Determinants of Consumers’ Responses on Government Policy toward Eco-Friendly Behavior in Indonesia

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ABSTRACT

The main purpose of this study is to investigate the determinants of consumers’ responses on government policies surrounding paid plastic bags during their shopping behaviors. This study employs an extended theory of reasoned action (TRA) by incorporating consumers’ knowledge on environmental issues and their religiosity. The survey was conducted on students at six different universities (public and private universities) in a major city in Indonesia. From 384 distributed questionnaires, 332 completed questionnaires were used to test developed hypotheses by using structural equation modeling partial least squares (SEM-PLS). The research findings show TRA as a valid model for predicting consumers’ intentions to support government policy on paid plastic bags. Interestingly, consumers’ knowledge on environmental issues and religiosity have no direct relationship to their intentions to support government policy on paid plastic bags.

Keywords: theory of reasoned action, religiosity, knowledge, green consumer behavior, and government policy.

INTRODUCTION

Green marketing and behavior became key to debates in academic and policy forums (do Paco and Raposo, 2010; Zhao et al., 2013), thus encouraging empirical studies and advanced agendas. The stakeholders believe that consumers who care about environmental concerns are able to help companies and governments towards achieving environmentally-based competitive advantages. So, green marketing can be an instrument to identify and meet consumer needs as an environmental responsibility (Akehurst et al., 2012).

One of the biggest challenges for the environmental sustainability programs is reducing plastic consumption. The waste of plastic bags is environmentally polluting, harmful to wildlife, taxes (hygiene costs), as they are made of non-renewable resources and can take up to 1,000 years to decompose (Gosden, 2015). Plastic packaging not only provides immediate economic benefits (e.g. cheap, light, comfortable, high performance), but is harmful to the environment, and it is difficult to unravel even toxic waste (Moharam and Al M-aqtaari, 2014; World Economic Forum, 2016). Surprisingly, the World Economic Forum (2016) reported that plastic production in the last 5 decades has increased, from 15 million tons (1964) to 311 million tons (in 2014) and is expected to double over the next 20 years with 26 percent of the total volume of plastic production being used in the form of plastic packaging.

These facts are interesting, in which consumers have adequate knowledge on the harmful consumption of plastic bags, but they tend to neglect it in order to appropriate immediate economic benefits (Moharam and Al M-aqtaari, 2014). In developed countries, consumer awareness and knowledge on these environmental issues play a role in reducing environmental problems (Follows and Jobber, 2000), including the role of marketing actors through environmentally friendly behavior campaigns (Cheah and Phau, 2011; Lee et al., 2012). In developing countries - particularly in Asia - eco-friendly behaviors face a lack of attention (Joshi and Rahman, 2016), and people even tend to not care about these issues.

According to Jambek et al., (2015), Indonesia is the world's second largest contributor of waste plastic (187.2 million tons) after China (262.9 million tons) and has a high consumption of plastic bags at around 9.8 billion per year (Indonesian Consumers Organization, 2017). According to the Indonesian Consumers Organization (2017), the biggest contributor to this huge plastic consumption is consumers’ shopping behaviors in using plastic as a bag, in which there are more than 32,000 shops responsible on delivering plastic bags at as much as 9.6 million to 11.68 million pieces per day (Indonesian Consumers Organization, 2017). A further report by the Ministry of Environment and Forestry Republic of Indonesia (2016) showed that plastic waste from 100 shops for one year reached 10.95 million pieces or equal to 65.7 Ha of plastic bags. To respond to this condition, the Ministry of Environment and Forestry Republic of Indonesia together with the National Consumer Protection Board, the Indonesian Consumers Organization and the Indonesian Retail Entrepreneurs Association, issued a nationwide “non-free” plastic bag policy (need to pay 200 rupiah, equal to US$0.01), tested on the modern retail network of Retail Entrepreneurs Association members in 22 cities (Thejakarta Post, 2016; Elyda et al., 2016). This effort is to encourage consumers to reduce the use of plastic bags and educate people towards eco-friendly behavior. Therefore, this study aims to answer the question of what are the determinants consumers need to support the government policy on reducing plastic bag usage in Indonesia?

