# Impact of Social Influence and Environmental Literacy on Green Consumption Behaviour: A Case Study of Indonesian Students

*by* Amin Pujiati

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# Impact of Social Influence and Environmental Literacy on Green Consumption Behaviour: A case study of Indonesian students

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### *Abstract*

*Research on the influence factors for green consumption has been very advanced in recent years. However, little research has explored green consumption behavior in educational institutions that practice the principles of sustainable universities such as Universitas Negeri Semarang. The questionnaire survey method was used to collect data from 251 consumers who were students. Empirical results revealed that family, media & other organizations, educational institutions were in a supportive condition. Consumers had very good environmental literacy and had shown good green consumption behavior. Social influence and environmental literacy positively affected green consumption behavior either partially or simultaneously.*

*Keywords: Social Influence, Environmental, Literacy, Green, Consumption Behaviour*

## 1. Introduction

Humans' concern for the survival of life is higher. The quality of the earth is decreasing due to the increasing amount of pollution from vehicles, factories and the residential environment. The environmental degradation increases due to economic behavior, production and consumption patterns that only consider temporary and unsustainable interests or ignore the existence of sustainable ecosystems. For this reason, a global action plan was agreed upon by world leaders, including Indonesia, to end poverty, reduce inequality and protect the environment or what we know as the Sustainable Development Goals (SDGs). The SDGs contain 17 Goals and 169 Targets which are expected to be achieved by 2030. The SDGs concept is a continuation of the Millennium Development Goals (MDGs) concept that has been implemented first [1].

The university educates individuals both knowledge, skills and behavior. For this reason universities have a great responsibility to increase the awareness, knowledge, technology and development tools needed to create an environmentally friendly future that will support the realization of Sustainable Development Goals (SDGs) in Indonesia. Internationally, the initiative is realized in the Higher Education Sustainability Initiative (HESI) which consisted of 272 universities from 47 countries. There is also the Talloires Declaration (TD) signed by more than 350 universities from 40 countries that are committed in Education for Sustainable Development (ESD). *Universitas Negeri Semarang* has implemented Education for Sustainable Development (ESD) which is clearly seen from its vision of conservation [2]. Sustainable universities are defined as institutions of higher education that discuss, involve and promote the minimization of negative environmental, economic, social and health impacts in the use of their resources in the main functions of teaching, research, outreach and partnerships, and dedication to help people make the transition to sustainable life style [3].

The solution to environmental problems must begin with the modification of human attitudes [4] [5]. Attitudes towards environmental care vary by gender, age, level of education and other social variables [6]. The initial step that can be done is to realize various opportunities to reduce the impact of global warming, one of which is to consume environmentally friendly products [7]. This is based on the awareness that the consumption process will have a direct impact on the environment [8]. Consciousness to consume is formed because of behavior

patterns that are responsible for the environment and respect for the existence of other creatures on earth [9].

Every economic activity carried out will inevitably lead to various problems that will arise in the environmental and social dimensions. Basically, human action is inseparable from activities in meeting the needs as part of the economic system, which includes environmental and social dimensions [10]. In meeting their needs, humans should pay attention to ecology by using nature responsibly and ruling out values-free views that lead to rational nature (unselfish). As it is known that natural resources are non-renewable natural resources, so that they require wise management and use for the survival of the next generation [11].

Environmentally friendly purchasing behavior reflects the tendency of consumers to be careful when shopping, to buy products that are more energy efficient, which do not cause pollution, are environmentally friendly, recycle and biodegradable products, and product packaging that does not cause harm to the environment [12]. Green purchase behavior is a complex form of ethical decision making behavior and is considered a type of socially responsible behavior. As socially responsible consumers, environmentally friendly consumers take into account the public consequences of personal consumption and efforts to use it or purchasing power to bring about social change [13].

