenikina et al. (2016) claimed that it is 'real play' rather than a 'virtual play'. The virtual world in digital play is not a virtual play, but a reappearance of play behavior in the real world. That means children can gain real experience in virtual environment Therefore, digital play practices can help children construct knowledge.

However, as for the digital play practices of children, researchers showed their different opinions. Digital play leads to children's active and passive behavior, which has become an important reason for controversy among researchers (McClure and Sweeny 2015; Blum and Parette 2015; Stephen and Plough 2014). Positive means that children can use digital play creatively and interact with the content of digital play. So, McClure and Sweeny (2015) argued that digital technology promotes children's play and learning. However, some scholars hold the opposite view. They think that children's digital play practices without criticism and mechanization hinders children's social activities of play, so they are called passive (Blum and Parette 2015; Stephen and Plough 2014). Some researchers claim that the behaviors and thinking of young children will be controlled by digital play if they use it early, because digital play lacks vitality (McClure and Sweeny 2015; Mustola et al. 2018). When children watch the screen for a long time, their digital activities are regarded as dependent and passive behavior (Shaw and Tan 2015).

Another voice is a refutation to regard children's digital play practice as a passive activity. Some scholars emphasize that digital play as an active medium in the children's daily life. Because it is created more social characters for children and providing more social experiences for them (Hadley and Nenga 2004; Marsh and Richards 2013). Young children can gain more happiness in digital play practice

(Buckingham and Sefton-Green 2003). There is a study of children's use of digital technology at home, it has been shown that children's use of digital technology is active rather than passive (Marsh et al. 2005; Plowman et al. 2018). Children can acquire skills in using digital play, such as technical and operational skills, understanding of the knowledge and the world, and specific and objective understanding of a certain field, such as literature or mathematics (Marsh et al. 2005; Plowman et al. 2008). Therefore, children's digital play practice behavior is also considered as a reflection of children's creative behavior.

However, many people have shown a lot of anxiety in children's enthusiasm for electronic technology. One anxiety is that digital play threatens children's ability to participate in open, imaginative play (Levin and Rosenquest 2001). Some negative views about the role of technology in early childhood come from the Children's Alliance (Cordes and Miller 2000). Their main point of view is that science and technology cannot promote children's health and development. Some critics point out that childhood obesity, language retardation and social alienation are all disadvantages of technology for children (Plowman 2019).

Marklund and DunKels (2016) pointed out that changes in society may be the cause of changes in some patterns of children. Because of different technology products, digital technology is gradually unified in the integration of digital and non-digital. It may be different from our current understanding

of play and learning, but digital technology and digital play are an indispensable part of contemporary practice. People need to understand the existence of digital play in the overall cultural and historical development (Marklund and Dunkels 2016; Fleer 2018). In other words, there is no accurate evidence or research that science and technology lead to these adverse factors, nor can it prove that play and technology cannot coexist at the same time (Yelland 1999).

### 1.3 The perspectives from parents

Although there are many kinds of digital technologies and applications in children's lives, parents' behaviors are the way for children to acquire these technologies. Parents have greater decision-making autonomy in choosing digital media for young children. Therefore, it is more important to understand parents' attitudes towards children's digital play practices.

Almost all parents attach great importance to children's spontaneous games, but for the use of digital play, they pay more attention to the educational value of digital play, rather than their development value to children (Verenikina and Kervin 2011). Simply put, educational value means that children can purposefully acquire useful knowledge from digital technology. Other parents said they want their children to learn how to use digital technology and improve their operational skills rather than digital play (Verenikina and Kervin 2011). As for some parents who have a positive attitude towards digital play claimed that their children will expand digital play into real life, thereby increasing the

interaction between digital play and their living environment, enriching children's life and creativity (Marsh et al. 2005). However, the development value that is ignored by parents is more inclined to promote the development of certain aspects of young children, such as creativity and imagination. However, some parents do not encourage their children to participate in any activities related to digital technology, mainly because they do not want to force their children to do anything, and secondly because they do not want their children to form a dependence on digital play and lose their creativity. It is undeniable that in the study of Verenikina and Kervin's (2011), when it comes to digital play, all parents interviewed mentioned children's health problems. Also, in the other study, the results showed that the digital play is the least popular among parents in the United States, Turkey, China and South Korea (Isikoglu Erdogan et al. 2019). Because most of parents more worry about the problems in children's health, the content of digital play and the addiction of playing. Then, the parents in China and South Korea also raised concerns about the visual impact of young children. The most important reason why they do not encourage their children to use digital play is that they cannot accept the existence of the violent behaviors, gender stereotypes and inappropriate contents in the digital play (Isikoglu Erdogan et al. 2019).

