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**A STUDY ON ENVIRONMENTAL AWARENESS, KNOWLEDGE AND
ATTITUDE TOWARDS TROPICAL RAINFOREST ISSUES AMONG
MELAKA SECONDARY SCHOOL STUDENTS**

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ABSTRACT

The study was conducted to assess the environmental awareness, knowledge and attitude on tropical rainforest issues among Melaka secondary students. It aimed at determining if there were significant differences in students' environmental awareness, knowledge and attitude, students' reading or watching environmental programme habit and students' involvement pertaining to tropical rainforest issues or activities between the locations of schools (urban and rural), forms (Form 1 and Form 4 Science and non-Science) and gender (male and female).

The study involved 255 Melaka secondary school students. Two schools in Melaka Tengah represented urban schools while two other schools in Jasin, represented rural schools.

Students were given a set of questionnaires, which consisted of four sections. Section A sought general information about the students. Section B and C consisted of 15 multiple-choice questions each, which tested on students' awareness and knowledge on tropical rainforest issues, respectively. Section D consisted of 20 statements, which required students to respond accordingly to five options based on the Likert scale. Data were statistically analysed using descriptive statistics, analysis of variance, rank correlation analysis and principal components analysis.

Melaka secondary school students showed a moderate level of environmental awareness (7.55) but low level of environmental knowledge (6.90), with maximum score of 15 for each section. However, students showed a moderately positive attitude (46.18 out of 80) towards the environment. Student's environmental awareness was significantly influenced by locations of schools ($p=0.018$) and forms ($p<0.001$), with higher environmental awareness for students from urban schools and higher forms. Gender as

the main effect however showed no significant influence on awareness, although there were significant interaction effect between locations of schools with gender ($p=0.009$) and between forms with gender ($p=0.025$). Urban female students showed higher environmental awareness as compared to urban male students while rural male students had higher environmental awareness as compared to rural female students. Form 4 female and male students showed higher environmental awareness compared to Form 1 students of both gender. Students' environmental knowledge was significantly influenced by forms ($p<0.01$), with higher environmental knowledge among form 4 students as compared to form 1 students. The test results on students' attitude showed the main effects of both forms ($p=0.001$) and gender ($p=0.0001$) were also highly significant, with more positive attitude shown by the form 1 students as compared to form 4 students. Similarly, female students also showed more positive attitude towards tropical rainforest issues as compared to male students. Interaction effect between form and gender was also significantly different ($p<0.009$), with female students of both forms showing more positive attitude. More than 75% of the Melaka secondary school students sampled 'never' or 'seldom' participated in environmental activities. Some misconceptions regarding the celebration on World Forestry Day, the main cause of deforestation in Malaysia and the plant medicinal values were also observed through the test.

ABSTRAK

Kajian ini bertujuan untuk mengkaji tahap kesedaran, pengetahuan dan sikap para pelajar sekolah menengah di negeri Melaka berkaitan isu hutan hujan tropika. Kajian ini bertujuan untuk menentukan sama ada wujud perbezaan ketara (significant difference) dalam tahap kesedaran, pengetahuan dan sikap pelajar-pelajar, tabiat membaca atau menonton program alam sekitar serta penglibatan mereka dalam aktiviti-aktiviti alam sekitar dengan pembolehubah-pembolehubah lokasi sekolah (bandar dan luar bandar), tingkatan (tingkatan 1 dan tingkatan 4 aliran Sains dan Sastera) dan jantina (lelaki dan perempuan).

Seramai 255 pelajar dari 4 buah sekolah menengah terlibat dalam kajian ini. Dua buah sekolah di Melaka Tengah telah mewakili sekolah bandar dan dua buah sekolah di Jasin mewakili sekolah luar bandar.

Para pelajar yang terlibat telah diberi satu set soalan yang terdiri daripada 4 bahagian. Bahagian A tertumpu kepada maklumat latar belakang pelajar. Bahagian B dan C masing-masing mengkaji tahap kesedaran dan pengetahuan pelajar mengenai isu hutan hujan tropika. Kedua-dua bahagian ini mengandungi 15 soalan objektif dengan 4 pilihan jawapan. Bahagian D pula mempunyai 20 kenyataan dan dijalankan berasaskan kaedah skala Likert. Data-data telah dianalisa dengan menggunakan statistik diskriptif, analisis varians, analisis korelasi Spearman dan *principal component analysis*.

Pelajar-pelajar sekolah menengah di Melaka mempunyai tahap kesedaran yang sederhana (7.55 daripada 15) dengan tahap pengetahuan yang rendah (6.90 daripada 15). Walau bagaimanapun, para pelajar menunjukkan sikap sederhana positif (46.18 daripada 80) terhadap alam sekitar. Kesedaran alam sekitar di kalangan para pelajar dipengaruhi oleh lokasi sekolah ($p=0.018$) dan tingkatan ($p<0.001$) di mana para pelajar dari kawasan

bandar dan juga pelajar-pelajar tingkatan 4 menunjukkan tahap kesedaran yang lebih tinggi. Jantina sebagai faktor utama tidak menunjukkan perbezaan ketara. Walau bagaimanapun, kesan interaksi (interaction effect) antara lokasi sekolah dengan jantina ($p=0.009$) dan antara tingkatan dengan jantina ($p=0.025$) menunjukkan perbezaan ketara. Di kawasan bandar, pelajar-pelajar perempuan menunjukkan tahap kesedaran yang lebih tinggi berbanding pelajar-pelajar lelaki manakala di kawasan luar bandar, pelajar-pelajar lelaki mempunyai tahap kesedaran yang lebih tinggi. Pelajar-pelajar lelaki dan perempuan dalam tingkatan 4 menunjukkan tahap kesedaran yang lebih tinggi berbanding pelajar tingkatan 1. Tahap pengetahuan pelajar pula dipengaruhi oleh tingkatan pelajar ($p<0.001$) di mana pelajar tingkatan 4 mempunyai tahap pengetahuan yang lebih tinggi berbanding pelajar tingkatan 1. Sikap pelajar pula dipengaruhi oleh tingkatan ($p=0.001$) dan jantina ($p=0.0001$). Pelajar-pelajar tingkatan 1 menunjukkan sikap lebih positif berbanding pelajar tingkatan 4 manakala antara jantina, pelajar perempuan menunjukkan sikap lebih positif berbanding pelajar lelaki. Kesan interaksi antara tingkatan dan jantina menunjukkan perbezaan ketara ($p=0.009$) di mana pelajar perempuan dari tingkatan 1 dan 4 menunjukkan sikap lebih positif. Lebih 75% daripada pelajar-pelajar sekolah menengah di negeri Melaka yang dikaji 'tidak pernah' atau 'jarang' melibatkan diri dalam aktiviti alam sekitar. Beberapa salah tanggapan turut dikenalpasti, iaitu yang berkaitan dengan sambutan Hari Hutan Sedunia, punca utama penghutanan di Malaysia dan nilai perubahan tumbuh-tumbuhan.

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