

THE INFLUENCE OF SOCIAL ENVIRONMENT TOWARDS TEENAGERS RESPONSIBILITY IN CONSERVING THE NATURE

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ABSTRACT

Environmental sustainability needs to be maintained by all the parties, especially to the adolescents. This study was conducted to survey the influence of the social environment of adolescents' self-responsibility in protecting the environment. Social environment which studied include the influence of parents, teachers, counsellors, peers, co-curriculum activities and media technology. A total of 807 adolescents who consist of 16 years old (form 4) and 19 years old (upper 6) were involved in this study were selected using randomly stratified in 22 SMK around in Johor. The findings obtained through the distribution of questionnaires adapted and modified based on literature review. The results illustrate that the level of social environment and environmental responsibility were high min score. ANOVA analysis showed that are no significant differences in environmental responsibility based on gender and age. Correlation analysis showed the influence of parents, teachers, peers, and co-curriculum activities have a significant at the medium level with environmental responsibility and the influence are weak to the counsellors and media technology. Regression analysis showed that only parents, co-curriculum activities, peers, teachers and media technology that contribute significantly by 23.1% to the environmental responsibility. This study give an implication that the parents play the most important role for shaping the adolescent's responsible in preserving the environment.

Key words: Social environment, environmental care

Introduction

Since 1996, Ministry of Education highlighted the importance in conserving among students via Integrated Curriculum for Primary School (ICPS), Integrated Curriculum for Secondary School, and Standard Curriculum for Primary School syllabus. The purpose of this syllabus is to create students to be more concern about nature (Winther, Volk & Shrock 2002). Students concern towards nature are one of responsibility irrespective of race, religion and nation (Osman 2007). The effort by Ministry of Education in enlightening nature conservation through education system is parallel to the report that published by United Nations World Commission on Environment and Development (1987) entitled "Our Common Future". This report emphasis that global community should take responsibility to make sure that community care for nature and avoid from damage or run out of sources in spite of pursuing the advancement of science and technology (Fazrul 2012).

Between the elements that highlighted by Ministry of Education through the educational system are plant, air, water, noise and care of public property (Barraza, Duque-Aristizabal & Robollo 2003). All the information regarding the effect of irresponsibility towards nature was given to the student through the educational system. For example, littering, vandalisme and etc. should be avoided. This is because polluted nature will give side effect such as animal lost their habitat that will lead to extinction, excessive global warming that brought to air and water pollution that will effect quality of health. All this examples enough to show and make people realize through education and always conserve nature.

Other than that, it is undeniable that every country include Malaysia going through process of modernization. All the facilities in daily life need machine, computer, internet and telecommunication gadget. It is no wonder this technology to some extent affect the national economy where industrial area developing. We also need high technology device to fasten the process and alleviate power in manufacturing. Therefore, Ministry of Education realized that the community should be educated formally from early stage regarding manage the nature wisely. Example, a farmer should prepare a septic tank to ensure the septic from his farm does

not pollute the nature. The factory owner instead should not simply dump the toxic waste from the factory into the river. They must prepare a toxic dump site in order to save the nature.

All the example above show that nature conservation is community responsibility. Awareness about this responsibility should be planted since childhood. Thus, government effort through Ministry of Education system that formally educate is one of important effort to build community that aware of nature conservation and responsible toward it. Besides that, this effort also become a support for informal education that being applied by parents at home. After all, either formal or informal education, its purpose are to conserve nature so that it will stay until future generation (Lim 2005).

Problem Statement

Our nature already polluted by irresponsible person by dumping rubbish into the river, dumping chemical fertilizer and other activities. This shows through the average amount of rubbish produce everyday by each house in Malaysia is 800 grams which is 27 tonnes of rubbish produce by 27 million Malaysia (Tiwi & Samsilah 2014). The nature should be taken care of because it is not only for today's life but it will be used for hundred years more. In past few research debating the factors that become an assumption why nature quality issue still not encouraging.