### **Purpose of the study**

This study mainly aims to explore the Chinese parental attitudes on digital play practices of young children aged between 3 and 6 years old. It will invite few Chinese parents as participants, analyzing their opinions on positive and negative impacts of digital play practices on young children. The challenges that Chinese parents have when they face to their child's digital play practices also will be explained.

## 2. Research question

This research will be focused on the following questions:

1. What the Chinese parental attitudes on child's digital play practices?
2. What impacts do parents think digital play has on child's development?
3. What challenges do parents have with regard to child's digital play practices?

## 4. Methods

### Participants

This survey was conducted anonymously to Chinese parents who have the child aged 3-6 across the country through an online questionnaire. A total of 112 valid online questionnaires (N=112) were collected. The 112 Chinese respondents included 92 mothers and 20 fathers. Detailed demographics of the participants are shown in Table 4.1

**Table 4.1** Demographics of participants in questionnaire

Percent of Chinese parents	
Gender	
Female	82.14%
Male	17.86%
Years of Child	
3-4 years old	28.57%
4-5 years old	19.64%
5-6 years old	51.79%
Educational background	
Junior high school or below	13.39%
High school or Technical secondary school	30.36%
Associate or Bachelor's degree	49.11%
Master's degree or above	7.14%

In addition, three Chinese parents were invited to participate in an online semi-structured interview via WeChat to gain an in-depth understanding of their attitudes towards digital play, the impacts, and the

challenges they have regarding children's digital play practices. All interviews were audio recorded and transcribed. Detailed demographics of the participants are shown in Table 4.2.

**Table 4.2** Demographics of the participants in interview

Participants' name	Educational background	Children's age
Lily	College	3 years
Sophia	Master	4.5 years
Jane	Bachelor	5.5 years

### Data collection

Quantitative and qualitative research method will be used to collect the data in this research.

The purpose of questionnaires is to find out problems and understand the existence of a phenomenon in depth that supported by numbers (Denscombe 2017). Thus, collecting the Chinese parental attitude will by online closed questionnaires.

As for collecting the data of the impacts and challenges, researcher uses the semi-structure interview which is qualitative method. The purpose of the interview method is to deeply understand the feelings, experiences, opinions of participants (Denscombe 2017). It can provide more direct and valuable information for research through dialogue with participants.

### Data analysis

The questionnaires data aims to show the attitudes of Chinese parents toward digital play. It interprets by descriptive statistics. Interview questions were concerned with the impacts and challenges do Chinese parents think digital play has on the children. Semi-structure interviews were analyzed by Nvivo 12 software program. The interviews were recorded and then transcribed with unit of

themes. The content analysis method was used to analysis those data.

## 5. Findings

### 5.1 The attitudes of digital play do Chinese parents in?

When the participants were asked about their attitude towards digital play, a total of 49.11% of Chinese parents were disagree it, including 9.82% of them were strongly disagree it. On the contrary, 24.11% of Chinese parents who participated in the survey agreed with their children's digital play practices, even 3.57% of the participants strongly agreed. In addition, 23.21% of Chinese parents held a neutral attitude, and they did not clearly express their agreement or disagreement. Furthermore, most Chinese parents also control the time, frequency and type of their children's digital play practices. When asked about the time allowed for their children to do the digital play practices, most parents allowed their children to do the digital play for less than 30 minutes a day, accounting for 57.14% of the total number of participants. 34.82% of Chinese parents allow their children to do digital paly practices for thirty minutes to an hour every day. In addition, a small number of parents

allow their children to do digital play practices for 1-2 hours, but absolutely no parents allow their children to do that for more than two hours a day.