This study employs an extended Theory of Reasoned Action (TRA) that has been applied and expanded for consumer behavior research in many green purchasing and product consumption behavior studies (Park et al., 1998; Chan, 2001). The TRA is parsimonious, able to give a strong and...
responsive answer to the test, and it includes personal (attitude) and social (subjective norms) as determinants of behavioral intention (Lujja, 2016), and it gives more understanding both about the attitudes and intentions of green product consumption and behavior (Paul et al., 2016; Liu et al., 2017). Thus, psychological and behavioral aspects play an important role as determinants of the success of environmentally friendly programs (Narula and Desore, 2016).

Previous studies (Chryssochooudis, 2000; Gracia and De Magistris, 2007) reported that consumers' knowledge significantly influences their intention to consume pesticide-free (organic food). Meanwhile, the study of Aartsens et al. (2011) reported that consumers' objective and subjective knowledge determine their positive attitude toward consuming organic food. Therefore, this study aims to investigate the role of consumers' knowledge on their attitudes and intention to support governmental policies on reducing the use of plastic bags in Indonesia.

Previous studies have found that religion and religiosity have an impact on consumer behavior and attitudes (Abou-Youssef et al., 2015; Lada et al., 2009). Arguably, Indonesia, as the biggest Islamic country in the world, will involve religiosity as the determining issue on studying their consumers' attitudes and behavioral intentions. The reason is in Islam, actions that are deliberately damaging to the natural environment and resources are a kind of corruption that is forbidden (Hassan, 2014). Based on that, this study also aims to investigate the role of consumers' religiosity on their attitude and intention to support governmental policy on reducing plastic bags in Indonesia.

**LITERATURE REVIEW**

Until now, marketing research studies have been conducted by experts on consumer behavior in the cognitive domain using the theory of reasoned action – TRA (Fishbein and Ajzen, 1975). TRA serves to analyze non-routine thinking decisions for such behaviors which require critical deliberation (Oppermann, 1995). In other words, TRA is effective at explaining psychological/cognitive processes to comprehend consumers' contextual decision-making (Han and Kim, 2010). TRA's central tenet is focused on individuals' intention to engage in certain behaviors. In this context, “intention” refers to willingness or readiness to engage in behavior under consideration (Han and Kim, 2010; Ajzen, 1985). According to this theory, eco-friendly behavior indicates the extent to which consumers are willing/readily to support or participate in eco-friendly behavior.

TRA explains that one's intentions toward behavior are shaped by attitudes toward the behavior and subjective norms (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980). According to TRA, a person's intentions are built on two basic determinants, namely a personal evaluation of good and bad ways to behave, called the attitude toward the behavior, and perceptions of social pressure that one obtains, called subjective norms (Ajzen and Fishbein, 1980; Lada et al., 2009). TRA assumes that in behavior, consumers consciously consider the consequences and choose the behaviors to be expected of them (such as choosing a halal product), irrelevant to inadvertent behavior or reflexes (Ajzen and Fishbein, 1980; Peter and Olson, 2005). Specifically, many studies use TRA to predict consumer behavior in various contexts and to date are considered as relevant models, such as adopting Islamic banking (Lujja et al., 2016), selecting halal products (Lada et al., 2009; Rahman et al., 2015) or supporting eco-friendly behavior (e.g., Paul et al., 2016; Liu et al., 2017; Paswan et al., 2017).

