

**PERCEPTIONS OF LOWER SECONDARY SCHOOL
STUDENTS TOWARDS ENVIRONMENTAL ISSUES
IN THE SEPANG DISTRICT, SELANGOR DARUL
EHSAN**

BY

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بِوَسِيْلَةِ رَبِّكَ يُسَبِّحُ اسْمَ رَبِّكَ اسْمًا مَلِيْحًا

ABSTRACT OF THE PROJECT PAPER

This study assesses the perceptions of lower secondary school students towards environmental issues. Specifically, it attempts to assess students' knowledge of and attitude to environmental issues. It further seeks to investigate whether students' attitudes differ according to race and gender.

This study utilized a questionnaire that is an adaptation of the Ecological Attitudes and Knowledge Scale which was found to be reliable in previously conducted research. Part of the questionnaire which was developed to assess students' knowledge of environmental issues is called Students' Knowledge of Environmental Issues Questionnaire (SKEI) while part that was developed to measure students' attitudes to the environmental issues is called Students' Attitudes towards Environmental Issues (SAEI). The respondents of this study were randomly selected from 4 secondary schools in the Sepang District. A sample size of 283 was obtained to allow the researcher to justifiably construct 90% confidence intervals with an accuracy of $\pm 5\%$ and to test hypotheses with the chi-square test at an alpha of .05, power of .99, and a medium effect size.

The results indicate that majority of the students possess good knowledge of environmental issues and positive attitudes to environmental issues. However, the Indian students record a lower percentage of good environmental knowledge and positive attitudes to environmental issues than the Malays and Chinese. Finally, the results also indicate that the variables race and gender make a difference in their attitudes.

ABSTRAK KAJIAN

Kajian ini menilai persepsi pelajar sekolah menengah rendah terhadap isu-isu alam sekitar. Khususnya, kajian ini cuba menyelidiki tahap pengetahuan pelajar serta sikap mereka terhadap isu-isu alam sekitar. Kajian ini juga cuba meninjau sama ada terdapat perbezaan sikap mengikut kaum dan jantina.

Kajian ini menggunakan soal selidik yang berasaskan "Ecological Attitudes and Knowledge Scale" yang banyak digunakan dalam penyelidikan yang lampau dan mempunyai tahap kesahihan dan reliabiliti yang tinggi. Bahagian soal selidik yang telah diubahsuai untuk mengukur tahap pengetahuan pelajar disebut "Students' Knowledge of Environmental Issues (SKEI)", manakala bahagian yang telah dihasilkan untuk mengukur sikap pelajar dinamakan "Students' Attitudes towards Environmental Issues (SAEI)". Responden kajian dipilih secara rawak dari empat buah sekolah di Daerah Sepang. Saiz sampel minima yang terdiri daripada 283 diperolehi supaya penyelidik dapat membina secara sah julat keyakinan 90% dengan ketepatan $\pm 5\%$ dan menguji hipotesis dengan ujian chi-square dengan nilai alfa .05, kuasa .99 dan saiz berkesan (effect size) yang sederhana.

Hasil kajian menunjukkan bahawa kebanyakan daripada pelajar mempunyai tahap pengetahuan yang baik dan sikap yang positif terhadap isu-isu alam sekitar. Walaubagaimanapun, peratus pelajar India yang memperolehi tahap pengetahuan baik dan sikap positif didapati lebih rendah berbanding dengan kaum lain. Hasil kajian juga menunjukkan bahawa pembolehubah jantina dan kaum mempengaruhi sikap pelajar terhadap isu-isu alam sekitar.


APPROVAL PAGE

TITLE OF PROJECT PAPER: PERCEPTIONS OF LOWER SECONDARY
SCHOOL STUDENTS TOWARDS
ENVIRONMENTAL ISSUES IN THE
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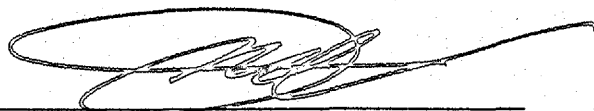
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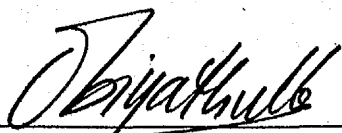
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DECLARATION

I hereby declare that this project paper is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by reference notes and a bibliography is appended.