The main problem is involving responsibility that can be seen through social problem and discipline cases at school (Azyyati et al. 2013). Ministry of Education (2012) reported that 107,191 out of 5.3 billion primary and secondary students all over Malaysia involve with discipline problem. Secondary student only had recorded highest value that is 73.09%. Other than that, discipline problem among teenagers along years 2012 recorded smoking problem as main problem at school that is 13,362 cases. After that followed by absenteeism (11,408), bad attitude such as fighting (11,613), neat and tidy aspect 10,844, crime like problem such as stealing and illegal racing (8,350), waste of time (8,178), naughtiness (7,812), pornography (2,714), bullying (2,154) and vandalism (1,913). All this data show that teenagers involve in this problem should be taken seriously. It makes us wonder how this problematic teenagers can conserve nature properly (Sidek 2012). So, research regarding teenager responsibility issue should be continued from time to time because it will never end.

Besides that, issue and problem regarding responsibility in conserving nature arise when bond between human and nature break because of human psychological problem (Fisher, Paul & Baum 1984; Davies 2003; Maria 2008). Regarding Robert Harvighust (1953), social problem usually happen during teenage age where there is significant relation between drastically change of physical and mental follow by development role that become more complex. This is because of teenager always have an urge of knowing and try new things in their lives. Changes in their physical and emotion will cause the teenager learn continuously about their selves, who they are and what their purpose and responsible in finding their purpose of life. Thus, teenager will try to shape their responsibility based on what they believe about their selves. However, because of ego, teenager do not want to be treated like a child, they want to have freedom like an adult. But, the fact is they still need guidance from people around them. This situation named as teenage psychology crisis regarding E. Erikson (1970). This situation can affect the sense of responsible among teenager in conserving nature.

Apart from problems involving psychological, modern lifestyle and urbanization also makes people more individualistic and practice the concept of dualism in life. (Miranda 2007). Furthermore, what need to worry is the community especially the youth today are more likely to get stuck in a comfort zone that later then will drag them to make damage towards themselves, the social crisis that is suffocating, easy to affect by the thought of hedonistic, forget their responsibility in science building and nation building and more extreme is to be involve with criminal wrongdoing (Sidek Baba & Mohamad Kamaludin 2007). This phenomenon is caused by the development of technology, media and by that the role of parents at home and teachers at school are necessary in shaping teenager in this millennium era. Therefore, the main focus in this study is Y generation that grew from psychological aspects in line with today's technology development that need to be concerned by all parties (Clinebell 1996; Culen, & Volk 2000; Chen Yin, Chyan-Chyuan & Chieko 2002; Shu, 2004).

The study of the issue of responsibility in conserving the nature especially among teenager of Generation Y still less been carried out empirically. Therefore, this study that focused on nature, social environment and lifestyle of community today become a reason why this study is still relevant to be done empirically to explore in what extent the social environment influences human in shaping themselves to be more responsible towards the nature. This is because people, especially youths, are often used as human capital and will lead the modern world full that is full of competition in terms of economic progress and development, but even so still responsible in ensuring environmental quality is always consistent.

Objective

The purpose of this study is to show the teenagers perception regarding social environment and responsibility towards nature. The objectives that need to achieve throughout this study are:

1. To identify level of social environment and responsibility towards nature.
2. To identify whether there is significant mean score difference in responsibility towards nature based on gender and age.
3. To identify how far the social environment influence responsibility towards nature.

Questions And Hypothesis

Research questionnaire was created based on two research objectives which is:

1. What is the level of social environment and responsibility towards nature.
2. Is there any significant difference in responsibility towards nature based on gender and age.
3. How far the social environment influence responsibility towards nature.

While hypotheses were created as for early assumption towards research result that will be gained from inferential analysis. Null hypotheses for this research are:

- Ho1 There is no responsible difference based on gender in conserving the nature.
Ho2 There is no responsible difference based on age in conserving the nature.
Ho3 There is no relationship that is significant with social environment element with responsible in conserving the nature.
Ho4 Social environment element not contribute significantly towards responsible in conserving the nature.