**Hypotheses Development**

Attitudes toward behaviors refer to the extent to which a person evaluates (good or bad) behavior (Ajzen, 1991; Asnawi et al., 2018). In the context of eco-friendly behavior, Mostafa (2007) reports that there is a positive relationship between attitude and behavioral intention which has been established across many cultures. For example, Boldero (1995) determined that attitudes about the benefits of recycling household newspapers were significant predictors of consumers' intentions on recycling this. Further, consumers prefer environmentally friendly beverage packaging if they hold positive attitudes towards preserving the environment (Birgelen et al., 2009). In organic food choice behavior, scholars investigated the positive relationship between attitude and intention (e.g., Dean et al., 2012; Ha and Janda, 2012; Zhou et al., 2013). In addition, Paul et al., (2016) reported that Indian consumers' intentions to consume green products are significantly influenced by their positive attitudes toward green products. Based on that, consumers' positive evaluations of government policies to pay plastic bags positively influence their intention to support it. Therefore,

**H1:** Consumers' attitudes positively associate with their intentions to accept government policies on paying for plastic bags.

According to TRA, beliefs pertain to expectations derived from references or influential individuals and groups for individuals (significant others) such as parents, spouses, close friends, co-workers or others, depending on the behavior involved (Ajzen, 2005). Ajzen (1991) argued that subjective norms as the social factor of TRA is a determinant factor in the emergence of consumers' intentions to do or not to do something. The argument is that subjective norms determine the total set of accessible injunctive and descriptive normative beliefs (Ajzen, 2015). Consequently, social pressure (subjective norms) from important people such as close friends and family can encourage an individual's intention to decide (Sukoco, 2011; Charsetad, 2016). In summary, subjective norms captures an individual’s feelings about the social pressure they face about a given behavior (Paul et al., 2016).

In the context of eco-friendly behavior, many studies have documented subjective norms as being an important determinant of consumers' intentions, including intending to purchase organic food (Dean et al., 2012; Ha and Janda, 2012), revisit a green hotel revisit (Teng et al., 2014; Han et al., 2010), and uphold environmentally conscious consumption (Khare, 2015; Mouser, 2015; Tsarenko, Ferraro et al., 2013). When consumers perceive that their “significant others” endorse green purchase behavior, they
are more prone to adopt these behaviors (Paul et al., 2016). It is therefore expected that they will be more likely to adopt group behavior such as purchasing green products (Kumar, 2012). Based on that, when social pressure becomes strong enough among Indonesian consumers, their intentions to accept government policy on paying for plastic bags during their shopping will be high. Therefore,

H3 - Consumers’ knowledge on environmental issues positively associate with their attitudes on governmental policy on paying for plastic bags.

H4 - Consumers’ knowledge on environmental issues positively associate with their intentions to accepting governmental policy on paying for plastic bags.

According to Moissander (2007), green consumerism is an ethical and moral matter. Religious beliefs guide the believers in determining between right and wrong of their behaviors (Hassan, 2014), which is consistent with the idea proposed by Hirschman (1981) that conduct of the religion (i.e. religiosity) is likely to influence their behavior. Religious values shaped the individual's emotional, cognitive, and psychological experiences, which in turn affected the choice of consumption (Alam et al., 2012).

In the context of Islam, Muslims are required to protect the Islamic faith, life, property and the mind (Abdul-Martin, 2010). Actions that are deliberately damaging to the natural environment and resources are a kind of corruption that is forbidden in Islam (Hassan, 2014). Islam regards human beings as the “Khalilahs” or Caliphs of the Earth, who are entrusted with the responsibility of looking after and taking care of the Earth. Many verses appear in the Holy Quran that stress the importance of caring for the environment. For example, “Who made all things good which He created (Quran, 32:7)”,”And we are commanded to keep it that way: Do no mischief on the Earth, after it hath been set in order (Quran, 7:56).” Based on that, it is clear that Muslims are obliged to always protect the Earth in every respect, as Islam holds the belief that the earth is a sacred and holy place (Hassan, 2014).

In the context of eco-friendly behavior, Hirschman (1983) argues that religiosity is related to questions of why people consume. Referring to the above idea, Muslims tend to favor and strongly support intentions to protect the environment, because it is their obligation as commanded in their Holy Quran (Hassan, 2014). Therefore,

H5 - Consumers’ religiosity positively associates with their intentions to accept governmental policy on paying for plastic bags.

