



THE EFFECT OF INTEGRATED MARKETING COMMUNICATION, ENVIRONMENTAL RESPONSIBILITY AND VOLUNTARINESS TOWARD ELECTRICITY SAVING BEHAVIOR INTENTION

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ABSTRACT

There is a strong relationship between the development of industrial technology and electric power. It is time when people are required to have electricity saving behavior. This research purpose is to strengthen the relationship of integrated marketing communication, perceived environmental responsibility, and voluntariness in behavior intention. The population of this research is individuals who involved in the decision of electricity use, either for himself or his family in DIY Province. The

sample was taken using non probability sampling with convenience sampling method. The number of sample used in this research is 170 respondents. The data analysis technique is using AMOS 4.0. The research result proved that; (1) integrated marketing communication and perceived environmental responsibility has a significant positive effect toward voluntariness, and (2) voluntariness has a significant positive effect toward behavior intention.

Keywords: integrated marketing communication, perceived environmental responsibility, Behavior intention

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1. INTRODUCTION

The development of industrial technology has strong relationship with electric power which is one of the most important factors in supporting the development, especially the industrial sector. The crisis of electric power source in Indonesia begins with an increase of electrical demand in the community. As a result, there are so many temporary termination and electrical energy sharing in rotation. This happens because the rate of increase of new energy source and the procurement of power plants is not proportional to the increase in electricity consumption. The strategic step that must be taken by the government is to educate and persuade the community to have an electricity saving behavior. This research emphasizes the electricity saving behavior intention based on the Theory of Reason Action (TRA). TRA that is proposed by Fishbein & Ajzen (1975; Ajzen & Fishbein (2000) provided a framework for how attitudes affect the behavior intention and the behavior itself. TRA has been able to predict and explain behavior in different areas of study. The theory is often used as a theoretical model in the information system. Davis, et al. (1989) stated that the performance of a person regarding a particular behavior is determined by the purpose to execute the behavior and it is determined by subjective attitudes and norms.

This research consider integrated marketing communication aspects because communication has a role to convey information, persuade, remind, and encourage behavior to potential buyers (Assael, 1998; Kotler, 2002). Good communication has an important role in long term relationship with costumers (Sugandini et al, 2017b). The important role of communication has been explicitly mentioned in the effectiveness of advertising (Lautman & Hsieh, 1993). Consumer decision making is also determined by the strength of industrial communication in persuading the consumer (Dalmeny, 2003). This research will also add the effect of perceived environmental responsibility toward voluntariness. This is because there is a change in the consumer life style toward green product. People are actively trying to reduce the impact of unsanitary product (Sivek & Hungerford, 1990).A meta-analysis of environmental behavior research found that individuals with more positive attitude toward environment were more likely to have a volunteer behavior (Venkatesh, 2003)and participate in a pro-environment behavior (Hines et al., 1987). Individual who have responsibility toward environment will show attitude towards environment that emphasizes on the importance of nature and environment (Schultz, 2000; Stern, et al., 1995; Cherian and Jacob, 2012). This research also places voluntariness as a factor that predict behavior intention. Moore and

Benbasat (1991) found that voluntariness can be used as a factor that affects behavior intention.

2. LITERATURE REVIEW AND HYPOTHESIS

2.1. Behavior Intention (BI)

Behavior intention is a proxy for actual behavior (Sugandini et al., 2017a). The TRA model from Fishbein(1980) shows that intention is an intermediate variable between the cause of an attitude or other variables. In this TRA, Ajzen & Fisbein (1980)stated that the intention of a person to perform a certain behavior determine whether the behavior will be done or undone. Behavior intention is a person's desire to perform an action, either positive or negative. Behavior intention indicates a level which a person has a good or poor evaluation of a particular behavior (Dharmmesta, 1998) and (Sugandini et al., 2018c). TRA that is developed by Fishbein & Ajzen (1975)is focused on the consumer behavior area. According to TRA, behavior is determined by behavior intention. So, the measurement of behavior intention will be able to predict the actual behavior. TRA included two independent variables related to behavior intention, which is attitude toward the behavior and subjective norm.

