

The Power of Green Brand Loyalty: Exploring the Effect of Green Perceived Value, Green Perceived Risk and Green Trust on the Green Repurchase Decision

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Recent research studies are increasing the awareness of consumer behavior about green purchase decision. Green purchase decision of consumer can play a key vital role for going “green”. This study is design to explore the relationship among the green perceived value, green perceived risk, green trust, green brand loyalty and customer repurchase decision of the green products in order to understand the customer intentions towards the green products and services. In order to collect data, total 200 questionnaires were distributed randomly by convenience sampling among university students and employee, 187 responses were collected. The study demonstrates that green perceived value and green perceived risk has significant effect on green purchase decision, green trust and green brand loyalty. Green trust has significant effect as a mediator between green perceived value, green perceived risk and green brand loyalty. Green trust has significant effect on green brand loyalty. While green brand loyalty has significant effect as a mediator between green trust and green purchase decision. This study will be helpful for manufacturer of green product/services and consumers to keep the environment green.

Keywords: Green perceived value, Green perceived risk, Green trust, Green brand loyalty, Green repurchase decision

INTRODUCTION

In today’s world, the consumption patterns of consumers are changing due to environmental concerns i.e. global warming, environmental distortion, air and water pollution and depletion of the natural (Ali & Ahmad, 2016; Joshi & Rahman, 2015) (Paul, Modi, & Patel, 2016) Therefore, the focus towards the green products consumption is growing day by day due to its environmental friendly nature and utilization of recyclable resources which protect the environment and provide a solution to the scarce resources (Ali & Ahmad, 2016). Organizations are producing environment friendly products and customers are also willing to purchase those (Joshi & Rahman, 2015). However, in spite of customer willingness and concern for environment, still there is gap between the environmental concerns and actual purchasing behavior (Wei, Chiang, Kou, & Lee, 2017) (Joshi & Rahman, 2015). These inconsistencies of the customer behavior affect the consumer purchasing intentions (Joshi & Rahman, 2015). There are several factors which effect the consumer green purchase intentions in spite of green products value and environment concern (Ali & Ahmad, 2016).

From the previous studies, different drivers has been found which impact the consumer purchase intentions, such as, green perceived value, green perceived risk, green trust and customer loyalty have a significant impact on the consumer green purchase intention (Martínez, 2015; Rahardjo, 2015). Green perceived value is the benefit which a consumer receives after utilizing the green product in exchange of forgoing other product and green perceived risk is the possibility of having negative impact on the environment due to consumer purchasing behavior (Rahardjo, 2015). Green trust is the willingness to rely on a green product with the belief of its environment credibility (Lin, Lobo, &

Leckie, 2017) while green purchase intention is the tendency to buy a green product because of environment need (Rahardjo, 2015) and green brand loyalty is a commitment to a brand with intention of repurchasing its products (Lin et al., 2017).

It has been observed by the researchers that there is direct relationship of green perceived value with customer loyalty and green purchase decision while there is indirect relationship between the green perceived risk and green purchase intention through the mediating factor of green trust (Lin et al., 2017; Rahardjo, 2015). While some studies show that green perceived risk and green trust has significant impact on customer loyalty while green perceived value has a direct impact on green perceived risk and green trust, while there is indirect relationship of green perceived value and customer loyalty with the mediating impact of green trust (Marakanon & Panjakajornsak, 2017). Hence all the previous researches show that green trust play a role of mediator between the consumer purchase decision and green perceived value. Therefore green perceived value and green trust plays an important role in consumer purchase decision (Lam, Lau, & Cheung, 2016). Therefore, this study is design to examine the how these drivers impact the customer willingness to pay for green products or brands and how brand loyalty impacts their repurchase intentions.

LITERATURE REVIEW

It has been observed that government and other legal authorities now a days have high concern for environment protection and they are encouraging the firms and organizations to adopt green products and green technology in their operational activities (Joshi & Rahman, 2015). Moreover, many customers are also focusing on green products due to their sustainability and environmental changes as well as due to awareness of the green

products and services (Lin, Lobo, & Leckie, 2019; Schena, Netti, & Russo, 2015). However, still some customers are reluctant to adopt green products or brands due to certain reasons such as premium prices, brand loyalty to old brands and lack of awareness regarding their benefits (Ali & Ahmad, 2016; Goh & Balaji, 2016; Wei et al., 2017).