As discussed previously, knowledgeable consumers are able to differentiate between the attributes of products (Gracia and De Magistris, 2007) that use less natural resources and do no harm to the environment (Paul et al., 2016). When knowledgeable consumers hold greater religiosity, in this case Islamic beliefs, then it can be expected that their intention to participate in eco-friendly behavior will be greater. The reason for this is that their knowledge on environmental issues is strengthened by their beliefs of protecting the earth (environment) being a Muslim’s obligation (Hassan, 2014), so that the positive effect of Muslim consumers’ knowledge is strengthened when they hold higher religiosity level compared to when they do not.

Therefore,

H6 – Greater consumers’ religiosity strengthened the positive association between their knowledge on environmental issues.
and intentions to accept governmental policy on paying for plastic bags.

**RESEARCH METHOD**

**Sample and data collection**

In this study, we used a survey method to investigate educated consumer intentions in Indonesia in responding to government policies on paid plastic bags. Data collection involved using questionnaires (closed-ended questions) which were disseminated directly to potential respondents to get the best response. Before these were given to the actual respondents, our questionnaire was pre-tested on 35 students in the marketing class to examine the level of validity and reliability. Then, we trained students to be surveyors assigned to the distribution of questionnaires to respondents i.e. students at six different universities (three state universities, three private universities) in one of the largest cities in Indonesia. The city itself is also categorized as having the second largest density in terms of higher education student population in Indonesia. The use of cluster sampling (probability sampling) as a method gives equal opportunity to randomly selected students in six different universities to be respondents (Sekaran, 2003; Malhotra, 2007). We believe that the selected respondents represent Indonesian consumers in responding to the government’s policy on paying for plastic bags.

**Measurements**

The focus of this research is to explain the relationship between the five constructed constructs of religiosity adopted from Teah et al. (2014); Charseatd. (2016); and Hassan (2014) with five indicators, and the knowledge construct is built on Rahman et al. (2015) with four indicators. Then, the TRA model with subjective norms constructs was adopted from several researchers (i.e. Tarkiainen and Sundqvist, 2005; Charsetad, 2016) with three indicators. Finally, the personal attitude and intention constructs are adopted from Lada et al. (2009) with two and three indicators respectively. All constructs were measured using a five-point Likert scale with the definition of the number 1 = strongly disagree to 5 = strongly agree (Likert, 1932) with reliability measurements of all constructs using Cronbach's alphas with a cut-off value of greater than 0.70 (Cronbach, 2004).