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Dedicated to
my wife P. Saroja and my son Tharanneetharan

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CHAPTER ONE

INTRODUCTION

Background of Study

Malaysia is a dynamic country which is experiencing rapid growth. While the country has been experiencing such favourable economic growth, the development itself has had a lot of negative effects such as environmental pollution. It has been reported that the quality of the environment has been continuously deteriorating for the past two decades. This has put a great deal of stress on the government as uncontrolled economic growth will further damage the environment if left unchecked. In view of the significance and role of human values in today's scientific and technological society, environmental issues are more and more becoming moral and ethical issues.

According to Cerovsky (1971), every environmentally conscious citizen must have a home environment in which he loves, explores, understands, and improves. A sound global awareness can only grow out of such a background. People lacking a home environment or deprived of it cannot acquire a proper awareness of environmental issues.

Over the last two decades, a lot of attention has been given to environmental issues like pollution, the depletion of natural resources, industrialization, urbanization as well as their implications. The indiscriminate clearing of forest areas and destruction of natural habitats have caused a loss of wildlife and genetic materials which could be of importance for plant breeding and the control of pests and diseases.

“Define what should be done to maintain the earth as a place suitable for human beings to live in not only now but also for future generations”. This is what the United Nations stressed in the “International Conference on the Human Environment” where member countries were asked to give due importance to environmental factors when they formulate development programs (UNESCO, 1972).

It is generally accepted that environmental awareness through education plays a vital and integral part in environmental concern. Such efforts include providing opportunities for the public to acquire the appropriate knowledge of nature and related values and attitudes towards the environment. One of the objectives of the New Primary School Curriculum is to educate pupils to acquire a basic

understanding of the environment and its associated problems as well as people's role in protecting and preserving the environment. In line with this emphasis, one of the subjects introduced into the new KBSR curriculum and to be taught from the fourth year to the sixth year is the "Man and The Environment."

The environment is an issue of great importance these days. It has been generally recognized that long term success of environmental policies and programs can be accomplished by educating the public to understand the ever-changing environmental problems, which can only be achieved by adopting an environmental education policy.

The Role of Environmental Education

The major role of Environmental Education is to create awareness and concern among the people. The right place to start this is the school. Through Environmental Education, school children will be provided the opportunities to acquire knowledge and skills. The role of Environmental Education consists of efforts to develop an awareness and concern about the interaction of ecological, political, economic and

social issues. Eventually, students will be able to develop appropriate values and attitudes towards the environment they live in.

Environmental Education in Malaysia

There has been growing concern about the need for Environmental Education in the last two decades in Malaysia. The seriousness of the environmental issue is reflected in the Third Malaysian Plan (1976-1980) in which a National Environmental Policy was formulated. The formulation of this policy showed the government's commitment to preserving and protecting the environment. The Sixth Malaysia Plan (1991-1995) identified certain environmental issues and concerns that required immediate action and management. Integrating environmental considerations into the formulation of projects and programs will ensure the efficient management of the environment and its natural resources as well as balanced development. In Section 15.31 of the Sixth Malaysia Plan, it is stated that:

"Environmental education as a tool for creating environmental awareness was introduced in the upper primary school curriculum in 1986 in the form of the subject Man and His Environment. This subject is intended to provide knowledge perception and positive attitudes towards the environment in a holistic manner".

The Plan called for more effective environmental management, and identified the issues and concerns that required effective management including: the increasing air and noise pollution in urban areas; the constraints on the supply of affordable housing as well as efficient sewerage and sanitation services; the lack of adequate waste disposal facilities; pollution resulting from the disorganized disposal of consumer products; the encroachment of economic activities on vegetation, forests and catchment areas; and soil-related pollution. It was also stated:

“...The conservation of the environment is the responsibility of all...environmental awareness programmes will be intensified to promote greater consciousness among the public, since the lack of environmental awareness may be due to the ignorance of the long-term adverse implications of pollution hazards to human welfare”. (Sixth Malaysian Plan, 1991-1995).

There is a need to inculcate positive environmental attitudes, values and environmental awareness among the public through a greater exposure, an increased knowledge and a better scientific understanding of the environment. Knowledge and awareness influence attitudes and values towards caring more for the environment...

