

THE DEVELOPMENT AND IMPLEMENTATION OF HEALTH, NUTRITION, AND SAFETY MODULES FOR PRESCHOOL CHILDREN IN RURAL AREAS

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ABSTRACT

The importance of health, nutrition, and safety in certain preschools is still underestimated, specifically in preschools in rural areas, due to several factors, namely, the lack of teacher training, a lack of information, and a lack of resources, which result in child malnutrition and obesity. The Health, Nutrition, and Safety (HNS) module will be designed based on learning theories such as Cognitive and Ecological Theories. The module comprises three health-related teaching and learning activities, three nutrition-related teaching and learning activities, and three safety-related teaching and learning activities. The purpose of this paper is to propose a preschool-aged child's Health, Nutrition, and Safety (HNS) module. This module will be validated by experts and piloted to preschoolers in rural areas prior to implementation in the actual study. In this study, qualitative research will be used. Interview questions and an observation checklist will be developed. The participants in this study will be a group of preschoolers from Sik, Kedah (about 20–25 children). Five preschoolers will be chosen at random to be engaged in the interview and observation. The module will be implemented within 12 weeks by the preschoolers by the researcher. The findings will be expected to provide early educators with the knowledge and abilities to advance the health and well-being of preschoolers. In addition, promoting children's understanding of how health, nutrition, and safety affect their physical, mental, and emotional well-being as supports normal growth supports maintaining healthy body weight, and lowers their chance of developing chronic diseases.

Keywords: health, nutrition, safety, preschool rural areas

INTRODUCTION

The three fundamental factors that parents, teachers, and other caregivers must take into consideration when caring for children are health, safety, and nutrition. Many of the practices and diets used today by adults to stay in shape can be harmful to children. Because some adults do not comprehend the importance of safety, health, and nutrition needs. It is essential to take care of children's health, safety, and nutrition from the moment they are born or even during pregnancy. As a result, children who eat a balanced diet rich in all the nutrients they need benefit from more learning opportunities, fewer illnesses, and plenty of energy for play. On the other side, children whose diet is deficient in important nutrients like protein and iron may develop anemia, which can cause exhaustion, a reduction in alertness, failure of growth, failure

in school, and appetite loss (Marotz, 2014, p8). This paper discusses a proposal for the study of the development and implementation of health, nutrition, and safety modules for preschool children in rural areas.

Statement of Problem

There are still problems with children's health, nutrition, and safety in Malaysia, particularly in rural areas. The lack of studies on educators' readiness lends credibility to this view (Hudin et al., 2019). In addition, the lack of concern educators have for the health, nutrition, and safety of the children in their charge raises this problem. According to Regulation 54, Preschool Regulation 2012, educators must complete 144 hours of the KAP (Knowledge, Attitude, Practice) course and 40 hours of practice to demonstrate that they are adequately qualified to practice safety and health standards (Peraturan 54, Peraturan-Peraturan TASKA 2012) 2012 (Jabatan Kebajikan Masyarakat, 2018). However, the fact that children's health, nutrition, and safety issues are still occurring in Malaysian preschools and have become a common issue.

In addition, children's malnutrition can manifest as being underweight or overweight. However, stunting in children under five dramatically rose from 2006 to 2016, going from 17.7% to 20.7%, according to UNICEF Malaysia (2018). These three studies show a rising prevalence of underweight, stunting, and wasting in Malaysian children under the age of five, indicating the need for intervention programs to lower these rates (Bahtiar et al, 2021). Furthermore, a previous study discovered that the problems and prevalence of childhood malnutrition in Malaysian poor communities are caused by unidentified determinants (Wong et al., 2014). Childhood malnutrition is an issue that risks children's performance, health, and safety. Control of underweight should be a priority for children because of their extensive growth and development (Blössner et al., 2006; Ruhaya et al., 2012).

Preschool teachers lack the information required to implement safe practices in nutrition, health, and safety. Implementation problems have been explored in previous studies. Some negative factors include time constraints, staff resistance, disruption of daily routines, and inadequate parental engagement. In addition, just a few teachers can promote the importance of implementing health, safety, and nutrition in preschool and the community. The connection between nutrition and health needs to be taught to teachers, and this knowledge needs to be taught in schools where the teachers are trained. There should also be practical courses on these topics (Songür et al., 2017).

