fastest due to utilizing both thumbs to access the touch screen.

Based on the earlier discussions, the results deduced that there is a relationship between the type of grip and gestures performed that can lead to different times. Also, to improve the GOMS model, the consideration of switching grips may be considered as an elementary action when considering the time requirements. In this research, this issue had not been considered partly due that the additional time may not be significant, leading to lower priority for this issue. However, this is an issue that could be explored in more details in future works.

Another issue that is of interest is that screen sizes of touch screen interfaces can affect the time estimation of actions. With larger screens such as phablets (6-7" smartphones) and tablets, it is difficult to reach parts of the screen. Due to the difficulty, certain actions may require more time to perform. This issue had been reported in other research [27] regarding the issue of reach with the motor ability of subjects. To deal with this issue, changes with the model may be considered. One such example would be adding the action of changing the grip to allow the subject to extend to reach the item easily. For example, an overextended tap gesture which could take more time than a typical tap gesture. This issue had not been considered in this research and could be explored later in a relationship with the grips that are discussed.

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