Methodology

Study Design

The study design is a procedure or method for collecting data based on specific and systematic planning which involves a number of variables in study (Chua 2006; Noriani 2010). Thus, this study was fully done using surveying method which is review the teenagers perceptions toward social environment and responsibility in conserving the nature. Data collection was entirely conducted through the questionnaire. Through this study, researcher can conduct descriptive analysis to identify the perceptions of teenagers toward social environment and responsibility in conserving the nature via the mean and standard deviation. The researcher used the One Way ANOVA to identify the difference of the mean score in teenagers responsibility in conserving the nature based on gender and age. In addition to descriptive analysis, inferential analysis was used via Pearson correlation test to examine the signification of relationship between social environmental and the responsibility in conserving the nature either at low, medium or high level. Meanwhile, Regression analysis technique 'enter' was used to assess the contribution of social environment toward the teenager's responsibility in conserving the nature.

Research Location

In total of 22 secondary schools (SMK) all over Johor was chosen as a research location. Selection of SMK only in this research was because of the students have balanced cognitive abilities. Regarding Hamid (2013), to give the perception of today's teenager identity, regardless of the type of school. Furthermore, the choice of Johor as the research location because of the statistics released by the Ministry of Education (MOE) from 2011 to 2012 that is Johor recorded the second highest record of discipline problems among teenager after Selangor. This record is enough to give a clear picture of why this study should be conducted at some state that have record of discipline problems among teenager who suffer from self-responsibility in conserving the nature.

Population, Sample and Sampling Technique

This research involve teenagers who are in their late teens at school all over Johor. Thus, 16-year olds (form 4) and 19 years old (form 6 upper) students at 22 secondary schools in Johor were used as sample in this research. Based on enrollment Jabatan Pelajaran Negeri Johor (2015), the population of form 4 students in Johor is 42,482 people while 5,365 form 6 upper students. Through Krijcie & Morgan (1970) sample counting, sample for form 4 student was 381 people and 358 for 6 above student. Therefore, the minimum number of samples is about 739 people.

Once the questionnaires are collected and data cleaning being conducted by researcher, only 807 questionnaires were used in this research to analyze descriptively and inferential. The number of samples (n=807) were more than adequate with a sample of the proposed by Krijcie & Morgan (n=739). So, from the 807 research sample, 374 male students (46.3%) and 433 female student (53.7%). For age factor, 410 (50.8%) Form 4 (16 years old) students while 397 (49.2%) consists of upper six students (19 years old). Overall, this research sample was selected randomly that not according to the number of actual population (disproportional stratified sampling). According to Sekaran and Bougie (2010), stratified random sampling that not follow the rate are mean to select an equal sample (balanced). This action is important because researcher can control the number of samples involved in each strata so it adequate, balanced and describe more clear for each population that representing strata.

Instruments, Validity and Reliability

Data were collected through questionnaires circulation involves two instruments that are Young Environmental Impact Inventory by Grieve (2009) and Barclay (2010) which has been translated back to back and Inventory of Personal Responsibility by Hasimah (2010). Both these instruments have been reviewed by four experts in psychology and teenager development to ensure the legality of face validity and content validity at a satisfactory level. Reliability of both these instruments obtained through a pilot study of 120 students at secondary school in Ledang district, Johor showed the Cronbach Alfa Instruments Effects of Teenager Social Environmental Factor value recorded 0.901 while IRTM instrument (Environmental Care) is 0.752. Cronbach's alpha values obtained shows both these instruments have a high level of reliability (Mohd Majid, 2009; Frenkel & Wallen, 2009 and have now & Bougie, 2010) and allows both the instrument used in this study.

Analysis Result

This study was divided into 3 section (1) to identify level of teenagers perception and responsibilities towards nature (2) to identify any significant difference in responsibility towards nature based on gender and age. (3) to identify how far the social environment influence responsibility towards nature.

