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Development of Zapin's Creative Dance to Improve Children's Kinesthetic Intelligence Aged 5-6 Years

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ABSTRACT: The purpose of this study was to develop dance-based learning media created by Zapin to improve the kinesthetic intelligence of children aged 5-6 years. This study is motivated by the low level of kinesthetic intelligence in children aged 5-6 years because the learning activities carried out by the teacher do not attract children's interest, causing low kinesthetic intelligence in children. In developing creative dance movement learning media using the development stage based on the ADDIE model (Analyze, Design, Development, Implementation, and Evaluation). The feasibility test was carried out by 2 validators, namely dance experts and ECE experts. The test subjects in this study were children aged 5-6 years in Tanggamus Regency, which consisted of 20 children. Data collection was carried out using interviews, observation, questionnaires, and documentation. The media effectiveness test was carried out using the one-group pretest-posttest method. From the results of the effectiveness test, it can be concluded that the developed creative dance can improve kinesthetic intelligence in children aged 5-6 years which consists of aspects of whole-body coordination, balance, agility, and flexibility in children who have carried out learning to move creative dance using the developed media.

Keywords: kinesthetic intelligence, dance movement creations, early childhood

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1 INTRODUCTION

Early Childhood Education is education that shapes the growth and development of children from an early age outside the family environment before entering basic education, meaning that education must start from an early age, namely Early Childhood Education (ECE). Thus, ECE is held before the level of basic education. The age from birth to entering primary education is the golden age in the stage of human life, which will determine the next child's development. For this reason, in the process of education and learning, especially every child must receive different treatment according to the potential of each intelligence, for this there is a term "the right man on the right competence" which means that a child will be able to learn any field of development if he is allowed to learn according to the intelligence they have (Nurani, 2020).

Khasanah (2016) explained in Gardner's theory of plural intelligence (*multiple intelligence*) initially outlines 7 intellectual competencies that are not the same, then adds one aspect which is intelligence, and currently consists of eight intellectual competencies. Aspects of intelligence in the form of linguistic intelligence, mathematical logic intelligence, kinesthetic intelligence, spatial intelligence, musical intelligence, intrapersonal intelligence, interpersonal intelligence, naturalist intelligence, and there are an additional one to nine, namely spiritual intelligence. The types of intelligence must be every child has even though there is only a few intelligence that stands out. This is very important for the child's life later and the intelligence that needs to be emphasized on the child is kinesthetic. Yetti and Juniasih (2016) define when kinesthetic intelligence in a person can build a relationship between mind and body to sweeten objects and movements. In general, the kinesthetic intelligence of children who are less concerned about the teacher's interest in accepting the child's kinesthetic intelligence (Majidah, et al., 2018). It causes children to often feel lazy to do play and learning activities involving body movements (Anggraini, et al., 2016).

Therefore, although the need for children to support children's kinesthetic intelligence is increasingly clear, in this context there are still many kinesthetic intelligence that has not developed properly. This can be carved from the situation of motion learning applied by teachers in one of the learnings in Lampung. Based on the results of interviews that have been conducted with teachers at Dharma Perempuan Tanggamus Lampung Kindergarten, and the results of online researcher observations, namely, in the form of video documentation of children's learning activities, which are documented by parents. There are findings of movement indicators in coordinating the movements of the eyes, feet, hands, and head of children who have not been skilled, seen also in the balance and flexibility of the body. The stages of learning that have been described are usually passive and do not help the opportunity for natural creativity development in learners, teachers have an important role in front of the classroom and learners are required to practice movements in the teacher or exemplified by the teacher. This is also reinforced by the results of online interviews with parents, who stated that during learning activities in children's movement activities less excited and lazy in doing it, they are more interested

in coloring and math activities. The results of the interview are in line with the findings (Diana, 2013) which describe that many children have low kinesthetic intelligence in improving body movement, agility, and balance between thinking and body (body coordination) is still not maximal, the occurrence of this is due to psychomotor relationships of children who are still not trained.

From the existing problems and the results of various relevant studies that can be known that the kinesthetic intelligence of children greatly affects the child's motor development, in this case, teachers and parents still do not pay full attention to the importance of kinesthetic intelligence. There is still a lack of learning activities and methods that are used in the motor activities of children and children's parents only focus on math learning in learning activities. This is the reason for the topic of discussion about improving children's kinesthetic intelligence. One of the efforts to increase children's kinesthetic intelligence is with new creation dances, namely dance to increase kinesthetic intelligence and introduce cultural values to children, both using old and new materials based on customary territories. Indonesia has diversity such as customs, manners, association, art, language, natural charm, and skills in the form of characteristics of ethnic groups. This diversity beautifies and provides norms of life to the Indonesian nation. Therefore, diversity needs to be emphasized in the development and cultivation of preservation to maintain educational efforts.

One of them is dance a medium for the development of children aiming for perfection of art, creation, or performance (Brown, 2014). Education in the form of dance arts is very influential in the development of students who are valued with good and bad motor development of learners, language patterns, and social and emotional development of learners (Rouf, 2018). The implementation of learning in school only prioritizes cognitive development, the preferred learning is memorized, lack of dance motion learning activities (Yetti, 2012). The results of the study (Anisa, 2014)**,** children do not practice the commands given by teachers such as teachers ordering students to do *floating samber* movements but students are just silent. Teacher efforts in developing constructive learning activities for learners in learning to create through dance movements (Dewi, 2018). Dance that is applied in early childhood education is a play activity in the form of movement and music. Movements in the art of dance usually have differences from the art of dance in people who are said to be adults. The movements that are carried out must include the child's life consisting of joy and pleasure (Mulyani, 2016).