**4.3. Characteristics of Respondents**

The survey was conducted over a period of three months to obtain a response of 384 respondents based on the calculations of M organ and Krezie (1970). Of the 384 distributed questionnaires, 332 were declared to be valid (response rate 86.5 percent) to qualify statistically (Baruch and Holton, 2008) as Table 1 summarizes the descriptive statistics and matrix correlations of the respondents in this study. Further, we deleted 24 respondents who are non-Muslim, since we used religiosity items referring to Islamic values. The composition between male and female respondents was almost equal, and respondents’ age dominantly fell between 18-24 years old (86.7 percent). Undergraduate students are the dominant respondents (73.5 percent), followed by postgraduate students – studying master’s degrees (20.5 percent). In terms of shopping intensity, daily shopping consists of 130 respondents (39.2 percent), followed by weekly shopping (27.4 percent) and monthly (17.5 percent).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.53</td>
<td>0.500</td>
<td>n.a.</td>
<td>0.023</td>
<td>0.010</td>
<td>0.022</td>
<td>0.01</td>
<td>0.006</td>
<td>0.003</td>
<td>0.002</td>
<td>0.000</td>
<td>0.000</td>
<td>0.001</td>
<td>0.008</td>
</tr>
<tr>
<td>Age</td>
<td>1.178</td>
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<td>n.a.</td>
<td>0.152</td>
<td>0.674</td>
<td>0.266</td>
<td>0.03</td>
<td>0.404</td>
<td>0.404</td>
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<td>0.006</td>
<td>0.041</td>
<td>0.003</td>
<td>0.067</td>
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<tr>
<td>Marital status</td>
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<td>0.244</td>
<td>-0.102</td>
<td>0.821</td>
<td>n.a.</td>
<td>0.333</td>
<td>0.02</td>
<td>0.428</td>
<td>0.375</td>
<td>0.005</td>
<td>0.009</td>
<td>0.045</td>
<td>0.007</td>
<td>0.053</td>
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<tr>
<td>Education level</td>
<td>2.271</td>
<td>0.565</td>
<td>n.a.</td>
<td>0.147</td>
<td>0.516</td>
<td>0.577</td>
<td>n.a.</td>
<td>0.230</td>
<td>0.208</td>
<td>0.008</td>
<td>0.007</td>
<td>0.014</td>
<td>0.010</td>
<td>0.012</td>
</tr>
<tr>
<td>Shopping intensity</td>
<td>2.102</td>
<td>1.095</td>
<td>-0.133</td>
<td>0.175</td>
<td>0.179</td>
<td>0.082</td>
<td>n.a.</td>
<td>0.008</td>
<td>0.001</td>
<td>0.000</td>
<td>0.000</td>
<td>0.002</td>
<td>0.000</td>
<td>0.003</td>
</tr>
<tr>
<td>Disposable income</td>
<td>2.244</td>
<td>1.059</td>
<td>-0.080</td>
<td>0.636</td>
<td>0.654</td>
<td>0.480</td>
<td>n.a.</td>
<td>0.612</td>
<td>0.010</td>
<td>0.010</td>
<td>0.013</td>
<td>0.006</td>
<td>0.003</td>
<td>0.056</td>
</tr>
<tr>
<td>Monthly expenses</td>
<td>1.861</td>
<td>0.909</td>
<td>-0.051</td>
<td>0.636</td>
<td>0.612</td>
<td>0.456</td>
<td>0.02</td>
<td>0.782</td>
<td>n.a.</td>
<td>0.012</td>
<td>0.001</td>
<td>0.062</td>
<td>0.004</td>
<td>0.089</td>
</tr>
<tr>
<td>Religiosity</td>
<td>3.740</td>
<td>0.709</td>
<td>0.046</td>
<td>-0.070</td>
<td>-0.068</td>
<td>-0.087</td>
<td>0.01</td>
<td>0.012</td>
<td>0.111</td>
<td>0.655</td>
<td>0.045</td>
<td>0.002</td>
<td>0.000</td>
<td>0.001</td>
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<tr>
<td>Knowledge</td>
<td>3.750</td>
<td>0.689</td>
<td>0.004</td>
<td>-0.079</td>
<td>-0.094</td>
<td>-0.085</td>
<td>0.00</td>
<td>-0.098</td>
<td>-0.031</td>
<td>0.212</td>
<td>0.626</td>
<td>0.002</td>
<td>0.006</td>
<td>0.004</td>
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<tr>
<td>Subjective norms</td>
<td>3.606</td>
<td>0.701</td>
<td>-0.018</td>
<td>0.202</td>
<td>0.211</td>
<td>0.118</td>
<td>0.04</td>
<td>0.191</td>
<td>0.249</td>
<td>0.049</td>
<td>0.043</td>
<td>0.565</td>
<td>0.005</td>
<td>0.484</td>
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<tr>
<td>Attitude</td>
<td>3.645</td>
<td>0.893</td>
<td>-0.030</td>
<td>-0.056</td>
<td>-0.084</td>
<td>-0.099</td>
<td>0.01</td>
<td>-0.052</td>
<td>-0.061</td>
<td>-0.018</td>
<td>0.075</td>
<td>-0.073</td>
<td>0.877</td>
<td>0.102</td>
</tr>
<tr>
<td>Intention</td>
<td>3.681</td>
<td>0.843</td>
<td>-0.092</td>
<td>0.259</td>
<td>0.231</td>
<td>0.108</td>
<td>0.05</td>
<td>0.237</td>
<td>0.298</td>
<td>-0.035</td>
<td>0.064</td>
<td>0.696</td>
<td>0.106</td>
<td>0.809</td>
</tr>
</tbody>
</table>