Level of social environment and responsibilities towards nature

Table 1: Level of social environment and responsibilities towards nature

Elements of Social environment	Mean (M)	Standard Devition (sd)	Score interpretation
Parents	4.30	0.492	High
Teachers	4.05	0.602	High
Counsellors	3.71	0.765	High
Peers	3.75	0.687	High
Co-curriculum activities	3.8	0.760	High
Media and Technology	3.78	0.675	High
Social Environment (Total)	3.93	0.431	High
Responsibilities toward nature	3.87	0.592	High

Low (1.00-2.33), medium (2.34-3.66), high (3.67-5.00)

Table 1 showed Level of social environment and teenagers responsibilities towards nature. As overall, teenagers perception toward social environment at the highest mean score (mean=3.93, sd=0.431). After focused at each dimension, we can concluded that parents factor showed the highest mean score (mean=4.30, sd=0.492) however, counsellor showed the lowest mean score (mean=3.71, sd=0.765). The teenagers also give high perception regarding responsibility toward nature (mean=3.87, sd=0.592). As a conclusion, this data supported that teenagers agreed social environment and responsibilities toward nature is important which is answered the first question from this study.

Difference in responsibility towards nature based on gender and age

Table 2: Descriptive analysis regarding level of responsibility toward nature based on gender

Categori	Sample (n)	Mean	Standard Devition (sd)	Standard Error
Male	374	3.844	0.585	0.030
Female	433	3.894	0.597	0.028
Total	807	3.871	0.592	0.021

Based on the table above, study showed that female teenagers (mean=3.894, sd=0.597) had the higher responsibility compare to male teenagers (mean=0.844, sd=0.585).

Table 3: ANOVA analysis regarding level of responsibility toward nature based on gender

Variation	Sum of Squares	df	Mean Square	F Value	Significant
Between Groups	0.508	1	0.508	1.448	0.229
Within Groups	282.261	805	0.351		
Total	282.769	806			

Significant on level $p < 0.05$

According ANOVA analysis that showed in table 3, there is no significant different on responsibility toward nature based on gender ($F=1.448, p>0.05$). Therefore, H_0 can not be rejected, which is no responsible difference based on gender in conserving the nature.

Table 4: Descriptive analysis regarding level of responsibility toward nature based on age

Categori	Samples (n)	Mean	Standard Devition (sd)	Standard Error (se)
16 tahun (form 4)	410	3.846	0.586	0.028
19 tahun (form 6 upper)	397	3.897	0.597	0.030
Total	807	3.871	0.592	0.021

Table 4 showed that, study showed that form 6 students (mean=3.897, sd=0.597) had the higher responsibility compare to form 4 students (mean=3.846, sd=0.586).

Table 5: ANOVA analysis regarding level of responsibility toward nature based on age

Variation	Sum of Squares	df	Mean Square	F Value	Significant
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Between Groups	0.522	1	0.522	1.490	0.223
Within Groups	282.246	805	0.351		
Total	282.769	806			

Significant on level $p < 0.05$

According to one way Anova that showed in table 5, there is no significant different on responsibility toward nature based on age ($F=1.490, p > 0.05$). Therefore, H_0 can not be rejected, which is no responsible difference based on age in conserving the nature.

Influence of social environment toward nature

Table 6: Correlation analysis of relationship between social environment and responsibility in conserving nature

Independent variable (X)	Dependent variable (Y)	Coefficient, r	Significant value- p
Social environment	Responsibility		
Parents	Nature conservation	0.355	0.000*
Peers		0.354	0.000*
Co-curricular activities		0.323	0.000*
Teachers		0.312	0.000*
Media and technology		0.264	0.000*
Counsellors		0.240	0.000*

Significant on level $p < 0.05$

According to table 6, its show relationship between social environment with teenagers responsibility in conserving nature. As overall, there is significant relationship between social environment and responsibility in conserving nature at level 0.05. Parents factor showed the highest level at ($r=0.355$) however counsellors showed the lowest level ($r=0.240$). This result showed that H_0 can be accepted, and that will prove there is significant relationship between teenager responsible with nature conservation.

Table 7: Multiple regression analysis (enter) social environment contribution toward responsibility in conserving nature.