2.2. Integrated Marketing Communication (IMC)

Integrated marketing communication is a concept that integrates and coordinates communication channels of a company to convey a clear, consistent message that push the organization and its product. Integrated marketing communication involves the identification of targetted audiences and it produces a well coordinated promotion program to achieve the desired response. The purpose of communication is to achieve a shared understanding between two or more communication participants toward a message through certain communication channel. Thus, the adoption of a new idea (innovation) is affected by: communication participant and communication channel (Mason & Culnan, 1995). Integrated marketing communication is a step that must be done by the company to get, maintain, and increase their consumers. Assael (1998) stated that marketing communication has two main objectives, which are to provide information of a product or new product from the company and persuade consumers to buy products in order to achieve the effectiveness and the purpose of optimal marketing communication (Susilowati and Sugandini, 2018). According to Clow & Baack (2002), the essence of integrated marketing communication program is to design messages that effectively reach the target audience. The right and effective message design is directed to change or shape consumer behavior. Kotler (2002) stated that to communicate effectively, marketer needs to understand the fundamental elements that underlie an effective marketing communication. Kotler (2002) suggested that the two elements of the main communication functions are the sender and the receiver or the message. Assael (1998) explained that there are five components in the communication process as follows: (1) source of message, (2) encoding, (3) transmission, (4) decoding, and (5) action.

Rogers (1995)stated that the degree of attribute similarity (such as trust, education, social status, etc.) between participants has an effect toward the diffusion process. The greater the degree of attribute similarity of communication participant, the more effective the communication occurs, and vice versa. The bigger the degree of attribute difference of the participants, the communication becomes less effective. Therefore, in the process of innovation diffusion, it is important to understand the potential adopter characteristics in order to minimize the different perceptions of information received by each adopter. In certain stages of the decision making, a particular type of communication channel plays a more important role in creating awareness than other types of communication channels.

2.3. Environmental Responsibility (ER)

The concept of perceived environmental responsibility is an individual's responsibility for environmental conservation (Kaiser et al., 1999; Muafi, 2017; 2016). The theory that underlies perceived environmental responsibility is Norm Activation Theory (NAT). NAT is developed to explain pro-environmental behavior. NAT assumes that personal norm is directly affecting the behavior. The activation factor in the NAT model is affected by perceptions of ecological problems, awareness of consequences, and perceptions of behavior control. Perceived environmental responsibility is the relationship mediator between awareness and personal norm in which awareness mediates between value orientation and responsibility (Eriksson et al., 2006). Kaiser et al. (1999) showed that perceived environmental responsibility can predict the intention to have pro environmental behavior. Sugandini et al. (2018a) found that perceived environmental responsibility has an effect toward behavior intention. Chen & Chai (2010) have tested the effect of awareness and perceived environmental responsibility on the attitudes toward the use of green products and attitudes toward the environment. The result explained that awareness and responsibility towards the environment have a positive effect on the intentions of using green products.

2.4. Voluntariness (V)

Voluntariness is a level of innovation use that perceived voluntarily. The innovation adoption will be different in people who perceived the acceptance of innovation voluntarily and people who have the necessity to use innovation because of mandatory (Rogers, 1995; Muafi, 2015). From the practical point of view, mandatory-voluntary can be sorted based on the perspective of the job. Hierarchy of effect model from Lavidge & Steiner (1961) divided attitude into three components: cognitive, affective, and conative. Cognitive function means that advertisement provides information and facts in order to make consumers aware and have knowledge about the advertised brand. This is related with mental image, understanding, and interpretation of a person to a particular person, object, or issue (Sugandini, 2003). Affective function means that advertisement creates preferences for the advertised brand that can create a more favorable or unfavorable attitudes, and likes or dislikes. Affective component is someone's feeling or emotion about a particular object, topic, or ideas. Conative component includes intention, action, or behavior of a person that can be directed to product purchase. Cognitive awareness arises because of attention response. The awareness consists of message recall and brand recall (Rossiter & Percy, 1997) and increases the willingness to adopt.

Recent literature does not attempt to clarify the difference of mandatory innovation and innovation adoption that is voluntary (Rogers, 2003; Moore & Benbasat, 1991). Related to consumer decision, Moore and Benbasat added the construct of voluntariness of use. Voluntariness of use is defined as the degree to which use of the innovation is perceived as being voluntary. Agarwal & Prasad (1997); Plouffe et al. (2001) explained the relation of voluntariness with behavior intention. In UTAUT, Venkatesh et al. (2003) also use voluntariness to predict behavior intention.

H1: Integrated marketing communication has a positive effect toward Voluntariness

H2: Environmental Responsibility has a positive effect toward voluntariness

H3: Voluntariness has a positive effect toward behavior intention

3. RESEARCH METHOD

This study embraces the positivism paradigm and uses respondent survey approach because it consider some factors that explain the existence of the researched phenomenon (Simonson et al., 2001). The primary data was obtained from in-depth personal interview and questionnaire.