Balanced motor development directly influences other development domains such as speech, cognitive development, and social and emotional competence (Damovska, L.et.al, 2009). A person's kinesthetic intelligence is the relationship between the mind and the body to manipulate objects and motion (Yetti & Juniasih, 2016). However, in this case, children's kinesthetic intelligence is still lacking concern and involvement of the teacher in improving children's kinesthetic intelligence (Majidah, et al., 2018), so children are often lazy in carrying out play and learning activities that involve body movements (Anggraini et al., 2016). This is also in line with findings (Diana, 2013) which state that

many children whose kinesthetic intelligence is still low in developing gestures, agility, and harmonizing between mind and body (body coordination) are still lacking, this is closely related to psychomotor children who have not been trained.

Based on the results of previous research there has been no research that develops creation dance activities that use Lampung regional songs created with regional Zapin dance, not only that from this development children will be introduced related to new creation dance movements. Therefore, researchers want to provide insights related to innovation in the stage of science knowledge obtained in schools by developing media using designed and created a dance for early childhood in improving the kinesthetic intelligence of early childhood. The advantage of media is that are designed as well as possible so that learners can freely practice the basis of dance. So that it can preserve cultural arts, especially dance itself.

2 THEORETICAL STUDY

2.1 *Understanding Kinesthetic Intelligence*

Kinesthetic intelligence is an implementable ability to use a limb to explore the feelings and hands used to acquire something. This intelligence includes certain skills in the form of coordination, speed, agility, strength, balance, and flexibility. Skills included in intelligence are control movements made by the body and the ability to sweeten objects (Yaumi, 2012). According to Junaedi and Nugroho (2014), kinesthetic intelligence is an ability that equalizes the mindset with the body so that what is stated in the mind will be applied to the form of creative body movements and has meaning. Another definition of kinesthetic intelligence is the ability to unite between mindset and physical to obtain good and perfect movement, if the perfect good movement comes from a combination of mindset and physical applied well, then whatever the person has done will get good results (Suwarni, 2014).

Jamaris (2017) proposed that growth of ability can be applied using gestures and motoric consisting of three aspects, (1) Posture, is the ability that regulates visual perception and motoric perception correctly so that the individual places himself among the objects around him. (2) Literality is the ability that moves coarse and thirsty muscles based on the expected direction. (3) The combination of posture and literality which is a provision of body and muscle movements, both movements that include rough muscles and hand and finger movements that include smooth muscles. The main material emphasized to simulate the ability of motion or called kinesthetic child is the body. Through a good physical child can explore ideas and feelings (in the pulpit, exercising, dancing) where the hands are used to shape or change something such as making crafts, making sculptures, and sewing) based on what is on his mind, kinesthetic intelligence is learning and thinking to understand the want of scrambles (Musfiroh, 2014).

Based on the above definition if it is associated with early childhood, it can be concluded that kinesthetic intelligence is the ability to develop motion so that *it has*

performance values and is different from others. Learners who have kinesthetic intelligence in the form of coordination, balance, agility, strength, and flexibility of the body are good (perfect movement) so it stands out in physical abilities compared to friends his age.

2.2 *Characteristics of Kinesthetic Intelligence in Children Aged 5-6 Years*

When the growth of children at the age of 0-6 years is an important moment that calls with *the golden age*. Where currently almost all aspects of the development and growth of children are very rapid and thorough. The child's development process has special characteristics that need to be known by ECE teachers or parents. In the age range of five to six years, some children are already smart to throw and catch the ball. They can also play with scissors, can apply soil, make cakes or cakes, and sew. With the existence of crayons, pencils, and paint children can color the image, draw, or color the image itself using paint and can also draw humans (Papalia & Et al, 2018).

The development of rough motoric in children aged 5 to 6 years (Suyadi, 2015) describes the stages of rough motoric in children aged 5 to 6 years, (1) running and can directly kick the ball, (2) jumping up and down in turn, (3) raising the tennis ball with one hand and catch the tennis ball using two hands, (4) walk according to the line that is made, (5) tiptoe and hands placed on the hips, (6) touching the toes without having to bend the knees, (7) Pedal one leg towards the front or back without losing balance. In this case, Jamaris (2015) describes the stage of learning based on motor movement skills, (1) Posture, by understanding posture, the individual can determine his position towards the direction and spatial orientation, so that the individual concerned can move his body precisely, effectively, and avoid danger. (2) Laterality, which is the understanding of the position of objects, such as above - below, outside - inside, irrigated, upfront - behind. (3) Direction, the ability to determine directional discrimination between objects and space. (4) Image of the body, which is the understanding of the position of the body between space and existing objects. This development is based on the ability to posture. (5) Balance and posture, i,e, coordination of overall body movements. (6) Locomotor, which is motor movement (muscle) at the time of walking, running, jumping, and others. (7) Contact, which is the movement of the limbs at the time of throwing, catching, and releasing. (8) Receiving and proportion, i.e., movements that occur when capturing moving objects (receiving), movements that occur at the time of throwing, pressing, or hitting moving objects.

Children who have kinesthetic intelligence tend to be more active in moving and touching everything that appears in front of them. If observed more closely, each child has kinesthetic intelligence that appears in the characteristics of motor skills with different characteristics and capacities in each child. This characteristic appears as a basic potential that if stimulated and responded to well by the right environment, the child will be able to use his body to realize the ideas he has.