According to the survey results on the control of the frequency and type of children's digital play practice, most Chinese parents control

the frequency and type of children's digital play practice. Only 6.25% of parents do not control the frequency of children's digital play practice at all and 11.61% of parents do not limit the type of children's digital play practice at all.

**Table 5.1** Chinese parents' attitudes toward digital play

Percent of Chinese parents	
Parents' attitude towards digital play	
Strongly agree	3.57%
Agree	24.11%
Undecided	23.21%
Disagree	39.29%
Strongly disagree	9.82%
The time that allowing children spend on digital play everyday	
Under 30mins	57.14%
30 mins - 1 hour	34.82%
1 -2 hours	8.04%
More than 2 hours	0.00%
The purpose of digital play practice	
Education	42.86%
Entertainment	57.14%
Others	0.00%
Control the times on children's digital play practices	
Never	6.25%
Hardly	9.82%
Sometimes	30.36%
Usually	28.57%
Always	25%
Limit the types or context of digital play	
Never	11.61%
Hardly	11.61%
Sometimes	33.046%
Usually	25.89%
Always	17.86%

5.2 What impacts do Chinese parents think digital play has on the child’s development?

As for the impacts of digital play practices on children's development, the result showed two parts of impacts which are positive and negative impacts. This part will show those result in detail.

5.2.1 The positive impacts do Chinese parents think digital play has on child’s development

**Improvement of children's self-ability:**

The improvement of children's ability is a process of continuous development. Considering whether a thing is beneficial to the development of children's abilities has

also become a criterion to measure whether it is positive or negative. When considering the positive influence of children's digital play practices, Chinese parents still regard the improvement of children's ability as the criterion. Language is a tool for information exchange and transmission. Digital plays provide a real situational simulation environment for children's language learning (Kukulska-Hulme and Shield 2008), such as imitating the speech of virtual characters in digital play. In this research, the improvement of children's language ability and imitation ability was affirmed by the Chinese parents interviewed.

**Table 5.2**

<p>The App was called Songs-stories, my kid really like it, although she cannot understand all details. What makes me most happy is that when my child uses this application, she often actively imitates the language she has heard, and even occasionally speaks some English words she has heard. (Lily)</p>	
<p>She sometimes tells a lot of animated clips about Peppa Pig by herself, so she may learn some sentence patterns, and wait until the next time she meets the same scene, she will be able to transfer language to express her thoughts or feelings. (Sophia)</p>	
<p>My daughter especially likes watching videos about dancing. Normally, when she watches the same video repeatedly, she starts dancing with the dance videos. (Lily)</p>	

Lily and Sophia have in common that digital play can improve language proficiency in children's retelling of language in digital play, then enriching children's language expression and improving children’s ability

of self-expression. They think it is a positive effect of digital play on children. Although the fundamental purpose of early childhood education is to fully stimulate the potential of children and lay the foundation for their



future development. However, language is the externalization form of children's thinking, and the tool for the formation and development of children's thinking. Therefore, Chinese parents attach great importance to the development of children's language ability.

In addition, children's imitative behavior in pretend games originates from digital play practices, which increases the interest of children's life. Children's imitation of language is not only the improvement of children's language ability, but also the development of children's imitation ability to some extent.

For the development of children's digital play practices affecting the development of children's language ability and imitation ability, the interviewees gave positive feedback. Chinese parents are more aware of the output of children's language and behavior. Many outputs of language and behavior will be considered by parents as a positive impact of children's digital play practices. However, researchers worry that the digital play practice of young children

will affect the ability of children to talk with others. It was not mentioned by parents in this interview. It may be that most parents control their children's digital game practice in time. So, the influence of digital play on children's communicative ability is not obvious enough.

**The expansion of children's vision:** Appropriate digital play practices can be an effective educational tool to some extent. Children can understand the world from the perspective of play roles, and they are more able to realize the combination of teaching and pleasure. It seems to promote children's multimodal experience. Multi-modal experience refers to the experience that can bring diversification to children. This kind of experience can promote children's participation, increase children's self-confidence, and influence children's autonomy (Yelland 2010). Respondents generally believe that digital play contains rich content, it can expand children's horizons, stimulate children's interest in learning, and play a role in helping children grow up.

