

ENVIRONMENTAL KNOWLEDGE, ACTIONS AND AWARENESS - RELATIONSHIPS WITH SOCIO-ECONOMIC FACTORS

KIẾN THỨC, HÀNH VI VÀ Ý THỨC VỀ MÔI TRƯỜNG – MỐI QUAN HỆ VỚI CÁC YẾU TỐ KINH TẾ, XÃ HỘI

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TÓM TẮT

Mục đích của bài nghiên cứu này nhằm đánh giá hai quan niệm thông thường nhất về ý thức bảo vệ môi trường. Theo đó, tác giả đã thực hiện một cuộc khảo sát trên mạng với 211 người tham gia. Kết quả khảo sát cho thấy không có mối tương quan giữa kiến thức về bảo vệ môi trường và hành động bảo vệ môi trường. Hơn thế nữa, các yếu tố kinh tế, xã hội như giới tính, nền tảng gia đình và thu nhập được đưa vào khảo sát để xem xét tính phụ thuộc của ý thức bảo vệ môi trường vào ba yếu tố này. Theo kết quả thống kê, ý thức bảo vệ môi trường của người tham gia khảo sát không phụ thuộc vào giới tính, nền tảng gia đình hay thu nhập của người đó. Tuy nhiên, nền tảng gia đình lại có ảnh hưởng quan trọng đến kiến thức về môi trường. Những người được sinh ra và nuôi dưỡng trong gia đình trí thức có kiến thức bảo vệ môi trường cao hơn những người có xuất thân khác. Phát hiện này giúp khẳng định lại tầm quan trọng của giáo dục đối với môi trường.

Keywords: ý thức, hành động, kiến thức bảo vệ môi trường, mối tương quan, yếu tố kinh tế-xã hội.

ABSTRACT

This subtle and small-sized study aims at testing the two most common assumptions on environmental awareness. An online survey was conducted in order to reach the aim. 211 participants were involved. The results of the survey reveal that there is no correlation between implicit knowledge and explicit actions for the environment. In addition, gender, family background and income – the three socio-economic factors to be included in the study – were tested for the dependence of environmental awareness. Statistics shows that environmental awareness is not significantly dependent on gender, family background and income. However, family background has significant influence on the level of knowledge about the environment. Participants with intellectual background have better environmental knowledge than the other groups. It is concluded that family is important in educating people about the environment.

Keywords: environmental awareness, action, knowledge, correlation, socio-economic factors.

I. INTRODUCTION

Environment and environmental issues have been of interest to many people. Studies report that education is the key to these issues (Day, B.R. and M.C. Monroe, 2000). Changing people's awareness on environment and environmental problems can help change the situation. As the quote "Think green,

live green" goes. Nevertheless, it is said that environmental awareness is dependent on a wide range of variables (De Le Vega, 2006). In this very small-size study, the research relies on both descriptive and statistical data for the observation of environmental awareness of more than 200 people.

This research is designed based on several assumptions:

[1]. People who have better knowledge of the environment are more prone to taking actions for the environment. (Fahlquist, 2008)

[2]. Environmental awareness is dependent on a wide range of socio-economic variables. (Alibeli, M.A. & C. Johnson, 2009)

Therefore, the aim of the current study is to answer the following research questions:

(1) Is there any relationship between environmental knowledge and environmental actions?

(2) Is environmental awareness dependent on socio-economic factors?

II. METHODOLOGY

In order to find out the answers to the research questions, an online survey was carried out. Details are as follows:

1. Participants

More than 200 people participated in the research. These participants answered the questions provided in the questionnaire in a voluntary manner. There was no time pressure or else for the participants as it took only 5 minutes for online survey completion.

2. Design and analysis

An online survey was carried out within a week. There were totally 10 questions in the survey which had been compiled from

different sources on environmental awareness and protection. The survey can be approached at https://docs.google.com/a/hcmute.edu.vn/forms/d/1bshTz_6ojjvREYnKhZw2KjRHEkGPffjD5xZdo6op9nQ/viewform. The aim of the survey was to collect information on age, gender, family background, environmental knowledge, actions taken, etc. for further analysis and discussion. Questions 1 to 5 were designed to investigate the background information of the participants. Question 6 is involved with the knowledge about environment and environmental protection whereas questions 7-10 focus on the actions the participants actually took to help protect the environment. The environmental awareness which is based on two factors, environmental knowledge and actions is calculated by using the Pythagorean equation.

Raw data was collected and treated in MS-Excel where figures and tables were drawn. SPSS was then employed for obtaining statistical results.

III. FINDINGS AND DISCUSSIONS

1. Environmental knowledge

Participants were provided with 5 statements about environmental knowledge, which had been adapted from a Japanese study (Environment Waikato Technical Report 2001/02). In statements 1, 4 and 5, 'agree' response meant a high level of environmental knowledge whereas in the other statements 2 and 3, agreement was understood as a low level of environmental knowledge.

Table 1. Knowledge about the environment

Statements	Strongly agree	Partially agree	Disagree	No idea	Total
1. The balance of nature is very delicate and easily upset	57%	35%	6%	2%	100%
2. Modifying the environment for human use seldom causes serious problems	17%	32%	46%	5%	100%
3. Plants and animals exist primarily to be used by humans	21%	46%	31%	2%	100%
4. The earth is like a spaceship with only limited room and resources	55%	23%	19%	3%	100%
5. There are limits to economic growth	63%	24%	9%	5%	100%

The data from Table 1 reveals some positive signals. Particularly, most participants (92%) agreed that the balance of nature is very delicate and easily upset (Statement 1). Similarly, 78% agreed that the earth is like a spaceship with only limited room and resources (Statement 4). 87% of the participants agreed there are limits to economic growth (Statement 5).

