

FEASIBILITY OF EDUCATIONAL MEDIA FOR STIMULATION OF TODDLER DEVELOPMENT WITH SNAKE AND LADDER GAMES

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ABSTRACT

This research was carried out to stimulate the development of toddlers with educational media for snake and ladder games. This is necessary because if a child does not develop properly, it will experience delays in emotional, social, spiritual, intellectual and moral development. Research that has been carried out previously using various media. Unfortunately, the media is mostly carried out individually and even though some are in groups, it is only one direction. Therefore, this study seeks to stimulate the development of toddlers with educational media of snake and ladder games in an effort to increase knowledge about stimulation of toddler development because it has advantages, applied in groups so that it is more interactive. The goal is to determine the feasibility of stimulating the development of toddlers with educational media for snake and ladder games. The method used is Research and Development, which refers to the Instructional Design research and development model with the ADDIE approach. Validation of material experts is carried out by pediatricians, lecturers and midwives of the Health Center. Product implementation to users, namely parents of toddlers. Conclusion for educational media to stimulate toddler development with snake and ladder games is declared feasible to use, an alternative educational media with a percentage of 92%.

Keywords: Development; Snake Ladder; Stimulation.

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INTRODUCTION

The Childhood is also called the golden age. Human brain development, the most important thing is in early childhood where it is able to achieve brain development 80%. If a child does not develop properly, then a child will experience a delay in emotional, social, spiritual, intellectual and moral development so that it will determine a person's behavior pattern as an adult. In 2022 in Banyumas Regency, the growth and development of toddlers monitored was 80.3%, while the toddlers served by Child Growth and Development Early Stimulation, Detection and Intervention (SDIDTK) were 28.08% (Dinkes Banyumas, 2022). Stimulation is an activity that provides stimulation of basic skills at the age of 0-6 years so that the growth and development of toddlers will be maximized. The dimensions of the monitored development include: gross motor, fine motor, language ability, socialization of independence (Kemenkes RI, 2022). Previous research has been done for stimulation using

flashcard image media in stimulating language development (Aida & Mansur, 2019), media booklet (Saputri et al., 2021)(Marwasariaty et al., 2019)(Demo et al., 2021)(Fitria et al., 2020), Child Development Stimulation Fan (Fitria et al., 2020), Health Counseling (Neneng Sitti Lathifah, 2018), leaflet, modul, Maternal and Child Health Books (Huru et al., 2022), video (Amirullah et al., 2021), Flip Sheet (Khayati et al., 2019). Unfortunately, the media is mostly carried out individually and even though some are in groups, it is only one direction. Providing stimulation by providing prior counseling to families and cadres in a traditional way so that the teaching materials distributed cannot be optimally received (Aprianti, 2022). Counseling with the LCC method with puzzle modification is more meaningful for improving elementary school students' knowledge about dengue compared to the counseling method with lectures (Novita, 2019). Counseling using video media, leaflets and power points has an effect on knowledge (Saripah et al.,

2023). The video method was less effective than the demonstration method but there was no significant difference between the two methods as shown by the results of the independent t-test statistical test ($p=0,365$) (Setiawan et al., 2020). Therefore, this study proposes stimulation of toddler development with snake and ladder game educational media in an effort to increase knowledge about stimulation of toddler development because it is made with cheap basic materials, economical, practical, not easily damaged, does not require electricity, is applied in groups so that it is more interactive and can be used by all components of society in all corners of the region. Based on the limitations found in several media stimulation of toddler development by parents, this study was analyzed to examine the impact of stimulation of toddler development with educational media of snake and ladder games. The purpose of this study is to determine the feasibility of stimulating the development of toddlers with educational media for snake and ladder games.

METHOD

This research uses the Research and Development method through the Analysis, Design, Development, Implementation, Evaluation approach (ADDIE). The analysis in this study was carried out to find out what kind of educational media parents use to stimulate the development of toddlers and literature studies were carried out for a temporary introduction to the product to be developed.

Design in the form of developmental stimulation products with snake and ladder educational media that will be developed, namely by formulating steps, design, content, materials used and suitability with toddler development stimulation materials.

Development is an activity of making development stimulation products with snake and ladder educational media and then tested by experts so that from the results of the product testing there will be improvements in terms of material, media and others.

Implementation by applying developmental stimulation with snake and ladder educational media to research subjects, in this case parents.

Evaluation by assessing every step of activities and products that have been made in accordance with specifications.

This study was conducted with a population of parents of toddlers in the working area of the Baturraden I Health Center, the sample was parents of toddlers with the working area of the Baturraden I Health Center of 30 toddlers. The sampling technique used is incidental sampling. The instrument is in the form of a questionnaire, where the criteria in the assessment are adopted from the learning media by Walker & Hess and adjusted to the needs of the researcher.

