

Perceived practices and attitudes of the Sri Lankan preschool children pertaining to environmental protection

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Abstract

Perceptions of the environment that young children acquire in their early childhood function as a base for their holistic development. Studies convey that if children do not develop a sense of respect and caring for the environment during their early years, they are at risk of never developing such attitudes later in life. Therefore, educators, primary caregivers of children and environmental proponents should address and assess the frequency, nature, and quality of child-environment interactions during early childhood. However, research studies carried out to investigate children's sense of environmental protection is almost nonexistent in the Sri Lankan context.

The present study explores the preschool children's perceived practices and attitudes pertaining to environment protection using a two point pictorial rating scale (12 statements, 6 pairs). Participants were 34 preschool children, 12 boys ($M = 3.91$; $S.D = .539$) and 21 girls ($M = 4.19$; $S.D = .602$), from Colombo. The research was conducted, adhering to the ethical standards of test administration for young children. After listening to their preschool teacher instruction the children were requested to put stickers against the appropriate picture which indicated their preference. Results conveyed that the majority of the children have said that they do not leave the water running when they brush their teeth (28, 82.4%), love animals (31, 91.2%), like to play outside (23, 67.6%), pick trash (32, 94.1%), like to plant things (31, 91.2), turn the lights off when they leave a room (28, 82.4%). When children's perceived practices and attitudes of the environment was calculated the scores ranged between 9 to 12 ($M = 11.088$; $S.D = 0.996$), conveying that the majority of the children have positive attitudes and perceived practices pertaining to environmental protection.

Key words: *Preschool children, Environment protection, Perceived practices, Attitudes*

Introduction

It could be argued that environmental education based on life experiences is a necessity and should begin during the very earliest years of life. Mainly due to the fact that such experiences play a critical role in shaping lifelong attitudes

(Wilson, 1994; Pratt, 2009), values, and patterns of behavior within preschool children to preserve and cherish natural environments (Davis, 1998).

Young children learn about the environment by interacting with it. However, a significant percentage of Sri Lankan children spend most of their time in settings or doing activities that keep them essentially isolated from the natural world. However, in a world where new technological advancements are made daily and urban spreading persists, children spend more time in front of television, computers and traveling in cars than spending their time outdoors (Hudson, 2001). As a result, even after pre/school, a child's opportunity to explore a natural environment is becoming severely limited. With an increase in lawns and urban development, there is less natural open space available in which a child can play freely without the restrictions of a human-organized outdoor environment

Literature conveys children who are close to nature relate to it as a source of wonder, joy, and awe. Such wonder may provide them with the impetus to love and cherish the environment not only during their stay in the preschool but in primary school as well. Moreover, such impetus may also propel them to love the environment as adolescents and adults. Therefore, environmental education during the early years would create a powerful impact in the lives of preschool children in many years to come.

Literature also conveys that if children do not develop a sense of respect and caring for the environment during early childhood, they are at risk of never developing such attitudes later in life (Stapp, 1978; Tilbury, 1994; Wilson, 1994). Therefore, the importance of early years as a critical factor in formation of positive attitudes and inculcating environmental education of the child (Tilbury, 1994) has been globally accepted. (UNESCO, 1976). As Cohen (1984) pointed out if children developed negative attitudes toward the environment during their early years, such attitudes are likely to become deeply entrenched.

Therefore, early childhood has been considered a critical period in human development. Young children are active and inquisitive. To them learning is a spontaneous process which contains the sum of their experiences. Hence, providing opportunities for the growth and development of the whole child, opportunities to develop a sense of wonder about nature, and earnest engagement in discovery about the real world can be considered as the foundation for environmental learning during early childhood.

Though, environmental education has been provided to the children in Sri Lanka from their early childhood, studies carried out to explore the children's knowledge and skills pertaining to environmental protection seem to be almost non-existent. The present study aims to explore the environmental protection knowledge and awareness of the preschoolers, in order to bridge this gap.

Method

Focus of the Inquiry

The focus of the inquiry was to evaluate the attitudes, knowledge and perceived skills of protecting environment of the preschool age children by studying a selected group of young children from Colombo.