Purpose of the Study

The purpose of this study is to develop and implement a module on health, nutrition, and safety for preschool children in rural areas, with the ultimate goal of promoting healthy behaviors and improving health outcomes in this vulnerable population. By creating a module that has been validated by experts and piloted, it is hoped that teachers will have access to a comprehensive and effective tool for promoting health, nutrition, and safety in their classrooms. The implementation of the module in rural areas is particularly important, as these communities may have limited access to resources and face unique challenges related to health, nutrition, and safety. By providing teachers with a validated and effective module, it is hoped that children in these communities will have greater access to the knowledge and skills needed to make healthy choices and avoid negative health outcomes.

Research Objectives

Based on the problem statement and purpose of the study, the research objectives are as follows:

1. To develop and validate the module on health, nutrition, and safety for preschool children in rural areas.
2. To implement the module on health, nutrition, and safety for preschool children in rural areas.
3. To explore rural preschool children's knowledge and attitude on health, nutrition, and safety.

Research Questions

The research questions develop for this study are as follows:

1. How are the development and validation processes of the module on health, nutrition, and safety for preschool children in rural areas?
2. How are the implementations of the module on health, nutrition, and safety for preschool children in rural areas?
3. What are the rural preschool children's knowledge and attitude on health, nutrition, and safety?

LITERATURE REVIEW

The development and implementation of health safety and nutrition will be the theme of this literature review. Subtopics related to the variable will be covered in the literature review namely, the concept of health, nutrition, and safety, the importance of health, nutrition, and safety, studies on the development of health, nutrition, and safety programs/module for preschool children, studies on the implementation of health, nutrition, and safety program for preschool children, and lastly, studies on early childhood in rural areas. Related theories on children's learning will also be reviewed to develop the theoretical framework of this study.

The Concepts of Health, Nutrition, and Safety

Children's well-being is considered with the three components such as health, nutrition and safety (HNS). These three components are interrelated to each other and cannot be separated. The definition of health is actually more than preventing children from any diseases. Children and adults should understand the concept of health, which is how to adapt to everyday challenges, resist infection, cope with adversity, and be able to interact with their surroundings to promote their well-being. Current definitions of health take a broader approach and acknowledge that it is a condition of mental, physical, emotional, social, economic, cultural, and spiritual well-being. Previous research is showing that many adult health issues, such as high blood pressure, heart disease, and diabetes, are linked to what happens during early childhood (and even the penalty). Children's well-being needs support from families, teachers, and communities to promote their physical, oral and mental development.

In addition, a nutrition term is considered about healthy eating. According to Udeagbala et al., 2020, nutrition is the process of obtaining beneficial compounds from consumables that give the body the nutrients it needs for upkeep, growth, and development. However, nutrition focuses on how eating well and following a healthy diet can prevent or lessen diseases, ailments, and developmental difficulties (Udeagbala et al., 2020, p63). Healthy habits need to be introduced to children from an early age because they will grow and develop which will impact how they think, eat and behave. The previous study also mentioned that a healthy diet not only affects growth, but also immunity, intellectual capabilities, and emotional well-being. Meaning that the children are the product of how good nutrition will determine how the child grows in the future. Families and educators must ensure that children receive an adequate amount of needed nutrients to provide a strong foundation for the rest of their lives. Also, the safety term describes how the center prevents risk or any unnecessary harm that possibly happens to the children. Safety must be a priority at all levels, the center should prepare or plan a suitable program to make sure that safety is there and nothing is going to go wrong.

The Importance of Health, Nutrition, and Safety

Preschool is a critical time in a child's development, and it's important to prioritize their health, nutrition, and safety during this stage. Children at this age are rapidly growing and developing, and their experiences during this period can shape their future health and well-being. Young children are prone to illnesses, and those who are at a day care facility are probably two- to three times more likely to catch a disease (Zamani et al., 2021, p. 8). According to a study by the American Academy of Paediatrics, promoting health, nutrition, and safety in preschool can have a positive impact on a child's cognitive development (Rivara et al., 2019).

Health is essential in preschool because it affects a child's ability to learn and develop. A healthy child is more likely to have good attendance, be engaged in classroom activities, and have better academic performance. Health also plays a crucial role in a child's physical, emotional, and social development. It's essential to ensure that children receive regular medical check-ups and vaccinations to protect them from preventable illnesses. The National Institute of Child Health and Human Development (NICHD) recommends that preschools provide at least one-third of a child's daily caloric intake during their time at the centre (NICHD, 2017).