However, 49% and 67% of the participants agreed with Statements 2 and 3 respectively, which indicates a low level of environmental knowledge.

2. Environmental actions

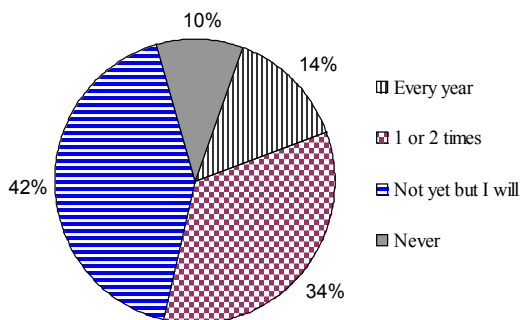


Figure 1. Have you ever taken part in Earth Hour?

Figure 1 is involved with the participation into Earth Hour – a very common movement for environment. The number of participants who have ever taken part in Earth Hour is 48%. A similar proportion admits that they will join this movement in the coming time.

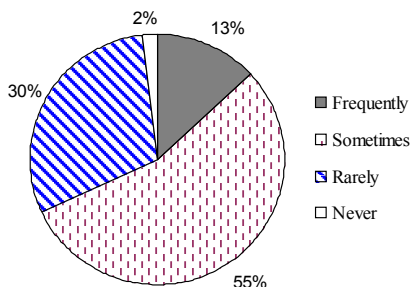


Figure 2. Have you ever searched information for a better understanding about our environment?

The question about searching environment-related information uncovers the fact that only 13% of the participants frequently did this action. The number for ‘sometimes’ responses is 55%. However, up to 30% rarely looked up information to get understanding about the

environment or environmental problems.

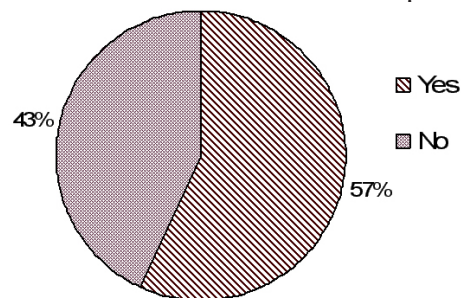


Figure 3. Have you ever done any voluntary work for the environment?

When a more demanding action is concerned, the responses show no difference between ‘yes’ and ‘no’. 57% of the participants have volunteered to do something for the environment while 43% have never.

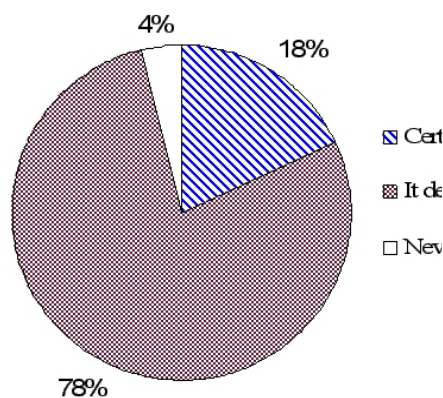


Figure 4. Are you willing to buy an environmentally friendly product which is a bit more expensive than the other product?

This question touches the economic matter of the participants. 18% of the participants expressed their willingness to buy environmentally friendly products whereas the majority of them (78%) said ‘it depends’. A minority of the participants will definitely not spend money on more expensive products. According to Soontonsmai (2001), green purchase correlates positively with gender and income. The result of this study fortifies Soontonsmai’s findings since most of the participants are students with no income and female in gender.

Relationships between environmental knowledge and environmental actions

A correlation test was conducted to test whether there is any relationship between a certain level of environmental knowledge and environmental actions. The test produced an insignificant result with the significance level equaling to 0.29 (higher than the alpha level set at 0.05).

3. Relationship between environmental awareness and socio-economic factors.

Firstly, gender is taken into consideration. A cluster of independent samples t-tests were performed to produce the result that the environmental awareness between males and females do not significantly differ. Details are in Table 2 below:

Table 2. Gender vs. environmental awareness

	Gender vs. environmental knowledge	Gender vs. environmental action	Gender vs. environmental awareness
p	0.09	0.54	0.25

Secondly, when income is concerned, a similar result is obtained. The statistic computation leads to the fact that participants with different levels of income do not have any significant differences in level of environmental awareness.

The third factor that is included in this study is family background. There are four groups of family background: intellectual, farmer, worker and businessman. Statistics produce the following outcome:

REFERENCE

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Table 3. Family background groups vs. environmental awareness

	Family vs. environmental knowledge	Family vs. environmental action	Family vs. environmental awareness
Level of significance	0.04	0.54	0.15

Table 3 allows the researcher to conclude that family background significantly affects environmental knowledge. People with different backgrounds have different levels of knowledge about the environment. Participants originating from intellectual background have better environmental knowledge than those coming from the other three groups. This entails the fact that family education plays an important role.

However, family education does not suffice for the formation of environmental action. That is why participants with different family backgrounds do not significantly differ in environmental actions. A similar situation goes with environmental awareness.

IV. CONCLUSION

The answers to the aforementioned research questions have been found. For question 1, there is no significant correlation between environmental knowledge and environmental actions. For question 2, environmental awareness does not significantly depend on gender, income and family background separately. However, family environment and education has some significant influences on the formation of environmental knowledge.

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