The research procedure consists of licensing (Ethical Clearance No. 1105/EA/F.XXIII.38/2024), manufacturing and use. The procedure for making educational media for snake and ladder games includes snake and ladder boards, information cards for stimulation of toddler development according to age, game rules, dice, blocks, materials adopted from SDIDTK contained in information cards about stimulation of toddler development according to age. The procedure for use is a game rule consisting of: can be played by a minimum of 2 people and a maximum of 5 people; Understand the purpose of the toddler development stimulation game with this snake and ladder game educational media is to be the first player to reach the last box (100th box) by moving from one box to another so that it reaches the last box (100th box); The plot of this game has a board whose paths are alternating; Each box is marked with the numbers 1 - 100 which indicates the flow of the player's movements. In addition to being marked with numbers, there is also the age of toddlers per period of stimulation which will be informed on the information card every time they stop in the number box; First, determine the players who will play at the beginning. Each player has to roll the dice to see which player gets the highest number. The player who gets the highest number will be the starting player. Once the initial player gets their turn, the player who gets a smaller number than the starting player will get the next turn of play, the next applicable to the player over 2; If there are two or more players who get the same number and that number is the highest number, each of the players is required to re-roll the dice once again in order to

determine who is the starting player; The game starts at the number 1, marked by all the player's blocks being at the number 1; In the first row, the player moves from left to right, then up the second row, the player will move from right to left, then up the third row, the player will move from left to right and so on, alternating intervals apply for the 4th to the 10th row; Follow the numbers on the game board to follow the game shifts. For example: if the player rolls the dice and shows the number 3 and the player is in box 1 then must move the pawn to box 4; If the player at the time of the pawn moves and at the stop shows the bottom of the ladder, then go up to the box indicated by the end of the ladder; If the player at the time of the pawn moves and at the stop shows the snake's head, it descends to the box indicated by the end of the snake's body; If the player rolls the dice and gets the number 6, he will get an additional opportunity with the first rule shifting the player's pawn to 6 squares. If the player stops at the snake sign box or ladder, it still follows the conditions. Then shuffle the dice again to play an extra turn. As long as the player continues to get the dice number 6 then it will be able to keep moving.; If the player shows a number box at the time of movement and at the stop, then open an information card that corresponds to the same number as the number box on the snake and ladder board; Read the information card until it is heard by all other players; After reading, continue to demonstrate with simple props; This information is a way of stimulating development that is recommended according to the age of toddlers; The first player to reach the last box (box 100) is declared the winner of the game.

RESULTS

The results of the development of this research pad consist of analysis, design, development, implementation, evaluation.

Analysis

Based on the results of the literature study, the educational media used for developmental stimulation so far are image media, flashcards, booklets, child development stimulation fans, health counseling, leaflets, modules, KIA books, videos, flip sheets. The snake and ladder game is a

therapeutic cooperative game. Cooperation is playing together and with clear rules so that a relationship between leaders and members is formed (Thaha et al., 2022).

Design

The activity of designing educational media in the form of snake and ladder products used to stimulate the development of toddlers to be developed consists of product design, the use of materials and the suitability of educational materials about the concept of stimulation of toddler development. The existence of a good product design will have many advantages in snake and ladder games, namely in the form of a balance between a fun atmosphere and seriousness, increasing the spirit of learning so that players are motivated to follow the game process that has learning content, and players will concentrate more on the material (Astuty et al., 2020).

Development

After the product of stimulating the development of toddlers with educational media for snake and ladder games was made, then testing was carried out by experts consisting of pediatricians, neonatal and bayi obstetrics and midwives. Based on the results of the product testing, there is input from the pediatrician, namely providing a picture on the snake and ladder box to be able to describe the stimulation stage, for example for the age of 0-2 months, the stimulation part of raising the head, then the image on the box is a picture of a baby practicing raising his head. The next input is on the developmental stimulation information card, which is to be more equipped in accordance with the SDIDTK book, for example the age of 0-2 months about training babies to recognize various sounds, then it is equipped with "Talk and sing": (Invite babies to listen to various sounds such as the voices of family members, animals, and so on). The third input is that players not only read the development information card, but also demonstrate with simple props so that the stimulation method is drawn so that it will be more interactive. The fourth suggestion is to have the snake and ladder board made in a large size so that the player can step on the snake and ladder board.

Input from other experts is to use materials that are more durable and not easily damaged, namely using banner/flexy fabric so that if used repeatedly, it will last a long time.



