

ENVIRONMENTAL CONCERN TOWARDS GREEN TECHNOLOGY USAGE: A STUDY AMONG STML STUDENTS

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ABSTRACT

The purpose of this study is to identify the level of environmental concern and green technology usage among STML students. Environment issues get to be overall worries subsequent to the world population and economic growth expanding quickly. Therefore, environment concern is critical and it is turned into an obligation of everybody as activities of commitment to save our mother earth. Green technology usage is an initiative evolving different sorts of systems and materials for creating vitality to non-harmful items. Furthermore, green technology usage is a wide term for more environmentally friendly solutions. The motivation behind becoming environmentally friendly is to utilize products or procedures that would not influence the earth through pollution. Environmental concern towards green technology is reduces natural damages created by the products and technologies for individuals' comforts. In order to investigate the correlation variables, 200 questionnaires have been distributed to STML undergraduate students. The correlation result shows that environment concern has a positive relationship between green technology usage because the correlation coefficient equal to 1. From the regression result, there is the positive relationship between the environmental concern towards green technology usage. However, there is no significant relationship between demographic factor and green technology usage.

Keywords: Environmental concern, Green technology usage, Demographic

INTRODUCTION

Environmental concern refers to the individual's consciousness with the ecological issues and their readiness to take part into problem solving. The continuous technological and industrial revolutions have an impact on the standard of life. (Akehurst et al, 2012). Green technology usage refers to the development and utilization of items, tools and systems used to conserve the natural environment and resources, so that reduce the negative effect of human activities. (Metz & Seadle, 2012). According to Fisher et al (2012), the advanced world has driven respondents to become progressively worried about the earth. The willingness of respondents to buy eco-friendly products is related to demographics.

PROBLEM STATEMENT

This research wants to investigate the environmental concern of respondents toward green technology usage. In current years, environmental concern has been highlighted in numerous

ranges of life. (Delafrooz et al, 2014). Increasing population and economic growth are putting stress on the Earth's natural resources. As the world's population and economic output continue to keep on expanding drastically, many environmental issues have become to be serious. For example, global warming, energy depletion, air and water contamination. (Thieme et al, 2015). According to Kumar & Ghodeswar (2015), in order to address environmental issues we need to produce the products which are not harmful to the animals and nature. The ingredients are recyclable and produce lesser environmental pollution during their usage.

LITERATURE REVIEW

Environmental Concern towards Green Technology Usage

According to Singh & Gupta (2013), the important relationship is observed when people endeavor to decrease trouble on environment. Some of the respondents will probably take part in sustainable behaviors, which incorporate any exercises that can add to maintainability of the earth or protection of the eco-framework. Sustainable behaviors reflect a wide variety of activities that respondents can choose to do to decrease their effect on the earth.

Demographic towards Green Technology Usage

According to Sharma & Bansal (2013), women are depended upon to be more environmental concern than men, as they display more readiness for eco-friendly items. On the other hand, the higher-educated students understand the environmental problems are more worried about natural quality and inspired to act on interest in ecologically practices.

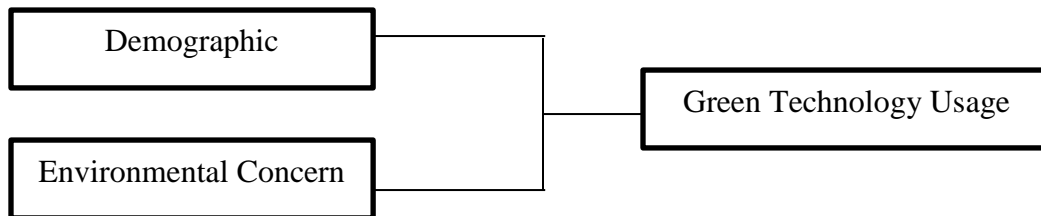


Figure 1: Framework of the Study

RESEARCH METHODOLOGY

Research Design

This research adopted the quantitative approach. Primary data is assembled through questionnaire and analyzed using Statistical Package for Social Sciences (SPSS). In this research, the independent variable is environment concern and demographic while the dependent variable is green technology usage.

