

HELLO SMART BABY APPLICATION FOR KNOWING CHILD DEVELOPMENT

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Abstract

The growth and development of children will always be the main thing for every parent. Various obstacles in the process of child development still occur. What is more fatal is when parents do not realize or do not know about the mismatch of developmental tasks for children aged 3 to 5 years. If left unchecked, this error will affect future developments. To solve this problem, we created a program called "Hello Smart Baby" in the form of a website that aims to detect the level of developmental appropriateness of children aged 3 to 5 years. This research method uses qualitative methods with as many as 20 research subjects. From the test results of the Hallo Smart Baby website on parents of children aged 3 to 5 years, which was carried out using a random sampling technique, it shows results that are relevant, specific and can have a positive influence on parents in terms of paying attention to their child's growth and development. This proves that the quality of human resources in Indonesia is greatly affected by the supporting facilities, facilities and infrastructure

Keywords: *Smart Baby, Application, Child Development*

Introduction

Children are the nation's next generation who should get more attention, especially during infancy. As children get older, their growth and development also increases, both of which are interrelated. The growth and development of toddlers can cause various kinds of obstacles in the form of growth delay and developmental delay in toddler growth which can be caused by malnutrition, while the delay in toddler development is mostly due to lack of stimulation which results in a lack of brain stimulation resulting in less than optimal development.

Development is the addition of more complex human structures, functions and abilities (Septiani et al., 2016). An important period of child development is the toddler period, because at this time the basic growth will influence and determine the development of the next child. The process of growth and development is divided into several stages based on age. One of the phases is preschool, which is children aged 3-5 years (Septiani et al., 2016).

Early childhood is where these children are still in their playing years who have not entered a formal educational institution such as elementary school (SD) and usually they want to learn and be able to learn from the challenges of the outside world or participate in activities in the form of various pre-school educational institutions, such as a playgroup, kindergarten, or nursery. Early childhood is children aged 0-8 years. Whereas in essence, early childhood is a unique individual who has a pattern of growth and development in the physical, cognitive, social emotional, creativity, language and communication aspects specifically in accordance with the stages that the child is going through. (Nurmalitasari, 2015).

In Indonesia, the number of children under five in 2012 was \pm 31.8 million people out of a total population of 250 million people or 12.72%. (BKKBN dalam Departemen Kesehatan RI, 2013). According to the Indonesian Ministry of Health, 2006 that 16% of Indonesian toddlers experience developmental disorders, both fine and gross motor development, hearing loss, lack of intelligence and speech delays.

Developmental delay in children is due to the lack of parents recognizing the danger signs (redflag) of child development, the lack of early detection examinations or development screening in children and the lack of direct involvement of parents with children or stimulation from other than parents (Murni, 2017). From Nurmalita's research (Nurmalitasari, 2015; Septiani et al., 2016), there is a significant relationship between maternal knowledge about early stimulation and motor development of children aged 6-24 months and children who have mothers with low knowledge of early stimulation will be at greater risk. to experience suspected motor delay.

Factors that influence child development, one of which is environmental factors. Environmental factors consist of prenatal and postnatal environment. One of the postnatal environmental factors that influence development is the psychosocial environment (Murni, 2017; Stewart & Stewart, 2019). This is supported by the judge's research (Hakim et al., 2012), where there is a relationship between environmental factors, especially the role of the mother in fulfilling children's basic needs on the development of fine motor skills, gross motor skills and social personalities of pre-school children. Psychosocial environmental factors in the form of stimulation that can be provided by mothers or caregivers in formal situations are expected to support optimal child development. Responding to the existence of children who have the potential to be developed as optimally as possible. According to (La & Ver, 2016), there needs to be adequate educational efforts both formal, informal and non-formal. Associated with psychosocial factors, namely stimulation that is very important for optimal child development, this can be obtained from both parents and formal education.