Three sample settings were used in this section of the study. Children were assessed using pictorial rating scales to investigate the following enquiries.

1. What young children's knowledge pertaining to environmental protection?
2. What are children's perceived skills pertaining to environmental protection?
3. What are children's attitudes pertaining to environmental protection?
4. Is there a significant difference between the attitudes, knowledge and skills between girls and boys?

Fit of the Inquiry Paradigm to the Focus

As this section of the study was an attempt to identify children's knowledge and skills pertaining to environmental protection, a quantitative approach to data collecting was employed.

Participants

For this section of the study, participants were 3 to 5 year old, 34 preschool children, 12 boys ($M = 3.91$; $S.D = .539$) and 21 girls ($M = 4.19$; $S.D = .602$), from Colombo.

Successive Phases of the Inquiry

The preschool teachers from each location were met and the pilot procedure was explained to them. Then, each preschool teacher was requested to introduce

the researcher to the children in a child friendly manner. Next, the preschool teacher met with each group of children and informed them that they would be playing games and activities with the researcher and teachers. Then, a simple game was carried out to form rapport, followed by a paper pencil task. As the next step, children were provided sticker charts¹ and instructions on how to use them for the study. The children were encouraged to ask questions and clarify if they did not understand the procedure. After making sure that everyone understood the instructions, a sample sentence to clarify whether children understood the instructions was read and tested. Afterwards, 12 sentences which were used to assess preschool children's knowledge, and attitudes pertaining to environmental protection were read one by one, and children were instructed to put stickers in the appropriate column in which they had to select one option out of the two options provided. It was hypothesized that choices of the children would illustrate their knowledge and attitudes pertaining to each sentence on environmental prevention. A period of two months was assigned for this task.

Instrumentation

The instruments used in this section of the study helped the researcher to identify the children's awareness of issues pertaining to environmental protection/ sensitivity. The primary data sources used were the sticker chart with 12 sentences.

Sticker Chart with Sentences

In this section a chart with a two point rating scale and stickers were distributed among the children to identify the young children's understanding of messages pertaining to environmental protection. This instrument was piloted with a panel of experts as well as with young children of the same age group. Instructions were explained to the children in a child friendly manner. In order to identify whether the children understood the instructions a sample sentence ("I have seen birds") was read out and the children were asked to put a sticker under the appropriate column ("true", and "false").

¹ Child friendly data collection tool in the form of a rating scale, which requested the children to paste stickers on to an appropriate answer box to record their knowledge on child protection.

After making sure that the children understood the instructions, the remaining 12 statements (06 pairs) on environmental protection were read out and children were requested to put stickers or circle in appropriate columns to indicate their responses. These simple to comprehend statements contained sentences such as “Some children like to plant things”, and, “Some children love animals”, “Some children leave water running when they brush their teeth”, and “Some children like to play outside”

Trustworthiness, Confidentiality and Objectivity

The instruments were piloted and a panel of preschool teachers and resource personnel in early childhood education and environmental awareness were requested to determine if the instruments were appropriate.

Permission was requested from the administrators of each institution to visit the preschool and administer the instruments to the children. Verbal permission was also requested from parents of all participating children through the head teacher at the preschools. In addition, the researcher kept the names of the children confidential. To ensure privacy and continued anonymity, pseudonyms were used, if and when necessary. Only the researcher had access to the real names of the children. Peer and expert debriefing was used to ensure that personal biases, which may have taken place during the research process would be identified and eliminated.

For this section of the study the researcher used the sticker chart, stickers and statements to identify children’s awareness of environmental protection. Frequencies, percentages, graphs and t-tests were conducted to identify general and specific trends. These trends attempted to identify differences of children’s knowledge, and attitudes pertaining to environmental protection awareness were explored.

Research Question: What are the perceived practices and attitudes of the preschool children pertaining to environmental protection?