Measurement of Variables

In this study, questionnaires are used as a tool for analysis and divided into two parts. According to Keegan (2009), Likert Scale is developed by Rensis Likert and most generally utilized scale as a part of a review research. This study demonstrated that a high score would show positive assessments to green technology usage and a low score unfavorable views.

Population and Sample Design

STML undergraduate students are the respondents for this study. Simple Random Sampling is one of the types of probability sampling method and the whole population is the main objective of the study. However, this research only selected 200 respondents. (Sekaran & Bougie, 2010).

Data Collection Procedures

Data collection refers to efficient methods of collect the information that must related to the research. Data collection included the actual gathering of data and the researcher decided from where and from whom data will be collected. (Burns & Grove, 2011).

Techniques of Data Analysis

Data must be analyzed carefully to dispense with or dodge the immaterial components. Important and valuable information will be sorted and organized in such a way as to simplify data investigation. Measurable instruments will be applied in figuring results and making determinations. The principle point of the analysis is to comprehend the different constitutive components of one's information through an assessment of the connections between ideas, develops or variables, and to see whether there are any patterns or trends that can be distinguished or to build up subjects in the information. (Burns & Grove, 2011).

DATA ANALYSIS AND FINDINGS

Sample Characteristics

The participants of this study consist of 200 students. All of the respondents are STML undergraduate students in UUM. The aim of questionnaires is to get feedback from the STML respondents. All of questionnaires returned due to full of responsibility from students and the questions are using simple words and have the translation in Bahasa Melayu. Hence, 100% of the respondents were answered completely the questionnaires.

Descriptive Statistics of Data Collection

In this part of study shows the background of the respondents. The respondent demographic data is useful to understand the data segment. The respondents' profiles include gender, age, race, religion, course, and academic level.

Analysis of the Relationship between Demographic Factors towards Green Technology Usage

Based on Table 1, there is no significant relationship between demographic factor and green technology usage. Since that the significant value is greater than 0.000 indicates that the model has no a predictive value. This is because of the significance value for gender, age, race, and religion is greater than the common alpha level of 0.05, which indicates that it is not statistically significant. The value of R^2 , 0.034 can be described as 3.4% of variability of the green technology usage (dependent variable). Then, the value of adjusted R^2 is 0.014.

Table 1: Effect on Green Technology Usage Based on Demographic Factors

Independent Variables	β	t	Sig
Gender	-0.098	-0.921	0.358
Age	0.118	1.584	0.115
Race	0.051	0.302	0.763
Religion	-0.123	-1.001	0.318
R ²	0.034		
Adjusted R ²	0.014		
F	1.710		
Sig	0.149		

Mean and Standard Deviation

Descriptive statistics can be used to distinguish the circumstance of dependent and independent on a given study measure. The mean value of the variables was acquired by the measure on a Five-Point Likert Scale. Furthermore, the mean is calculated by finding the sum of the study data and dividing it by the total number of data.

Reliability Analysis (Cronbach’s Alpha)

Cronbach’s Alpha is used to examine the consistency of the result has been answer by respondents in the questionnaire. Cronbach’s Alpha is the common measurement of reliability. It is usually used on the multiple Likert Scale questions in a questionnaire. Alpha coefficient ranges in value from 0 to 1. The higher the score, the more reliable the scale is. There are 10 questions in questionnaire (Section B) designed to investigate the relationship of environmental concerns towards green technology usage. A five-point Likert Scale from 1=strongly disagree to 5=strongly agree method is applied on Section B of questionnaire.

Normality Analysis

Normality test is used to determine whether a data set is well-modelled by a normal distribution and to compute how likely the variable underlying the data set to be normally distributed. Besides that, skewness and kurtosis coefficients are categorized as descriptive statistics whereas theory-driven methods include the normality tests such as SW, KS and AD tests.