Nutrition is crucial in preschool because it's the foundation for good health. Proper nutrition helps to promote healthy growth and development, support the immune system, and prevent chronic diseases. Children at this age require a balanced diet that provides them with the necessary nutrients they need for their growth and development. Preschools should provide nutritious meals and snacks and encourage healthy eating habits to promote good health. Safety is critical in preschool because young children are more vulnerable to accidents and injuries. Children at this age are curious and are exploring the world around them, so it's essential to provide a safe environment for them. The Centres for Disease Control and Prevention (CDC) provides guidelines on how to create a safe environment in preschools and prevent injuries (CDC, 2020). Preschools should have safety protocols in place to prevent accidents, and teachers should be trained to respond quickly in case of an emergency.

Moreover, children must be involved with the environment, such as in a daycare center or higher education, because they cannot stay at home forever. As early as possible, teachers must emphasize the value of safety, nutrition, and health. because educating childcare personnel and fostering a healthy atmosphere can lower the risk of diseases (Zamani et al.,

2021, p8). To grasp fundamental first-aid procedures relevant to the childcare context, an educator must be well-trained. Identify frequent infectious pediatric diseases that occur while also preventing accidents and injuries in the childcare environment.

Review of Related Studies

Related studies on the development and implementation of health, nutrition, and safety modules for preschool children will be reviewed. In addition, studies related to early childhood education in rural areas, related learning theories, and the theoretical framework of this study will be discussed.

The Development of Health, Nutrition, and Safety Modules for Preschool Children

In *A Science-Based Framework for Early Childhood Policy*, published by the Center on the Development Child at Harvard University, it is stated that "the principal elements that have consistently produced positive impacts include highly skilled teachers, small class sizes and high adult-to-child ratios, age-appropriate curricula, and stimulating materials in a safe physical setting (Paris, 2018, p13). The proposal for the health, nutrition, and safety module for childcare centers stems from the need to upgrade the facilities for childcare centers in terms of health, nutrition, and safety since an existing program in the school may not be as successful as intended. The curriculum often focuses more on skills, cognition, social-emotional development, etc., but less on safety, nutrition, and health.

Children are meant to learn from this module the value of safety, nutrition, and health for overall growth and development. From an early age, children are aware of the need to care for themselves. The module's goal is more likely to be accomplished in the preschool with parents and teachers working together. The advantage of having a module is that parents and teachers may use it as a guide when deciding what kinds of diet and activities are best for kids. The Nurturing Care Framework for Early Childhood Development, developed by the World Health Organization (WHO) and partners, emphasizes the significance of the first 1,000 days of life as a critical period of development and the crucial function of parents and other primary caregivers in providing nurturing care (Thorogood et al., 2021). The module will be employed as a guideline for parents and teachers in providing what is needed for children's health, nutrition, and safety (NHS).

The Implementation of Health, Nutrition, and Safety program for Preschool Children

One study that explores the implementation of health, nutrition, and safety programs for preschool children is "Assessing the implementation and feasibility of a nutrition education and physical activity curriculum in Head Start preschools" by Ruelas, Roy, Johnson, and Brown (2017). The study aimed to assess the feasibility of implementing a nutrition education and physical activity curriculum in Head Start preschools. The study used a pre- and post-test design with intervention and control groups. The intervention group received the curriculum for 6 weeks, while the control group received the usual program. The study found that the intervention group had significantly improved nutrition knowledge, eating behaviors, and physical activity levels compared to the control group. The study concluded that the curriculum's implementation was feasible and effective in promoting healthy eating and physical activity habits among young children.

However, a review article by Wilford, Pham, Kremer, Skouteris, and Bell (2020) identified several barriers to implementing nutrition interventions for preschool children in childcare centers. These barriers included a lack of resources and funding, inadequate training for staff, and limited parent involvement. The article also identified facilitators, such as staff training and community partnerships. In a different perspective, Calvert, Parker, Anderson, Conner, and Bice (2019) examined the implementation of a safety program in preschools from the perspective of center directors. The study identified several barriers to implementation, such as a lack of funding and resources, inadequate training for staff, and staff turnover. The study also found that the directors' attitudes and beliefs towards the program influenced its implementation.