Green perceived value

Green perceived value (GPV) is the general valuation of the product or service by the customer in terms of its environmental benefits (Rahardjo, 2015). People will choose to buy those green products or services which have high value to them and have environment friendly nature (Rahardjo, 2015). According to the GPV theory as defined by (Chen & Chang, 2013) as “a consumer’s overall appraisal of the net benefit of a product or service between what is received and what is given based on the consumer’s environmental desires, sustainable expectations, and green needs.” GPV has been used to explain the consumer purchasing intentions (Woo & Kim, 2019) because it has been observed that GPV has significant impact on the customer purchase decision (Khan & Mohsin, 2017). If customers are provided with higher perceived value as compare to the traditional product, they will buy more. Therefore, there is a positive relationship between the GPV and customer repurchases decision (Rizwan, Mahmood, Siddiqui, & Tahir, 2014). However, some studies have found that GPV has indirect relationship with repurchase decision because it is observed that a buyer will buy again if he has a trust on the product green value or when he is loyal towards the brand (Konuk, 2018; Lam et al., 2016). Therefore, green trust and green brand loyalty are considered as mediators ((Rahardjo, 2015; Rizwan et al., 2014). While some researches have observed a direct relationship between the GPV and repurchase intentions as well as between GPV and green trust (Jayashankar, Nilakanta, Johnston, Gill, & Burres, 2018; Lin et al., 2017). From the theoretical background it is also observed that GPV helped to build strong green brand loyalty and trust (Martínez, 2015)

Green perceived risk

Green perceived risk is the probability of having negative consequences on the environment due to the customer purchasing intentions (Rahardjo, 2015). Many researches revealed that, many customers are ready to purchase the green products or services but due to their higher prices as compare to the traditional products they feel reluctant (Ali & Ahmad, 2016; de Medeiros, Ribeiro, & Cortimiglia, 2016). In such cases, green perceived risk is high and customer wrong decision can harm the environment (Rahardjo, 2015). Therefore green perceived risk has negative impact on the customer repurchase decision (Lam et al., 2016). Moreover, green perceived risk also hurt the green trust and green brand loyalty (Chen & Chang, 2013; Marakanon & Panjakajornsak, 2017) if the customers are reluctant to buy, they will be less loyal towards the green products and did not rely on environment friendly products and services (Rahardjo, 2015; Wei et al., 2017). According to the theory of perceived risk, chances of purchase can be increased by decreasing the perceived risk and it will also help to build strong customer trust (Chen & Chang, 2013).

Green trust

Green trust is the inclination of the buyer to rely on a green product or service in regards of its benefits to the environment (Rahardjo, 2015). Few researchers have found that customer intention to buy an environment friendly product or service rely on their belief in the benefits of the green product or service to the environment (Rizwan et al., 2014). Therefore, it has been found, that there is a significant impact of the green trust on the customer repurchase intention (Rizwan et al., 2014). It is also observed that green trust plays a role of mediator between the GPV and green brand loyalty (Rahardjo, 2015). GPV has significant impact on the green trust which indirectly impact the customer repurchase intentions because if customers has trust on green brand they will buy again and again (Lam et al., 2016; Martínez, 2015; Rahardjo, 2015). According to the social exchange theory, a consumer is going to rely more on a brand if he receives values which he expected (Lin et al., 2017). therefore, green trust has negative relation with the green perceived risk which ultimately impact the brand loyalty and purchasing intentions (Lam et al., 2016; Rahardjo, 2015).

Green brand loyalty

Green brand loyalty is the commitment of a buyer to buy again from the same green brand (Rahardjo, 2015). A customer will be loyal and repurchase again when he has trust on the green value provided by the green products and services of the specific green brand (de Medeiros et al., 2016; Martínez, 2015). Therefore green trust plays a major role in the development of the brand loyalty and customer repurchase intentions (Marakanon & Panjakajornsak, 2017). Both GPV and green perceived risk impact the green brand loyalty indirectly because of the mediating effect of the green trust (Rahardjo, 2015)). According to the signaling theory, a customer will be loyal to a brand unless it provides value which is perceived by the customer (Lin et al., 2019). However, green brand loyalty plays a role of mediator between the green trusts and repurchase decision (Rizwan et al., 2014).

Green Repurchases decision

Green repurchase decision is the intension of the buyer to buy again the green products and services from the same brand (Rahardjo, 2015). This intension of repurchasing is effected by the brand loyalty (Rizwan et al., 2014). A customer with loyalty towards the green brand, has a belief on the product’s environmental friendly nature and will buy again that product (Rizwan et al., 2014).