2.3 *Aspects of Children's Kinesthetic Intelligence*

In this study, aspects of kinesthetic intelligence studied in children were devoted to aspects of coordination, strength, agility, balance, speed, and movement control. Below describes each aspect of a child's kinesthetic intelligence such as (1) Coordination. Coordination is a combination of performance and the value of a muscle, bone, and joints to obtain one relevant motion. Additional coordination requires concentration and attention which are aspects of cognitive function (Ambarwati, et al., 2017; Malak, R. et al, 2013) in this study, coordination is stimulated through activities attached to nature as well as finger painting patterns, coloring geometric shapes in natural material media, and cutting objects according to patterns. (2) Strength. Strength is the ability to do work with work intensity and volume in a short period. Effective resistance training can result in hypertrophy or muscle growth. Strength requires the capacity to hold or repeat contractions over a specified period (Cook, 2018; Ervin et al., 2014).

Power is stimulated through jumping activities from one meter using one foot and jumping from one meter using both feet. (3) Scruffiest, Agility is the activity of regulating the right physical condition while easily changing direction according to the arrangement of movement. The ability to compose directions is quickly noticed when starting and stopping when making movements. This ability is a determinant of sports performance or physical activity evidenced by the time movement (Sekulic, et al., 2013). Agility in this study was stimulated through zigzag running and walking activities changing direction when needed. (4) Balance. Balance is used to describe training designed to create symmetrical movement between the right and left sides of the body and to promote the balance of mobility and stability within the body (Cook, 2018). Balance is stimulated through the activity of walking on a board with three meters. (5) Speed. Speed is affected by various mechanisms, especially energy and nerve control mechanisms. Basic speed or human speed potential is largely innate (85-90%). Speed depends on the quality of muscles and nerves, less than metabolism and heart, circulation, and respiratory conditions (Karalejić et al., 2014). Speed is stimulated through the activity of running back and forth with three meters. (6) Motion Control. Movement control is a skill to control movements that include small muscles and large muscles in the physical to achieve goals in the development of a child's movements. Skills also require a high position of mobility to display special skills with a high level of kinesthetic intelligence (Coker, 2017). Motion control is stimulated through the activity of making simple movements spontaneously.

3 METHOD

These research methods use a type of research and development, popularly known as research and development. With ADDIE model or analysis, design, implementation, and evaluation. This model research aims to develop and study the results of a video that is used as a dance learning creation created to increase the kinesthetic intelligence of children aged 5-6 years. This study is a study conducted at the odd time of the 2021/2022 school year in kindergarten group B of Lampung Tanggamus district. In group B of this

kindergarten, there are several institutions that researchers involved in the research process, namely Yapibar Islamic Kindergarten, Dharma Perempuan Kindergarten, and the last is ECE Harapan Bunda Institute. The selection of kindergarten institution is chosen based on several considerations first. Myarnawati (2018) named such a technique *the* purposive sampling technique. Choosing a research subject and informant is entirely self-determined by the researcher with some consideration. Of course, researchers ensure that the learning media of dance movement creations designed will be developed accordingly and can be used in children.

3.1 *Media Characteristic*

Furthermore, the researchers explained the characteristics of the media used in this study there are several things, namely: first the media learning dance video creation. It is a movement technique that is created to be for children at an early age. Where the purpose of the creation of the dance movement is not to train learners to be able to dance with *Sempura,* but just a container to train learners can move and express themselves, and the most important thing is to train mental learners to be brave and not ashamed to perform in front of the stage. Therefore, the development carried out through dance creation movements is not just danced but includes elements of traditional games that can be played by children, such as *Engklek* games combined with dance movements. The song used in accompanying the dance is popular in the Zapin Lampung dance. The second is by using a guidebook introduction to dance creation movements. This book is used as a reference by teachers in doing and training dance movements that have been created before, this book also uses a special format in which there are some materials about dance movement creation movements, in the first part of this book contains instructions on the use and purpose of the book published, the second contains about teacher explanations related to cosmetology, Fashion, and game themes to carry out media, images and characteristics and descriptions of dance movement creations, and in all three of these books cover.

3.2 *Procedure*

Furthermore, in the research steps section, researchers divide it into 4 stages of research steps, namely preliminary research, development planning, validation evaluation, and revision, and finally the implementation of media. Preliminary reading is the initial step or stage carried out in research, this includes analyzing research needs, conducting literacy studies, and updating the latest information. This stage has the goal to obtain a solid research foundation that the development media can be a necessity of the community, especially for teachers. The method used in preliminary research is to conduct literation studies, studies from previous research results, and interviews. While in the second stage, researchers do development planning, which is an activity to organize the needs of sitting participants through a medium developed with the form of the most important characteristics.

The third stage in the research step is validation, evaluation, and revision. This stage is a step taken to validate and effectively media used to be able to increase the kinesthetic intelligence of children aged 5 to 6 years. It contains some important things such as studying experts. This activity is the gift of a questionnaire. In this study, the questionnaire was given to ECE experts. Next is to conduct small-group and large-group trials. The fourth stage or the last stage is the implementation of media, which is to implement media developed to improve the kinesthetic intelligence of children aged 5 to 6 years. Media administration can be measured effectiveness and feasibility using several ways, namely conceptual definitions, and operational definitions.

