Development of a Booklet for Introduction to Types of Emotions in Preschool Children

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Article Info	Abstract
Article history: Received: 18 June 2024 Publish: 1 July 2024	*This study aims to develop an emotion recognition booklet for preschoolers based on Paul Ekman's (1972) basic emotion types. This research uses the Research & Development (R&D) method with ADDIE instructional design. Validation by experts showed that the booklet is 100% very valid and feasible to use to support emotional learning in early childhood in preschool, Before the use of the booklet, children only recognize some basic emotions such as angry and sad. After using the booklet, they can identify six basic emotions and connect the expression of emotions with triggers in daily life. The booklet is designed with simplified sentences and attractive visuals, using an interactive approach.*
Keywords: *Emotion* *Preschool* *Booklet* *Development* *Children*	

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1. INTRODUCTION

Since birth, humans have had the innate ability to feel various kinds of emotions (Nadhiroh, 2015). Emotions, referred to from Nonverbal communication: Science and applications according to the definition of Tobby and Cosmides (2008), are individual responses involving biological, psychological and social aspects to certain events or stimuli. According to Paul Ekman's theory in 1972, there are six basic types of emotions, namely: happiness, anger, sadness, disgust, fear and surprise. The ability to recognize and name emotions, both in oneself and in others, is a crucial adaptive aspect in survival and social interaction (Negrão et al., 2021). Studies show that children who are able to recognize emotions well tend to show higher levels of resilience in facing life challenges in adulthood (Sánchez-Álvarez et al., 2015). Unfortunately, the ability to recognize emotions is still a challenge that preschool children must face regarding the events they experience every day (Martin, 2011).

Child-a preschool children are a critical age group in their social, emotional and cognitive development. Previous research also highlights that preschool children often have difficulty recognizing and expressing their emotions appropriately which can have a negative impact on their mental health, social development and academic readiness (Ministry of Health, 2013; Wardani, 2023). If not properly guided and trained, children can have difficulty recognizing and regulating the emotions they feel. For example, Möller (2022) found varying abilities of preschool children from various cultures to recognize emotional expressions, with some children experiencing significant barriers in understanding and expressing their emotions. Likewise, research by Erlita and Abidin

(2020), which shows that There are some children Which not only difficulty expressing emotions verbally, but also in correctly identifying types of emotions.

There are difficulties for children in understanding emotions at an early age in preschool made researchers want to develop an interactive booklet specifically designed to introduce and teach preschool children about various types of emotions. Currently, most children's educational media tend to focus more on cognitive aspects and pay less attention to the development of their emotional aspects (Liu & Huo, 2023). Therefore, it is hoped that this research can make a new contribution by developing innovative and useful learning tools to help preschool children in developing children's understanding of their own emotions. Preschool children about various types of basic emotions. So, this research hypothesizes that the use of booklets that focus on pictures and illustrations will be able to increase children's understanding of recognizing the basic types of emotions referred to in Paul Ekman's theory.

This research aims to develop and evaluate an educational booklet that can be widely used in introducing types of emotions to preschool children. It is hoped that this article on the development of the booklet will provide valuable information for parents, educators and caregivers to help children understand and manage their emotions more effectively. Through learning using this booklet, it is hoped that children can face their emotional challenges better, strengthen their social skills, and increase their readiness to enter formal education in the future. Thus, this research not only provides a new theoretical contribution to the literature on child development, but also has significant practical benefits in early education.

2. RESEARCH METHOD

The research method used in this research is booklet research and development or Research and Development (R&D). According to Sugiyono (2011) research and development methods are research methods used to produce certain products and test the effectiveness of these products. Then, this research was structured based on the ADDIE instructional design, which consists of the Analyze, Design, Development, Implementation and Evaluation stages (Retnowati & Istiana, 2018)
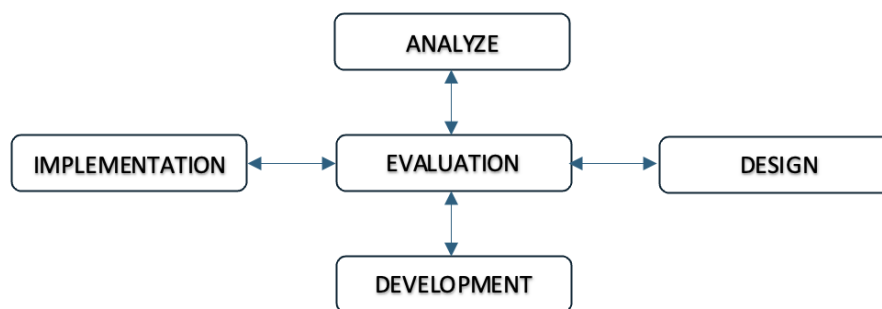