There are several possible tactics that could increase the possibility that safety, health, and nutrition policies and practices are implemented in childcare services. The determinants of module implementation are complex because a large number of elements function at many macro and micro levels that can impact the success of implementation. Since the last study mentioned that practice implementation was more likely when service managers, management committee, and parents were supportive, and where external resources to support implementation were accessible, the teacher or caregiver needs to understand the implementation context, purpose, and boundaries before doing the implementation module (Wolfenden et al., 2016). The more communities and individuals participating, the simpler it will be to execute the module.

Early Childhood in Rural Areas

Better early learning environments for kids build both cognitive and non-cognitive talents. Excellent early childhood education has been linked to later success and greater social and emotional maturity in children, according to a prior study. However, there is compelling evidence that attending preschool improves students' preparedness for school and may have long-term consequences on scholastic achievement (Temple, 2009, p403). Many kids don't participate in any formal early education programs before entering kindergarten. Because they originate from disadvantaged backgrounds and live in rural locations with limited access to high-quality early education programs, the majority of rural families have few options for enrolling their children in a decent school.

Boller and Vossler (2019) noted that rural areas face significant challenges in providing high-quality early childhood education. Rural areas often lack resources and infrastructure for early childhood education, including access to transportation, child care facilities, and trained teachers. To address these challenges, the authors suggested that rural communities should collaborate with state and federal agencies to create innovative programs that address the unique needs of rural children. Additionally, studies by Liu, Yang, Tu, and Pan (2012) in China found that the poor results of learner accomplishment in rural areas are indicative of the poor quality of teaching in those places (Hannaway et al., 2018). Also, Deaton (2016) conducted a literature review of early childhood education in rural areas and found that rural children face significant barriers to access early childhood education. These barriers include a lack of transportation, a shortage of qualified early childhood education providers, and the high cost of childcare. The author suggests that policymakers should increase funding for early childhood education in rural areas and invest in teacher training programs to address the shortage of qualified early childhood education providers.

In addition, according to Hannaway et al. (2018) a major issue in rural areas is a lack of infrastructure. Here, "poor infrastructure" referred to poor conditions in rural schools that endanger children's lives and physical well-being as well as the requirement for sterilization improvements in rural schools. Furthermore, according to a study Hannaway et al. (2018), there are various challenges to the development of high-quality education in rural areas, including socioeconomic factors, a shortage of teachers with the necessary qualifications, inadequate curriculum execution, a lack of resources, subpar school administration, and a lack of community involvement in rural schools.

Theories on Children's Learning

Theoretical perspectives provide the foundation for study and illustrate how these concepts or variables relate to the topic. These two ideas include Jean Piaget's theory of cognitive development and Bronfenbrenner's ecological theory.

Cognitive Development by Jean Piaget

Jean Piaget (1896–1980) was a scientist who collected mollusks before transitioning to psychology and becoming interested in researching how children's intelligence develops. Piaget's idea is based on his observations of his three children's mental growth (Başkale et al., 2009). The three guiding principles of this process are assimilation, accommodation, and equilibration. In addition to emphasizing a child-centered approach, play, and self-discovery, Piaget's theory offers a detailed characterization of children's cognitive development and offers suggestions for creating age-appropriate educational materials. The cognitive development process described by Piaget will have a significant impact on how they view children. With the help of his hypothesis, parents, teachers, and other caregivers are better equipped to explain the perfect nutrition and healthy habits to support children's development, particularly in terms of their cognitive abilities.

Schemata is yet another concept from Piaget's theory of cognitive development. Teachers or other adults who care for children can research the feeding habits of young children by watching them eat and asking them a series of questions on nutrition. To help the child's schemata become more tangible, one activity has him draw his favorite meal. The capacity to react to new conditions is known as schemata (Başkale et al., 2009). Other activities include showing them actual fruit or fruit-related images that may or may not be known to them. Additionally, children gain knowledge about the many varieties of food, which enriches and develops their existing food concepts. This helps kids in remembering the food-related concepts they pick up through social transmission (Başkale et al., 2009). In addition, as they begin to recognize the value of good habits, especially with regard to food, they become more conscious of the need to eat nutritious food while also knowing how it would improve their development.

