ABSTRACT

Cognitive development occurs in each individual affecting children's behavior and thought pattern. According to Piaget's theory, each child has different ideas relative to their age. The concrete-operational stage (7-12 years old) is a cognitive development stage in which children begin to think logically and systematically. Based on observations and interviews, one particular way to train children's cognitive development during the concrete-operational stage is determining the daily schedule of activities independently. This can be made simple using a smartphone, since most children today are already familiar with such technology. Based on observations, existing applications do not have features for children to schedule their activities independently, making it impossible to meet the goal of training children's cognitive development. In view of such fact, there's a need for an app product focused on the user's goals. The method used in the user interface model for this app is Goal-Directed Design, which focuses on the user's goals. It is followed by a usability test in the form of Quality in Use Integrated Measurement (QUIM). This research produces a user interface model for self-scheduling applications customized to the user's goals and fulfill usability with percentage of 80.07% for children persona user, and 75.2% for parent persona user with good category.

Keywords: *cognitive development, schedule, user interface, goal-directed design, usability,* QUIM.