

Achieving green trust in low price product through perceived value and risk

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Abstract

Some study had done research about the role of green perceived value, risk and trust but unfortunately mostly the previous done on green electric product also known as premium price product and not many done in low price product. This research was undertaken to examining the role of green perceived value, risk to improving green trust on low price product such as Fast Moving Consumer Goods (FMCG). The research was a survey research using an online questionnaire as an instrument. Population and sample used in this research were the community of South Kalimantan - Indonesia as many as 300 respondents. The analysis technique are constructs validity-reliability test; the suitability of the models based on the goodness of fit index, pathways analysis, and the Influence test using Structural Equation Model. This research has found that the effective contribution of perceived value on community trust (21.4%) is higher than the contribution of perceived risk (13.4%). From pathway analysis, our result are neither the perceived value nor perceived risk have indirect effect on community trust, and based on the effect test, we found perceived value have a significant effect but the perceived risk have no significant effect on community trust toward green low price product such as FMCG.

Keywords: Relationship; structural equation model; direct effect; indirect effect; green product; effective contribution

INTRODUCTION

Green products that were developed on the sector of fast moving consumer goods (FMCG) also known as low price product such as food, beverages, and herbal medicines have a lot of community interest since they are often promoted as products that use raw materials that are environmentally friendly and do not harm human and animal health. Green products are also known to use resources efficiently and do not cause pollution to the environment. Along with the rise of green products marketing activities, companies often try to formulate their products to conform to the perceived value and risk and also expectations of society (Haden, 2009). The marketing concept assumes that the perceived value, perceived risk, and expectations of consumers should be proportionate and aligned, in that as not causing further negative perception can lower their trust in green products which are being developed. Increased community awareness of matters related to the environment was allegedly not automatically be able to increase the number of green product purchases (Waskito and Harsono, 2011) and may be their perceived value of green products has not been established and it is the primary cause of why not implement environmentally conscious consumers into a decision purchase intention of green products (Chang and Chen, 2008).

Moreover, at present, there are still often found the fact that the expectations of consumers in green products often cannot be met by the manufacturer which produced low-45 quality products and are not in accordance with the promotion by the company (Chang and Chen, 2008). Even the fact that consumers often feel afraid of cheated when buying a product that claims to be green products (Bray et al, 2011), especially when the price charged to the consumer is a price premium (Thøgersen, 2011) and high prices might have possibility to decrease consumers' loyalty (Bezawada and Pauwels, 2013; Marian et al, 2014). Many studies had conduct to examine the role of perceived value, risk and trust toward green electronic product (Chen and Chang, 2012; Chen & Chang, 2013; Marakanon&Panjakajornsak, 2017; Bearth & Siegrist, 2019), toward online buying intention (Chen, 2012; Ponte et. al, 2015), and toward IOT (Jayashankar et.al, 2018), unfortunately mostly the study was examine the role toward green product in premium price product and not many investigating the effective contributions of the perceived value and risk to trust specifically in low price product. According to this reason, this study was conduct to examine the role of perceived value, risk and trust toward green FMCG and their effective contributions to trust. While the target of this research was to obtain empirical evidence for the role of perceived value and perceived risks to community trust using structural equation model, which can help to explain the relationship between all variables and can be used as consideration for green fast moving consumers goods marketers and developers. Thus, this research should be done to fulfill the research gap by answer the following question: What is the role the perceived value and perceived risk to community trust towards green fast moving consumers goods? How many effective contributions does the perceived value or perceived risk give to community trust in green fast moving consumers goods? Do the perceived value or perceived risk have a direct or indirect effect of on influencing the community trust in green fast moving consumers goods?

Review of literature

Perceived value was found as a set of attributes that can build a good purchase intention (Ashton et al, 2010). Previous research has found that perceived value has a positive influence on consumer purchasing intentions (Chen and Chang, 2012; Chen & Chang, 2013; Marakanon& Panjakajornsak, 2017; Bearth & Siegrist, 2019). If consumers feel that the value of a product is higher, they are more likely to buy a product (Chang and Chen, 2008) and there is a significant relationship between perceived value and the consumer trust (Zulfikar and Mayvita, 2018), as the result green products manufacturers should continue disseminating their products and explore the advantages and all product benefits through research and innovation activities (Zulfikar and Mayvita, 2018). Perceived risk was known as a form of consumer judgement and a negative action will occur and impact buying behavior and for marketing activities, the challenge is how to reduce the perceived risk therefor and could increasing consumer trust (Chang and Chen, 2008) because green perceived risk give a negative influence to green trust, and increases the level of perceived risk will influence the consumer's decision to trust (Chang and Chen, 2012). Based on this, every developer of green products must provide consumer