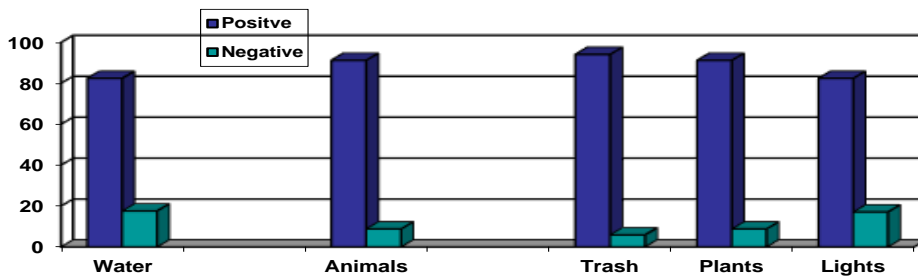
Table 01: Attitudes of the children pertaining to environment protection

Statement	F	%
1. Some children leave the water running when they brush their teeth	6	17.6%
But other children always turn the water off when they brush their teeth (+)	28	82.4%

2. Some children love animals(+)	31	91.2%
Other children hurt animals	03	8.8.%
3. Some children like to play inside a room/ preschool	11	32.4%
Other children like to play outside(+)	23	67.6%
4. Some children like to pick up trash and throw it away(+)	32	94.1%
Other children do not like to pick up trash	02	5.9%
5. Some children like to plant things (+)	31	91.2%
Other children like destroy plants and crush flowers	03	8.8%
6. Some children leave the lights on when they leave a room	06	17.6%
Other children turn the lights off when they leave a room(+)	28	82.4%

Results of the table 18 convey the attitudes of the children who participated in the study. Results conveyed that the majority of the children have said that they do not leave the water running when they brush their teeth (28, 82.4%), love animals (31, 91.2%), like to play outside (23, 67.6%), pick trash (32, 94.1%), like to plant things (31, 91.2), turn the lights off when they leave a room (28, 82.4%).

When children's perceived practices and attitudes of the environment was calculated, the scores ranged between 9 to 12 ($M = 11.088$; $S.D = 0.996$), conveying that the majority of the children have positive attitudes and perceived practices pertaining to environmental protection ($p < .01$). Therefore, it could be said that on the whole, preschool children carry positive attitudes pertaining to environment protection.



Graph 04: Attitudes of the children pertaining to environment protection

Graph 4 conveys the findings of the table 01, conveying at a glance that preschool children in the study had positive attitudes pertaining to environment. This study contributes to the existing literature first by assessing the perceived knowledge, attitudes and perceived skills of the pre/school teachers and parents. Secondly, it explored environmental consciousness/ practices in Sri Lankan preschools. Thirdly, it investigated perceived attitudes of the preschool children. Hence, the use of quantitative measures of knowledge, attitude and behavior provides strong support for the demonstrated capacity of environmental education to achieve intergenerational influence.

Discussion

The current research explores existing attitudes, perceived knowledge and perceptions pertaining to environmental education during the early years. In order to identify the existing situation preschool children were given a pictorial rating scale, to explore their environmental protection practices as well as their love for the environment which they live in.

Exploring environmental protection practices of young children can be considered an important variable within the milieu of early childhood environmental education. It would also be considered in the process of developing positive environmental attitudes pertaining to environmental issues (Pratt, 2009). Therefore, exploring the existing attitudes of the young children can not only inculcate a sense of wonder of the environment from early years would also serve as a key way of dealing with environmental problems of twenty first century (Biriukova, 2005; Nikolaeva, 2008).

Results conveyed that the majority of children who responded to the pictorial rating scale loved plants, animals and were aware of positive environmental protection practices. Hence, the present study can be described as a fact finding mission which, came up with vital information pertaining to environmental attitudes and protection practices of young children. However, future studies need to concentrate in detail specific environmental practices of young children such as their awareness pertaining to recycling practices.

Finally, it could be said that practices pertaining to environmental protection thrives on consistency and teamwork. Policy makers, educationists, and preschool teachers should work together in regular professional interactions for the common good of the children and the preschool. If and when possible, evaluations should be carried out. Preschool teacher training programs should incorporate culturally appropriate and economically feasible evaluation strategies. Evaluation should be ongoing and contain strategies to promote the environment education within young children.

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