Figure 1. Snake Ladder Game Board Toddler Development Stimulation

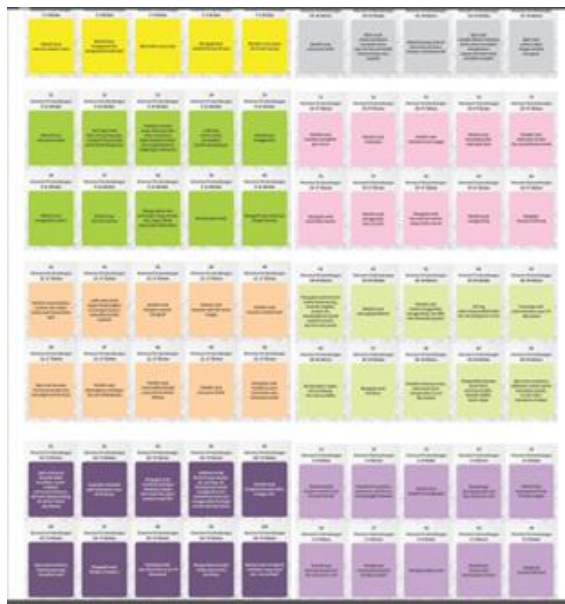


Figure 2. Developmental Stimulation Information Card.

Table 1 Validation of Material Experts

Variable	Average	(%)	N
The media used is in accordance with the material on stimulation of toddler development	3	75	3
Media content at every developmental age has the right and right concept	3	75	
Media can be used as a means of health promotion	4	100	
The media is easy to apply to stimulate the development of toddlers	3	75	
The media is easy to operate and safe to use	3.3	83	
Simple medium	3.7	92	
Can be used as an alternative media in stimulating the development of toddlers	3.7	92	
The material for stimulating the development of toddlers in the media is easy to understand	3.3	83	
Innovative and engaging in-media display	3	75	
The concept of writing in media is clear and easy to read	3.7	92	

Implementation

The application of stimulation of toddler development in the educational media of snake and ladder games to parents of toddlers to the product. As many as 89.2% of users can using media to stimulate toddler development with educational media for snake games ladder.

Evaluation

The stages of activities and products that have been made are in accordance with the specifications.

DISCUSSION

Experts carry out the validation process through the observation method and assess the media that has been made. Input and suggestions from experts in relation to the material and whether the display is in accordance with the assessment indicators contained in the assessment instrument sheet. If based on the information of media experts it is still declared unfeasible, then the researcher carries out revisions based on the advice of experts. The development of snake and ladder educational

media is repeatedly revised until it is declared feasible from experts (Hendraningrat & Fauziah, 2021).

The results of the validation analysis of material experts in Table 1 illustrate that the media "stimulation of toddler development with educational media of snake and ladder games" used in accordance with the material on stimulation of toddler development, obtained an average score of 3 and a percentage of 75%. The simulation of the snake and ladder game will lead players to know clearly the material (Astuty et al., 2020). The content of the media "stimulation of toddler development with educational media of snake and ladder games" at each developmental age has a correct and appropriate concept with an average score of 3 and a percentage of 75%. The media "stimulation of toddler development with educational media of snake and ladder games" can be used as a means of health promotion, with an average score of 4 and a percentage of 100%. Parents can get to know information/health problems by looking at the pictures listed on the snake and ladder because it is an interesting medium so that it is easier to focus on receiving information that is ultimately easily attached to the memory (Astutik & Herlinadiyaningsih, 2023). Health education media with snakes and ladders is effective as a promotional medium (Hisanah et al., 2023). The media "stimulation of toddler development with educational media of snake and ladder games" is easy to apply to stimulate the development of toddlers, with an average score of 3 and a percentage of 75%. Snake and ladder media has advantages in increasing knowledge because this media is more interesting and can be applied in playing while learning (Sriwahyuni et al., 2021). The media "stimulation of toddler development with educational media of snake and ladder games" is easy to operate and safe to use, with an average score of 3.3 and a percentage of 83% (Thaha et al., 2022). The media "stimulation of toddler development with educational media of snake and ladder games" is simple, with an average score of 3.7 and a percentage of 92%. "Stimulation of toddler development with educational media of snake and ladder games" can be used as an alternative educational media in stimulating the development of

toddlers with an average score of 3.7 and a percentage of 92%. The research results it was found that using media modules are more effective than using leaflet media maternal behavior (knowledge, attitudes and actions) in stimulating development in children aged 36-48 (Aprianti, 2022). So apart from using modules and leaflets, snakes and ladders can be used as an alternative. The educational media applied is a more effective way to present health-related information that is traditionally printed (Occa & Morgan, 2022). The stimulation material for toddler development in the educational media of snake and ladder games is easy to understand with an average score of 3.3 and a percentage of 83%. The display in the media "stimulation of toddler development with educational media for snake and ladder games" is innovative and interesting with an average score of 3 and a percentage of 75%. Designing more images than writing will make the information conveyed easier to understand and interesting, because stimuli that can be felt by various human senses can be displayed in visual media. Utilizing various senses increases the capacity to receive different types of information and facilitates information processing (Info, 2024). The concept of writing in the media "stimulation of toddler development with educational media of snake and ladder games" is clear and easy to read with an average score of 3.7 and a percentage of 92%.

CONCLUSION

Based on the results of the research and discussion, it was concluded that the educational media for stimulating the development of toddlers with snake and ladder games was declared feasible to be used. Parties that need to be involved to maximize the use of this media include posyandu cadres and PAUD teachers

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