3.3 *Data Collection*

In collecting the research data needed, researchers use several data collection techniques, namely through interviews, questionnaires, observations, and tests. An interview is a dialogue or conversation conducted between the researcher and the research subject to obtain the desired data. If reviewed from the type, the interview is divided into 3 forms, namely structured interviews, semi-instructed interviews, and unstructured interviews. While questionnaire is a test given to research subjects to obtain the necessary data. Observation is an observation made by researchers to find out the condition of the research field and other things intended to collect research data through observations. The last one is a test. That is a form of data collection through questions, here researchers use two types, namely pretest, and posttest. Pretests are tests conducted in the early period of research to know the media developed. While posttest is a test to assess the increase in media development on the influence of kinesthetic intelligence of children aged 5-6 years.

Furthermore, after the data is collected through data collection techniques on the previous pin, the data is analyzed and processed. Related to this research using combination research methods, then there are two stages in the collection of data, namely data collection with qualitative and quantitative. In this research process, the researcher experienced problems when using qualitative data collection techniques (interviews), and ultimately found field testing through products with quantitative techniques questionnaires and structured observations). The stages in conducting data analysis with two qualitative and quantitative approaches) are as follows:

First by reducing the data obtained in the study, this step is an activity to summarize and categorize the data that has been obtained so that it is easy to group the data and choose the data that is needed and discard the data that is not needed, second is to present the data, otherwise known as a data display. When the data has been successfully grouped according to research needs, then the next stage is to present data in descriptive forms. Third is by verification or conclusion withdrawal, the data that has been presented is done by conclusion, which aims to know the summary concisely from the research conducted. Usually making the conclusions of the data presented is temporary and will change later if stronger and supporting evidence is found in the research process. And the last data analysis in this study is a t-test is a quantitative analysis technique through formulas that

have been established to find out the influence of the media that is used to increase the kinesthetic intelligence of children aged 5-6 years.

4 RESULT AND DISCUSSION

4.1 *Result*

4.1.1 *Media Development Results and Needs Analysis Results*

The results known through research and development conducted to find out the increase in kinesthetic intelligence of children aged 5-6 years conducted in kindergarten in group B in Lampung based on the creation of Zapin dance movements are known through the needs of learners obtained through the study of precedence by presenting the stages in the preliminary study.

4.1.1.1 Data Results of Needs Analysis

In analyzing the needs, namely analytical activities were carried out to find out the needs of media development. At least it has been carried out with interview activities with 3 teachers from each school and 1 accompanying teacher. This activity is carried out aimed at finding data related to the understanding of children in the teaching and learning process, and to get information related to the application of activities to the improvement, problems, and potential of kinesthetics in children and their environment to stimulate the development of children's kinesthetics.

The problem that often arises in children in four institutions is the tendency of children to do only one motor activity be it fine motor only or gross motor only. Aspects of kinesthetics are realized through motor physical activity such as coordination, speed, balance, agility, and flexibility. In addition to that, aspects of the implementation of the learning model are also quite widely discussed because to make children interested in an activity, it takes a fun teaching and learning strategy that is compatible with the characteristics of children's needs.

4.1.1.2 Draft 1

The acquisition of results through the improvement of draft 1 is described based on the results of the needs analysis carried out to obtain a draft that describes the design of the development of motion-based media and Zapin Lampung songs to increase children's kinesthetic intelligence.

Draft 1 of the media development in the form of implementation videos and guidebooks contains videos that contain beats and movement counts. The stages of product development are divided into 2 sessions, namely the first is to examine the material needed to increase kinesthetic intelligence and the second is to make a comprehensive design concept of dance movement creation media.

The next step after the implementation video and guidebook in draft 1 is implemented, then media validation involving several experts, namely material experts and ECE

experts, and validation of ECE experts. A material expert can validate the learning media that has been made to be known the feasibility of the media. Material experts conduct assessments using a scale of 1-5. Material experts who validate learning media based on dance creation movements to increase children's kinesthetic intelligence are Indah Juniasih, M.Pd he is a lecturer of ECE Programs UNJ, and Dr. Elindra Yetti, M.Pd as Coordinator of ECE Doctoral Study Program. Here is validation conducted by material experts to test the efficacy of media used in the development of kinesthetic intelligence of children aged 55-6 years. Validation results of dance experts, the results of validation from dance experts obtained a score of 34. The score has a good category which means it can be concluded that the learning medium of dance movement creations of children deserves to be applied to develop kinesthetic intelligence of children aged 5-6 years. Validation of ECE Expert Experts, the results of validation from ECE experts obtained a value of 36. The score has a good category which means it can be concluded that the learning medium of dance movement creations of children deserves to be applied to develop kinesthetic intelligence of children aged 5-6 years. By the provisions that have been made.

4.1.1.3 Draft 2

The next step is to develop drafts. It's a revision of a small group. In the previous discussion, validation has been done by experts in draft 1. The validation resulted in several Sara to be revised on the learning media. Therefore at this point will be spelled out draft 2 which is a continuation of draft 1. It's about small group trials. Still for the next stage. The trial phase was conducted on 8 (eight) children aged 5 to 6 years old in group B, in Dharma Perempuan Kindergarten involving 1 teacher in group B conducted by school conditions and school protocol. The medium of learning dance movement creations is piloted to increase the kinesthetic intelligence of children. In addition, it is expected that teachers can provide advice and input on *draft2* learning media. Teachers are given a guidebook along with A CD in the form of a video of dance moves created by *draft 2*, then the teacher uses the media in the classroom. Then assess it through questionnaires.

