

The Influence from English Teaching Apps on Young Chinese Children's Second Language Learning

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Abstract: *This research aimed to explore how English teaching apps affect young Chinese children's second language learning. Besides, it also discussed how Chinese parents mediate their pre-school children learn language through using apps.*

Keywords: *English Teaching Apps; Effective Learning; Parents' Mediation; Second Language Learning*

1. Introduction

These years, many parents choose apps for their children to learn English. The rapid development of electronic technology, tablets and smartphones are easier for children to operate. A variety of apps are also provided to enrich children's English learning experience. In this research, I mainly focus on whether using apps can improve children's English learning. In addition, parents' behavior during children's app learning and their opinion to English teaching apps are also valued in this research.

2. The Influence of English Teaching Apps

Aiming to enrich children's English learning experience, more interactive features are included in the apps on the iPad and the iPhone [1]. For example, in some English teaching apps, children need to read new words aloud or choose pictures that match words to win the game. These interactive activities can enhance the effects of listening to or reading vocabulary and help children construct the new words into their own learning system [2]. Children will feel more involved, especially in repeated vocabulary learning processes, which is necessary to learn vocabulary [3].

In addition to interactive activities, English teaching apps also have an advantage in improving children's vocabulary because of its portable nature. The repetition of words may improve children's acquisition of vocabulary and help them establish a better basis to carry out further learning [4]. As opposed to traditional learning methods, children can access and use English teaching apps any time of the day and at any place, even on the move or on vacation [5]. The resources of language learning are always available in the apps on smartphones or iPads, giving children more opportunities to become familiar with the English words [5]. Moreover, the attractive pictures and other visual effects in English teaching apps also act as an effective assistant in children's vocabulary learning [6]. Pictures and videos have a positive impact on improving children's comprehension while reading and learning words [6]. Therefore, to some extent, it is an effective and convenient way to develop children's English through teaching apps.

However, in spite of the strength of English teaching apps, their weakness of lacking interaction and communication cannot be ignored. Face-to-face teaching will give students better understanding of the skills of using lips, tongue and facial muscles [6]. Though teaching apps contain different kinds of interactive activities, they are still not able to provide instant communication during the learning process. Moreover, children need to have positive responses and evaluation [7]. When there is lack of response and encouragement of children's progress, they may be more likely to lose their interest in learning or practicing [8]. Therefore, given all the issues mentioned above, English teaching apps still have several weaknesses in some important aspects if they are used to improve children's discourse skills.

3. Parents' Mediation

Whether or not parents are familiar with the apps, they can give active guidance to children during

their learning process. Parents who have a lot of experience using apps can maximize the learning effectiveness by conducting activities with specific learning goals or giving related prompts to children during their learning process [9]. Children will have more opportunities to communicate with adults and practise using the words they have learnt before. On the other hand, parents who are not familiar with apps can also share their experience and knowledge of words with children when they are using apps to learn. This could increase children's grammar, word and syntax knowledge; attract their attention; and encourage them to explore more [10].

4. Findings and Discussion

In this research, I chose to apply a very common qualitative approach: interview. As Greenback stated, qualitative approaches are more suitable for describing facts and characteristics of a specific phenomenon [11]. There are four families involved in the interview and they are all from the school where I used to work. These children are a 3-year-old boy named Mike, a 3-year-old girl named Sarah, a 4-year-old girl named Ann and a 5-year-old boy named James. The long-term use of English teaching apps has given these families enough experience and knowledge to evaluate the apps during the interview.

