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Nature as school: Indigenous Mentawai children's play activities based on local wisdom for enriching motor skills

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ABSTRACT

Childhood is a period of growth and motor development. Therefore, analyzing strategies to prevent motor delays is very important. One strategy to prevent motor delays is play activities. Therefore, this study aimed to obtain in-depth information about play activities based on local wisdom of indigenous Mentawai children while enriching children's motor skills. The methodology of this study was qualitative research. The sample included six indigenous Mentawai children and three parents of participating children. This study employed data triangulation—specifically, semi-structured open interviews, observation, and document analysis—as methods of data collection. The results of the study conveyed that play activities based on local wisdom can enrich the motor skills of indigenous Mentawai children. Based on the results, the researcher advised parents not to limit children from doing outdoor activities and to provide opportunities for children to explore activities. Play activities based on the local wisdom of indigenous Mentawai children can enrich motor skills, so that it can minimize the occurrence of motor delays in early childhood.

KEYWORDS

Children; Playing; Motor Skills; Indigenous; Mentawai

1. INTRODUCTION

Childhood is a period of rapid growth and development. During this period, it is necessary to provide learning and understanding of the importance of motor skills. In several countries, it is reported that motor delays reach 6%-13% (Guo et al., 2021) and 34% of children who are able to master control objects (Eather et al., 2018) greatly affect the child's future life. Therefore, planning is needed to

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overcome motor delays. According to (Pienaar et al., 2021), children's motor skills are influenced by biology, the environment and the child's activities. This means that motor delays collaborate with the child's environment, biology and activities, so that in dealing with motor delays, it must be directed at biology, the environment and the child's activities.

In addition, parents have an important role in improving children's motor skills (Ku et al., 2020, 2023). As a child, doing motor skills is something that is often done in everyday life, and children who are hampered in doing motor activities make themselves afraid to be active with peers (Vanhala et al., 2024), with an active environment, children are free to do their activities, one of which is playing, playing is something that is fun and has an impact on motor skills, social and emotional (Lee-Cultura et al., 2022) and can develop social and physical cognitive skills (Castañer et al., 2016; Loo & Zhang, 2024).

As previously stated, that playing activities are one of the preventive efforts for children's motor skills. According to (Khawaja et al., 2019), by providing activities to children, of course, they become active. One of them is providing play activities. Playing activities are fun activities that stimulate children's motor skills (Moriya et al., 2022). Playing is something that is often done and is fun (Gusril et al., 2022; Rasyid et al., 2024) playing can also train children to improve their skills (Lee, 2022; Mulder et al., 2018), and to encourage children to complete challenges (Lee-Cultura et al., 2022). Therefore, this study aims to obtain information about the role and use of play activities in improving children's motor skills and efforts to overcome motor delays in children.

Mentawai indigenous children have been taught from an early age to be active outside, such as boys accompanying their fathers to hunt and fish, and girls teaching them to plant and gather forest products with their mothers, making Mentawai indigenous children grow up, strong, independent and always appreciate nature which provides a source of life. The habits of Mentawai children who are active outside make children know that nature provides many lessons that are not realized, such as gathering plants to make food and hunting lessons for motor skills and to be able to survive, with this making Mentawai children happy in their activities, without realizing it, Mentawai children have been playing games from nature. With the various explanations above, it is stated that Mentawai indigenous children make nature a school that provides many lessons such as motor skills and appreciating nature.

2. METHODS

The purpose of this study was to explore the play activities of Mentawai indigenous children in enriching motor skills and utilizing nature as a learning environment. This descriptive study employed a qualitative approach and aimed to understand and document play activities rooted in the local wisdom of the indigenous Mentawai community. Data were obtained using observation, documentation and interviews.

The determination of samples in qualitative research cannot be determined from the beginning of the study, and the children involved in this study were 6 indigenous Mentawai children and 3 parents, who met the criteria with an age range of 4-6 years. Data collection used data triangulation, namely open semi-structured interviews, observation and documentation analysis, as data collection procedures. The information collected was then analyzed using previously determined themes.

3. RESULTS

The results of the study indicated that games based on local wisdom had a positive impact on the motor skills of indigenous Mentawai children. The use of semi-structured interviews was appropriate for this research, as it involved pre-determined open-ended questions that could also be further developed during the interviews. The interview data were analyzed using open coding followed by selective coding. Parental support and the natural environment played a crucial role in optimizing the skill development of indigenous Mentawai children. A summary of the interview findings and documentation in this study is presented below:

3.1. What are the daily activities of indigenous Mentawai children?

The habit of indigenous Mentawai children to spend time outside the home, which is generally closely related to nature. The habit of indigenous children such as playing water (swimming), exploring the forest (looking for animals, horse racing, archery) and concocting medicine (mixing potions and combining colors).

