

8 Chinese parents' perceptions and practices of EFL technology usage with young children

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Abstract

Despite a large body of literature on the Technology Acceptance Model (TAM), studies on young children's usage of media technology in China are still scant. This paper characterises the variations in Chinese parental acceptance and intent to continue related to their children's use of web-based English as a Foreign Language (EFL) technologies. A sample of 20 parents from an inland city in China participated in individual interviews and reported factors affecting their acceptance and preferences. Thematic analysis reveals that parents' beliefs about EFL affect the perceived ease of use and perceived usefulness of EFL technologies. The study has also found that Chinese parents are now attaching more importance to children's emotional and social skills development.

Keywords: TAM, EFL, e-learning, parents.

1. Introduction

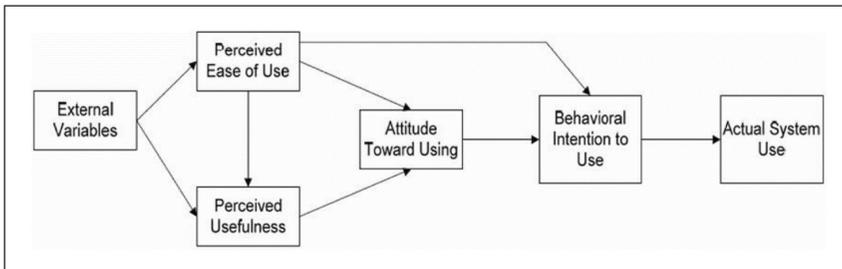
Despite a large body of literature on the TAM (Davis, 1989), studies on young children in China are still scant (Bittman, Rutherford, Brown, & Unsworth, 2011; Lieberman, Bates, & So, 2009; Lieberman, Fisk, & Biely, 2009; Plowman, McPake, & Stephen, 2010).

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Davis (1989) proposed the TAM to understand factors affecting user behaviour. The TAM implies that people’s acceptance and rejection of technology is influenced by their cognition and belief. It suggests that the Perceived Ease Of Use (PEOU) and Perceived Usefulness (PU) are two core factors in explaining user attitudes towards using, behavioural intentions, and actual use. Figure 1 shows the interplay among TAM elements. Although TAM has been validated in various technology contexts (e.g. e-commerce, Wu & Wang, 2005) and regions (e.g. Taiwan, Tsuei & Hsu, 2019), researchers pointed out that this model lacks explanatory power because it does not clearly define external variables (Legris, Ingham, & Colletette, 2003). In other words, what factors affect PEOU and PU? Specifically, this paper tries to identify the external variables that affect parents’ perceptions and in turn their practices.

Figure 1. A common operationalisation of the TAM (adapted from Davis, 1989)



Plowman and McPake (2013) looked into how parents might have the greatest influence on children’s early developmental stages. Parental perceptions and practices either directly or indirectly relate to children’s technology habits and behaviours, for example, concerning technology access (e.g. whether or not to buy an iPad, amount of screen time), function (e.g. for family time or education), attitudes (e.g. health concerns), and support (e.g. emotional or technical help), etc.

This paper attempts to explore factors that influence parental perceptions and beliefs using the TAM. The findings will provide a better understanding of how Chinese parents’ prior EFL experiences and beliefs influence their PEOU and PU

of EFL apps and whether cultural and social specific factors exist in technology acceptance studies.

2. Method

This study was set in Y city, a small and less developed northwest inland city in China. While previous studies about children's technology use in China were largely conducted in more prosperous metropolitan cities in coastal or eastern areas, such as Beijing, Shanghai, and Shenzhen, the relatively lower-middle socio-economic level of Y city fills the literature gap by providing a different context since a body of literature has shown a strong relationship between parents' socio-economic status, parenting styles, and children's technology use (Gjelaj, Buza, Shatri, & Zabeli, 2020; Liu, Georgiou, & Manolitsis, 2018; Zhu et al., 2019).

Parents in this study were from a local mid-tier kindergarten. Tuition fee is the major criteria when the tier a kindergarten belongs to is decided. In total, 20 parents (17 mothers, three fathers) were recruited and participated in the study. Their ages ranged from 29 to 39 years and their children's ages ranged from 3-6. All of them have used EFL technology in the past year.

Parents responded individually to an exploratory 20-minute semi-structured interview to elicit the maximum depth of their attitudes and perceptions. Some questions included were as below.

- What types of EFL mobile devices do you have at home?
- Why do you let your child use this EFL App?
- What is your expectation of using this EFL App?

A thematic analysis (Braun & Clarke, 2006) was then conducted and interviews were transcribed and then coded by the researcher using the software Nvivo 12.

3. Results and discussion

Two major sub-themes emerged as the most important factors contributing to either acceptance or rejection of an EFL app: parents' EFL beliefs, as well as their parenting goals.

3.1. Parents' EFL beliefs

Language related beliefs are most mentioned when parents answered the question of why or not they use particular apps. Most of the parents mentioned in their interviews their EFL beliefs and how these beliefs direct their practices. Many parents responded to the question of 'why use' by ascribing great value to English. For example, they claimed that the reason for using the app is

“English is useful. If you want to travel abroad by yourself, you have to learn English. At least you need to learn some daily communication vocabulary”.