Consumer behavior is difficult to observe and understand directly, but the behavior in a person's purchases arises because of interactions with their environment, so it becomes a decision to consume the goods / services. Consumer behavior is basically influenced by cultural, social, personal and psychological factors [14]. The theory of reasoned action (TRA) by Ajzen and Fishbein [15] and the theory of planned behavior (TPB) by Ajzen [16] are the two most prominent theories used by previous researchers in exploring consumer attitudes, intentions and purchase behavior related to green products.

A large number of factors that influence green purchase intention and behavior appear as independent variables in various studies. Joshi, and Rahman [17] describe some of the main factors influencing consumers 'green purchase intentions / green purchase behavior, namely consumers' high concern for environmental and social issues, and functional attributes of green products as well as other factors such as environmental literacy.

Social environment is all social interactions between people, both directly, for example by discussing with a friend, and observationally, namely observations about what is being done or worn by others. Consumer social environment becomes two based on its closeness namely micro social environment and macro social environment [18]. The research of Johnstone & Hooper [19] shows how green consumption behavior is influenced by other individuals. Green consumption behavior, like other consumption behaviors, can be shaped by consumer interactions with others. This might involve direct interactions or indirect interactions [20] [21].

The aim of environmental education is to develop a world population that is aware and concerned about, the environment and related problems, and who have the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively towards solutions to current problems and new prevention [22]. The seven main components of environmental literacy are: (1) effects, (2) ecological knowledge, (3) socio-political knowledge, (4) knowledge of environmental problems, (5) cognitive skills, (6) environmentally responsible behaviors (ERB), and (7) additional determinants of ERB. Knowledge of environmental issues positively influences consumer intentions and actual purchases of green products [23] [24].

## 2. Method

This research was conducted with a quantitative approach, descriptive analysis techniques and multiple regressions to examine the relationship and determine the contribution of social influence and environmental literacy variables to green consumption behavior. The research population was consumers, in this case, students of the Faculty of Economics, Universitas Negeri Semarang with a research sample of 251 students selected by proportional random sampling technique. Data collection techniques used a questionnaire using a Likert scale with 5 answer choices [25]. Research analysis techniques included descriptive analysis and the analysis of the

regression tests of causality relationships by using statistical Product and Service Solution assistance (SPSS) [26].

## 3. Results and Discussions

The results of descriptive analysis and multiple regression of the independent variable of social influence as X1, environmental literacy as X2, and the dependent variable of green consumption behavior Y are summarized in the table below.

**Table 1. Descriptive Analysis of Research Variables**

| Variables and Indicators | Mean | Category |
|---|---|---|
| Social influence (family, media & other organisations, institusi pendidikan) | 74 | Support |
| Environmental literacy (affect, ecological knowledge, socio-political knowledge, knowledge of environmental issues, environmentally responsible behaviors (erb), additional determinants of erb | 87 | Very good |
| Green consumption behaviour (purchase behavior, consumption habits) | 74 | Good |

Description analysis showed that consumers had behaved in green consumption both in purchase behavior and consumption behavior. Family, media & other organizations, educational institutions supported / encouraged green consumption behavior. Consumers had environmental literacy in very good categories. The Faculty of Economics, Universitas Negeri Semarang, had implemented education for sustainable development (ESD) which was clearly visible from its vision of conservation, namely, "to carry out superior and character education, develop and disseminate science and technology in the field of economics and economic education with a conservation perspective and international reputation". Environmental education was manifested in environmental subjects. In addition, there were extracurricular or intracuricular activities at campus that were able to provide education and support for the cultivation of more environmentally friendly behaviors [27].

The results of the study with regression analysis showed that the social influence and environmental literacy variables simultaneously had a significant influence as evidenced by the results of the simultaneous hypothesis test, the calculated F value was 12,060> F table and the sig value by 0,000 was smaller than 0.05. Correlation analysis of the contribution of the coefficient of determination simultaneously social influence and environmental literacy affected the green consumption behavior by 81%. This means that the dependent variable of green consumption behavior can be explained by the independent variable of social influence and environmental literacy by 81% while the remaining 19% was explained by other variables not examined in this study.