4.1.1.4 Draft 3

The acquisition of development in draft 3 is the result obtained through the trial activity of the large group of development based on the results of small group trials in the previous draft 2. Based on input and suggestions from previous trials, then the next. In draft 3, the trial was conducted using a large group. The large group is Yapibar Islamic Kindergarten with 20 respondents group B and 2 teachers. In implementation, the researchers collaborate with the school, especially the teachers to facilitate the research process. By taking care of research licenses and providing understanding to the school to develop its implementation in the school.

The implementation of field trials operationally is carried out at a gradual tempo, i.e., first, the child is given a pretest, then the teacher is allowed to understand the medium of

dance movement creation that is experiencing development and its playbook within one week. After that teachers are asked to apply learning media in the classroom by using learning media that have been developed as many as 3 meetings. At the *pretest* on Tuesday, January 11, 2022, at Yapibar Islamic Kindergarten. The implementation of this pretest was carried out by 2 teachers of 20 children of group B. In the previous phase, teachers were given training related to care to use the instrument. At the stage of his activities, 1 teacher has 10 children in one class. And one other teacher and 10 children were in another class. It looks like the kids are still shy about making moves. From aspects of the development of coordination throughout the body, eye, and hand coordination, balance, agility, and flexibility.

4.1.2 *Data Analysis Result*

4.1.2.1 Data analysis of the results of coordination aspects of the entire body

The effectiveness of dance movement learning media creation to improve children's kinesthetic intelligence is measured using 5 aspects, namely coordination of the entire body, eye and hand coordination, balance, agility, and flexibility. The results of the coordination aspect show the average value in treatments 1 to 3. In the preliminary study, it was found that children have difficulty coordinating between the eyes and hands, and feet. After being given three treatments with materials from different natures, it increases the coordination of the entire body, eyes, and hands of the child. The following is presented a graph of the results of kinesthetic intelligence observations on the following aspects of coordination.

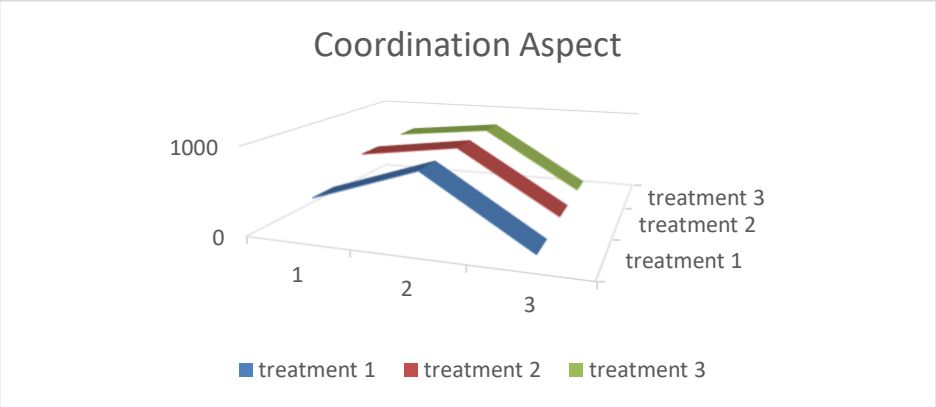

Figure 1. Coordination Aspect Graph

The data presented in Figure 1 indicates that the results of kinesthetic intelligence observations in the coordination aspect increase from treatment one to treatment 3rd. The average value in treatment 1 amounted to 39 proved to increase to 64 in the 2nd treatment using the medium of learning dance creations. After 3 treatments, there was a significant increase in the score from 39 to 67. The results of the recapitulation of the calculation of kinesthetic intelligence observation scores in children can be reviewed in the following table.

Table 1. Comparison of Average Aspects of Coordination

Treatment	Average Score	Percentage	Category
Treatment 1	39	49%	Low
Treatment 2	64	79%	Tall
Treatment 3	67	83%	Very High

The tendency to score the average aspect of coordination of kinesthetic intelligence in the table above has increased from each treatment. In the first 2 treatments, the coordination of children still belongs to the low category with a percentage of only 49%. Improved aspects of the coordination of children begin to occur in the 3rd treatment. This is seen from the results of the presentation of the maximum score reaching 83% with a very high category. Based on the results of observations of kinesthetic intelligence coordination aspects that have been outlined, it can be concluded that the medium of learning dance movement creations has a positive and significant influence on the development of the coordination aspects of children's kinesthetic intelligence.

4.1.2.2 Data Analysis of The Balance Aspect Results.

The next aspect in the assessment of a child's kinesthetic intelligence is the balance aspect. Balance is one of the kinesthetic intelligence elements assessed in operational field tests. The balance aspect is related to gross motor skills where the child involves large muscles and all members of his movement to perform activities. Aspects of balance in operational field tests are assessed through activities running on the board in the series of learning media. The results of observations in the preliminary study are known that the competence of children in body balance is still relatively low. Treatment carried out Three times in operational field tests to improve kinesthetic intelligence aspects of balance was found to have a considerable effect on child development. It was found that the results of kinesthetic intelligence observations on the balance aspect increased with the average score ranging from treatment 1st to treatment 3rd.