Table 5.3

It can make virtual things more visual. I usually find some videos on YouTube about knowing the world, such as the exploration of the moon, and somethings that we can hardly touch or somethings we cannot describe in our daily life. For example, telling her that there are ladders in the fire engine, she may not be able to imagine or understand what a ladder is, but through digital media, she can easily understand or feel the existence of the ladder. (Sophia)
Most digital plays have colorful pictures and vivid characters, which can provide children with richer visual and auditory experience. (Jane)

Some situations created in digital play can make up for the limitations of children's understanding of things in real life. It provides a powerful condition for the construction of children's knowledge (Verenikina et al. 2016). Respondents mentioned that digital plays expand children's knowledge and enrich their personal experience. These are important manifestations of digital play in helping children to construct knowledge and play a role in promoting children's development and learning (Lieberman et al. 2009). Based on the data from interview, Chinese parents use digital play as a tool for young children to understand virtual things or things that they cannot experience personally. The emergence of digital play also provides convenience for parents to a certain extent. For example, when Chinese parents encounter things that cannot be described,

digital play is a better choice to help them show that. Thus, digital play practices increase the chances of young children getting in touch with new things.

5.2.2 The negative impacts do Chinese parents think digital play has on child's development

**Effects on the physical health of young children:** The passive behavior of children caused by the digital play is a controversial issue among some scholars (Stephen and Plowman 2014). Children's health is regarded as the primary goal by parents, it includes physical and psychological. The impact of digital play practices on children's health is a concern of almost every parent. In this interview, when parents were asked about the negative impact, the most mentioned was the digital play practice that affected the vision of young children.

**Table 5.4**

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I think that digital play practice will hurt the eyes of young children, I prefer her to choose outdoor activities. (Lily)

It must be an influence on children's vision. I prefer to use a projector instead of an electronic screen. In addition, maintaining a static state for a long time will reduce the amount of activity of young children. I think this is not conducive to children's physical development. (Sophia)

Radiation from electronic products can cause harm to children's bodies, the most obvious of which is visual impairment. Secondly, I would worry that the long-term practice of digital play will lead to the reduction of children's outdoor activities. (Jane)

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According to interview records, in the view of the respondents, digital play practice affects children's eyesight, and the length of practice of digital play is negatively correlated with the length of children's outdoor activities. Long-term digital play practices may take up the time of children's outdoor activities, it will reduce the chances of children's exercise, which is not conducive to the child's physical development (Stephen and Plowman 2014). That means that the use of electronic devices by young children can reduce their vision. Meanwhile, the longer the practice of children's digital games will lead to shorter outdoor activities. Przybylski and Weinstein (2019) claimed that the behavior and habits of young children are the basis of their health. Therefore, Chinese parents pay more attention to the vision and physical development of young children. Also, respondents said that when children concentrate on digital play, they will reduce

communication with others. They worry that spending a long period of time on digital play practices may lead to some psychological disorders, such as autism.

To sum up, the impact of digital play on children's physical health has become the most worrying issue for Chinese parents. The decline of children's visual acuity and the possibility of inducing children's mental illness are regarded as the most important negative effects of children's digital play practices.

**Young children's spiritual dependence on digital play:** As a product of high technology, digital play has the advantages of image, irritability and operability. Compared with the real world, the content of virtual world is more extensive and colorful. However, it has become a negative influence in the view of Chinese parents that hinders children's development.