This research is using six point Likert scale with the choices of 6 (strongly agree) to 1 (strongly disagree). This research uses four variables, which are IMC, ER, V, and BI. IMC is a process of processing, producing, and delivering messages through one or more channels to the target audiences group, which are conducted continuously and are a two-way process in order to supporting the effectiveness and efficiency of a product marketing. IMC is measured using three indicators adopted from Mason & Culnan, 1995, Assael (1998); Kotler (2002); Clow & Baack (2002). Voluntariness is a level of innovation use that perceived voluntarily, and it measured using four indicators adopted from Rogers, 2003; Moore & Benbasat, 1991; Agarwal & Prasad (1997) and Plouffe et al. (2001). ER is an individual responsibility for their environmental conservation, and it measured using three indicators adopted from Kaiser *et al* (1999), Sugandini et al (2018a; Chen & Chai, 2010). Behavior intention is someone's desire to perform an action. BI in this research is measured using three indicators adopted from Ajzen & Fisbein (1980) and Sugandini (2018a; Wijayani et al., 2017). The population of this research is individuals who involve in the decision of electricity use, either for himself or his family. The research location is in the Province of DIY. The sample was taken using non probability sampling technique with convenience sampling method. The number of samples used in this research is 170 respondents. The statistic technique used in this research is AMOS 4.0.

4. RESEARCH RESULT

4.1. Profile of Respondents

These respondents' characteristics are based on: gender, age, education, job, and income per month. It can be seen on Table 1.

Table 1 Profile of Respondents

Variable	Category	Procentase
Gender	Man	42%
	Woman	58%
Age (Years Old)	35 - 49 Years old	25%
	50-64 Years old	53%
	65-80 Years old	22%
Education	Senior High School	60%
	Diploma/Bachelor	18%
	Master/Doctor	22%
Job	Student	59%
	Employee	19%
	Entrepreneur	22%
Income per month	<Rp. 2.000.000,-	45%
	Rp. 2.000.000,- s/d Rp. 4.000.000,-	44%
	>Rp. 4.000.000,-	11%

4.2. Results of Validity and Reliability Test of Measurement Model

Based on the analysis result, it is known that the questionnaires item presented are valid and reliable. There are 170 questionnaires collected from 200 questionnaires that were distributed. This has been qualified to be analyzed using Structural Equation Modelling as suggested by Hair et al., (1998; Bentler, 1992). The confirmatory factor analysis was conducted by researcher using SPSS program. The four main constructs, including behavior attention, voluntariness, integrated marketing communication, and environmental responsibility consists

of 12 question item. The result is the question have good validity because it has loading factors value ≥ 0.5 (MacLean & Gray, 1998).

The internal consistency reliability test for each construct show a good result because the coefficient of *Cronbach's Alpha* obtained has fulfilled the required rules of thumb of ≥ 0.7 (Hair et al., 1998; Sekaran, 1992). The instrument reliability test with construct reliability and extracted variance shows that the instrument is reliable. The value of construct reliability is above 0.07. Although that number is not a “dead” measure, which means that if the research is exploratory research, a value below 0.07 is still acceptable as long as there are empirical reasons in the exploration process. The extracted variance is recommended at the level of 0.50.

The test of multicollinearity symptoms between independent variables shows that there are no multicollinearity symptoms that damaged the model. This can be seen from the determinant of sample covariance matrix value of 7.5044e-005 and this value is far from zero. Therefore, it can be concluded that there is no multicollinearity or singularity in this data, so that the assumption is fulfilled.

4.3. Evaluation toward Model

The test result using structural equation modal with AMOS 4.0 program can be seen on Figure 1.

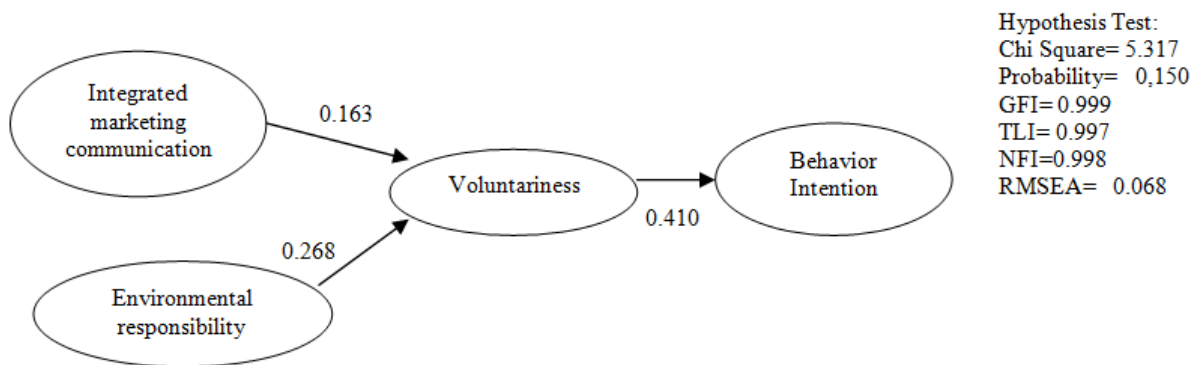


Figure 1 SEM Test Result

The evaluation result toward proposed model shows that all of the criteria used are mostly show good result. This means that the model is good and it is in accordance with the data. The test of the hypothesis of causal relationship of intention behavior, voluntariness, integrated marketing communication, and environmental responsibility can be seen on Table 2.