Developing a more environmentally friendly consumption and production system depended on the willingness of consumers to get involved. The picture that emerged from green consumption was from a process that was strongly influenced by consumer values, norms, and habits, but very complex, diversed, and depended on the context [28]. Furthermore, these factors can strengthen or weaken the strength of the attitude-behavior relationship [17]. For this reason, modification of human attitude was an alternative solution to environmental problems [4] [5]. This research reinforced the results of the study of Joshi and Rahman [17] which reviewed 53 empirical articles about green purchase behavior from 2000 to 2014. The findings classified these factors in two broad categories: individual and situational. Individual factors included variables related to individual decision makers such as knowledge whereas situational factors consisted of variables that made and described various situations where individual consumers made consumption decisions such as social norms and reference groups.

**Table 2. Results of Simultaneous Causality Relationship Analysis**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 314,095 | 2 | 157,047 | 12,060 | ,000[b] |
| | Residual | 3229,531 | 248 | 13,022 | | |
| | Total | 3543,625 | 250 | | | |
| a. Dependent Variable: Green Consumption Behaviour | | | | | | |
| b. Predictors: (Constant), Environmental Literacy, Social Influence | | | | | | |

**Table 3. Results of Partial Causality Relationship Analysis**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 42,274 | 4,001 | | 10,567 | ,000 |
| | Social Influence | ,325 | ,094 | ,210 | 3,456 | ,001 |
| | Environmental Literacy | ,514 | ,151 | ,207 | 3,412 | ,001 |

a. Dependent Variable: Green Consumption Behaviour

**H1.** Contribution of Social Influence on Green Consumption Behavior

The results of the study with regression analysis showed that social influence partially had a significant effect as evidenced by the results of the partial hypothesis test (t-test) for the social influence variable (X1), t-count of 3.456 was greater than t-table and a sig. value of 0.001 was smaller than 0.05. Correlation analysis of the contribution of the coefficient of determination partially affected social influence on green consumption behavior by 7.84%.

The results of this study were consistent with the opinion of Khare et al., [20] and Lee, [21] that green consumption behavior, like other consumption behaviors, can be shaped by consumer interactions with others, either direct interaction or indirect interaction. Consumption behavior itself according to Engel [29] can be influenced by several factors including environmental factors and personal factors. Environmental factors consist of situation, group, and culture. This study showed that if the social environment was supportive, a person behavior would be better in consumption behavior. Based on descriptive analysis, it illustrated that the social environment consisting of family, media & other organizations, educational institutions can support the green consumption behavior of students of the Faculty of Economics, Universitas Negeri Semarang.

**H2.** Contribution of Environmental Literacy on Green Consumption Behavior

The results of the regression analysis showed that environmental literacy partially had a positive and significant effect as evidenced by the results of the partial hypothesis test (t-test) for the environmental literacy variable, t-count of 3.412 was greater than t-table and a sig. value of 0.001 was smaller than 0 .5. Correlation analysis of the contribution of the coefficient of determination partially affected environmental literacy on green consumption behavior by 4.49%

Environmental knowledge was often thought to encourage green consumption behavior, and several studies supported this. These results were in line with the studies of Chan et al., [23] and Eze et al. [24] which found that environmental knowledge measured objectively had positive effect on green consumer behavior. As a sustainable university, Universitas Negeri Semarang had integrated environmental and economic education both directly and indirectly. It was hoped that environmental education can produce knowledge and responsible behavior towards the environment [22]. With an experimental research design, integration of environmental economic education in the Faculty of Economics, Universitas Negeri Semarang can build economic behavior of students with environmentally friendly behavior [30] [31].

## 4.  Conclusion

Based on the results of hypothesis testing, they showed that green consumption behavior influenced by social influence and environmental literacy was declared acceptable. The findings of this study had implications for efforts to improve consumer consumption green behavior by strengthening the encouragement of families, other media & organizations, and educational institutions. In addition to increasing environmental literacy, social influence will also encourage consumers to adopt green consumption behavior.

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