But some parents expressed their doubts about the importance of English, either because of the advent of modern translations technologies or because of the heightened status of Chinese. They said

“I don't want my daughter to spend too much time on English. China is becoming more powerful and perhaps when my daughter grows old, the world will all speak Chinese”.

Apart from language ideologies, parents also indicated that they thought there was a 'critical period' for English learning (Penfield & Roberts, 1959), i.e. when learning a foreign language is easier and thus they claimed 'the earlier, the better' and made the following statement:

“undoubtedly, the earlier, the better, especially when you consider pronunciation. If you let your child learn English at a very early age, he could speak like a native”.

3.2. Parenting goals

Nearly all parents mentioned parenting goals in their interviews as an explanation for technology acceptance, rejection, or abandonment. However, it is interesting that these beliefs are inconsistent and sometimes contradictory.

Table 1 below shows results of the thematic analysis. A classification and illustration of the patterns about goals and specific expectations as well as the signifiers (what represents the goals) display the variety of parental expectations and their relationship with technology acceptance. Parents who place great emphasis on children's academic achievement, especially on test scores, show high regard for using EFL apps, while parents who prioritise social and emotional development express concerns with children's use of EFL apps. It is also interesting that some academic achievement-orientated parents also worry that use of apps may reduce children's classroom attention level due to the relatively more entertaining features of modern technology.

Table 1. Parenting goals and EFL technology acceptance

Parental Goals	Parental Expectation	Signifiers	Technology Acceptance	Technology Rejection
Academic	Emphasis on learning outcome	test scores	14	6
	Emphasis on learning process	classroom attention	8	12
Social	Communicative skills	understanding classroom rules	7	13
Emotional	Emotional welfare	loneliness, courage, and other emotional issues	7	13

4. Conclusions

This paper provides insights into parent's acceptances and intentions for continued use of young children's EFL apps. The study found that parents' prior EFL beliefs and parenting goals have a strong impact on both initial use and

continued use. Parents with a more optimistic view towards Chinese language are more likely to reject or abandon EFL apps, while parents who are more concerned with children's test scores show more willingness to adopt an EFL app.

These findings also provide further insights into how external factors rather than the app itself affect people's technology acceptance. However, the limited number of participants calls for further investigations, especially a qualitative one to confirm these findings. It should also be stressed that since this study was conducted in a small inland city in China, results may differ should it be replicated in other regions, due to the presence of a vast socio-economic gap.

References

- Bittman, M., Rutherford, L., Brown, J., & Unsworth, L. (2011). Digital natives? New and old media and children's OlitComeS. *Australian Journal of Education*, 55(2), 161-175. <https://doi.org/10.1177/000494411105500206>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319-339. <https://doi.org/10.2307/249008>
- Gjelaj, M., Buza, K., Shatri, K., & Zabeli, N. (2020). Digital technologies in early childhood: attitudes and practices of parents and teachers in Kosovo. *International Journal of Instruction*, 13(1), 165-184. <https://doi.org/10.29333/iji.2020.13111a>
- Legris, P., Ingham, J., & Colletette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & management*, 40(3), 191-204. [https://doi.org/10.1016/s0378-7206\(01\)00143-4](https://doi.org/10.1016/s0378-7206(01)00143-4)
- Lieberman, D. A., Bates, C. H., & So, J. (2009). Young children's learning with digital media. *Computers in the Schools*, 26(4), 271-283. <https://doi.org/10.1080/07380560903360194>
- Lieberman, D. A., Fisk, M. C., & Biely, E. (2009). Digital games for young children ages three to six: from research to design. *Computers in the Schools*, 26(4), 299-313. <https://doi.org/10.1080/07380560903360178>

- Liu, C., Georgiou, G. K., & Manolitsis, G. (2018). Modeling the relationships of parents' expectations, family's SES, and home literacy environment with emergent literacy skills and word reading in Chinese. *Early Childhood Research Quarterly*, 43(November), 1-10. <https://doi.org/10.1016/j.ecresq.2017.11.001>
- Penfield, W., & Roberts, L. (1959). *Speech and brain mechanisms*. Princeton University Press.
- Plowman, L., & McPake, J. (2013). Seven myths about young children and technology. *Childhood Education*, 89(1), 27-33. <https://doi.org/10.1080/00094056.2013.757490>
- Plowman, L., McPake, J., & Stephen, C. (2010). The technologisation of childhood? Young children and technology in the home. *Children and Society*, 24(1), 63-74. <https://doi.org/10.1111/j.1099-0860.2008.00180.x>
- Tsuei, M., & Hsu, Y. Y. (2019). Parents' acceptance of participation in the integration of technology into children's instruction. *Asia-Pacific Education Researcher*, 28(5), 457-467. <https://doi.org/10.1007/s40299-019-00447-3>
- Wu, J. H., & Wang, S. C. (2005). What drives mobile commerce? An empirical evaluation of the revised technology acceptance model. *Information and Management*, 42(5), 719-729. <https://doi.org/10.1016/j.im.2004.07.001>
- Zhu, S., Yang, H. H., Macleod, J., Shi, Y., & Wu, D. (2019). Parents' and students' attitudes toward tablet integration in schools. *International Review of Research in Open and Distributed Learning*, 19(4). <https://doi.org/10.19173/irrodl.v19i4.2970>



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