3.2. How do parents respond to educating children?

As parents, we give our children the freedom to do activities as usual, such as giving them the opportunity to explore activities in nature, and we as parents from an early age introduce our children to depend on nature, because nature is the source of life, therefore we as parents teach our children to preserve and take enough from nature. For children's skills from an early age, we take children to do

activities outside, such as taking children to fish in the river, teaching children to hunt (archery, running) and introducing plants for traditional medicines.

3.3. What games are usually played by children?

Games often played by indigenous Mentawai children range from fruit archery, Sipuk-Sipuk (playing tag/running), Mangirai (rafting a small river/sailing using a banana stem to train balance), Roropogai (a game that knocks down a wooden structure that has been arranged using small stones). This is what has become a habit for children in their daily lives.



Figure 1. (a) children's activities and (b) research sample

Indigenous Mentawai children are active outdoors as seen in picture (a) that children enjoy being active with nature, being at one with nature and having joy when doing activities in nature, it is natural that children are active outdoors making children skilled in motoric aspects. Picture (b) shows a photo with children and family wearing traditional Mentawai clothing.

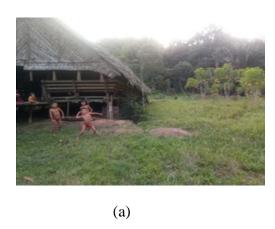




Figure 2. Indigenous children's skills

It can be seen in picture (a) that children aged 4-6 years are already good at performing manipulative movements, especially throwing. This is reflected in the daily life of Mentawai's idiogenius children, who live in nature and are active directly in nature. In picture (b) children can already balance their bodies by going up and down stairs without assistance. This is illustrated by children who often play by weighing wood.

4. DISCUSSION

In accordance with the research objectives that games based on local wisdom of Mentawai inland children are fun activities and have an impact on children's skills, this can be seen in the daily activities of children who are able to do activities such as throwing, catching, jumping, jumping, walking and running, these activities can be done easily by indigenous Mentawai children. Because Mentawai children are active outdoors and spend a lot of time playing outside, such as joining their parents hunting, fishing and archery, the things done by children contain elements of motor skills that they are not aware of, therefore, indigenous Mentawai children are skilled in performing motor movements. The results of this study are supported by previous studies which stated that place of residence (geography) has an influence on children's motor skills (Eddy et al., 2021; Santos et al., 2020), and influences children's play activities (Gusril et al., 2024)

The main results of this study convey that indigenous Mentawai children have good motor skills, seen when children easily do activities such as throwing, catching, jumping, walking and running, this is supported by children's daily activities that are one with nature, indigenous children are active in nature and make nature a friend and a place to play that is rich in experience to explore such as children doing walking on a wooden log that has been robbed, this trains balance in walking and there are also children who throw fruit using a level that illustrates that children have done manipulative

movements without realizing it, with the daily lives of indigenous Mentawai children like this, there are no motor delays experienced by indigenous Mentawai children.

Recently it was reported that activities in nature make children healthy and happy in doing activities (Stott et al., 2024), and it was also reported in research (Prins et al., 2022) that children who are directly involved in nature make children skilled in motor skills, therefore it is necessary to give children the opportunity to explore activities in nature not only inside the house (Leonard, 2016), children who do not do activities outside the room make children easily emotional and children's motor skills are limited (Lee et al., 2020) such as children cannot follow directions as given, and children become lazy to do activities with their peers.

From the research that has been done, it was found that playing activities based on local wisdom make children easy to do motor movements and good at socializing. Researchers hope that this research can be used as a guideline on how to teach children to improve motor skills through playing activities based on local wisdom. Although this research has been carried out as it should, researchers still feel that there are shortcomings in the research such as the research sample is still too narrow and not too deep to explore the daily lives of indigenous Mentawai children. Researchers hope that future research can involve a wider sample and compare the activities of indigenous children such as those in the Riau and Jambi islands and study the daily lives of indigenous children in more depth.

5. CONCLUSIONS

Local wisdom-based play activities are one of the efforts to improve motor skills as well as a way to overcome motor delays in children. Local wisdom play activities are physical sports that help improve children's motor skills. In addition, local wisdom-based play activities can be one of the preventive efforts against motor delays. The implementation of this research becomes a guideline for parents, teachers and stakeholders to be used as a reference in teaching children. For future research, researchers hope to involve a wider sample and compare the activities of indigenous children such as those in several areas, especially Riau and Jambi, and study more deeply the daily lives of indigenous children.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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