According to the parents, generally children would be allowed to access at least one tablet or one smartphone at home from 15 minutes to 30 minutes in total for the whole day. Usually, the length of use will not be used once and this was accessed in bursts of 15 to 30 minutes. For example, Mike used to use apps to learn English for 15 minutes after he came back from kindergarten and for another 15 minutes of his free time after dinner. Similarly, Sarah normally used interactive English teaching apps in the afternoon and listened to English stories before bedtime. The duration of these two periods also totaled nearly 30 minutes. All the parents expressed that they have to control the time their children use apps. Mike's mother explained:

'From the beginning of Mike's access and use of electronic devices, such as smartphones, tablets and eBooks, he was terribly addicted to it. Finally, we found that he could not stop using these electronic products without our intervention. Therefore, in order to better control his use, we always learn English together with him and limit the time to 15 minutes.'

James's parents also pointed out that the addiction towards apps becoming a serious problem in electronic learning. James's father said:

'When he is using apps, especially watching some English videos or playing interactive games, he could not hear any sound from the outside world even if you sit beside him and speak to him. If he used the apps before a meal, he would refuse to eat at this time.'

However, having terrible addiction to apps temporarily happened to the young boys. Both Ann's and Sarah's mother reported that their daughters do not seem to have much interest in using apps. Ann's mother mentioned:

'She always wants to hold a talking doll instead of focusing on a tablet or smartphone. Except for the time we used to learn English with her together, she rarely or even never asked to play with apps or electronic products.'

The reason parents hope to reduce young girls' exposure to apps is the worry about the side effects of apps. Violence and pornographic information, obsession and the harm to children's eyesight are listed among their worries. Of the side effects, the possibility that apps may cause vision loss in children is the most serious concern. According to the report published by Xinhua net, one of the biggest news websites in China, the myopia rate of Chinese young children aged 3 to 6 is 2.5%, ranking the first in the world [12]. This situation makes these parents pay more attention to children's health problems as a result of electronic devices. During the interviews, parents from the four families expressed extreme concern about this issue more than once. Sarah's mother even said that if parents did not control their children's use of apps, their children would become blind in the future. Based on their feedback, the harmful influence of apps on children's eyesight is one of the reasons for banning apps. James's mother added the following:

'To be honest, we decided to abandon the use of any apps after James entered primary school. Because during that time, he has to face lots of homework and after-school classes. He has to spend more time on reading and writing. In his spare time, we thought it was important to relax his eyes.'

These parents' reports show that young children have opportunities and certain times to access apps every day at home. Parents will strictly control the time that the children use the apps and consider

reducing the time in the future.

As opposed to using apps at home, children seldom had access to tablets or smartphones at a friend's or relative's place. Sarah's mother explained:

'Lots of Sarah's friends are her age and they are not allowed to access apps frequently. As far as I am concerned, a large number of parents are concerned about the side effects from electronic products, especially in children's early years, like 0 to 4. Thus, they rarely allow children to use apps apart from formal learning time.'

In contrast, James's mother reported that whether James accesses apps at other places is largely influenced by his peers. If one of his friends or peers starts playing with apps, the other kids will quickly be attracted and want to play in turns.'

Surprisingly, these children could also access tablets and apps in kindergarten and training classes. Their parents described that some private kindergarten and after school classes had already adopted digital media such as tablets or touch-based screens in their courses. However, the application of apps is based on the teacher's pedagogy and teaching content. According to Ann's mother's, most of the time that children can access apps is during English and Chinese classes. Digital technology is regarded as an advanced teaching method in the field of language teaching and accepted by the majority of parents. Therefore, it is possible that children who have opportunities to access apps in their learning places are allowed to use apps for a longer time than at home because parents and teachers consider it an effective tool in language learning. However, all of the children interviewed are studying at higher level private kindergartens which cost 130,000 to 150,000 RMB a year. Therefore, their experience of using apps in kindergarten and tutorial classes may not represent all such classes in China.

4.1 Parental Mediation

The information from the interviews shows that co-use (repeating words or phrases, prompting and narrating story content) frequently occurred when children used educational apps to learn. Ann's mother reported that their family will use English storytelling apps together with Ann before she goes to bed. In Ann's mother's description:

'We used to read printed books before but it is hard to keep and requires much time to search for and buy the appropriate one. So, now we changed to using English teaching apps which include nearly 500 stories. Every night, I will listen to the story and watch the animation or illustrations with Ann. At the beginning of each section of the story, I would have a briefly pause in order to better explain the story content for Ann and prompt her to guess some of the plot. If she was interested in imitating some words, I would resume and repeat those words with her several times.'