Figure 1. ADDIE model

In the first stage, the researcher carried out an analysis by analyzing the needs and materials for making the booklet using a literature review through internet portals, books and also journals which then produced the analysis results which were used as the basis for designing the booklet. At the booklet design stage, the researcher began to design a draft booklet which consisted of making a storyboard & color palette, making material, and also making practice questions, which was then called the booklet as Draft 1. After carrying out the design stage on the contents of the booklet, the researcher carried out development (development) by realizing the design concept that has been created. After the booklet was prepared, the researcher carried out a validity test by referring to the validation instrument

created by Barseli et al. (2020) and also Haumahu (2021). Then the arrangement of the booklets that had been developed was given to three expert judgments (expert experts) to carry out a validity test using a formula compiled by Akbar (2013), with a value of 1 for an unfit assessment and 2 for an appropriate assessment, as for the formula used to test the validity of the booklet are as follows:

$$Vi = \frac{Tse}{Tsh} \; x \; 100\%$$

$$Vt = \frac{Tse}{Tsh} \; x \; 100\%$$

To obtain conclusions, researchers used combined descriptive analysis with the following formula:

$$Vtot = \frac{Vi + Vt}{2}$$

Information:
Vt = display validity
Vi = Content validity
Vtot = total validity
Tse = total empirical score (valid validation results from expert experts)
Tsh = maximum expected total score

Table 1: Validity Criteria for Learning Booklets (Akbar, 2013)

No	Criteria	Validity Level
1	85.01% - 100.00%	Very valid, or usable
2	70.01% - 85.00%	Quite valid or usable but needs minor revision
3	50.01% - 70.00%	Not valid, it is recommended not to use it because it needs major revisions
4	01.00% - 50.00%	Invalid or may not be used

After receiving input and suggestions according to experts, the researcher made revisions and continued to the implementation stage of the product on subjects who were students. School girl preschool on Kindergarten X in Bekasi. Furthermore, the researcher entered the evaluation stage, where the results of implementation b were compared with the objectives of creating the booklet. During the process of compiling the booklet, the supervisor provided regular input to the researcher use for revision.

3. RESEARCH RESULTS AND DISCUSSION

Procedures used to develop *book let* this is a model development of ADDIE, based on the stages that researchers have carried out, the results obtained include:
1. Analysis (analysis)
➤ Analfill the need

At this stage, researchers conduct an exploratory literature review to make it easier to analyze needs and deepen problems through searching for relevant current phenomena. Researchers collected data regarding emotion recognition through journal articles and news uploaded via web portals to obtain comprehensive news. The data collected was then elaborated and analyzed further until an understanding

was found that the introduction of the six basic types of emotions at the early childhood stage in the preschool period could be stimulated by the use of booklet media. The results of this needs analysis will be the basis for researchers in formulating the objectives and methodology of the research being carried out.

➢ Analysis material

In the process of analyzing the material, the researcher used Ekman's (1972) theory of basic emotions as a reference in developing the booklet material. Apart from that, researchers also use characteristics of each expression of the various emotions discovered by Matsumo, Frank, and Hwangin 2013 in a book entitled Nonverbal Communication Science and Applications. Meanwhile, in the practice questions, the researcher designed each question to suit the material and objectives of the book, where the structure of the design was tested through expert judgment validation.