Note: * refers to p<0.05, ** refers to p<0.01
Analysis and Results
The partial least squares (PLS-Graph 3.0; Chin 2003) approach was used to path modeling to estimate the measurements and structural parameters in the structural equation model (SEM) (Chin 1998).

Measurement Validation
To assess the psychometric properties of the measurement instruments, a similar procedure to that of Kleijnen et al. (2007) was performed, using reflective indicators for all research constructs. A null model with no structural relationships was estimated, and then reliability was evaluated by means of composite scale reliability (CR), Cronbachs Alpha, and average variance extracted (AVE) (Chin, 1998; Fornell and Larcker, 1981). For all measures validity and reliability results (Table 2), the PLS-based CR was well above the cutoff value of 0.700, Cronbachs Alpha exceed 0.600, and AVE exceeded the 0.500 cut off value (Fornell and Larcker, 1981). In addition, convergent validity was evaluated by inspecting the standardized loadings of the measures on their respective constructs (Chin, 1998), and all measures were found to exhibit standardized loadings that exceed 0.500 (except items Knowledge 1, Knowledge 2, Religiosity 2 and Religiosity 3). Next, the discriminant validity of the measures was assessed. As suggested by Fornell and Larcker (1981), the AVE for each construct was greater than the squared latent factor correlations between the pairs of constructs. Consequently, the determination was that all constructs exhibit satisfactory discriminant validity.

<table>
<thead>
<tr>
<th>Code</th>
<th>Outer Loadings</th>
<th>Cronbachs Alpha</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Int1</td>
<td>0.847</td>
<td>0.882</td>
<td>0.927</td>
<td>0.809</td>
</tr>
<tr>
<td>Int2</td>
<td>0.917</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Int3</td>
<td>0.932</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att1</td>
<td>0.960</td>
<td>0.865</td>
<td>0.935</td>
<td>0.877</td>
</tr>
<tr>
<td>Att2</td>
<td>0.913</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN1</td>
<td>0.866</td>
<td>0.601</td>
<td>0.788</td>
<td>0.565</td>
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<tr>
<td>SN2</td>
<td>0.834</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN3</td>
<td>0.500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know1</td>
<td>0.906</td>
<td>0.603</td>
<td>0.765</td>
<td>0.626</td>
</tr>
<tr>
<td>Know2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know3</td>
<td>0.657</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know4</td>
<td>0.906</td>
<td>0.603</td>
<td>0.765</td>
<td>0.626</td>
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<tr>
<td>Rel1</td>
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<td>0.784</td>
<td>0.846</td>
<td>0.655</td>
</tr>
<tr>
<td>Rel2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rel3</td>
<td>0.782</td>
<td></td>
<td></td>
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<tr>
<td>Rel4</td>
<td>0.725</td>
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<tr>
<td>Rel5</td>
<td></td>
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</table>