services unit that can handle any complaints or information indicating weakness products to maintain consumer trust and will be realized in the form of repurchase CITATION Placeholder25 \l 1033 (Zulfikar and Mayvita, 2018) Several studies have shown that consumers' perceived and attitudes towards green products depends on the attributes of credibility as the expected benefits to health and the environment CITATION Placeholder5 \m Placeholder6 \m Placeholder7 \m Placeholder8\m Placeholder9\l1033 (Schleenbecker et al, 2013; Thøgersen, 2011; Thøgersen and Zhou, 2012; Nuttavuthisit and Thøgersen, 2015) and an increase in the level of consumer confidence will increase the purchase intention of the product CITATION Placeholder14\mPlaceholder15 \m Placeholder16 \m Placeholder17\l 1033 (Chen, 2010; Ashton et al, 2010; Chen and Chang, 2012; Zulfikar and Mayvita, 2017, 2018). According this reason, the developers and marketers of green products should always know the level of consumer perception because of the changing consumer perception can affect their trust in a product which is also impacted on the sales of green products. In the era of the environment, the green trust will affect consumer purchase behavior CITATION Placeholder14 \l 1033 (Chen, 2010).

METHODS

Our research was a survey research using questionnaires as an instrument. The population is the community of South Kalimantan Province in Indonesia and the minimum sample size for this research was obtained by using the Slovin formula CITATION Placeholder34 \l 1033 (Arikunto, 2010) was 288 sample. This research was using a sample of 300 people and has met the minimum requirements of the sample size. Sampling technique was done by nonpurposive sampling.

Data analysis techniques used in this research were (1) Validity and reliability instrument test to see the validity and reliability of the questionnaire used level, (2) Validity and reliability construct test to see the level of validity and reliability of indicators that represent variables in this research, (3) Structural Equation Model which consists of modeling studies based on theories and previous research, the goodness of fit analysis and modification of the model to fit the criteria of goodness of fit (GOF), (4) Path Analysis which consists of Square Multiple Correlation Test to see how many influence the green perceived value and perceived risk give to the community trust, and Direct and Indirect Effect Analysis to look at the role of direct and indirect perceived value and perceived risk influences the community trust, (5) Hypothesis testing using structural equation model that already fit with the goodness of fit index.

RESULT AND DISCUSSION

Characteristics of respondents in this research were presented respectively by socio demographic factors such as: gender, age, occupation, income, and education. The majority characteristics of the respondents were female, in middle age, work as private employee, have education in the level of undergraduate in middle-high income.

This research used online questionnaire consist 24 questions and based on instrument test result, we found 2 questions had not pass the validity test because the significancy were above 0.05, according this result, the 2 questions had to be remove from questionnaire (Table3). Based on instrument reliability test (Table 4), the value of Cronbach's Alpha is equal to $0.927 > 0.8$, which means the questionnaire was in high reliability.

The obtained model (Figure 2) gave us the Results of testing the feasibility of the model based on the criteria GOF research result (table 5) were : Chisquare value is 26.182 (small), 141 probability $(0.563) \geq 0.05$, GFI $(0.963) \geq 0.9$, AGFI $(0.928) \geq 0.9$, TLI $(1.007 \geq 0.95$, CFI $142 (1.000) \geq 0.95$ and RMSEA $(0.000) \leq 0.08$. As the result, our research model after modification has met the criteria GOF (Hair, 2006).

Our research study used SEM analysis, prior to further analysis conduct, several SEM analysis prerequisite tests such as normality, multicollinearity and outliers are tested. Normality was done by observing a critical ratio value of ± 2.58 at a significance level of 0.01% (Hair, 2006) and the results of normality test data, showing all indicators have a cr value that is in the range of $-2.58 < cr < 2.58$.

The next SEM requirements test were the multicollinearity and singularity test, where the multicollinearity presence and singularity can be determined through determinant values of covariance matrices that are really small or close to zero (Ferdinand, 2004). We had found that the determinant

value of the covariance matrix was 629.652 which showed that the determinant value of the covariance matrix was far from zero and clearly the research data did not have multicollinearity and singularity, and it was possible to use (Hair, 2006).