Correlation Analysis

The Pearson correlation is a method for examining the relationship between two continuous variables. Values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 illustrates that two variables are perfectly related in a positive linear sense.

Regression Analysis

Regression Analysis is the statistical process for evaluating the relationships among dependent variable and independent variables. It incorporates many strategies for analyzing several variables. Most regularly, regression analysis estimates the conditional expectation of the dependent variable given the independent variables.

Table 2: Effect on Green Technology Usage Based on Environmental Concern

Independent Variables	β	t	Sig
Environmental Concern	0.783	14.545	0.000
R^2	0.517		
Adjusted R^2	0.514		
F	211.545		
Sig	0.000		

Based on Table 2, there is the positive relationship between the environmental concern towards green technology usage. Since the Beta value is 0.783, so that environmental concern is able to predict the green technology usage. The value of R^2 , 0.517 can be described as 51.7% of variability of the green technology usage (dependent variable). Then, the value of adjusted R^2 is 0.514. The significance value of 0.000 indicates that the model has a predictive value.

DISCUSSION, RECOMMENDATION & CONCLUSION

Discussion

The main focus of this study is to examine the relationship between environmental concern with dependent variable which is green technology usage among the STML undergraduate students in UUM. From the result of this study, it could be understood that environmental concern and demographic are the independent variables for green technology usage.

In the correlation result, the result shows that environment concern has a positive relationship between green technology usage because the correlation coefficient equal to +1. All the variables are significantly correlated since all are laid the ranges of +1. In fact, individuals intend to actualize the green technology usage due to their concern on ecological issues.

On the other hand, from the regression result, there is the positive relationship between the environmental concern towards green technology usage. Since the Beta value is 0.783, so that environmental concern is able to predict the green technology usage. The significance value of 0.000 indicates that the model has a predictive value. However, there is no significant relationship between demographic factor and green technology usage. This is because of the p-value for gender, age, race, and religion is greater than the common alpha level of 0.05, which indicates that it is not statistically significant.

Recommendation

The result of the questionnaires indicates that green technology give a good impact to nation development. Therefore, government ought to play important roles to enhance the consciousness of green technology usage. For example, government can undertakes awareness campaign, advertisement and free consultation about the green technology. Government should consider tax

exemption to students who buy green products. In addition, this study can be an input towards the government policy in reviewing and promoting green technology usage.

Next, parents also play an important role in shaping the psyche of their children as responsible future citizens. Parents can teach their children by promoting hobbies and encouraging them to work for nature. There are some steps that can be taken by children in order to make the house environment more eco-friendly and energy efficient. For example, children should be guided to switch off all switches when not in use to save electricity. Children also should be save water and not to leave the taps running in washrooms. Parents can make children aware of importance of trees and paper should not be wasted. Thus, parents will inculcate important values in their children.

In addition, social networks such as Facebook, WeChat, and WhatsApp have become popular. By using social networks, it is preferably used for advertising and promotional activities purpose about green technology usage among students. Moreover, it can increase usage of green technology and environmental concerns among students when surfing Internet.

From this research, the respondents can use digital sources like online databases and e-mail as medium to spread information. Besides that, students can use both side when photocopy any notes in order to save cost of paper. To conclude, by adopting an eco-friendly life, we can assure a safer and responsible generation.

CONCLUSION

As a conclusion, environmental concern among STML students in UUM has a significant impact on green technology usage. The aim of this study is to investigate environmental concern towards green technology usage. Therefore, the variables that have been chosen to investigate are environmental concern and demographic.

Based on the feedback from respondents, there are some limitations that appeared in the study owing to the result of the relationship between the independent variables towards green technology usage. 200 respondents from STML students in UUM cannot be an accurate data because the scope is too small.

To conclude, environmental concern is able to influence the future of the undergraduate students. Therefore, it is not only concern by particular undergraduate students but it should be concern by everyone.

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