Hypothesis Testing
PLS-Graph 3.0, which allows for the explicit estimation of the latent variable (LV) scores, along with the bootstrapping resampling method, were both used to test the proposed model (Chin, 1998). This procedure entailed generating 300 sub-samples of cases, randomly selected, with replacements from the original data. Path coefficients were then generated for each randomly selected sub-sample. T-statistics were calculated for all coefficients, based on their stability across the sub-samples, indicating which links were statistically significant. As shown in Figure 1, the results illustrate that the Theory of Reasoned Action is confirmed. It was found that consumers’ attitudes toward green products (β=−0.115, t=−2.612) and consumers’ subjective norms (β=−0.688, t=−16.065) are positively associated with consumers’ intentions to accept governmental policy on paying for plastic bags, supporting H1 and H2. Hypothesis 3 and 4 posits that consumers’ knowledge about green products is positively related with consumers’ attitudes toward green products and consumers’ intentions to accept governmental policy on paying for plastic bags. The results indicated that there is no significant relation between consumers’ knowledge toward green products on consumers’ attitudes toward green products (β=−0.088, t=−1.011) and consumers’ intentions to accept government policy on paying for plastic bags (β=−0.078, t=−0.666). Thus, H3 and H4 are not supported in this study. Hypothesis 5 predicts that consumers’ religiosity is positively associated with consumers’ intentions to accept...
governmental policy on paying for plastic bags, but the result is not significant ($\beta$=0.074, $t$= 0.600); thus, $H_5$ is not supported. Finally, Hypothesis 6 posits that consumers’ religiosity moderates the positive relation between consumers’ knowledge toward green products and consumers’ intentions to accept government policy on paying for plastic bags, but the result is also not significant ($\beta$=0.049, $t$= 0.281). Thus, $H_6$ is not significant. Further results indicate that control variables are significantly related with consumers’ intentions to accept government policy on paying for plastic bags ($\beta$=0.118, $t$= 2.770).

**Figure 1.** Research Model

Note: * refers to $p<0.05$, ** refers to $p<0.01$, *** refers to $p<0.001$
CONCLUSION
The objective of the study is to empirically test the determinants of consumers’ responses on governmental policy toward eco-friendly behaviors in Indonesia, by extending the TRA. The results indicate that the two original components of TRA, attitude and subjective norms, are proven to be the determinants of consumers’ support of the government’s policy to pay for plastic bags during their shopping activities. The results confirm the notion of prior studies that attitude is the main predictor of consumers’ intentions on a particular behavior (Kotchen and Reiling, 2000). In the context of eco-friendly behavior, many studies also reported that positive attitudes of consumers determine their intention to participate in making the environment more sustainable (e.g., Mostafa, 2007; Birgden et al., 2009).

The results are also consistent with the findings of Paul et al. (2016) that Indian consumers’ intentions to consume green products are significantly influenced by their positive attitudes toward green products.

As proposed by Ajzen (1991), “subjective norm” is defined as “the perceived social pressure to perform or not to perform the behavior.” When consumers perceive that their “significant others” endorse green purchase behaviors, they are more prone to adopt these behaviors (Paul et al., 2016). It is therefore expected that they will more likely adopt the group behavior, such as purchasing green products (Kumar, 2012). Our findings support these studies that consumers’ subjective norms positively influence their intentions to support the government’s policy on eco-friendly behavior, i.e., paying for plastic bags during their shopping activities. The findings also support prior studies (e.g., Moser, 2015; Tsarenko et al., 2013) that when consumers perceive that their “significant others” endorse green purchase behaviors, they are more prone to adopt these behaviors.

Further results indicate that consumers’ knowledge about environmental issues has no direct or positive influence on their attitudes and intentions to supporting the government’s policy program on eco-friendly behavior. The results are inconsistent with previous studies that consumers’ knowledge also directly influences the degree of attitudes toward pro-environmental behaviors (e.g., Aartsens et al., 2011; Thagersen, 2009). Further, the results do not conform with the meta-analytical results of Bamberg and Moser (2007) that the role of knowledge with regard to environmental problems is an important, indirect determinant of pro-environmental behavior. The result is consistent with the study of Schmitt et al. (2017) that consumers tend to show neither consistent pro-environmental nor consistent anti-environmental tendencies as the “walkers only” and “talkers only” (i.e., for short, “walkers” and “talkers”). In other words, Indonesian consumers might be categorized as either walkers or talkers, in which the former are defined as persons who put much effort into the recycling of waste materials but do not support pollution standards, whereas the latter term describes individuals who have a strong opinion with regard to the support of pollution standards yet do not engage in recycling efforts (Schmitt et al., 2017). These conditions can explain as to why there is no significant effect of knowledgeable consumers on environmental issues on their attitudes and intentions to support the governmental policy on eco-friendly behaviors.