Detection of multivariate outliers was conducted by observing the value of the Mahalanobis distance and the calculation of the Mahalanobis distance value resulting in the value of p_1 and p_2 . A data includes an outlier if the value of p_1 and p_2 is less than 0.05. To

160 perform SEM analysis, data outliers must be removed first. Based on data onto research result Table 6), we found 9 data indicated outliers that must be eliminated to do further analysis, that is data 9th, 25th, 63rd, 66th, 71th, 77th, 111th, 118th, and 131rd.

We also test the validity of indicators by examining the values of AVE (Average Variance Extracted) and predictors of variables are valid if AVE value above 0.05 (Ghozali & Fuad, 2011). From our result, it shows that AVE value for the entire predictors > 0.5 , as the result all the predictors were valid (table 7). To test the reliability construct, we examined the Construct Reliability (CR) value, which expected CR is above 0.7 (Ghozali & Fuad, 2011) and as the result our research construct have reliability value were above 0.7 (table 7). This result showed us that the value of the construct reliability (CR) has been qualified reliable.

Next test we done is square multiple correlations (R^2) analysis and direct - indirect effect analysis (table 8). From the test of square multiple correlations (R^2) which used to demonstrate the dependent variable effective contribution and conducted by examined the value of multiple correlations square in SEM analysis. Our result indicated that perceived value effective contribution to community trust is higher than effective contribution of the perceived risk. While the rest of 64.8% contributed by other variables that had not examined. The next analysis was direct and indirect effect test and our result show the direct effect of perceived value to trust is greater than the indirect-effect and the direct effect of perceived risk even give negative direct effect but it still greater than its indirect effect.

Subsequent to the research model meets the criteria GOF, then the model we used to perform hypothesis testing by observing the value of CR and Sig variables. The results of hypothesis 1 testing is perceived value significantly give effect to trust, since the value of CR (2690) ≥ 1.96 and probability (0.007) < 0.05 and hypothesis 1 is supported (see Table 8). Difference finding for the Hypothesis 2, that The perceived risk has no significant affect to trust, since the value of CR (-1.435) < 1.96 and probability (0.151) > 0.05 , base on this result the hypothesis 2 is rejected.

RESULT AND DISCUSSION

As our result, perceived value give an effective contribution to community trust toward green FMCG higher than an effective contribution perceived risk to community risk. Our other result are, neither Perceived value nor perceived risk have indirect effect to community trust. Therefore no need a mediation of other variables in this role. Next result are perceived value significantly give positive influence to community trust and this are consistent with the previous research, which states that the perceived value can build a positive impact that will increase the purchase intention result findings of CITATION Placeholder10 \m Placeholder4\m Placeholder15 \m Placeholder25 \l 1033 (Gounaris, 2007; Chang and Chen, 2008; Ashton et al, 2010; Zulfikar and Mayvita, 2018) .

The developers of green products in the FMCG sector must focus more on increasing the perceived value of the product, because based on our findings, the perceived value has a positive effect on community green trust. Although in this study, perception risk was found have no significant effect, but developers of green products must pay attention to the possibilities that can change perceived risk in the community. An interesting finding from our research is even have an effective contribution, perceived risk significantly has no affect to community trust even it still have an effective contribution not more than 20%. Even this results are not similar to the previous research which states that the perceived risk has exhibited significantly give negative influence to community trust in green products CITATION Placeholder4 \l 1033 \m Placeholder25 (Chang and Chen, 2008; Chang and Chen, 2012). The possibility why it happens due the differences object of our research from the previous study is the previous study used an electric product as an object, while our research used green fast moving consumer goods as the research object. Another differences occur because about of some facts green consumer complaints that feel disappointed either because the price

or the quality of green fast moving consumer good not in significant number occurred on community of South Kalimantan province. It probably because consumer give more attention for the product which have a high price such as electronic product CITATION Placeholder7 \m Placeholder20 \l 1033 \m Placeholder23 \m Placeholder22 (Thøgersen, 2011; Bray et al, 2011; Bezawada and Pauwels, 2013; Marian et al, 2014) than product with low price such as green fast moving consumer goods. The differences about culture, social norm and community surrounding where the research had conduct also can be a source of differences in results.

CONCLUSION

The conclusion of our research are the role of perceived value to community trust above 20% and the role of perceived risk to community trust in green products is less than 20%, while the rest contributed by other variables that we had not examined. Another role is perceived value and perceived risk have no indirect effect and the models not require a mediating role of other variables. Community trust only influenced significantly by perceived value, but even give an effective contribution, the perceived risk give no significant influenced to community trust toward green fast moving consumer goods differ as the previous study finding.

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