From the theoretical background, it has been determined that there is significant relationship between the above variables. Therefore, the purpose of this study is to further explore the relationship between these variables, their direction and strength by considering these all variables in one research model.

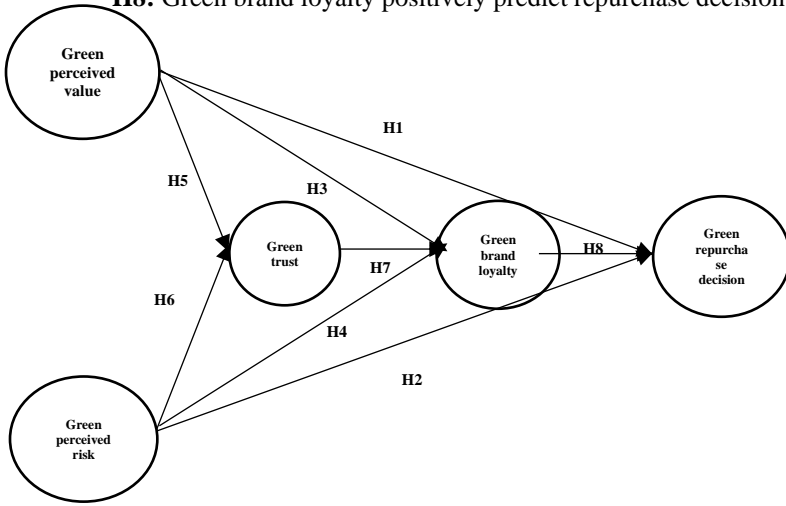
H1: Green perceived value positively predicts green repurchase decision

H2: Green perceived risk negatively predicts repurchase decision

H3: Green perceived value positively predicts green brand loyalty

H4: Green perceived risk negatively predicts green brand loyalty

- H5:** Green perceived value positively predicts green trust
- H6:** Green perceived risk negatively predicts green trust
- H7:** Green trust positively predict brand loyalty
- H8:** Green brand loyalty positively predict repurchase decision



Methodology

Sample Design and Data Collection

The data for this research is collected through the online structured questionnaires. Sample of the research is comprised of common customers which are based on university students and employees. Almost 200 online questionnaires were distributed among the participants and 187 responses were collected. Among the 187 respondents, 64.8% are male and 35.2% are the females. 92.7% of the respondents are in the age group of 20 to 30 years while other 7.3% are in age group 31-40 years. Questionnaire is based on the five-point Likert scale i.e. 1 for always to 5 for never. Total 17 measurement questions were used to measure the constructs while 3 are the demographic questions which are the part of the questionnaire.

In this study, five-point Likert scale from 1 to 5 i.e. rating from always to never be used in order to measures the constructs. Green perceived value is measured by using the constructs of (Lin et al., 2017). While repurchase intentions are measured by using (Woo & Kim, 2019). Brand loyalty is measured by using (Lin et al., 2017) and (Lin et al., 2019) and green perceived risk is measured by (Lin et al., 2017) while green trust is measured by following (Konuk, 2018). Although this study has used some modified wording in questionnaire for the measurement of constructs.

Analysis and Results

After collecting the data results are interpreted and evaluated by using the PLS measurement model. Therefore, Smart PLS is used for the data analysis. For measuring the correlation between the indicators convergent validity and discriminant validity are used. This correlation is observed by using the PLS techniques, in order to check the discriminant and convergent validity. Convergent validity is measured by using composite reliability (CR), factor loadings and average variance extracted (AVE). In the section of factor loading, it has been observed, indicators with value greater than 0.5 have significant relationship between them. Moreover, average variance extracted (AVE) should be

greater than 0.5 as it is observed that all the variables have AVE greater than 0.5 and composite reliability (CR) should be greater than 0.7. As it is shown in the table that all the constructs and indicators meet the all three criteria which shows high convergent reliability between the constructs.

In order to examine the discernment validity, the rule is that “the square root of the AVE be larger than the correlations between the construct and any other construct in the model” (Chin, 1998). As it is observed in Table 1, that square root of average variance extracted (AVE) is greater than the correlation between the constructs (by looking at the values in bold words in diagonal position in the table 2). Therefore, all the constructs in the table met the criteria which show adequate discriminant validity.