Finally, there are no positive influences of consumers’ religiosity on their intentions to support the government policy on eco-friendly behavior. The findings tend to be inconsistent with Hirschman’s (1983) idea that religiosity is related to questions of why people consume and behave. Based on this idea, Muslims tend to favor and strongly support intentions to protect the environment, because it is their obligation as commanded in their Holy Quran (Hassan, 2014). Again, the results indicate that Indonesian consumers tend to differentiate religion and their behavior, in which religion is mainly about practicing Islamic sharia, while protecting the environment is another issue. The findings are also consistent with the notion of Schmitt et al. (2017) that there is paradoxical behavior among consumers who understand about environmental issues and their behavior. In this context, there are paradoxical behaviors between consumers who understand and practice Islamic values with their behavior on protecting the environment. Moreover, there is no positive moderation of consumers’ religiosity on the relationship between consumers’ knowledge and their intention to support the government’s policy on eco-friendly behavior.

Academic implications
First, this study examines the constructs of religiosity and knowledge as determinants of consumers’ intentions by extending the TRA model (Ajzen and Fishbén, 1980) as an extension of the previous research model (e.g. Paul et al., 2016; Liu et al., 2017) and contributes to a sustainable research paradigm of green behavior. Second, over the years, research on green behavior only focuses on western countries with their socioeconomic background (e.g. Sparks and Shepherd, 1992; Minton and Rose, 1997; Gilg et al., 2005), and there is little empirical evidence from non-western countries (especially Muslim countries). Finally, numerous studies of consumer awareness on the environment are mostly conducted in countries where there are minority Muslim societies (e.g. Jansson et al., 2010; Chan, 2001; Akehurst et al., 2012), recorded only in Hassan (2014) who is studying in Malaysia; we are confident that with the growing interest of academics, we will be able to increase the literature of green behavior in Muslim-majority countries.

Managerial implications
First, the results of the research show that Indonesian consumer’s intentions in supporting government policy toward eco-friendly behavior are determined by subjective norms and attitudes, not religiosity and consumer knowledge, so marketers must intensive and socialize with the consumer in order to give a better understanding toward environmentally-friendly consumer behavior (Carrete et al., 2012). Second, the marketing manager must educate the notion of eco-friendly behavior—government’s policy—to equate perceptions in various segments of consumer, industry and community organizations (Narula and Dasore, 2016). Finally, as knowledge and religiosity have no impact on the formation of consumer attitudes of Indonesia, the
green marketers must develop messages and campaigns to educate consumers about the importance of eco-friendly behaviors (e.g., testimonies of consumers’ success in preserving the environment and their implications for ecosystems (Joshi and Rahman, 2016)).

Limitations and future research directions

Limitations of the study are described in six important points. First, this study focuses only on issues of consumer responses to government policies on eco-friendly behavior (plastic waste pouch hazard). The researcher can further test the model proposed in another context, e.g., recyclable products (Park et al., 1998; Elgaaed, 2012), green fashion (Lee et al., 2012), and green branding (Suki, 2016). Secondly, this research is based on TRA’s well-established model, even though we extended it by incorporating consumers’ knowledge and religiosity into it. Future research could develop this by incorporating TPB for green consumption behavior (Paul et al., 2016) or by comparing the TRA with cognitive-affect behavior (Liu et al., 2017). Finally, understanding consumer behavior toward green behavior is multifaceted, and cannot only be viewed from the point of knowledge and religiosity as a determinant of attitudes. To that end, further researchers can propose a broader model involving environmental concerns (Paul et al., 2016), green consumer awareness (Safari et al., 2018), and demographic factors (Khare, 2015) to investigate eco-friendly behaviors of consumers in developing countries.

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