Independent variable (X)	Dependent variable (Y)	Regression coefficient B	Beta value β	Value- t	Significant p	Contribution R ²
Social environment	Responsibility					
Parents	Nature	0.246	0.203	5.681	0.000	0.231
Co-curricular activities	conservation	0.127	0.159	4.473	0.000	
Peers		0.129	0.149	4.032	0.000	
Teachers		0.104	0.101	2.707	0.007	
Media		0.061	0.069	1.984	0.048	

Significant on level $p < 0.05$

Based on table 7, from all the dimension only parents, curricular activities, peers, teachers and media contribute toward teenagers responsibility in conserving nature that is 23.1% except counsellors. This result shows that H_0 can be accepted, that is social environment elements are contributed significantly towards responsible in conserving the nature. That means, parents is the most important factor in shaping teenagers to be more responsible towards nature.

In conclusion, the result regarding the influence of social environment toward the responsibility in conserving the nature is in line with Bonferbrenner's Ecological Theory (1986) which states the establishment of self-concept of teenagers, either positive or negative was started at the micro level, especially from family environment involving parents, peers and school such as co-curricular activities. Thus, microsystems social environment is very influential in creating more responsibility teenagers in conserving the nature.

Conclusion And Implications

Nature conservation efforts involving all parties, especially teenager (Clinebell 1996; Barraza et al., 2003; Fishman 2005). To produce a teenager who is responsible in conserving nature, parents, school and positive peer group should play an important role in encouraging, advising, admonish and share information from time to time about the importance of nature conservation (Ajzen 2005). This is because according to Makki, Abd-El-Khalick, and Bonjaude (2003), Hsu (2004), Winther, Volk, and Shrock S.A. (2002), the attitude and mentality of oneself should be practice since school days. Therefore, all people are expected to be more aware of the role and responsibilities to maintain the quality of nature. In addition, the government and non-governmental agencies should play an important role in restoring and preserving the nature. As the ruling class, they can certainly maintain and control the environment from being polluted (Fisher, Paul & Baum, 1984; Bogner 1998; Yusof 1999; Davies 2003).

Significant from this research proved that parents become most important contributors in shaping teenager to be more responsible in conserving nature. This shows that parents need to educate teenager in taking care of nature, such as maintain personal hygiene at around place, not doing any vandalism on public equipment, use wisely and not wasting water and electricity whether at home or public areas. In addition, extra-curricular activities such as uniform body activities, sports and associations will be added value in this research which also plays an important role in helping teenager to be more disciplined, obedient to the command, not selfish thus to educate teenager to be responsible in conserving nature. Furthermore, today's teenager that famous for generation Y that is synonym with use of telecommunication gadgets also have an impact on teenager responsibility in conserving nature. In this context, parents and teachers need to encourage teenager to always use telecommunication gadgets wisely for example watching a video about the impact of environmental pollution, create a task that requires teenagers to find information and explore the importance of protecting the environment at the school, sharing information through Facebook and e-mail. Examples of these activities indirectly establish a more open-minded teenager and mature in deciding whether or not to produce Y generation that are proactive and appreciate the importance of nature in the future.

Suggestion For Future Research

In this study, researcher used a limited design that is stratified random sampling and assessing the situation ex-post facto. This means no intervention on the formation of teenager, which is a positive obligation. Further research could use an experimental design, longitude or cross-sectional studies. Experimental studies allow researchers to analyse any teenager responsibility in conserving nature and their impact on self-concept through module developed within the time stipulated. Longitude reviews can collect accurate data on how the teenager responsibility in conserving nature change over a period of generations X, Y and Z. This is because teenager responsibility may change over time and the nature at different times (Sidek 2010, 2012).

Other than that, research regarding social environment towards teenager responsibility in conserving nature by adding more variables in the domain of social environment is an added value that should be recommended. There may be other factors that contribute to teenager responsibility in conserving nature such as a neighbours, personality, IQ, EQ and so on.

Another proposal as an added value in future research which come from the two instruments used in this research is the result of adaptation and modification of the instrument by Grieve (2009), Barclay (2010) and Hasimah (2010). Therefore, the Rasch model method can help researchers in constructing social environment instrument and responsibility in conserving nature to produce instruments that appropriate to the Malaysia context with various environment elements, personal responsibility in conserving nature that been improved from existing instrument in this research.

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