Table 1: Validity and Reliability of Construct

Constructs	Indicators	Loading factors	Average Variance Extracted (AVE)	Composite Reliability (CR)
Green perceived value (GPV)	q1	0.678	0.668	0.797
	q2	0.936		
Green perceived risk (GPR)	q3	0.878	0.661	0.795
	q4	0.743		
Green trust (GT)	q9	0.736	0.523	0.846
	q10	0.744		
	q11	0.741		
	q14	0.670		
	q15	0.723		
Green brand loyalty (GBL)	q5	0.885	0.768	0.869
	q6	0.868		
Green Repurchase decision (GRD)	q16	0.893	0.812	0.896
	q17	0.909		

Table 2: Correlation

Constructs	Green trust (GT)	Green perceived risk (GPR)	Green perceived value (GPV)	Green brand loyalty (GBL)	Green Repurchase decision (GRD)
Green trust (GT)	0.723				
Green perceived risk (GPR)	0.412	0.813			
Green perceived value (GPV)	0.532	0.297	0.817		
Green brand loyalty (GBL)	0.609	0.325	0.581	0.876	
Green Repurchase decision (GRD)	0.636	0.389	0.417	0.460	0.901

Path significances are determined by calculating the R². As in this research there are total eight hypothesis, therefore its research model has eight paths. These hypotheses are tested by using the path significances. Therefore, path coefficients are calculated for each path in order to know how much variance is explained by a construct by using the PLS techniques

All the significant paths are highlighted in Table 3 that shows the path coefficients. In this study, “a two-tailed t-test was used because independent variables may show either a positive or negative effect on the dependent variables” (Helm, Eggert, & Garnefeld, 2010).

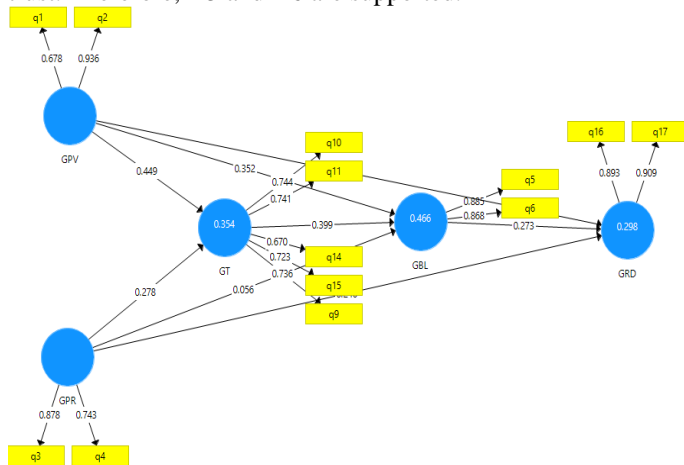
Table 3 Regression Analysis

Paths	β	t	Sig.	R ²	Hypothesis supported
H1: green perceived value green repurchase decision	0.330	4.144	***	0.298	Yes
H2: Green perceived risk repurchase decision	0.291	3.689	***		Yes
H3: Green perceived value green brand loyalty	0.531	7.893	***	0.466	Yes
H4: Green perceived risk □ green brand loyalty	0.167	2.524	***		Yes
H5: Green perceived value □ green trust	0.449	6.141	***	0.354	Yes
H6: Green perceived risk □ green trust	0.278	4.100	***		Yes
H7: Green trust □ green brand loyalty	0.345	5.374	***		Yes

H8: Green brand loyalty \square green repurchase decision 0.218 3.274 ** Yes

Note: ** p < 0.01, *** p < 0.001

Green repurchase decision is predicted by green perceived value, green perceived risk, and green brand loyalty which explained 29.8% ($R^2 = 0.298$) of the variance in green repurchase decision, indicating a moderate R squared value. Therefore, H1, H2 and H8 are supported. Green brand loyalty is predicted by green perceived value, green perceived risk, and green trust which explained 46.6% ($R^2 = 0.466$) of the variance in green brand loyalty. Therefore, H3, H4 and H7 are supported. Green trust is predicted by green perceived risk, and green perceived value, which explained 35.4% ($R^2 = 0.354$) of the variance in green trust. Therefore, H5 and H6 are supported.



Conclusions and Implications

From the results of findings is consistent with the previous studies that there is a significant positive relationship between the repurchase intentions and green perceived value. While there is negative relationship between the green repurchase decision and green perceived risk. Similarly, it is observed that there is a positive relationship of green brand loyalty with green perceived value and negative relationship with green perceived risk. Moreover, there is also positive relationship between the green trust and green perceived value, on the other hand, there is a negative relationship between the green trust and green perceived risk. It is also observed that there is positive relationship between the green trust and green brand loyalty as well as with green repurchase decision.

