A Mixed Study to Understand Taiwanese Children's Preference for A Mobile Game

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Abstract: This mixed study focused on an educational mobile game, "Lily's Daily Life," to explore children's preference by big data in 8216 children and behavior observation for 12 children. The data result shows the game most attracted 3-5 years old children. The highest frequency of play is 3 years old. The results presented by big data are the same as our observations on the behavior of 12 children. As for the gender preferences, there were no differences for different genders regardless of big data and children's behavior observations. This study found that: 1. There is a significant difference in age preference for games. 2. There is no significant difference in gender preference.

Keywords: Game-based learning, mobile game, a mixed study, age preference, gender preference.

1. Introduction

Nowadays, there are plenty of Game-based Learning games (Lin & Hou, 2016), especially educational mobile games for children (GSMA, 2015; Wishart, 2018). Children learn from play (Piaget, J. 1952), and children have their own preferences for games. Do children of different age groups or genders have different preferences for games? This research mainly used a mobile game as an example to explore children's preferences for the game by big data and behavior observation.

2. Research Method

This study adopted a mixed method to find out children's preference to the game. The mixed method of this study is based on big data and supplemented by behavior observation. The selected game for this study was Lily's Daily Life, which guides children to arrange life routine through role tasks. The way of playing is to allow children to enter different situations, such as going to school in the morning and going home in the evening. It lets children arrange life activities, and in the end, presents a picture of the story after children planned the situations. Please refer to Figure 1, Screenshot of Lily's Daily Life.



Figure 1. Screenshot of Lily's Daily Life.

3. Research Structure and Findings

The implementation steps of this research include: 1. Exploring children's preferences of different ages and genders in this game through big data. 2. In order to verify whether the big data information is true, we observed children's behaviors for this game in the classroom. The structure and findings of this research are shown in Figure 2.



Figure 2. Research Structure and Findings.

This study found: 1. Children of different ages have a preference for games. Take Lily's Daily Life as an example, children who prefer this game are 3-5 years old. 2. Children of different genders have no significant differences in game preferences. Taking Lily's Daily Life as an example, we found no significant differences.

The results of this study can be used as a reference for early childhood educators and game designers. This study only tested for one game, we will plan to discuss and compare more games in the future.

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