**Table 5.5**

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If I don't control the time that she does digital play, I'm worried that she will be addicted to digital play, which will ignore what she should do at this stage. (Lily)

Digital plays are too attractive for children, their pictures and colors are too rich, even far beyond reality. That will increase children's interests for digital play, and even they will indulge in digital play. (Jane)

I think when children are interested in digital play, they will constantly want to try again and gradually become dependent. In the long run, they will become disillusioned with real life. (Sophia)

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In this interview, participants Jane mentioned that if children become dependent on digital play, it will affect their learning efficiency. This is mainly reflected in the richness screens of digital play and the fast update speed. Those factors are easy to attract children's attention and interest. The constant visual impact of digital play on young children will stimulate their dependence on digital play practices. Once children become addicted to digital plays, their thoughts and behaviors will be controlled by them (Mustola et al. 2018). Compared with digital play, the form of offline face-to-face courses are relatively single and have less visual impact on children. It is difficult for children to be interested in these courses. On the contrary, it will have a stronger spiritual dependence on digital play. Moreover, Children are in a sensitive period of development, full of curiosity about all kinds of things. The scenarios simulated by digital play is very attractive to young children, but children have limited understanding of the potential threat of digital technology. Moreover, because preschool children are still in the preoperational stage of psychological development, it is difficult to distinguish between imaginary things and real objects, so they cannot distinguish between the real world and digital play.

Therefore, children's spiritual dependence on digital play practice is regarded as a negative influence by Chinese parents.

5.3 What challenge do Chinese parents has with regards to child's digital play practices? Most of parents may have a variety of problems and challenges when they with regard to their child's digital play practices. This part will explain and analyze the different challenges when Chinese parents with regard to children's digital play practices.

**Guidance of children's reasonable digital play practices:** The early childhood stage is a period of rapid development of children's physiology and psychology. There are still huge differences in cognitive thinking and behavior habits between children and adults. In detail, it is difficult for children to recognize digital play clearly and accurately in the process of digital play practices. It has led to whether the practice of digital play has more positive impact on children's development, which has become one of the most worrying issues for Chinese parents. Therefore, how to guide children's rational practice of digital play is one of the biggest challenges faced by Chinese parents in the digital play practices for children.

**Table 5.6**

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...how to guide children's digital play practice correctly will make me feel like a challenge, such as how to use a reasonable range of time, and how to judge whether this activity is suitable for my kid. (Lily)

With the rapid development of digital technology, I am afraid that we may not be able to keep up with its development speed and make better guidance to my kid. (Lily)

There is no effective way to enable young children to manage themselves. (Sophia)

I don't know I am doing right or not, but I try to make the using rules when my child first came into contact with the digital play..... I would judge whether it was suitable for my children based on my experience. If not, I would never let him contact it. (Jane)

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In these interviews, all the respondents claim that they did not object to the children's digital play practices, but they also felt anxious about the negative impact of digital play. It also reflects modern parents' ambivalent mentality towards digital play (Dong 2018). On the one hand, digital play may be a product of the times and a necessary tool and resource for children's learning and development (Marklund and Dunkels 2009; Donohue 2014). On the other hand, parents are worried that digital play may pose a threat to children's health. Therefore, this study shows that some Chinese parents are helpless in guiding children's digital play practice. Although some parents can do something to control children's digital play practice, like Jane, she still has the same challenges on reasonable digital play practice. Thus, it is

undeniable that the introduction of reasonable digital play practice for young children is still one of the challenges faced by most Chinese parents.

**The influence of personal preference on children's digital play practices:** Some scholars proposed that the digital play practices have a positive impact on children's development, but they still need parents' guidance and regulation when they use digital play (Yelland et al. 2012; Marsh et al. 2015; Neumanu 2015; Yelland 2010). Different modes of regulation have different effects on young children. In addition, Nikken and Jansz (2014) pointed out that the way parents adjust their children's digital play practices is influenced by their own use habits.

**Table 5.7**

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I do not like to play digital games, even some resistance. Thus, rarely let my daughter get into digital games. I prefer that she gains more opportunities to broaden their horizons by reading and outdoor activities. But if there is digital play about education or science, I would like to let her try. (Sophia)

In most cases, I do not refuse my kid to use educational applications, like learning English or numbers. But I've always opposed entertainment applications, even though I control the time. (Jane)

I will consider the age of the child. I don't want my kids to be exposed to digital technology too early, so I hardly show any digital devices in front of my kids. (Lily)

There is a personal bias in choosing digital play for my kid, and I am worried about whether there will be some one-sided information to pass on to my children. Some interesting things may cause my child to miss the opportunity to try it because of my lack of interest. (Sophia)

Sometimes I see children who are similar to my child's age and use some digital devices skillfully. I wonder if I should let my children try to understand digital play. (Lily)

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Parents took greater autonomy in decision-making was reflected in this interview. All respondents indicated that they dominated the choice of digital play, and their child's preferences were influenced by them, but also expressed concern about personal preferences. They have given great affirmation to the educational value of digital play, just as they mentioned before that digital play can expand young children's horizons. However, for the impact of digital play on the psychological development of young children, respondents said that they cannot directly observe whether it had a positive impact on young children. They even think that digital play hinders the psychological development of young children. Therefore, in the face of the type of

digital play, Chinese parents are more affected by personal preferences.