Finding the relationship between the drivers; green perceived value, green perceived risk, green trust and green brand loyalty with the repurchase decision, help to understand the consumer's intentions toward the green product consumption. This study helps to understand how to build customers brand loyalty towards the green products and to provide a solution to the green needs of the customers by establishing strong brand trust.

This research highlights the importance of green perceived value, such as a green brand can strong its perceived value and links to customer's value in order to gain competitive advantage over other brands. Moreover, findings of this research can contribute to take investment decisions regarding the green brand success such as green marketing and new product development

It will also help to understand the environmental concerns and trends, so that green brand can produce products accordingly which will help to reduce green perceived risk and increase the customer satisfaction by understanding the customer's attitude and behavior towards the green brand image and purchasing intension.

Hence, the purpose of this study is to understand customer's perception towards the green products and highlighting the positive and negative impact of their perception on green brands future and environment.

References

- Ali, A., & Ahmad, I. (2016). Environment friendly products: factors that influence the green purchase intentions of Pakistani consumers. *Pakistan Journal of Engineering, Technology & Science*, 2(1).
- Chen, Y. S., & Chang, C. H. (2013). Towards green trust. *Management Decision*.
- de Medeiros, J. F., Ribeiro, J. L. D., & Cortimiglia, M. N. (2016). Influence of perceived value on purchasing decisions of green products in Brazil. *Journal of Cleaner Production*, 110, 158-169.
- Goh, S. K., & Balaji, M. (2016). Linking green skepticism to green purchase behavior. *Journal of Cleaner Production*, 131, 629-638.
- Jayashankar, P., Nilakanta, S., Johnston, W. J., Gill, P., & Burres, R. (2018). IoT adoption in agriculture: the role of trust, perceived value and risk. *Journal of Business & Industrial Marketing*.
- Joshi, Y., & Rahman, Z. (2015). Factors affecting green purchase behaviour and future research directions. *International Strategic management review*, 3(1-2), 128-143.
- Khan, S. N., & Mohsin, M. (2017). The power of emotional value: Exploring the effects of values on green product consumer choice behavior. *Journal of Cleaner Production*, 150, 65-74.
- Konuk, F. A. (2018). The role of store image, perceived quality, trust and perceived value in predicting consumers' purchase intentions towards organic private label food. *Journal of retailing and consumer services*, 43, 304-310.
- Lam, A. Y., Lau, M. M., & Cheung, R. (2016). Modelling the relationship among green perceived value, green trust, satisfaction, and repurchase intention of green products. *Contemporary Management Research*, 12(1).
- Lin, J., Lobo, A., & Leckie, C. (2017). The role of benefits and transparency in shaping consumers' green perceived value, self-brand connection and brand loyalty. *Journal of retailing and consumer services*, 35, 133-141.
- Lin, J., Lobo, A., & Leckie, C. (2019). The influence of green brand innovativeness and value perception on brand loyalty: the moderating role of green knowledge. *Journal of Strategic Marketing*, 27(1), 81-95.
- Marakanon, L., & Panjakajornsak, V. (2017). Perceived quality, perceived risk and customer trust affecting customer loyalty of environmentally friendly electronics products. *Kasetsart Journal of Social Sciences*, 38(1), 24-30.

- Martínez, P. (2015). Customer loyalty: exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of retailing and consumer services*, 29, 123-134.
- Rahardjo, F. A. (2015). The roles of green perceived value, green perceived risk, and green trust towards green purchase intention of inverter air conditioner in Surabaya. *iBuss Management*, 3(2).
- Rizwan, M., Mahmood, U., Siddiqui, H., & Tahir, A. (2014). An empirical study about green purchase intentions. *Journal of Sociological Research*, 5(11), 948-5468.
- Schena, R., Netti, G., & Russo, A. (2015). Consumers' behavior toward green products: A signalling theory approach. Schena, Rosamartina, Giulia Netti, and Angeloantonio Russo." *Consumers' Behavior toward Green Products: A Signalling Theory Approach.*" *International Journal of Business Administration*, 6(2015), 44.
- Wei, C. F., Chiang, C. T., Kou, T. C., & Lee, B. C. (2017). Toward sustainable livelihoods: Investigating the drivers of purchase behavior for green products. *Business Strategy and the Environment*, 26(5), 626-639.
- Woo, E., & Kim, Y. G. (2019). Consumer attitudes and buying behavior for green food products. *British Food Journal*.