

# Mediating Role of Green Trust in the Link Between Green Perceived Value, Risk, and Purchase Intention of Electric Motorcycles

Nur Cahya <sup>1</sup> , Veronika Santi Paramita <sup>2</sup>
<sup>12</sup> Universitas Jenderal Achmad Yani, Indonesia
Correspondent: veronika.santi@lecture.unjani.ac.id1

	<u>inika.sanu(wiecture.unjani.ac.iu</u>
Received : January 15, 2025	<b>ABSTRACT</b> : This study aims to examine the influence of green perceived risk (GPR) and green perceived value
Accepted : February 23, 2025	(GPV) on purchase intention (PI) through green trust
Published : February 28, 2025	(GT) in Honda EM-1 electric motorcycles. A total of 271 respondents were selected using the Lemeshow method.
Citation: Cahya, N., & Paramita, V.S. (2025). Mediating Role of Green Trust in the Link Between Green Perceived Value, Risk, and Purchase Intention of Electric Motorcycles. Sinergi International Journal of Management and Business. 3(1), 59-73. https://doi.org/10.61194/ijmb.v3i1.413	Data was collected through a cross-sectional or one-shot research approach. The research instrument successfully passed validity and reliability tests. Structural equation modelling (SEM) was employed for data analysis using Smart-PLS version 3.0. The study used PLS software, including outer and inner model assessments. The outer model analysis evaluates convergent validity, discriminant validity, and composite reliability, while the inner model analysis includes r-square, f-square, model fit tests, path analysis, and hypothesis testing. Among the four proposed hypotheses, all were found to have a significant effect. Green perceived value (GPV) positively influences purchase intention (PI), both directly and indirectly, through green trust (GT). Conversely, green perceived risk (GPR) negatively affects purchase intention (PI), both directly and indirectly, through green trust (GT). <b>Keywords:</b> Green Perceived Value, Green Perceived Risk, Green Trust, Purchase Intention, Electric Vehicle.
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## **INTRODUCTION**

Awareness of the importance of environmental conservation is increasingly becoming a major concern in today's global society. With increasing concerns about climate change, air and water quality deterioration, and the destruction of ecosystems, customers are becoming more conscious of how their purchases affect the environment. On the other hand, companies also realise that adopting environmentally friendly business practices supports the planet's sustainability and can be a competitive advantage. Motor vehicles have become a part of people's daily lives. However, the rapid growth of the population of motor vehicles, especially those that are fossil fuels, has caused significant environmental impacts. Carbon emissions and air pollution have become urgent global problems that must be solved. During these challenges, electric vehicles have become a viable way to lessen the impact of transportation on the environment.

Electric motorcycles have become a major spotlight in the global automotive industry. With its large population and rapid economic growth, Indonesia is also increasingly recognising the

importance of electric motorcycles as a sustainable mobility solution. Amid environmental issues and climate change concerns, electric motorcycles such as the Honda EM1 promise more environmentally friendly use with lower carbon emissions than oil-fueled motorcycles (Ferlia et al., 2023).

Although the potential of electric motorcycles for the future is very exciting, sales data shows their contribution to Indonesia's total motorcycle market is still very small. Electric bike (EV) sales account for only about 1% of the motorcycle market. (Dananjaya & Ferdian, 2024). As PT AHM Executive Vice President and Director Thomas Wijaya noted, electric motorcycles have not contributed significantly to the overall motorcycle market. The sales data of electric motorcycles that will be distributed to the public in Indonesia is only 60,857 in 2024 (Sisapira, 2024). This data is still relatively small when compared to motorcycle distribution data of 4,343,781 million in the period January to August 2024 (Asosiasi Industri Sepeda Motor Indonesia, 2024) and can be seen in Figure 1.1. This indicates that even though the development of electric motorcycle technology is increasing, consumer purchase intention for electric vehicles is still limited compared to gasoline-fueled motorcycles.

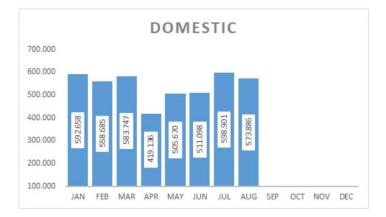


Figure 1. Motorcycle Distribution Data in Indonesia

The Honda EM1 electric motorcycle is designed to offer mobility solutions that are both efficient and environmentally friendly. This product is expected to attract consumers increasingly aware of the importance of protecting the environment. One of the main factors that can affect consumer purchase intention is the green value perceived by consumers (GPV) (Román-Augusto et al., 2022).