Bronfenbrenner's Ecological Theory

This study places a strong emphasis on the various systems that have an impact on human development, guided by the ecological and bioecological theories of Bronfenbrenner. According to this belief, one's upbringing has an impact on every aspect of human life. His idea addressed social elements that affect how people change and develop over time (Iruka et

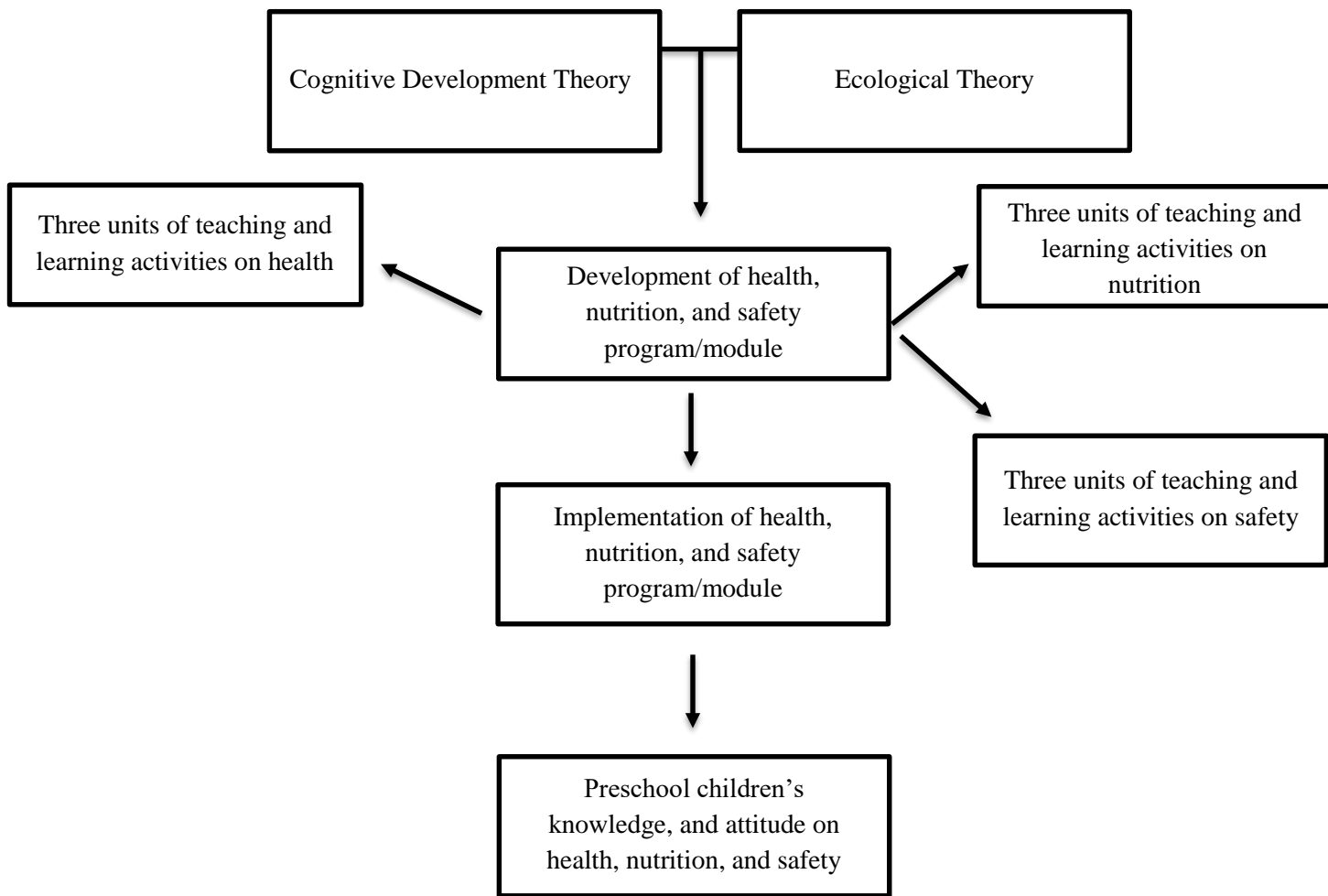
al., 2019). These systems, such as the microsystem, the mesosystem, the exosystem, and the macrosystem, are distinguished from micro to macros.

