ABSTRACT

A Thai alphabet keypads on mobile phones has been designed and continuously developed for the purpose of users' convenience. The current research proposed a new model of Thai alphabet keypad on a mobile phone based on Thai Romanization and frequency use of Thai characters. The average of keystrokes per character (KSPC) and time for each character input were collected for two Thai alphabet keypad designs by Thai alphabet model and Thai Romanization. A within-subject experimental design was conducted with 108 participants and 180 students. They were asked to type fifteen messages by each model. Calculated based on the KSPC formula, the KSPC of Thai Romanization model was 2.796, which was less than the KSPS of Thai alphabet (3.297). This calculation result was consistent with the experimental result, which revealed that the Thai Romanization keypad design yielded the KSPC and average time for Thai character input less than the Thai alphabet models significantly at 0.05. Also this layout available for peoples. Unless educational level, age and sex were difference.

The keystroke per time at the correct sentence used for evaluation also. Calculated results from 108 participants and 180 students, Thai alphabet keypad on a mobile phone by the Thai Romanization has the ratio of keystrokes per time at the correct sentence less than Thai alphabet models significantly at 0.05.