Despite the obvious environmental benefits, consumers' decision to buy an electric motorcycle like the Honda EM1 depends on their awareness of the green perceived value and the potential danger of using this technology (green perceived risk). These two factors significantly influenced consumers' purchase intention towards environmentally friendly products.

Trust in green products, or green trust, is an important issue in this study. Manufacturers and marketers of electric vehicles must understand how green perceived risk (GPR) and green perceived value (GPV) interact through green trust (GT). The implementation of strategies that highlight environmental benefits while strengthening consumer trust is believed to accelerate market acceptance of electric motorcycles in the community (Lutfie & Marcelino, 2020).

#### **Green Perceived Value**

Green perceived value (GPV) is the consumer's perception of the value or benefits of an environmentally friendly product, including benefits for the environment, health, and sustainability. These values can reduce environmental impact, use energy more efficiently, or contribute to environmental conservation (Lou et al., 2022; Yu & Lee, 2019). When consumers feel that an eco-friendly product such as the Honda EM1 electric motorcycle provides significant positive value (e.g., energy saving, reduced pollution, or long-term benefits for the environment), they are likely to have a higher interest in purchasing the product (Akroush et al., 2019; L. Chen et al., 2021; Tan et al., 2019). These values often elicit strong moral satisfaction and social responsibility, ultimately increasing purchase intention. Consumers who have a high awareness of environmental issues tend to appreciate products that are considered environmentally friendly. They may be able to pay more or choose a product with additional features focused on sustainability (Dhewi et al., 2018; Hudayah et al., 2023; Solomon, 2019). Green perceived value in research (Hudayah et al., 2023) can be measured using four indicators, including functional, emotional, social, and ecological benefits.

#### **Green Perceived Risk**

Green perceived risk (GPR) is the customer's perception of potential risks or uncertainties associated with environmentally friendly products. These risks can be concerns about product performance, additional costs, functionality, and social and psychological impacts that may arise from the use of such products (Amirtha et al., 2021; Marakanon & Panjakajornsak, 2017; Shukla, 2019; Yee et al., 2011). The higher the risk consumers feel towards environmentally friendly products, the lower their interest in buying them. For example, if consumers think the product will not perform as well as their expectations, have a higher long-term cost, or pose difficulties using it, they will likely avoid purchasing it. Consumers may be worried that eco-friendly products, such as electric motorcycles or other items with eco-friendly labels, will not be as reliable as conventional products. These concerns can include issues such as having no supporting infrastructure (e.g., charging stations for electric motorcycles), uncertainty about the lifespan of the product, or the perception that the product is more expensive in the long run without providing comparable benefits (Dutta & Hwang, 2021). Indicators to measure green perceived risk in line with (Y. S. Chen & Chang, 2012; Dhewi et al., 2018; Jacoby & Kaplan, 1972) Among them are performance, financial, functional, social, and psychological risks.

## Green Trust

Green trust is crucial in analyzing consumer responses to products or brands with environmentally friendly attributes. This is relevant when associated with perceived value (GPV) and perceived risk (GPR). GT is a customer's belief in an environmentally friendly product or brand that is based on the assumption that the claim is authentic, trustworthy, and under expectations regarding environmental benefits (Y. S. Chen & Chang, 2013a). This refers to the belief that an eco-friendly product or brand meets its sustainability claims without harming consumers or the ecosystem. This

trust is formed through three main aspects: perception of the quality of environmentally friendly products, assessment of the risks inherent in green products, and customer satisfaction. Green Trust arises when consumers feel confident that the product not only supports sustainability efforts but is also able to deliver performance that meets expectations (de Sio et al., 2022; Ming Tsai & Chien, 2023a; Pratama, 2014). According to (Y. S. Chen & Chang, 2013a)Indicators of green trust include environmental claims, reputation, performance, and commitments.

#### **Purchase Intention**

Purchase intention (PI) is a person's intention or tendency to buy a product or service. Purchase intention refers to the desire or intention of consumers to buy a particular product, which is influenced by various factors such as value perception, attitude towards the brand, and previous experience. This reflects the extent customers are ready to purchase (Sohn & Kim, 2020; Solomon, 2019). Purchase intention (PI) is a behaviour in which consumers desire to choose and consume a product. