



## Developing Children's Fine Motors Through Used Materials to be Useful Tools in Early Children

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### ABSTRACT

Fine motor skills are one aspect of development that must be developed in early childhood. This aspect relates to physical movements that involve small muscles, such as coordination between the eyes and hands in carrying out several activities, such as grasping, drawing, sticking, shaping and tracing. Objective:: To examine literature, journals and research documents that identify through used materials which are useful tools in developing fine motor skills at an early age. Method: Search for research journals using specific words in the period 2015-2020. There were 65 research journals on fine motor skills and the use of used goods as useful tools both nationally and internationally, 27 journals met the criteria, 38 journals did not meet the criteria, only 20 selected journals met the criteria. 15 national journals and 5 international journals. Results and discussion: Literature review shows that using used materials as a useful tool can significantly help develop fine motor skills in early childhood. Statistical analysis proves that this method can increase the knowledge and actions of parents, teachers, and the community in using used goods as useful tools. Conclusion: Using used goods can significantly develop children's fine motor skills by making it a useful tool.

### KEY WORDS

fine motors; material used; early childhood

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Manuscript submitted October 21, 2021; accepted December 7, 2021.

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### ECRJ (Early Childhood Research Journal)

ISSN Numbers: Print, 2655-6448; Online, 2655-9315

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### INTRODUCTION

Education in childhood is one of the innovations aimed at early childhood with a minimum age of more than 5 years, which is carried out through providing education to support

the development of *children, both* physically and mentally so that children have *prepared* to continue higher education or elementary school level.



PAUD is education that is fundamental to child development. Child development is deeply controlled by stimuli which means when it is attempted in childhood. Education must be strived for in a serious and structured manner, especially aimed at *childhood*, so that during the development period the right child gets complete stimulants, so that it can be significant can develop to its full potential.

Law Number 20 of 2003 regarding the form of National education article 28 describes (1) education in childhood is taken before primary school, (2) education in childhood can be taken through formal or non-formal schools, (3) education in childhood is carried out through formal education such as kindergarten or other equivalent forms of education. (4) *Childhood* education in non-school education in the form of playgroups, child care centers or *Other* beings are equal, (5) *Education* in childhood through the field of school education in the form of family education or education provided by the surrounding environment.

In view of the mapping of Kindergarten education ages, it is synchronized with Article 1 paragraph 4 of the Government Regulation of the Republic of Indonesia No.17 of 2010, specifically fostering children aged 4-6 years. In addition, the Regulation of the Minister of National Education, education in childhood, describes the direction of implementation of childhood education so that it is in line with the smallest service standards

mandated by law, including the implementation of early childhood education in line with standards

Judging from the mapping of the age of Kindergarten Education, the Republic of Indonesia Government Regulation No. 17 of 2010 article 1 paragraph 4 which explains that child education is intended for those who are less than 6 years old.

The signs along with the technical level of the National Education Ministerial Decree need to be parsed in detail, so that it is easy to understand and implement in the continuity of education in kindergarten or early childhood education. Early childhood education needs to be supported by many service standards so that it is of higher quality in education so that it can be in sync with existing regulations, for example, giving examples, formulating, and other aspects that are in accordance with the character of implementing education in early childhood.

Elizabeth B. Hurlock said that development can be seen from the regulation of physical activity through the activity of the center, nerves, and muscles. This increase in regulation occurs through activities carried out more than once or continuously starting with spontaneous movements after birth.

Child development at an early age is a natural development of children. If sharpened or raised, the child's development will reach the best stage. The direction and control carried out by educators are steps taken to play an important role in optimizing children's growth and development.



Developmental aspects that can be applied are psychological improvement, movement, feelings, language, society, ethics, self-planning, and discipline. The integration of these sections can support optimal child development.

The movement skills that are performed by the muscles in the fingers and palms are one of the stages of developing the soft movements that children perform. Activities are activities in the form of actions taken seriously. The activity referred to by the author *in* the context of this thesis is an event or event which is carried out for a specific reason which is not carried out continuously. Kindergarten is education in *childhood, which* has the aim of fostering and controlling the complete development of children at the age of less than 6 years which includes both physical and non-physical. The stage of developing and controlling body movements by carrying out the work of the nerves and brain on gross and fine motor development. Basically, early childhood is able to accommodate and implement the 5 ideal fine *materials* development. At this stage of motor development, children need sharpening in order to be able to develop their mental and fine motor skills. When the child is active, the child will often see and listen to something so that the child's curiosity increases, but when the child doesn't get enough nurturing, the child will be bored.

Improvements to the increase in children's movement can have a positive effect on development, namely; a healthy body condition,

children who have the correct movement arrangements feel happy, happy, and always have motivation, are not insecure, and are also active in all activities. Children will be more independent and can manage body parts so that they do not depend on others. Entertain yourself, can *make* your own fun without having to have peers because of the child's skill in controlling motor skills. Socialization, increasing good movement will make children accepted in their environment. Self-confidence, self-confidence will emerge psychologically when children are able to control their motor skills well.

5 principles of motor *development, according* to Elizabeth Hurlock (1978: 151-152). Maturity of muscles and nerves in motor development is the first principle in motor development. Failure will come to *the children* if the muscles and nerves used to carry out activities are not yet mature. The initial movements in muscle and nerve development are reflexes. So that when the reflex movement is well developed it will make a good alignment movement. The second principle is to learn motor skills. However, when the abilities of nerves and muscles are not yet developed or immature, the teaching of skills in early childhood will be useless. Following the predicted pattern is the third principle of motor development. With this, educators can analyze and predict about children's abilities which can be done at a later stage. A reference for forecasting motor *development, including* principles in motor



development. So that it is clear that there is an increase in motor development found in children so that it is used as a reference material to be able to make a comparison in children who are considered normal or abnormal. The principle contained in increasing motor *development*, *according* to the last Elizabeth is the difference in motor development in individual children. This means that every child has the ability to grasp the rhythm in motor development. With these principles, it is hoped that educators will be able to respond to the difficulties faced by children when they are going to make movements related to improving the motor development of the child.

Steps taken by educators in implementing activities related to motor development in early childhood education and various activities aimed at means of expression, activities, means of channeling imagination and fantasy that are useful in developing children's creativity and productivity and will get good results.

Based on the results of observations of learning in children, they tend to be less creative, therefore special activities are needed that can stimulate children to have *created* in skills. It appears that many items have uses when they are not used *by* this media, educators can make learning to develop fine motor skills of children. For example: Used plastic straws that can be used as learning media so that children have the opportunity *and* will practice doing it.

## RESEARCH METHOD

This research is a secondary research type of literature review which means reviewing the literature is like a ladder in which it includes introduction to the results of good activities that are published or not published through various sources of low information, conducting an assessment of the results of these activities in relation to problems, and the last immortalize the results (Sekaran: 2010). Literature *review*, *which* means analysis of various literature reviews. Conducting a literature *review*, *analysis* carried out in a scientific paper research is one way that must be taken so that an important part of the overall research method steps can be more valid.

According to Sanusi (2016), who conducted research based on literature, said that the object of research or data collection was based on scientific writing that was literature and could be used to solve everything that existed in the problem in relevant or appropriate material, which was the goal of research activities. Researchers are required to know the source of scientific information used before reviewing library materials. The sources used are scientific journals, *textbooks*, thesis that shows the results of research, including a thesis and also a dissertation, and also takes material from other relevant and appropriate sources.



There are 3 reasons that the writer can put forward in relation to the use of library research, namely: 1) *All* problems in this study can be answered and resolved based on library research, 2) considering that literature study is needed as a provision of stages, including about the preliminary study used to provide a deeper understanding of the new symptoms that exist in society, 3) *Library* compilation can still be more reliable in answering all the problems that exist in the research.

With the reasons stated, literature-based studies in various ways can take advantage of all library sources so as to obtain an outline or based on data taken from his research so that literature review can limit activities only to materials regarding existing literature without requires field research. In this research activity, the researchers analyzed the independent variables in the form of motor skills including fine and the dependent variable of activities with used materials.

The population is all journals of research results with the topic of improving motor development, including fine in childhood.

The sample is an exploratory journal of the results of various studies on the topic of improving motor development, which is considered *the finest* in childhood. The criteria contained in the exploration of the chosen journal are: 1) in the form of written works that are presented according to the standards of writing

scientific papers 2) The journal has publications via the internet. 3) Fulfills the accuracy of the availability of access to the instructions for writing scientific papers, while journal identities are managed professionally, 4) The scientific work is issued by a publisher, scientific body, organization belonging to a profession or a university and its parts. 5) Has an editorial or regulatory board.

The specific criteria for journals taken in this article are: 1) The journals taken are qualitative or quantitative research and PTK. 2) The treatment given develops soft movement skills in childhood through the use of various unused items. 3) *Respondents* in research journals are teachers, guardians of children, and children. 4) *Research* locations are scattered in several locations in Indonesia. 5) The results of the research are published in the 2015-2020 period. 6) Approximately 20 primary articles were referenced. 7) *Quality*, accredited and reputable national journals with a period of 5 years and international journals with a period of 7 years.

Data analysis from the 20 journals is divided into several aspects, namely, researcher and year, title, type and research design, population, sample, variables, data collection techniques and instruments, data analysis, and research results which are grouped into a table.

## RESULTS AND DISCUSSION

According to Hidayatuna's research (2020) entitled 'Use of Used Material Media to



Develop Fine Motor Ability in Early Childhood Group B' by using Classroom Action Research, this provides action in 2 cycles, and each cycle includes steps to provide actions that must be done at PTK. The subjects used in this exploration were 10 children in class B who were less than 6 years old, consisting of 6 boys and 4 girls. Then the method for data collection will be carried out using observation and performance through several activities that can produce a work of unused items. Based on the results of the study, it can show that there is an increase in the mastery of soft movements found in children, in giving action in the initial *cycle*, *there* are children who get the criteria for developing according to expectations as many as 2 children, and no child has the criteria for Very Good Development. Giving action in the next cycle, it can be seen that there are 3 children who get the criteria for developing according to expectations and developing very well, a number of 6 children. So that the exploration shows that the control of soft movements found in children can be increased through the use of various tools from unused materials.

According to Zherly Nadia Wandu, Farida Mayar (2019) entitled "Analysis of Fine Motor Ability and Creativity in Early Childhood Through Collage Activities". The purpose taken from this exploration is to describe the mastery of fine movements and the creative ability of children in kindergarten through various collage or mosaic activities. The method used in this research is

literature review which is carried out by taking various data or sources from scientific papers that have something to do with research with existing literature to solve a problem. The method used to collect library data is by reading books and recording everything that happens and taking care of the materials used in the study so that the conclusions obtained from the research material are obtained.

From this exploration, it is found that the growth of mastery of fine movements and the ability to create children in kindergarten requires adjustments to eye and hand movements so that they are expected to be able to carry out movements such as arranging objects, tearing paper, even sticking media carried out in collage or mosaic activities.

According to research conducted by Moh Fauziddin, Mufarizuddin in 2018 entitled 'Useful of Clap Hand Games for Optimizing Cognitive Aspects in Early Childhood Education' type of case study research. The sample used in this study was 8 boys and 14 girls in group B of Kindergarten Flamboyan Mekar, Tapung District, Kampar Regency. Documentation, giving and filling out questionnaires, as well as conducting interview techniques are techniques for collecting data used in data processing. This research can include various parties such as the Indonesian Kindergarten Teachers Association (IGTKI) in Tapung Regency to get suggestions and criticism in the form of input in improving the existing patterns



in the game in order to obtain significant results. Based on the results, the data analysis showed that as many as 86% of the children in the class were able to improve the direction concerning cognitive development.

According to research conducted by Nova Putri Pangesti, Siti Wahyuningsih, Nurul Kusuma Dewi (2019) entitled 'Improving the Fine Motor Ability of Children aged 4-5 Years through Busy Book Media'. The type included in the research is research in the form of classroom action (PTK). . Planning, observing, acting, and reflecting are the steps applied to this *Classroom Action Research*. While the children used for the study sample were 5 children aged less than 5 years. Retrieval of information or data collection in this study is the teacher who teaches the class and their students. Observation, documentation, interviews and performance tests are data collection techniques. The results of the classroom action research showed that the indicators of lacing 19 children or 76% were complete in increasing the mastery of smooth movements found in children through the use of busy book tools, while a number of 21 children or about 84% of children were able to achieve success according to the indicators given such as button buttons. As many as 19 children or about 76% have been able to achieve success according to the indicators given, such as pasting several shapes of the provided picture cutout patterns. Based on the results of these *data, observations*, a conclusion can be drawn, namely

that the busy book tool can foster the development of fine movements found in children aged less than 6 years.

According to research conducted by Zaiyannal Isma, Dra. Fakhriah, M.Pd, Dra. Yuhasriati, M.Pd (2016) with the title 'Teachers' Efforts to Improve Cognitive Through Picture Card APE at Kindergarten Bungong Seulanga Lamteuba Dro, Aceh Besar District'. Exploration from researchers using an approach that includes qualitative research with the type of Classroom Action Research. The samples taken were 10 children who were educated at Bungong Seulanga Lamteuba Dro Kindergarten in Seulimeum sub-district and included in *the Aceh Besar district* as many as 10 children consisting of 4 girls and 6 boys. Observation and performance are techniques used to collect data. In this study, researchers conducted class action in 2 cycles. In the pre-cycle stage research, it turned out that there were no children in the class that included numeracy skills in the well-developed category, after the action in cycle I was found or seen that children who were included in the Very Well Developed category (BSB). And after the action was taken in cycle II, the numeracy skills of children in the class who were included in the category of starting to develop very well (BSB) increased to 8 children.

According to the research of Sarina, Muhammad Ali, Halida (2017) which takes the title 'Increasing Fine Motor skills through Clipping and Cutting Activities in Children aged 4-5



years in PAUD Aisyiyah 3 Pontianak' In this exploration, the researcher emphasizes more on the descriptive method. The type of exploration of this research is Classroom Action Research. In analyzing the data in this study using observation instruments, and interviews. From observations, the research results show us that is a) In carrying out the planning in the learning process by cutting and sticking techniques to improve fine motor skills in harmony with the existing instruments in the steps that are owned so that there is an increase before being given action and after being given action; b) In carrying out the planning in the learning process of cutting and tapering techniques to improve fine motor skills in harmony with the existing instruments in the steps that are owned so that there is an increase before being given action and after being given action; c) There is an increase in the growth of existing movements in children after following the learning process with the cut and attached technique, increasing in each cycle. This means that the ability of soft movements that exist in children can increase significantly.

According to research from Rina Yanti, Anizar Ahmad, Erni Maidiyah (2016) entitled 'Social Emotional Development of Children Watching Animated Films at Kindergarten Idaman Hati, Sawang District, Aceh Utara' In this exploration the researcher used a qualitative descriptive approach. 5 children aged less than 6 years and some information from the child's parents and teachers

of Kindergarten Idaman Hati are the subjects in this study. Researchers collected data using environmental observation techniques and interviews with respondents. In this exploration it can be concluded that there are deficiencies in the development of emotional and social development in students, including children's behavior that reflects bad actions.

According to the research of Ai Sutini, Leli Halimah, Mohamad Helmi Ismail (2019) entitled 'Character Education Model Based on Literacy Gardens in Paud.' This exploration uses qualitative techniques and is based on relevant case studies. Activities in analyzing data can be carried out such as: installing the appropriate pattern, making work in the form of exposure, and conducting analysis on a time series. The analysis is carried out every time the learning process is carried out to obtain research conclusions and the interpretation of the results of the analysis which is harmonized with the teacher. Gardening habits for children who are students at TK Sukahaji and younger than 6 years old can be seen in their concern for the environment.

According to research by Nurhabibah, Anizar Ahmad, Erni Maidiyah (2016) with the title 'Social Emotional Development of Children through Social Interaction with Peers in PAUD Nurul Hidayah, Lampuuk Village, Aceh Besar District' This Classroom Action Research uses a descriptive qualitative approach. In this exploration, it shows that there is growth related to emotional and social





in students through relationships with friends at PAUD Nurul Hidayah showing a good direction, including: a). *Students* can share with friends in the class b). *Students* can obey all the rules applied in various games c). *Students* can interact with friends in the class d). *Showing* politeness ethics that *are* in line with the cultural values in the region.

According to research by Khoiriyah Ikawati, Sri Saparahayuningsih, Yulidesni (2017) entitled 'Improving Children's Fine Motor Skills through Learning to Make Batik Using Teaching Aids in the form of Flour given to Group B students PAUD Aisyiyah III Bengkulu City' is a Classroom Action Research. In this exploration, it is proven that through activities in the learning process by making batik, it is very attractive to children. The use of various tools in the initial cycle can show a mean score of 2.175 with a classical completeness of 44% in the less skilled category, then in the next cycle it can show the mean score of the number that states completion classically 60% which *are categorized* as quite skilled in batik, The actions taken in the last cycle showed an average score of 87% in the good or *the skilled category* in batik.

According to Novi Ade Suryani's research (2019) with the title 'Social Emotional Ability of Children through Groping in PAUD Group A' which used a qualitative descriptive method for group A *child*. The sample of this study was 15 children, 10 women and 5 children. *Male* child. Meanwhile, this exploration is a Classroom Action Research.

Documentation and observation are data collection methods. Researchers use an instrument in the form of an observation sheet to be filled in by respondents and educators which are manifested in the *checklist* which is the instrument used. This research can show that there is mastery related to emotional and social which will be improved in this exploration, namely patience, independence, caring, respect, responsibility, and socializing can show significant developments. The meeting between *cycles*, *shows* progress. From this research, it can be seen that the initial cycle of 59.7% has increased and likewise in the next cycle shows a development from being 88.25%. *Emotional* and social abilities in children can be improved with the traditional *grouping* method of playing games. This game is played by children who are still sitting *on* the lower level in Kindergarten.

According to *Dwi Naomi* Pura's research, Asnawati conducted in 2019 entitled 'Fine Motoric Development of Early Childhood through Pencil Shavings Media Collage' using a qualitative descriptive approach, data *were obtained* by recapitulating all the answers *to* the list of questions on the sheet given to the respondent., photos and interviews. The sample in this study were 13 children in that class. This study shows that children who have good growth are greater in number than those who have not. Students who have not experienced good growth



are due to, among others, verbal bullying by their friends due

to *the students* the other child always considered disturbing.

According to Lolita Indraswati's research (2015), which has the title "Improving Fine Motoric Development of Early Childhood Through Mosaic Activities in Kindergarten Agam" The population in this exploration was the children at the Kindergarten Pembina Agam who were taken as samples of 20 children. This Classroom Action Research applies actions carried out in two cycles. This exploration shows that each *cycle, there* is an increase in positive fine motor development. In this study, in the early cycle action there was no increase in sticking skills, then after the action was carried out in the next cycle, there was a significant change.

According to research conducted by Sujarwo, Enough Pahala Widi (2015) who took the title 'Gross and Fine Motor Skills for Children aged 4-6 Years' This exploration is a descriptive study using a percentage count as for the mastery of fine movements in children aged less than 6 years who are in the kindergarten levels of class A and B which are considered by educators in their daily activities in the form of activities and learning can then be categorized. The total number of 89 children in the Kindergarten Pembina Bantul District. In this exploration, the researcher took a sample of all students who were in Kindergarten who were the subjects for this study. This study shows that there

is mastery of soft movements in children who are in class B in the high enough category *while* students who are in the class in terms of their abilities still need attention from educators. So the conclusion of this exploration is that the ability of smooth movements in children aged less than 6 years needs special attention from the educators.