Based on this description, each type of co-use activity was classified, and most of them took place during the use of educational apps, especially those that contained stories. This situation was highly consistent with the discussion in Cheng and Tsai's research [13].

On the other hand, Sarah's mother assists her daughter in learning English through apps every day. She claimed that in this process, parents can constantly emphasize and repeat difficult words beside children during their learning. Sarah's mother believes this is one of the most effective ways to enhance children's memory and improve their comprehension. She also explained how she assisted Sarah when her daughter used flash card apps:

'When Sarah uses flash cards to learn or review vocabulary, she taps the screen first and listens to its pronunciation, then she will follow to pronounce the word. During this process, I will sit next to her and listen to her pronunciation, if she has bad pronunciation of words, I will immediately stop and correct her. Later, when she can basically remember the word and pronunciation, I turn off the sound, point to the picture of the word she had learnt before and ask her. If she does not remember a difficult word, I will repeat the word several times and try to explain it again. This round of review is for checking gaps in Sarah's knowledge as well as enhancing her memory.'

Conversely, James's mother only applies co-use when apps require a parent's participation. During this process, she narrates the word in Chinese or shows him the picture and lets him answer the matched English word. She also gives James other hints if he could not remember the correct answer. After these kinds of interactive activities, James's mother also mentioned that she would explain and teach some confusing words to James. When James talked about his experience of playing interactive learning games with his parents, he expressed his enthusiasm for this:

‘Playing word guessing games is my favourite way to review vocabulary and learn English. Our family plays this game every night. I like to compete with my mom and dad in this game and I am always the winner. I can remember the new vocabulary and guess the correct answer in a short time. My mom and dad often praise me for that, you can ask them later.’

James was very excited when he talked about this experience during the interview. It is obvious that while using the apps which contain competitive elements such as word guessing games in English teaching apps, children are fully engaged in learning and memorizing the new vocabulary. This not only improves children’s interest in language learning but also enhances the effectiveness of their learning.

However, during the interviews, some children showed that they are not willing to use apps to learn English with their parents. Sarah expressed that ‘Sometimes I only want to listen to the pronunciation of the word and do not want to read it out loud. But my mother always constantly criticizes me at this time, and this makes me feel really bad and sad. Moreover, she always requires me to read and recite the word a thousand times, which makes me feel annoyed. So, I don’t want to use apps to learn if my mom is at home.’

Sarah’s exaggerated description of the number of times she was asked to read words directly show her dissatisfaction towards her mother’s behaviour during their co-use. In addition, this case also pointed out that children have their favourite learning methods; however, sometimes this will not be the same as their parents. As Baumrind stated in her study, authoritative parental control will cause children’s rebellious psychology [14]. Therefore, if parents forced children to obey their arrangements, children will have become annoyed, which not only reduces children’s interest in learning but also makes them feel fearful about using apps.

From all this information, it is obvious that Chinese parents already realize the importance of parental mediation. Typical practices of co-use such as repeating, narrating and prompting appear frequently in children’s e-learning process. Surprisingly, apart from basic co-use practices, correcting was newly identified as part of the co-use process in Chinese parents’ mediation. This situation was caused by the content and teaching purpose of the flash card app they used. As mentioned above, a flash card app is a kind of traditional-style English teaching app. It only provides children vocabulary and pictures that match the words. It is designed to help children understand and memorize new words. In this context, Sarah’s mother’s work and purpose is to help her daughter review and strengthen her knowledge. Therefore, there is no need for her to prompt or narrate. Correcting will be the necessary way for her to assist her child.