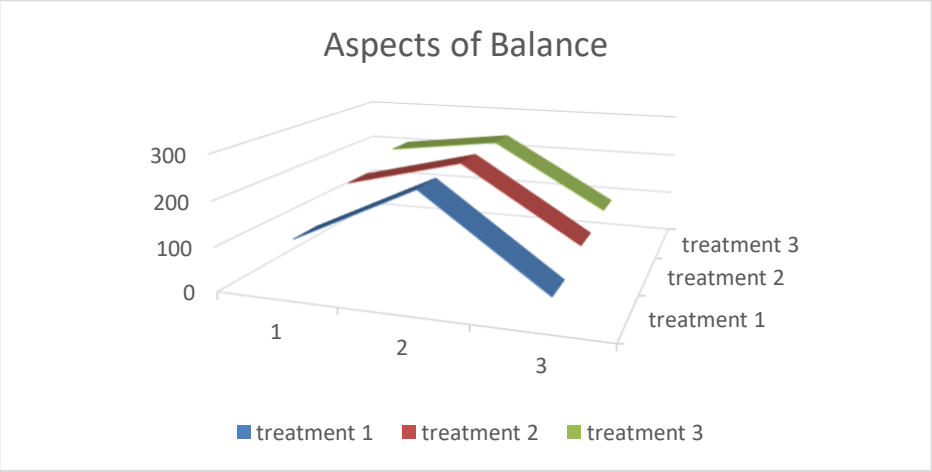

Figure 2. Balance Aspect Results

Based on the graph above, it was found that aspects of balance in children's intelligence kinesthetically increased significantly. This is seen from the increase in the average score of children ranging from treatment 1st to treatment 3rd. Of the 3rd treatments given to

children, an average of 36 were obtained on treatment 1 and the highest in treatment 3 with a score of 68.

Table 2. Comparison of Average Aspects of Balance

Treatment	Average Score	Percentage	Category
Treatment 1	36	45%	Low
Treatment 2	57	71%	Tall
Treatment 3	68	85%	Very High

The average comparison data of the balance aspect in the table above shows an increase in the percentage of a child's developmental score ranging from treatment 1st to treatment 3rd. With a low category, treatment 1 obtained a presentation of only 45%. Then given the 2nd treatment that increases the percentage of a child's development score to 71% with a high category. Child development is in the high category up to 3 85% treatment. Based on the data that has been spelled out above, it is stated that the media of learning tar creation has a positive impact on the development of children's kinesthetic intelligence. In other words, the medium of learning dance movements can significantly develop aspects of balance in a child's kinesthetic intelligence.

4.1.2.3 Data analysis of agility aspect results

The next element forming the kinesthetic intelligence of children to be analyzed is the agility aspect. In kinesthetic intelligence, the element of agility is closely related to a child's gross motor skills. Using all parts of his movement along with large muscles, children carry out activities contained in the medium of dance creation. Motion learning media conducted in operational field trials to improve children's kinesthetic intelligence is carried out in as many as 6 treatments. The development of the average score of kinesthetic intelligence of children in the aspect of agility has increased dynamically. But in general, there is a significant increase in average scores on the agility aspect of children. The figure is explained the data of the results of observations of children's kinesthetic intelligence on aspects of agility as folk.

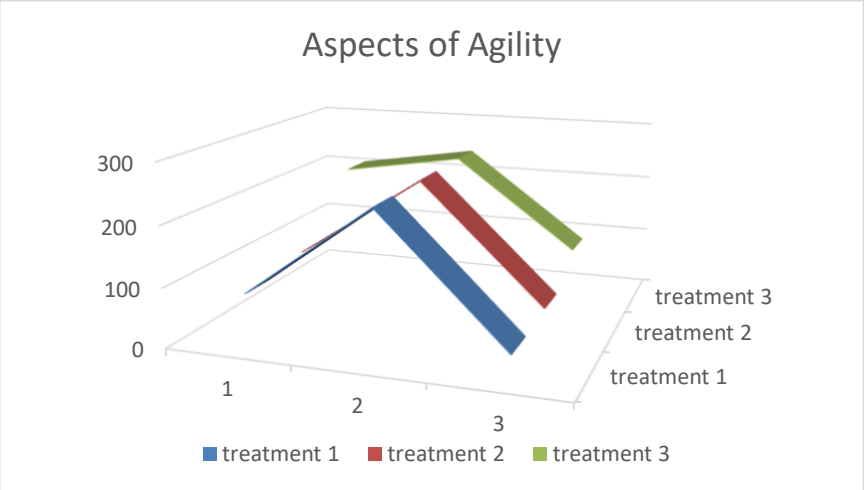

Figure 3. Agility Aspect Graph

This result is quite good on the increase in the average score that exists until there is a decrease back on the average score that is not too large from 28 to 69 in the 3rd treatment. This value still belongs to an excellent category even though there is little use for treatment 2. Data from the recapitulation of the calculation of the child's kinesthetic intelligence observation score can be known in the appendix.

Table 3. Average Ratio of Agility Aspects

Treatment	Average Score	Percentage	Category
Treatment 1	28	35%	Very Low
Treatment 2	32,3	40%	Low
Treatment 3	69	85%	Very High

The average comparison data of the agility aspect in the table above shows a significant increase in categories in the development of children's kinesthetic intelligence ranging from low, high, to very high categories.

4.1.2.4 Data analysis of flexible aspects

Flexibility is the last aspect that is assessed in the medium of learning dance creation. Assessment of flexibility is conducted on operational field tests to improve a child's kinesthetic intelligence. Flexibility is assessed in children in the form of children's ability to make simple movements spontaneously and move freely. Treatment done as much as three times to improve the child's movement control turned out to produce a good response in children. Based on existing data, it was found that there was an increase in the flexible aspect of children in doing activities to play activities, which managed to cause children's interest in actively playing using their bodies. The following is briefly spelled out by the results of observations of children's kinesthetic intelligence on the aspect of flexibility.