According to research Winarsih (2019) who took the title "Increasing Fine Motor Skills Through Batik Activities" The sample of this study was 10 children. This exploration implements the steps contained in the PTK, including making plans, taking action, observing and following up on the results of the research. This exploration implements two cycles of action, and each cycle requires eight face-to-face meetings. Qualitative and quantitative analysis and analysis are ways to analyze the data obtained in this study. Analyze qualitative data by reducing, displaying, verifying statistical data. Actions in the initial and final cycles are the result of *comparing* for quantitative data analysis with descriptive statistics. In conclusion, this exploration shows the development of soft movement mastery through batik activities, it can be seen in data processing before the action and after the action was given an increase from 34 to 44.

According to Meli Susanti's research (2018) entitled "Increasing Fine Motor Ability through Weaving Games of Natural Materials in the Kindergarten of Cahaya *Hati*, West Pasaman Regency" using Classroom Action Research (PTK)



through 2 cycles. This research got the results, namely, the activity of weaving together can improve fine motor skills. The division of groups of colored water games that run for observation purposes in order to obtain data. In this study, the *variations* seen were the child's ability to move *the fingers* and skills in weaving, as well as children's skills in inserting leaves in the space provided.

According to Asni Asni's research, Dorce Banne Pabunga (2019) entitled "Improving Children's Fine Motor Ability through Flannel Weaving Activities", this exploration is a Classroom Action Research through 2 cycles. Documentation, interviews and observations were used for data collection in this study. From the results of research data processing shows that teacher activities are more dominant than children's learning activities. The results of the learning process of students in the form of flannel weaving skills increased after being given action in the next cycle. The increase in the percentage of student learning outcomes completeness can be seen with the addition of the percentage.

According to research by Siti Darmiatun, Farida Mayar (2020) entitled "Improving Children's Fine Motor Ability through Collage Using Used Materials in Early Childhoods" by using Classroom Action Research through 2 actions (cycles). Based on the data processing of the exploration results, there was a change in soft movement skills in students through collage activities after being

given action in each cycle. The actions given in cycle two required learning time three times face to face and the results showed an increase in soft skills in children. The increase is in accordance with the given instrument.

According to research by Sri Hardiningsih Hanafi, Sujarwo Sujarwo (2015) with the title "Efforts to Improve Children's Creativity by Utilizing Used Media". Based on the processing of exploration data, it shows that through used / waste materials it can increase children's creativity. Included in this activity are creativity in turning used goods into toys in the form of *shippers* by cutting and folding, making straws and rags by cutting and sticking, attaching used carpets with adhesive, making toy toys from cardboard. Therefore, increasing creativity in terms of fluency, flexibility, authenticity, detail, and sensitivity of children can be through the media of used goods used to make toys.

According to research by Beti Suhandayani (2020) with the title "Increasing Creativity in Children Aged 5-6 Years through Utilizing Used Plastic Bottles" by using Classroom Action Research. Based on the research, there is an increase in creativity through the use of used plastic bottles, seen from the achievement of indicators in the learning process, the learning process in giving action in cycle II has increased significantly. This can be shown in the observation of children's activeness in having new ideas after giving action in *the cycle* I has increased to 4 (23%)



or 4 children and after taking action in cycle II has increased to 57% or 12 children. Meanwhile, based on the aspect of expressing the work in front of the class, after the action was held in the first cycle it increased to 43% or as many as 8 children. Then after giving action in cycle II it increased to 57% or as many as 10 children. And from providing various variations in the product after being given the action in *the cycle I* there was an increase of 9 (24%), and in giving the action in cycle II it increased to 69% or 12 children, *Whereas* in the aspect of appreciating the results of his work and the work of friends in giving action in *the cycle I* it has increased to 80% or 13 children, while after giving action in cycle II shows no significant increase so that the percentage remains 80%.