Taken together, most of the practice identified in this research show that Chinese parents pay much attention to their children’s language learning and are willing to participate in the children’s use of apps. They place more value on early childhood education and want to ensure positive results from their children’s use of apps for learning. Narrating, prompting and repeating are frequently employed when parents read stories or play interactive learning games with children. In addition, parents may also adopt correcting when children simply review and learn vocabulary.

Different content of the apps and purpose in children’s learning will affect parents’ specific practices in the co-use process and give children absolutely different feelings during their learning. Moreover, children’s evaluation of their parents’ involvement largely depends on the parents’ behaviour in the co-use process. Therefore, children from different families have different attitudes on whether they prefer their parents’ participation in their learning with apps. Moreover, parents’ mediation also revealed their control over usage time and access of the apps. Regarding children’s usage of apps which include interactive games, James’s mother applies active-mediation. She explained as follows:

‘In our family, James is not allowed to use apps without our permission. He has to come to ask me whether he could play or not then obey my decision. If he has already finished his homework and picked up his toys, I would allow him to play for up to 15 minutes. You know, for a five-year-old boy, even the interactive games in learning apps are extremely attractive. Therefore, in order to control his usage time and participate in his learning, I would sit beside him and watch his usage. Sometimes if I was busy completing my work, I would let him play not far from me.’

In addition, restrictive mediation II was also identified in Mike’s and Sarah’s cases. Sarah’s mother strictly controls the usage time and the types of apps downloaded to their tablet or smartphone. She only allows Sarah to use apps which contain traditional teaching methods and content, such as flash card apps and video of classroom teaching. Therefore, she even set a password for her smartphone, tablet and the process of purchasing apps in the App Store. In Mike’s case, his mother always selects and downloads the apps she prefers because she considers Mike too young to choose them. Tablets and smartphone are

hidden in Mike's parents' room so Mike is only able to access them when his parents are home.

4.2 Evaluation of the Apps

Parents' experience of using apps shapes their evaluation practices, while their children's learning results and experience will also change parents' views on apps. Children's evaluation of teaching apps always depends on their own learning experience. In this section, the evaluation of English teaching apps will be analyzed from both parents' and children's perspectives. Moreover, the analysis of children's learning results will follow Cameron's classification mentioned above, which mainly focuses on children's discourse skills and vocabulary knowledge.

The information from the interviews show that parents' perspective on apps varies depending on the content and type of the app. As mentioned above, Sarah's mother is a determined supporter of traditional teaching. She believes the apps which apply traditional teaching methods such as class teaching apps, flash card apps and word reciting apps as the most effective for children to learn vocabulary. She hopes to see Sarah's learning outcome immediately and this is her main evaluation criterion. As she stated:

'Compared with traditional methods such as printed word cards, children prefer to use English teaching apps to learn vocabulary. Maybe this is the charm of electronic products – children can press, touch, tap, slide the screen, and this lets them feel more engaged during the learning process. Generally, Sarah can recite five to eight words one day when she uses vocabulary learning apps but only four to five words when she uses printed cards.'

Based on Sarah's learning result and her mother's own opinion on the content of apps, Sarah's mother positively expressed her satisfaction of the English teaching apps during the interview. However, her positive evaluation was limited to the vocabulary learning apps which contain traditional teaching methods. She also admitted that these apps only help Sarah remember the vocabulary but Sarah could not use some of the words in daily life. The same situation is also mentioned by Mike's mother in the interview:

'After learning the new words through apps, Mike can quickly remember the words and answer correctly when we ask how to say this in English. But he never spontaneously uses these words in daily life though sometimes our family will talk with him in English.'

These cases show that these kinds of English teaching apps are helpful in improving children's vocabulary but fail to promote their discourse skills. This result is related to the design purpose and teaching content of the apps. Vocabulary teaching apps mainly focus on enhancing children's vocabulary knowledge; therefore, in the teaching process, they only include simple spelling and reading instead of dialogue and communication.