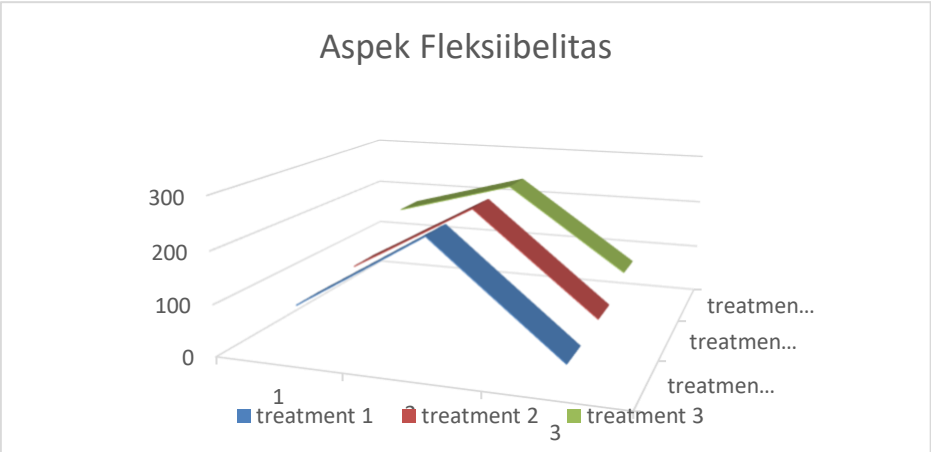

Figure 5. Flexible Aspects Graph

The data in Figure 5 is known to have an increase in the aspect of child movement control. This is seen from the increase in the average number of scores starting from treatment 1 to treatment 3rd. In treatments 1 and 3, the child's flexible development scores an average of 30 to 57. Then in the next treatment the average score of the child.

Table 4. Comparison of Average Aspects of Flexibility

Treatment	Average Score	Percentage	Category
Treatment 1	30	37%	Low
Treatment 2	34	42%	Low
Treatment 3	57	71%	Tall

Based on the comparison of the average aspects of motion control shown in the table above, it was found that there was an increase in the average percentage of scores that were quite high ranging from treatment 1st to treatment 3rd. In 1 initial treatment 37%, the development of child movement control is still relatively low in treatment 2 with a percentage of 42%. Then in treatment 3 increased to 71% to the high category. Based on the increase in the average number of scores and the percentage of aspects of child flexibility, it was stated that the medium of dance learning has a significant and significant impact on the development of children's intelligence kinesthetically at the age of 5 to 6 years.

4.1.3 *Posttest*

The posttest was conducted on Thursday 20 January 2022 at Yapibar Islamic Kindergarten. This test was carried out directly by 2 teachers against 23 children. The implementation of the posttest is done by taking turns in one classroom with only one teacher in it. There is a big difference between the posttest and the pretest, especially in the aspect of coordination and so on. Here are the results of the pretest:

4.1.3.1 Draft final.

This stage is the part that is carried out after the test of a large group using draft 3. The final draft aims to implement when analyzing needs, after which then conduct an effectiveness test against pretests conducted in Yapibar Islamic kindergarten using 20 respondents consisting of children aged 5-6 years. (1) Name of product. The name of the research development product conducted today is the Media of Journaling Dance Creation Movements to Increase the Kinesthetic Intelligence of Children aged 5 to 6 years the target of this book is to reach children aged 5-6 years of funds as well as our kindergarten group B. This media includes videos to help the application of learning dance creations in the classroom. (2) Characteristics of the product. (3) Video learning media based on the introduction of dance motion creative. (4) Guidebook.

4.1.4 *Media Eligibility*

4.1.4.1 Media eligibility theoretically

Validation of media eligibility is done by an expert, in this case, an expert in the field of dance because this research is related to dance learning. The dance expert who validates this media is a PG ECE Lecturer who is a graduate of the art of dance. Dance experts give a value of 3.0 (good) for the component of the display component 3 (good), relevance 3 (good), and function component 3.2 (good). Kinesthetic intelligence-related material experts give a value of 4.4 (excellent) for the learning section.

4.1.4.2 Empirical media eligibility table

Table 5. Media due diligence results

Component	Average value
Display	4
Relevance	4,3
Function	4,3
Overall average	4,2
Conclusion	Excellent

Based on the table above it can be known that the value of the average pretest is 39.7 and the average of *the posttest* 64.1. of course, there is an increase from the previous value of 24.2. Therefore, it can be stated that the introduction of dance movement creations to increase kinesthetic intelligence has increased. In comparing the results of the pretest and post-test using the T-test with the following hypothesis, (1) H0: there is no difference between the score before and after using the medium of the introduction of the pretest and posttest dance creations. (2) H1: There is a difference between the score before and after using the medium of the introduction of pretest and posttest dance moves.

Table 6. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	39,70	20	5,449	1,218
	Posttest	64,10	20	2,490	,557

Table 7. Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest & Posttest	20	,138	,562

Table 8. Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	Df	Sig. (2-tailed)
Pair 1	Pretest - Posttest	-24,400	5,670	1,268	-27,054	-21,746	-19,246	19	,000

From the table of paired samples, the statistical pretest has a score of 39.7, and the posttest has a value of 64.1. This indicates that there is a difference between the score of the two of 24.4, with a calculated value of -19,246 tt_{table} (df =19) 2,093 and *a p-value* of 0.000. Due to the score between the pretest and the posttest being different ($\mu_1 \neq \mu_2$), the numeracy value is greater than the t_{table}, and the p-value value < 0.000 (0.000 <0.05), reject H_0 and accept H1. Therefore, it can be concluded that there is a striking difference between *pretest* and *posttest* scores. This means, the use of learning media introduction of dance creation movements can make kinesthetic intelligence in children increase.