Objective

This research is expected to help parents in monitoring or detecting the level of suitability of developmental tasks for children aged 3 to 5 years. Help provide information and direction regarding the task of developing children under five. In addition, as an innovation that generates economic value when working with partners or investors.

Methods

This study uses a qualitative method. Qualitative research methods are carried out in natural conditions. Qualitative research is conducted to explain and analyze phenomena, events, social dynamics, attitudes of belief, and the perception of a person or group of something (Mulyadi, 2011; Somantri, 2005). This study aims to obtain an overview and also information about the level of parental awareness of the development of children aged 3 to 5 years. Random sampling technique is used to select respondents. Hello Smart Baby uses qualitative data collection methods through the process of observing parents who use the Hallo Smart Baby web. In addition, data were obtained from interviews with parents who had finished using the Hello Smart Baby web. The results of the interviews were used to determine the benefits of the Hallo Smart Baby program in web form. The object of this research is mothers who have children aged 3 to 5 years. Around the researcher's house, there are six stages in this research

1. Research and Information Gathering

Analyzing the knowledge of parents about the development of children under five is carried out by observation, interviews, and distributing questionnaires.

2. Design

Designing the Hallo Smart Baby web using descriptive qualitative study methods. Descriptive qualitative studies are studies that describe and describe existing problems and interpret and describe existing data along with the current situation without giving treatment or manipulation to the variables under study so as to obtain data that is what it is and emphasize the meaning of

the results. . The data collection technique is done by studying literature in the form of books, journals and scientific articles. This data is used as the basis for analyzing and explaining the problem in a discussion.

3. Develop

The product has been produced in a web form that has been validated by experts followed by practicality and effectiveness tests. This product will be developed into an Android-based application so as to increase the practicality and effectiveness value to make it easier for users.

4. Experiment

At this stage the product is tested on 20 users using simple random sampling technique to select respondents.

5. Evaluation

At this stage this product will be evaluated if there are deficiencies in this product, then it will be evaluated and will be tested again.

6. Application

This product can be used by parents of children aged 3 to 5 years.

Discussion

From the trials on 20 users showed the results that:

1. 13 children experience a good level of developmental task suitability:
 - a. 6 children had a high level of developmental task suitability with an average score of 353 points
 - b. 4 children had a moderate level of developmental task suitability with an average score of 276 points
 - c. 3 children had a low level of developmental task suitability with an average score of 189 points
2. 7 children had a developmental task mismatch.

Early childhood is a group of children who are in a unique process of growth and development. Children have a pattern of growth and development (fine and gross motor coordination), thinking power, creativity, language and communication, which are included in intellectual intelligence (IQ), emotional intelligence (EQ), spiritual intelligence (SQ) or religious or religious intelligence (RQ), according to the level of growth and development of the child. The growth and development of early childhood needs to be directed at laying the right foundation for human growth and development as a whole (La & Ver, 2016).

The learning process in early childhood should be carried out with the aim of providing basic concepts that have meaning for children through real experiences that allow children to show optimal activity and curiosity (Keenan, 2019)(Keenan, 2019). Montessori in Hainstock (Bhurlock, 1988) states that at birth to 6 years of age children experience a golden period (the golden years) which is a period in which the child begins to be sensitive / sensitive to receive various stimuli. Sensitivity period is a period of maturity of physical and psychological functions, children are ready to respond to stimulation provided by the environment. The sensitivity period for each child is different, along with the rate of growth and development of the child individually. This period is also the period of laying the first foundation for developing capabilities

cognitive, language, motor-motor, and socio-emotional in early childhood.

Conclusion

From the test results of the Hallo Smart Baby website on parents of children aged 3 to 5 years, which was carried out using a random sampling technique, it shows results that are relevant, specific and can have a positive influence on parents in terms of paying attention to the growth and development of their children. This proves that the quality of human resources in Indonesia is greatly affected by the supporting facilities, facilities and infrastructure. This website service is interesting because it can be a means and infrastructure in detecting the level of suitability of developmental tasks for children aged 3 to 5 years.

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