Comparatively, Ann's and James's mothers used English teaching apps as a teaching assistant or tool in their children's learning process. Both of them highly valued the fact that the apps can stimulate their children's interest in learning English and encourage the children to express themselves in English.

In the interview, Ann's mother noted Ann's rejection of boring and spoon-feeding teaching processes in some English teaching apps: 'During some learning processes in some apps, children are instructed to follow the assisting voice to read and recite during their learning. I am not surprised that Ann could not concentrate on using this app for 15 minutes. It is really dull and lacking interactive activities. I think that this design does not create an attractive atmosphere for children to learn English and it is not suitable for young children of this new era.'

On the contrary, she agreed that some specially designed English teaching apps, for example the English storytelling app and English painting app from Baby Bus, have a significant positive influence on young children's English learning. Ann's mother added:

'I think the most important goal of learning a second language is to use it in life. Learning English from everyday activities such as painting and reading stories, will improve children's ability to communicate with others in English. We noticed that after using the English painting app for nearly two weeks, Ann will use English inadvertently to ask for the colour she wants when she draws on paper at home.'

The same situation was mentioned by James's mother during her interview. She reported that James could use short phrases which are repeatedly emphasized in the story after using storytelling apps for two weeks. For example, after reading the story that teaches children to introduce the items around them, James could point to his bag and say, 'This is my bag' or pick up an apple and say, 'This is an apple'.

Though James can use simple English words or phrases to express himself in daily life, most of the time he use Chinese to communicate with others. At this stage, learning a second language did not affect James's first language, but became another language that he could use in life.

The information above shows that more interactive apps have obvious advantages in improving children's English discourse skills and encouraging them to express themselves in English. However, parents did not mention how many words their children had learnt through these apps. Though they admitted that they did not keep track of the result of children's vocabulary learning, they all believed that their children's vocabulary knowledge was promoted through interactive English teaching apps.

Compared with parents' evaluation, children's opinions towards apps are simple, depending on whether they like the apps. Based on the information from the interviews, all of the participating children think that listening to the stories in storytelling apps is the most interesting way to learn English. If the apps have animation and sound effects during the storytelling process, they are willing to watch and listen repeatedly. On the contrary, they all expressed that they did not like class teaching apps or vocabulary reciting apps.

In addition to James, who has a huge passion for interactive learning apps, Mike also expressed his love for interactive activities in his interview. He mentioned that 'Reciting after the teacher is really boring and I am not good at reciting vocabulary in a short time. My favorite app is one which has different stories and its main character is a car. I always share these stories with my friend and we will act out the roles in the stories when we are in kindergarten. You know, they always say 'have a sweet dream' to their parents before they go to bed every night.'

On the other hand, Ann and Sarah show great interest in the apps which are similar to role-playing games. For example, in the app named Little Panda, children will act as the main character Little Panda in the learning activity. In Little Panda's daily life, children can choose to go to the supermarket to buy fruits and vegetables; at this time, the vocabulary of each item they choose will pop up on the screen for children to read and recite. Ann reported that she wants to play this game for a longer time but her mother only allows her to play 15 minutes per day, while Sarah's mother does not allow her to play this type of app and she can only access it from other children's tablets or smartphones. The answers from children in the interviews can show that interactive teaching apps are the most popular kind for young children. The story lines, animations, sound effects and interactive games in the apps attract children's attention and enhance their comprehension in the learning process. It will not only improve children's learning efficiency but also give children a fun learning atmosphere.

5. Conclusion

The goal of this research is to examine the influence of English teaching apps on young Chinese children's second language learning. By conducting interviews with four Chinese families, children's learning results and the evaluation of the English teaching apps from both parents and children were discussed. Moreover, some detail can be observed in the study to show Chinese parents' and children's perspectives on English teaching apps. The discussion and findings in this research may become valuable information in terms of future app design to support effective second language learning for young Chinese children. It will also enrich the existing discussion on the use of educational apps in early childhood.

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