4.2 *Discussion*

The results of research findings that have taken place at Yapibar Tanggamus Islamic Kindergarten are then discussed in this research. The steps for developing Zapin's creative

dance use the ADDIE method (Analysis, Design, Develop, Implementation, and Evaluation). The ADDIE step was chosen to develop a research and development method that has been proven as a designer to develop a motion and song (Rahardjo, B & Hidayati, P, 2019). The first step is an analysis that includes needs analysis, literature study, and instructional analysis. The results show that there are basic competencies of kinesthetic intelligence that have not been well developed. Due to several factors, learning media is needed as a solution to maximize kinesthetic intelligence. Creative dance learning according to Pratiwi's research results (2018) creative dance is a learning activity to create and the task of exploring rhythmic movements as a creative communication in expressing oneself, both feelings and ideas to express personal movements and to develop one's personality and educate with emotional nuances, intellectual and physical and bodily movement. Learning to dance includes learning that prioritizes motor skills, these skills are in the form of skills in carrying out limb movements because the prioritized aspect in dance learning is the psychomotor aspect, motor skills emphasize the formation of awareness in children to move spontaneously, namely in carrying out dance movements it is required to run smoothly, orderly, flexibly and expressively, without the burden of thinking about why and how to do these movements (Wulandari, 2017).

The stages of making a creative dance based on the design that has been made are learning objectives that will be achieved based on the analysis and review of the literature that has been carried out, then making a design for the creative dance movement and the arrangement of the song that accompanies the creative dance is then poured into the form of a guidebook and learning videos for use by the teacher. From the draft guidebooks and videos that are developed in a content-validated way for experts. In addition to designing videos and guidebooks, they must also design instruments to measure the effectiveness of the developed creative dances that are implemented in children, and these instruments are also constructively validated by experts. The entire process of dance development is by the statement (Campbell, 2007), which states that the development of creative dance utilizes electronic or information technology, namely video, audio, or audiovisual.

After the dance media development media has been completed, the next step is implementation. Implementation was carried out at Yapibar Islamic Kindergarten with 20 children in group B or children aged 5-6 years as respondents. This implementation is by the plans made before. Before implementing it on children, the researcher conducted an initial assessment, or is called a pretest to see the students' initial abilities regarding kinesthetic intelligence. Then do the treatment or implementation of Zapin's dance creations to the child to obtain the data needed for evaluation needs. The evaluation is divided into two parts, namely the evaluation of creative dance and the evaluation of kinesthetic intelligence. Evaluation of creative dance is carried out on the quality of the dance to see or measure the effectiveness of the creative dance on increasing kinesthetic intelligence which will be explained in the second discussion about testing the effectiveness of creative dance.

In the process of developing this creative dance there were several findings obtained by researchers, these findings researchers describe, based on the results of the needs analysis, the results of observations of children, and interviews with teachers show that kinesthetic intelligence is still low in children, this is due to the lack of development of children's movements and songs. Movement and song learning that has been implemented so far mostly only imitates existing movements and is given to children and is not carried out massively so that children are lacking. Interviews were conducted with kindergarten teachers.

Based on the results of these interviews, it was found that so far movement and dance learning activities for children in the class were carried out only by introducing movements but not conveying the cultural values contained in the dance. Learning in class too, the teacher just sings and gives freedom to clap or move while playing to create a pleasant atmosphere for children. Teachers also experience difficulties in providing dance and movement activities to children, from this the teacher does not focus too much on dance activities in kindergarten, thematic and religious learning activities are prioritized, so the teacher feels the need for media guidance for implementing dance learning activities.

5 CONCLUSION

Based on the results of the research and discussion described in the previous chapter, the researchers concluded the results of the study, from the results of research conducted on the study of the development of Zapin-based creative dance learning media to improve children's kinesthetic intelligence, this research produced guidebooks and videos to support the learning process to improve children's kinesthetic intelligence. In the process of developing this media through the results of a literature review and the results of interviews in the field, conceptually, this media was compiled based on the concepts and principles of developing creative dance motion introduction media to improve the kinesthetic intelligence of children aged 5-6 years and through a series of trials and revisions to the final product.

From the results of the effectiveness test on creative dance learning media based on Zapin conducted in Yapibar Islamic Kindergarten on 20 children, based on paired samples statistics, the average pretest kinesthetic intelligence score was 39.7 while the posttest kinesthetic intelligence score was 64.1. This means that descriptively there is a difference in the average pretest and posttest kinesthetic intelligence scores, or the posttest kinesthetic intelligence score is greater than the pretest value. The difference in the pretest and posttest creativity scores was 24.4, with a t_{count} of -19,246 t_{table} (df=19) 2.093 and a p-value of 0.000. Because the average pretest creativity score is not the same as the posttest ($\mu 1 \neq \mu 2$), the t_{count} is greater than the t-table and the p-value <0.000 (0.000 <0.05), reject H0 and accept H1. Thus, it is concluded that there is a significant difference between the pretest and posttest kinesthetic intelligence scores. In other words, it can be concluded that the use of creative dance movement recognition learning media is effectively used to improve children's kinesthetic intelligence. Based on the results of the

study, there are several implications and impacts of learning media products for the introduction of creative dance moves for early childhood, namely: (1)The introduction of creative dance moves for early childhood has implications for increasing the kinesthetic intelligence of children aged 5-6 years, (2)Creative dance learning media can be used as learning activities in schools with teacher guidance.

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