However, digital play as the product of the times and a new way of playing (Marklund and Dunkels 2016). The limited acceptance of children's digital play by Chinese parents may affect children's understanding of new things. In the process of this interview, the respondents also indicated that they are constantly trying to expose young children to digital technology, but based on their personal experience, it is difficult to change their bias towards digital play in a short time. Therefore, most Chinese parents regard changing personal preferences as a challenge to the practice of digital play for their young children.

**The uncertainty of stimulating children's imagination and creativity by digital play practice:**

Children's digital play practice is the embodiment of children's creative behavior. In National Association for the Education of Young Children (2009), digital play practice was described to be conducive to nurturing children's imagination and

creativity. Although educators and relevant educational associations claim that digital play is conducive to the development of children's creativity and imagination, this theory has become a challenge for Chinese parents with regard to the children's digital play practices.

**Table 5.8**

Is it really can promote the development of children's imagination and creativity?  
(Sophia)

After she (her kids) watched Peppa Pig, she reflected what she had seen when she drew; when she sang, she might adapt it to what she had heard before, such as changes in tone. But I do not think its imagination, because she's also adapted on the basis of originality. I have seen on TV that watching cartoons can stifle children's imagination, but I have not found it. Secondly, there is no fixed criterion for the observability of imagination. Therefore, whether the practice of digital games can stimulate children's imagination is a very vague concept for me. I'm not sure if her imagination comes from life or from digital play practices. (Sophia)

I am not sure whether the digital play practice has promoted the development of children's imagination and creativity, because I think that imagination and creativity is a very abstract concept, it does not have a fixed measurement standard. I can only say that it affects the development of children's imagination and creativity. (Jane)

(Thinking for a long time) ...I am not sure.... (Lily)

According to the interviews result, the definitions and expression of imagination and creativity are vague for respondents. There are some debates among scholars about this point of view. Multi-modal digital play is considered to promote the development of children's creativity

(Kucirkova et al. 2014). However, because some scholars point out that digital play lacks vitality, it will lead that children's thoughts may be controlled by it, so, digital play is considered to hinder the development of children's imagination and creativity (McClure and Sweeny 2015; Mustola et al.

2018). In addition, some related media reports will also influence parents' views on digital play. Moreover, because respondents may lack relevant knowledge about child development, and they do not know how to judge the development of children's imagination and creativity. Therefore, the respondents are not sure whether the digital play practice has stimulated the development of children's imagination and creativity. This will lead to the generation of parental ambivalence, which is to encourage or restrict children's digital play practices.

## 6. Limitation

It is necessary to consider the limitations of the research process to some extent. It can help researchers to recognize the feasibility of the study, but also predict further research plans. This section will explain the restrictive factors of this study from two aspects: the diversity of participants' background and the limitations of survey samples.

In 2015, two-child policy were opened in China. Many families choose to have a second child based on having their first child. That means that there may be a difference in age between a second-born parent and a one-child parent, which will lead to differences in their life background, for example, young parents may have different educational backgrounds from second-born parents, and therefore different concepts.

Another diversity of participants is reflected in the differences in the living environment of the respondents. For example, the economic development of Eastern China is

faster than that of Western China, and its educational facilities are more perfect. Therefore, parents living in different regions may have different views on the practices of digital play for young children.

Quantitative research focuses more on quantitative statistics, which collects, discovers and interprets the relationship between different elements by collecting large amounts of data (Cohen et al. 2011). In short, the more data is more conducive to the researcher's description and analysis of external objective facts. In this study, a total of 112 people participated in the questionnaire survey and interviewed three groups of families. Although these quantities have been able to demonstrate external objective facts that Chinese parents' attitudes towards the children's digital play practices, the specificity of individual samples is not excluded. If more people can participate, the results will be more representative.