All journals sampled in this literature review study were 20 journals divided into 14 fine motor journals and 6 journals of used materials and useful tools using various types of research, namely: qualitative, quantitative, and PTK. There are 13 Classroom Action Research with two actions, 5 descriptive qualitative research with case study approach, 1 research with literature review and 1 quantitative research with experiment.

The sample selection method is in accordance with the standards of qualitative, quantitative, and PTK research, namely by collecting data using a questionnaire, questionnaire, observation, interview, and documentation. So that this literature review study can be generalized to the population and can

reduce the bias towards this study. There are various kinds of population used by 20 selected journals in this literature review study, namely: early childhood, parents, classroom teachers, and school principals. The range of the number of respondents from each study was 3-60 people. The sample in this literature review study varies greatly based on the purpose of the research focus, so that the researcher has calculated and decided appropriately so that the sample criteria do not affect the research results.

Of the 20 journals selected as material for analysis in this literature review, there are various kinds of dependent variables, namely fine motor skills, children's creativity, cognitive development. Meanwhile, the independent variables also have various kinds, namely used materials which are used as useful tools, busy book media, pencil shavings, APE, flour media, used bottles.

The results of research from these various journals are the majority of their research *successes* and there is an increase or change that occurs after the application and *the action* of the used material independent variable which becomes a useful tool. So that according to the observations of researchers, this literature review still has a very large opportunity and potential through *use* materials to be successful in realizing a significant increase in the mastery of soft movements in children since childhood.



Overall, the research in the 20 journals above that has been analyzed shows that there is a connection and continuity between one research and another towards the title of the literature review, namely by linking one of the variables which means that through used materials which become a useful tool is very effective in realizing an increase in motor mastery in fine categories. *In* students from an early age. This statement agrees with Yusuf and Nani (Apriyani, 2016) that the physical development of children is directly proportional to their motor development.

A child can be categorized as a child who has *created* if he can meet the requirements for fluency and flexibility on the problems at hand, and the child can solve it well.. Children in the group category will come up with ideas. Then the children will take steps to solve the right problem. When children need everything, they will plan to get it. And they will think about the steps taken so that what is planned can be successful. If the child can face the existing obstacles, it is said that the child has *created*. (Miranda, 2016).

Whereas a sign that children have *created* if they have the ability to think creatively from a cognitive perspective and are able to behave from a non-cognitive perspective (Munandar, 2009)

Research that supports the increase in mastery of soft movements through activities using used materials is a study that has been carried out by (Hidayatuna, 2020) which shows the

development of soft motion mastery based on processed data and the results obtained are by using the method of giving assignments through used material media, mastery of fine motor skills can increase. Research shows the development of meticulous gentle movements, namely doing folds *of* a paper, tearing paper, painting, gluing, sticking, cutting are all aspects of fine motor skills.

The teaching and learning process in early childhood education can develop fine motor skills of children and have an impact on students being able to practice calmness, accuracy, collaboration to get used to coordination of hand movements. Harmonizing hand movements *require* habituation so that the resulting movements are positive. There is a relationship between the activity of using used goods and the ability in fine motor skills in children aged less than 5 years. Most young children are fond of strange things in their environment. The efforts made to make children like activities with used materials, The teaching staff strives for used items that will be used in the learning process, for *example, used* drink bottles, used cardboard boxes and others that are easily available in the surrounding environment. The materials used in the learning process are not harmful to students and are according to the age of the students. (Widiastini et al., 2014). In another study conducted by (Misiyanti, Parmiti, & Wirya, 2014) showed the influence of fine *meteoric* growth in children with learning using used media. . By



utilizing used materials can reduce environmental pollution.

According to Iskandar, used materials are items that have been used that can be reused by recycling them into useful items. Nilawati is of the opinion that what includes used materials can be in the form of plastics, cans, paper and rags. If processed properly, these objects will have high benefits and selling points. Used materials are items that are not used by the owner. A new thing or object that has value can be created from this used material with creative and innovative ideas that have aesthetic and educational values. According to Conscience, creative media that can be used as creative media are mostly household appliances in the form of plastic or metal to produce creative and innovative works.