2. Design

After carrying out the analysis, the researcher then carried out the booklet design process with the following steps:

a) Creating storyboards and color palettes

During storyboard creation, the researcher divides the planning of the distribution of material in the booklet through chapter division. Chapter 1 contains an explanation of emotions, chapter 2 contains how to control emotions, and chapter 3 contains practice questions, page displays, and pictures or illustrations that you want to present in the booklet. Selection color *palette,* Researchers also do this to help the process of making booklets so that they have a consistent and visually attractive color scheme.

b) Material creation

In designing the booklet, the researcher created material using Paul Ekman's six basic types of emotions as a reference and made adjustments to the language and material so that it was easy for preschool children to understand.

c) Making practice questions

Researchers designed questions that functioned to train children's memory after studying the material explained in the booklet. In the first exercise, the researcher provided an exercise in which children had to attach stickers to the names of the appropriate emotions. Then the second exercise consists of reading and rewriting the names of emotions. Then, the third exercise is that the child has to draw a line to match the expression picture with the name of the emotion. Then, in the final exercise the researcher provides a picture pattern that the child must follow.

3. Development (Development)

At this stage the researcher realized the design that had been created using the Canva Premium application. The booklet was designed with a size of 15.3cm x 15.3cm. This was intended so that the size of the booklet was not too small for children to read and also not too big to save space on the paper. The researcher used bright colors for the booklet design such as yellow, pink, green, blue and red, apart from that, the researcher chose images and characters according to the target subject. In the contents of the booklet, researchers minimized the use of long sentences and used simple diction aimed at making it easy for pre-school children to digest. After the design is complete, you will get 32 pages with the following arrangements: cover, foreword, table of contents, understanding emotions, various emotions, and joint practice sheets. Apart from designing the booklet, the researcher also designed an observation sheet. The

observation sheet contains 25 statements that the researcher designed by referring to the material presented in the booklet.

During the booklet development process, the supervising lecturer provides input on each component of the booklet so that the booklet is ready to be tested for content validity and face validity by expert judgment which is carried out in stages with 3 experts. After validating with three experts consisting of lecturers in the fields of Child and Adolescent Psychology, Theory and Application of Personality Psychology, and Theory and Application of Educational Psychology, this emotion recognition booklet obtained an average which can be seen in the following table:

Table 2: Average Validation Value

No	Validator	Final score	Category
1	Validator 1	64.15%	Not valid
2	Validator 2	100%	Very valid
3	Validator 3	100%	Very valid

Based on table 2, the value obtained from the validation of validator one who is a lecturer who teaches child and adolescent development psychology courses obtained an average of 64.15% with the category less valid and it is recommended not to be used because it needs major revisions, therefore, in this section The researchers revised some of the material, including removing emotional characteristics that would make children feel confused. After the revision was carried out, then the score from validator 2, who was the lecturer in charge of the personal development psychology course, obtained an average of 100% with a very valid category, and from validator 3, namely the lecturer who taught the educational psychology course, the final score was 100% with the very valid category. At this stage the material is also adjusted. Based on the results of the validation process, the book is declared very valid and suitable to be continued to the next stage

4. Implementation

After the booklet is validated by experts, then the booklet that has been declared suitable is implemented according to the target subject, namely pre-school children. The booklet was tested in one of the kindergartens (TK) X di Bekasi City. There were 8 subjects in Kindergarten X with ages ranging from 4 to 6 years. Researchers used observation techniques to see the effectiveness of the booklet by observing and recording changes both before and after the learning process with the booklet. Based on the results of observations, the following data were obtained:

No	Indicator	Before	After
1	Know the basic types of emotions	Can only say angry and sad	Can name 6 basic emotions such as anger, sadness, joy, surprise or surprise, fear and disgust
2	Know the emotional triggers of anger	Can say "not allowed to play"	Can mention more than one trigger when angry, such as "not allowed to have snacks, "not allowed to ride bicycles", and "when told to study by parents"