## 7. Conclusion

This paper focused on exploring Chinese parental attitudes towards digital play practices of children aged 3-6 years. The results demonstrated that parental attitudes towards digital play affect children's digital play practice, even with the high popularity of digital technology, most Chinese parents still hold opposition attitude toward digital play. However, the practice of digital play in children is not completely reject. Parents will control the time or the type of digital play practice. It is consistent with Buckingham and Sefton (2003) and Harvey (2015) that



parents' beliefs and cultural values influence children's digital play practice. According to the attitude of Chinese parents towards the practice of digital play, this study further explored the views of Chinese parents on the positive and negative effects of digital play. The positive effects mainly focus on the improvement of children's ability and knowledge development, while the negative effects mainly come from the harm to health. At the same time, some challenges for Chinese parents come from the practice of digital play for young children, guiding children's appropriate digital game practice and uncertainty about imagination and creativity have been widely concerned by parents.

## References

1. Bergen, B. K. (2012). *Louder than words: The new science of how the mind makes meaning*. Basic Books (AZ).
2. Bird, J., & Edwards, S. (2015). Children learning to use technologies through play: A Digital Play Framework. *British Journal of Educational Technology*, 46(6), 1149-1160.
3. Blum, C., & Parette, H. P. (2015). Universal design for learning and technology in the early childhood classroom. In *Young children and families in the information age* (pp. 165-182). Springer, Dordrecht.
4. Brooker, E., Blaise, M., & Edwards, S. (Eds.). (2014). *SAGE handbook of play and learning in early childhood*. Sage.
5. Buckingham, D., & Sefton-Green, J. (2003). Gotta catch'em all: Structure, agency and pedagogy in children's media culture. *Media, Culture & Society*, 25(3), 379-399.
6. Denscombe, M. (2017). *EBOOK: The good research guide: For small-scale social research projects*. McGraw-Hill Education (UK).
7. Dias, P., Brito, R., Ribbens, W., Daniela, L., Rubene, Z., Dreier, M., ... & Chaudron, S. (2016). The role of parents in the engagement of young children with digital technologies: Exploring tensions between rights of access and protection, from 'Gatekeepers' to 'Scaffolders'. *Global Studies of Childhood*, 6(4), 414-427.
8. Dong, P. (2018). Exploring Korean parents' meanings of digital play for young children. *Global Studies of Childhood*, 8(3), 238-251.
9. Donohue, C. (2014). Technology and digital media as tools for teaching and learning in the digital age. In *Technology and Digital Media in the Early Years* (pp. 53-67). Routledge.
10. Edwards, S. (2011). Lessons from 'a really useful engine'<sup>TM</sup>: using Thomas the Tank Engine<sup>TM</sup> to examine the relationship between

- play as a leading activity, imagination and reality in children's contemporary play worlds. *Cambridge journal of education*, 41(2), 195-210.
11. Flerer, M. (2018). Digital animation: New conditions for children's development in play-based setting. *British Journal of Educational Technology*, 49(5), 943-958.
  12. Fromberg, D. P., & Bergen, D. (2012). *Play from birth to twelve: Contexts, perspectives, and meanings*. Routledge.
  13. Hadley, K. G., & Nenga, S. K. (2004). From Snow White to Digimon: Using popular media to confront Confucian values in Taiwanese peer cultures. *Childhood*, 11(4), 515-536.
  14. Harvey, A. (2015). Regulating Digital Play. In *Gender, Age, and Digital Games in the Domestic Context* (pp. 91-120). Routledge.
  15. Herr-Stephenson, B., Alper, M., Reilly, E., & Jenkins, H. (2013). T is for transmedia: Learning through transmedia play. In Los Angeles and New York: USC Annenberg Innovation Lab and The Joan Ganz Cooney Center at Sesame Workshop. Retrieved April (Vol. 10, p. 2015).
  16. Isikoglu Erdogan, N., Johnson, J. E., Dong, P. I., & Qiu, Z. (2019). Do parents prefer digital play? Examination of parental preferences and beliefs in four nations. *Early Childhood Education Journal*, 47(2), 131-142.
  17. Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(3), 271-289.
  18. Lauricella, A. R., Wartella, E., & Rideout, V. J. (2015). Young children's screen time: The complex role of parent and child factors. *Journal of Applied Developmental Psychology*, 36, 11-17.
  19. Lim, F. V., & Toh, W. (2022). Considerations on the curation of educational apps for digital play and learning. *Contemporary Educational Technology*, 14(3), ep366.
  20. Marklund, L., & Dunkels, E. (2016). Digital play as a means to develop children's literacy and power in the Swedish preschool. *Early Years*, 36(3), 289-304.
  21. Marsh, J., & Bishop, J. C. (2014). Challenges in the use of social networking sites to trace potential research participants. *International Journal of Research & Method in Education*, 37(2), 113-124.
  22. Marsh, J., Hannon, P., Lewis, M., & Ritchie, L. (2017). Young children's initiation into family literacy practices in the digital age. *Journal*