- a. The microsystem, which encompasses the near surroundings of home and preschool, and school programs, is the one closest to a child's growth. Family poverty levels, mobility, and the early childhood learning environment, particularly pre-K, are a few examples of micro-systemic variables (Iruka et al., 2019).
- b. The mesosystem is a link between microsystems, such as that between parents and the teachers of their children, or other ties between home and school. A community's geographic location (such as rural vs. urban), density, demographics, transportation, and economy all have an indirect impact on a child's development (Iruka et al., 2019).
- c. Exosystems, is the social environment or ecosystems that have an indirect impact on a child's development, such as a child's school and community resources in a rural setting, are the subject of the current study.
- d. Macrosystems are the values, norms, practices, and policies that are expressed throughout these systems that serve as a broad representation of macrosystems. comprehending how different systems from the micro to the macro scale emerge in a rural setting In the current study, we concentrate on how rural community norms, cultural practices, and policies affect children's learning (Iruka et al., 2019)

Theoretical Framework of the Study

The theory of Piaget gives a clear explanation of children's cognitive development, encourages a child-centred approach, emphasizes play and self-discovery, and offers suggestions for creating educational materials for different ages (Başkale et al., 2009). He claims that by concentrating more on children's diet, we may influence how their brains grow. Cognitive development, which lasts from infancy through maturity, refers to the mental processes that enable people to comprehend and learn about the world around them (Başkale et al., 2009). Piaget's theory of cognitive development is used in this study because, without information on how children grow their cognitive theory, adults may find it difficult to address children's requirements. Adults need to establish a solid strategy to expand their knowledge of health, nutrition, and safety. Based on this approach, this project will create and execute age-appropriate health, nutrition, and safety modules for children's cognitive development.

Also, Bronfenbrenner's Ecological Theory makes it easier to comprehend how individuals and environments, such as rural areas, affect children's development and learning achievement. When cognitive growth is insufficient, adding another theory, like Ecological Theory, would balance it out. Considering Ecological Theory will help influence children's personalities, cultures, languages, religions, and even the food they consume. Children do not always live at home since they are a part of a varied culture. It is crucial to keep in mind that early childhood education programs reflect the variety of the neighbourhood (Sagala & Munawarah, 2017). We must take into account our own culture, family, and instructors in addition to the natural links between health, safety, and nutrition (Sagala & Munawarah, 2017). The fact is that only specified themes and limited methods are used to present and implement health, nutrition, and safety programs. A person who is exposed to this environment will be able to focus their actions on achieving a certain objective (Sagala & Munawarah, 2017). This is why we employ this idea to introduce kids to the surroundings through the program.



To teach children how to encourage healthy eating and healthy habits, health, nutrition, and safety concepts need to be discussed and acknowledged more. The value of healthy habits, like eating well and exercising, is stressed to young children in rural preschools in order to help them develop both academic and non-academic skills. Early instruction in the value of safety, nutrition, and health will raise their understanding of the high cost of human wellness. With this information later, they will be able to decide what is and what is not proper for them according to their age. Yet many teachers and caretakers about this matter, due to lack of resources, poverty, and lack of parental involvement, make it hard to develop and implement a new curriculum as they believe the old program is enough for children. However, Piaget's cognitive development theory contends that by better understanding young children's cognitive development via observation and inquiry, parents and other caregivers may help pre-schoolers acquire appropriate eating and lifestyle habits.

METHODOLOGY

In this part, the research design, population and sample, instrument, module, pilot study, validity and reliability, data collection and analysis procedures will be discussed briefly.

Research Design

This study will employ qualitative research. Qualitative research was chosen because it suits this study, where we have interview questions at the same time as observation checklists that will be developed for preschool children. The qualitative research methodology put a strong emphasis on gaining a thorough understanding of the demands and difficulties that children currently faced in rural preschools. This study is a suitable for qualitative research because according to McMillan and Schumacher (1993), it examines and analyzes people's individual and group social acts, beliefs, thoughts, and perceptions (Hannaway et al., 2018). This combines a few questions and encouragement with direct observation of the participants.

Population and Sample

The population of this study is one preschool class in Sik, Kedah, which consists of 20-25 children. This means that the study aims to understand the behavior and skills of all preschool children in that particular class. Purposeful sampling was used to involve five preschool children selected at random to participate in the interview and will be observed with the checklist that has been developed by the researcher. The use of purposeful sampling in this study allows the researcher to obtain rich and detailed data about the behaviors and skills of a small group of preschool children, which can be used to draw conclusions about the larger population of children in the class. However, it is important to note that the findings of this study may not necessarily be generalizable to other preschool classes or populations, as the sample size is relatively small and specific to this particular class in Sik, Kedah.

Instrument

The research instruments that will be used in the study to collect data about the children's knowledge, attitude, and practice of health, nutrition, and safety. Specifically, the study will employ two types of instruments: interviews and observations.