3	Knowing how to control angry emotions	Not knowing how to control angry emotions	Know and demonstrate how to control angry emotions by breathing and counting backwards
4	Know the triggers for sad emotions	Mentions "when you see a cat", and "not allowed to play"	Can mention more than one trigger when you are sad, such as "not winning the August 17th competition", "not allowed to snack and play", "being scolded by parents for not wanting to study", "not finishing food" and "not getting good grades"
5	Can tell when someone is sad	Just mentioning "shed tears and curled lips"	Can you name one thing that is a trigger and characteristic when someone is sad? "Mommy sheds tears when she sees a sick cat."
6	Knowing how to control sad emotions	Not knowing how to control sad emotions	Can mention "telling stories to parents and friends" and "playing"
7	Know the emotional triggers of surprise	Mentions "saw a mouse", and "saw a cockroach on the bed"	Can say and demonstrate "being given and getting a gift"
8	Can tell when someone is shocked	Not knowing someone's expression is shocked	Mentioning "mother knows there are mice in the room and cockroaches at mother's feet"
9	Knowing how to control the emotion of surprise	Not knowing how to control the emotion of surprise	Can say and demonstrate "Taking a deeper breath, saying astagfirullah"
10	Know the triggers for the emotion of disgust	Can mention several triggers such as "seeing a cat splashing in a sewer," "seeing a cockroach" and "seeing a big rat."	Can mention several triggers such as "seeing a cat splashing in a sewer," "seeing a cockroach" and "seeing a big rat."
11	Can tell when someone is disgusted	Saying and demonstrating "huwek, huwek vomit"	Just say and demonstrate "cover your nose"
12	Knowing how to control the emotion of disgust	Mentions "cleaning up the dirty"	Can know and say "cleaning dirty parts", "cleaning rubbish" and
13	Know the emotional triggers of fear	Mentions "seeing mice"	Can mention and demonstrate when being scolded, "scolded by parents", "made a mistake"
14	Can tell when someone is afraid	Mentioning "friends close their eyes"	Can recognize "friends or parents screaming for help", "friends closing their eyes"

15	Knowing how to control the emotion of fear	Saying "run"	Can recognize and mention "telling parents", "asking friends for help" and "covering eyes with hands and running"
16	Know the triggers of happy emotions	Can say "while playing bicycle"	Can mention more than one trigger that is felt "studying with friends, playing with friends", "winning the August 17th competition" and "meeting the kindergarten cat"
17	Can tell when someone is happy	Just say "smile"	Can name more than one trigger for a person to be happy "mother goes shopping at the market", "friends can play together" and "friends are happy when they get good grades"
18	Knowing how to control happy emotions	Don't know how to control happy emotions	Can know how to control happy emotions by being grateful, saying "thank God" and "saying thank you to parents or friends who make you happy"

5.Evaluation(evaluation)

At the evaluation stage of this research, the researcher reflected on the entire development process that had been carried out. Reflecting through analysis based on literature review, researchers succeeded in identifying six basic types of emotions using Ekman's theory (1971) and emotional expressions developed by Matsumo, Frank, and Hwang (2013). After the booklet design and development stage, the material is evaluated by expert experts to obtain input for improvement. Revisions to the booklet were made based on the input received, so that it could be implemented more effectively in Kindergarten They were also able to identify emotional triggers and learn how to better manage their emotions, indicating that this approach is beneficial for the development of preschoolers' emotional intelligence.

In addition, the evaluation also noted important input from Kindergarten Suggestions to consider religious elements in the booklet content are also suggested, according to the religious context of the school. This input was critical in developing recommendations for further development, ensuring that the booklet was not only effective in emotional education, but also relevant to the specific needs of preschool children in the setting.

4. CONCLUSION

In this research, the development of a booklet to introduce different types of emotions to preschool children has resulted in significant improvements in their understanding. Before learning using booklets, children only knew a few basic emotions such as anger and sadness. However, after using the booklet, they were able to identify and express six types of basic emotions more broadly, including happiness, surprise, fear and disgust. Children also successfully linked emotional expressions to triggers in everyday life, demonstrating progress in managing their emotions.

The booklets developed are specifically designed to meet the developmental needs of preschool-aged children. With simplified sentences and words and attractive visuals, this booklet uses an interactive approach such as pictures, practice activities, and examples of the application of emotions in real situations. Validation by expert experts ensures that this

booklet is suitable for use in supporting the emotional learning of preschool-aged children, with an appropriate rating of 100%.

Suggestions for further research include expanding the use of pop art style booklets to involve children's motor skills as well as further exploration of the recognition and management of emotions in adolescence. Time discipline and thoroughness in the development process are also the keys to optimizing research results and preparation for printing booklets. This is expected to strengthen the applicability of research results and lead to prospects for further development and application in the future.

5. ACKNOWLEDGEMENT

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