- of Early Childhood Research, 15(1), 47-60.
23. Marsh, J., Plowman, L., Yamada-Rice, D., Bishop, J., & Scott, F. (2016). Digital play: A new classification. *Early Years*, 36(3), 242-253.
  24. McClure, M., & Sweeny, R. W. (2015). Participatory youth culture: young children as media and MOC makers in a post-millennial mode. In *Young children and families in the information age* (pp. 245-254). Springer, Dordrecht.
  25. National Association for the Education of Young Children (NAEYC) (2009) Position statement on developmentally appropriate practice. Available at: <http://www.naeyc.org/positionstatements/dap>
  26. National Association for the Education of Young Children. 2009. Developmentally Appropriate Practice Guidelines. Position Statement. Washington, DC: National Association for the Education of Young Children.
  27. Nevski, E., & Siibak, A. (2016). The role of parents and parental mediation on 0–3-year olds' digital play with smart devices: Estonian parents' attitudes and practices. *Early years*, 36(3), 227-241.
  28. Plowman, L. (2019). When the technology disappears. Exploring key issues in early childhood and technology: Evolving perspectives and innovative approaches, 32-36.
  29. Plowman, R. S., Peters-Strickland, T., & Savage, G. M. (2018). Digital medicines: clinical review on the safety of tablets with sensors. *Expert opinion on drug safety*, 17(9), 849-852.
  30. Przybylski, A. K., & Weinstein, N. (2019). Digital Screen Time Limits and Young Children's Psychological Well-Being: Evidence From a Population-Based Study. *Child development*, 90(1), e56-e65.
  31. Stephen, C., McPake, J., Plowman, L., & Berch-Heyman, S. (2008). Learning from the children: Exploring preschool children's encounters with ICT at home. *Journal of Early Childhood Research*, 6(2), 99-117.
  32. Verenikina, I., & Kervin, L. (2011). iPads, digital play and pre-schoolers. *He Kupu*, 2(5), 4-19.
  33. Verenikina, I., Kervin, L., Rivera, M., & Lidbetter, A. (2016). Digital play: Exploring young children's perspectives on applications designed for preschoolers. *Global Studies of Childhood*, 6(4), 388-399.
  34. Shaw, P., & Tan, Y. (2015). Constructing digital childhoods in Taiwanese children's newspapers. *new media & society*, 17(11), 1867-1885.

35. Silvern, S. (2006). Educational implications of play with computers. *Play from birth to twelve: Contexts, perspectives and meaning*, 215-221.
36. Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Harvard university press.
37. Yelland, N. (1999). Technology as play. *Early Childhood Education Journal*, 26(4), 217-220.
38. Yelland, P. M. (2010). An introduction to correspondence analysis. *The Mathematica Journal*, 12(1), 86-109.
39. Yelland, N., Muspratt, S., On, C. C. Y., & Gilbert, C. (2012). Asian Childhoods: exploring the lifeworlds of students in contemporary Hong Kong. *Global Studies of Childhood*, 2(4), 286-301.