The use of both interviews and observations is important because each instrument has its own strengths and weaknesses. Interviews are useful for gathering information about children's thoughts, opinions, and attitudes, and can provide rich data about their understanding of health, nutrition, and safety. In contrast, observations are useful for collecting data about children's actual behavior and practices in real-life settings, which may differ from their stated opinions and beliefs.

By using both interviews and observations, the researcher will be able to collect complementary data that can provide a more complete understanding of the children's knowledge, attitudes, and practices regarding health, nutrition, and safety. The qualitative data collected from both instruments will be detailed and can provide rich explanations of the children's behaviors and attitudes. This can help the researcher to identify patterns and themes that emerge in the data, which can then be analyzed to draw conclusions and make recommendations for future interventions to improve children's health, nutrition, and safety.

Interview

Interviews are commonly used in survey designs and in exploratory and descriptive studies (Mathers et al., 2000). The use of interviews as a research instrument in the study of children's

knowledge, attitudes, and practices regarding health, nutrition, and safety. Specifically, the researcher will prepare interview questions related to these topics, and there will be six questions in total for each component.

Interviews are commonly used in survey designs, as they allow the interviewer to ask open-ended questions and obtain detailed explanations from participants. In this case, the researcher will use interviews to gather information about the children's knowledge, attitudes, and practices regarding health, nutrition, and safety. By using open-ended questions, the children will be encouraged to provide detailed responses, which can provide valuable insights into their understanding of these topics. The researcher has chosen to ask six questions for each component (health, nutrition, and safety), which can help to ensure that a range of topics is covered and that the data collected is comprehensive. By asking about the children's knowledge, attitudes, and practices regarding health, nutrition, and safety, the researcher can obtain a well-rounded picture of the children's understanding and behaviors in these areas.

Observation Checklist

The used of observation as a research instrument in the study of children's participation in the implementation of a health, nutrition, and safety module. Specifically, the researcher will develop a checklist to observe the children and their participation during the implementation of the module. To develop the observation checklist, the researcher will review previous studies on children's participation in the implementation of health, nutrition, and safety modules. These studies may provide insights into the types of behaviors and practices that are most relevant for observing, as well as the most effective ways to structure the observation checklist.

Once the observation checklist has been developed, the researcher will use it to observe the children during the implementation of the health, nutrition, and safety module. The checklist will likely include items such as the children's level of engagement and participation, the types of activities they are involved in, and their interactions with other children and with the module facilitators. By using observation as a research instrument, the researcher can obtain data about the children's actual behavior and practices during the implementation of the module, which may differ from their stated attitudes and beliefs. This can provide valuable insights into the effectiveness of the module in promoting healthy behaviors and practices among the children.

Health, Nutrition, and Safety (HNS) Module

Based on the learning theories from the literature, the module of HNS will be developed. The proposed module will consist of the following teaching and learning units:

Three units of teaching and learning activities on health

CONCEPT: Children need to eat healthy food to grow a healthy body. These are the three activities suggested to improve children health awareness

OBJECTIVES:

The children should learn that

- All living things need food
- Food is important for growth and for good health.
- Body movement is important for growth and for good health.

SUGGESTED ACTIVITIES

1. Weighing and measuring children
2. My healthy plate
3. Hands & Feet Hopscotch

QUESTIONS FOR EXTENDING LEARNING EXPERIENCES

How to measure children's weight?

What do we use to measure weight?

What does it mean to be healthy?

Do people need healthy food to be healthy?

What kind of food do you need to eat to be healthy?

Do people need exercise?

What kind of exercise is suitable for children?

EVALUATION: Children can name some vegetables and fruits. Children able to describe what is healthy and unhealthy. Children can do simple body movement activities.

Three units of teaching and learning activities on nutrition

CONCEPT: Children need to eat healthy food to get proper nutrition. These are the three activities suggested improving children's nutrition awareness.

OBJECTIVES:

The children should learn that

- Learn many varieties of fruits and vegetables.
- Identify foods that belong to the milk group.
- make decisions about foods and taste a variety of foods.

SUGGESTED ACTIVITIES

1. Eating Different Types of Fruits and Vegetables Every Day
2. Tasting Dairy group of Food
3. Trip to the Grocery Store

QUESTIONS FOR EXTENDING LEARNING EXPERIENCES

Do you think fruits and vegetables are good for your body?