This study shows that the indicators that are achieved when the improvement of fine motor development are: a) The subject can paint by using various props; b). The subject gives color strokes to the sketch of the image; c) The subject can create works from used bottles and cardboard; d) Creating various games by gluing the media; e) Creating innovative works using various props from used materials. Taking samples of these activities *are* to develop creativity in mastering fine motor skills that exist in children with used materials. The purpose of this learning process is to create creative and innovative learning by using used bottles and other used materials (Misiyanti et al., 2014). It is hoped that the learning process will

develop fine motor skills in children. Based on the research that has been carried out, it can be concluded that the activity of used materials can be a means to improve the existing fine motor skills of children. Activities in this learning process use the harmonization of the senses of fine motor movement and the visual senses that exist in children so that activities are created that can attract children's attention. So that learning *activity* with used materials can affect the fine *meteoric* development of children. The variety of materials used is not limited to materials such as bottles or cardboard as materials for making various kinds of creations. But can use other used items while not dangerous for children. Based on the results of the exploration carried out, it can be concluded that the activity with used materials affects the development of fine motor skills in children. In increasing movement skills through brain, nerve and muscle activity is an increase in children's motor skills, this opinion was expressed by Hurlock. There are differences in the growth of motor movements in children aged less than 5 in each individual. There are two kinds of motor development, including gross motor development and fine motor development. Factors that influence gross motor development include children's movements and behavior. And this factor requires energy because it is moved by muscles. Meanwhile, the factors that affect fine motor growth do not require a lot of energy



because the energy used is only for small muscle movements.

Similar research was also carried out by (Hidayatuna, 2020) there is an influence between the use of used media used for learning activities and an increase in fine motor growth in children. Based on the data obtained, it shows that there is an increase in fine motor growth shown by various activities, including: a) Subjects can paint using various props; b). *The* subject gives color strokes to the sketch of the image; c) The subject can create works from used bottles and cardboard materials; d) Create various games by gluing the media; e) Making innovative works using various props from used materials.

In the literature review in this article, the researcher wants to provide knowledge and views to teachers, parents, and the community that the activity of using used materials as a *medium* that is useful in the learning process can affect the increase in mastery of fine motor skills in children. And it is seen that this activity includes a creative and innovative learning process. And parents, teachers, and the community can study and practice their own children in developing skills.

## CONCLUSION

From the results of the review literature on 20 national journals and international journals that have been studied, it is concluded that used materials are a medium of activity that can be used in developing fine motor skills for early childhood and also the use of used materials is a medium for

creativity games for children. The existence of learning process activities that can improve motor mastery through the use of used materials in the surrounding environment has a very positive value for children in protecting their environment, in addition to improving their fine motor skills children are also taught at the same time to utilize plastic waste so that indirectly participate in protecting the environment. By collaborating between the world of children's learning and children's play in their activities, it can ultimately have a positive impact on children. From the results of research journals have a good impact, from what has been researched, almost all research results have a good impact on the use of used materials in children's activities, there is a good effect on efforts to be able to develop mastery of fine motor skills that exist in children in early childhood education.

It is very important in every activity carried out by children in an effort to be able to improve the mastery of fine motor skills in children in early childhood education, from several activities using used materials children learn in cutting, in creating, folding, shaping, interacting with tools. *Tools* used by hand. The use of used materials can foster self-confidence, a sense of calm and improved fine motor skills. From accustoming children to playing by utilizing used materials, indirectly accustoming children to using used materials in the surrounding environment so that children will get used to keeping their



environment clean and secondly by using used materials to train creativity children in creating an item and finally, with this activity, they train their ability to master fine motor skills in early childhood education more optimally.

Efforts to improve the mastery of fine motor skills are factors that influence children's achievement in improving children's growth and development in life. Therefore, children must continue to be trained, honed their motor skills with the skills of various media, one of which in this case *is using* materials.

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