Table 2. Summary of the Direction and Significance Test of Hypothesized Relationship among Variables

	Relationship	Expected direction	Actual Direction	Path coefficients	CR	Criteria
H1	V ← IMC	+	+	0.268	3.657*	Accepted
H2	V ← ER	+	+	0.163	2.221*	Accepted
H3	B ← V	+	+	0.410	5.829*	Accepted

Note. * = sign. 0.05

Based on Table 2, it can be seen that all paths are significant. This means that, (1) Integrated Marketing Communication (IMC) has a significant positive effect toward Voluntariness (V), (2) Environmental Responsibility (ER) has a significant positive effect toward Voluntariness (V), and (3) Voluntariness (V) has a significant positive effect toward Behavior Intention (BI). So, it can be concluded that the proposed hypothesis can be accepted.

5. DISCUSSION

According to the findings in the field, the effect of Integrated Marketing Communication toward voluntariness is 26.8%, the effect of environment responsibility toward voluntariness is 16.3%, and the effect of voluntariness toward behavior intention is 41%. This strengthens the statement from Mason & Culnan (1995) that the purpose of communication is the achievement of common understanding between two or more communication participant to a message. The power of communication can be derived from four aspects which included on the propagation mechanism, and it consists of: (1) agent of change, (2) neighbors, friends, (3) mass media, (4) government (Ram, 1987).

This research result is consistent with Anderson (1971, 1980 in Dharmesta, 1998) which stated that information processing is strongly related to consumer attitude. As a general approach, the idea behind information processing emphasizes the complexity of how people gain knowledge and shape and change their attitude. According to the theory of information integration, most of the consumer behavior are formed in relation to the response to information they received about the object's attitude. Further, it is stated how consumers receive and combine the information to be the basic structure of attitudes and can create individual voluntary in their behavior. Rogers (1995; Sugandini (2017a) stated that individual decision to have an innovation will be different for the people who perceive the acceptance of innovation voluntarily and people who have the urge to have innovation because there is a mandatory (Rogers, 1995; Muafi, 2015; Muafi, 2009).

This research result also support the finding from Moore & Benbasat (1991) which mentioned that individual decision is also affected by the voluntariness of use. Agarwal & Prasad (1997; Plouffe et al. 2001) proved the relationship between voluntariness and behavior intention. In UTAUT, Venkatesh et al. (2003) also use voluntariness to predict the behavior intention. Related to the effect of perceived environmental responsibility toward voluntariness, this research result proved that a person who has high responsibility toward environment will voluntarily have the behavior that lead to the nature conservation and it affects the intention to do the electricity saving behavior. This research result support Kaiser et al. (1999) which stated that electricity saving behavior is believed to be very closely related to voluntary and it is a form of individual responsibility toward his environment preservation. This also supports Norm Activation Theory that explained pro-environmental behavior. Kaiser et al. (1999; Eriksson, et al., 2006; Muafi, 2017; Muafi, 2016) also proved that perceived environmental responsibility can predict the intention of pro-environmental behavior. Sugandini et al (2018 Chen & Chai, 2010) also proved that perceived environmental responsibility has an effect toward behavior intention.

6. CONCLUSIONS

Behavior intention which becomes the main topic of this research can be explained by integrated marketing communication, perceived environmental responsibility and voluntariness. A person who is voluntarily making an effort to save electricity can have the intention to an electricity saving behavior. This research takes the setting of electricity saving behavior using survey, and sample unit in this research is individual. The result of model

evaluation with some criteria of Goodness of Fit Indices indicates good result, which means that the model can be accepted. Thus, it can be said that this research result support the previous research that shows the relationship model of integrated marketing communication, environmental responsibility, and voluntariness.

7. THEORY CONTRIBUTION AND RESEARCH LIMIT

This research result gives contribution toward the role of voluntariness toward behavior intention. The previous research shows that voluntariness is a moderating variable from the relationship of social influence and behavior intention. Moore & Benbasat (1991) stated that voluntariness can be used as a factor that affects behavior intention. Related to the electricity saving behavior, this research support Moore & Benbasat (1991) which showed that voluntariness has an effect toward behavior intention. The next result is suggested to add some variables that can be used in predicting behavior intention which is attitude toward behavior and subjective norms (Davis et al., 1989). For further research, perceived behavioral control (Ajzen & Madden, 1986), social influence (Venkatesh et al., 2003) and trust (Gefen et al., 2003) can be considered to be a variable in predicting behavioral intention.

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