How do you differentiate fruits and vegetables?

Which food is familiar and which unfamiliar for you?

Can you describe one fruit?

Can you describe one vegetable?

Can you name some dairy group products?

Have you been to the grocery store before?

What did you see in the grocery store?

EVALUATION: Children can describe some vegetables, fruits and dairy products. Children are able to name the same dairy group product. Children can make decisions for their food.

Three units of teaching and learning activities on safety

CONCEPT: Food must be carefully handled before they are eaten and introduce protection guidelines for children's safety. These are the three activities suggested improving children's nutrition awareness.

OBJECTIVES:

The children should learn how to

- select and eat food safely.
- wash hands before eating
- apply sunscreen to protect children's skin

SUGGESTED ACTIVITIES

1. Safe lunches boxes
2. When and how you wash hands
3. Sunscreen experiment

QUESTIONS FOR EXTENDING LEARNING EXPERIENCES

Which foods need to be kept cold?

Which foods need to be kept hot?

Which foods need to be wrapped or stored in special containers to be kept safe?

How to wash your hands properly?

When do you need to wash your hands?

Why do we apply sunscreen?

When do we use sunscreen?

EVALUATION: Children select safe food for themselves. Children show how to wash their hands properly. Children can apply sunscreen whenever they go out of class.

Pilot Study

The researcher will interview one or two preschoolers to get their answers before beginning the actual instrumentation, and the researcher will then use a checklist to observe the children. The pilot study is being conducted to see if the participants comprehend and are capable of responding. After doing the pilot study, the researcher tries to gather feedback from children on what needs to be changed and improved regarding the interview questions and checklist statement. Before doing the actual study, this is a chance to enhance and adjust the tools.

Validity and Reliability

For the validity and reliability part, the researcher will seek experts in early childhood education to check whether the interview questions and the observation checklists are suitable. The purpose of determining validity is to check the accuracy of the questions regarding the topic; the researcher would like to be more focused on what is supposed to be identified, and reliability will help to check the consistency of the data. In addition, two experts in early childhood will validate the module by providing feedback for improvement.

Data Collection Procedures

The data collection procedures of the interview and observation checklist will be conducted as follows.

Interview

The researcher has created a list of interview questions for the participants. The interview is face-to-face, because the researcher will visit the school and choose random children who are able to cooperate to answer the questions. Every child will be interviewed for 5 to 10 minutes after each activity has been conducted. Five children who had chosen to be involved in the interview will take a turn to answer the questions.

Observation Checklist

The researcher will develop a checklist that consists of statements on children's health, nutrition, and safety based on the HNS module. The focus of the checklist is on the children's knowledge, attitude, and practice of HNS during the activities being carried out. In another word, the researcher will observe children's behavior, response, or participation during the activity.

Implementation of Module

The module will be implemented over the course of 12 weeks. The researcher will develop rapport with children and teachers in the first week. There will be three sections to the program. Implementing the healthy module takes up to three weeks, followed by three weeks of implementing the nutrition module, and the final three weeks of implementing the safety module. In another two weeks, the researcher will conduct interviews with the five children selected for this study. The implementation of the Health, Nutrition, and Safety modules will be carried out together by the teacher and the researcher.

Data Analysis Procedures

The data analysis procedures for the two instruments used in this study will be discussed as follows.

Interview

The standard thematic approach will be used in this study. After the interview, the data will be examined and categorized. The interview data will complement the information from observation. The interview data will be categorized based on the most frequently used words mentioned by the children. Researchers will learn a great deal through interviews and observation.

Observation Checklist

The following steps were used by the researcher to analyze the information from the observation checklist: the researcher will collect all the information from the observational notes. Then, reading through all the data gathered, and classifying the data depending on the

statement of problems. Describing the data, which have been classified. Using the key details from the observation to write a conclusion.

CONCLUSION

To obtain and analyze the data, the researcher will use qualitative methodologies. The majority of the students who answer the question are randomly selected children from a group of 15 to 20 students. In this paper, two different types of instruments will be employed, including an observation checklist and interview. The pilot study will be carried out before the main study. The expert in the field of early childhood will validate the instruments. A preschool in Sik, Kedah, will be visited in order to gather data for this study face-to-face. Lastly, data analysis for this paper will utilize multiple methodologies, which related to the instrument. According to the themes or words that children frequently use, the interview will use a thematic approach, and the observation will utilize a summary of the data that has been acquired.

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