“Focus will be given to conservation, environmental and ecological balance within the context of sustainable development. Education, including formal education, non-formal education, public awareness and training have been identified as being areas through which one can educate the individual to address environmental issues and provide a solution to the problems brought about by the exploitation of the environment”.
(Sixth Malaysia Plan, 1991-1995)

According to the Cabinet Committee which was set up to review the objectives and outcomes of the National Education Policy (1979), the curriculum subjects were laden with too much academic content and did not stress the development of skills and the aptitude of the pupils. It was also reported that there was less emphasis on physical and health education, the physical and social environments, social and emotional development and the promotion of attitudes and values. It was also revealed that curriculum was developed along subject lines with little or no relationship between different subjects.

Environmental Education at the Primary Level

The Introduction of the subject Man and the Environment (*Alam dan Manusia*) represented an early start to the Environmental Education. It was introduced and taught from Year Four to Year Six in the New Primary School Curriculum (KBSR). It was an interdisciplinary subject

and replaced some of the traditional subjects namely Geography, History, Science, Civics and Health education. The main aim of the subject was to impart knowledge and instill awareness, understanding and appreciation of man and the environment in which he lives, thus enabling pupils to make appropriate decisions on environmental issues.

When the New Primary School Curriculum (KBSR) was reviewed, it was replaced by the Integrated Primary School Curriculum (*Kurikulum Bersepadu Sekolah Rendah*) in 1994. Two new subjects were introduced namely Science and Local Studies (*Kajian Tempatan*). The environmental aspects are still retained and maintained in the two subjects. The Local Studies subject is the main channel to impart environmental knowledge to the pupils from Year Four to Year Six. They will acquire the basic understanding as well as life's experience in a harmonious and balanced relationship between man and man, and man and his environment. (Draft of the Local Studies Syllabus Description for Year Four, November 1993, Ministry of Education Malaysia). The opportunity for students to learn about their surroundings through their own experience and investigations also provided by the subject, Science, which will enable the students to investigate the environment in five areas of study: the living environment, the physical environment, the resource environment, the

earth and the universe, and the level of technology(Primary School Science Curriculum Descriptive, October 1993, Ministry of Education).

Environmental Education at the Secondary Level

At the secondary school level, Environmental Education is not taught as a subject. Environmental aspects are incorporated into various existing subjects. Population and Environmental topics are infused into disciplines like Human Biology, Geography and Home Science. In the Integrated Secondary School Curriculum (KBSM) more emphasis is given to Environmental Education, particularly in Science and Geography.

Statement of Problem

In both the New Primary and Secondary School Curriculum, it is emphasized that values are to be inculcated while teachers teach various subjects. For the subjects of Geography and Science for example, one very important value that should be exploited is that of the caring for one's environment. Environment related matters are

important issues to be addressed in Malaysia, which is experiencing rapid industrialization and modernization. There is a particular need to assess the extent to which students are aware of their environment and whether they have proper knowledge and perceptions of environmental issues.

However, one's knowledge and awareness of the environment do not necessarily influence one's attitudes towards environmental issues. Moral and ethical issues are vital as well. Our students are the future leaders of this country. They are the ones who will be formulating policies in the future. Their attitudes to environmental issues will thus greatly influence their decisions. The future environmental policies of this country will be a product of a better understanding on the part of our students towards environmental issues. This will have a long-term effect as far as environmental consequences are concerned.

This issue is especially important because a key domain of social responsibility is to care for the natural environment. Islam emphasizes man's role in the natural environment by making him responsible for his surroundings. Although Islam honours an individual's right to determine his actions or inaction, it does not consider these rights to be

absolute, especially if they lead to environmental pollution and threaten public safety.

Purposes of the Research

The primary purpose of this study is to assess the environmental knowledge and environmental attitudes of Lower Secondary School students in the Sepang District, Selangor Darul Ehsan. The secondary purpose of this study is to investigate whether students' attitudes towards environmental issues differ according to the race and gender of the students.

Research Questions

1. What is the knowledge level of Lower Secondary School Students in selected environmental issues?
2. What are the attitudes of Lower Secondary School Students towards environmental issues?
3. Do the students' attitudes towards environmental issues differ according to the race and gender of the students?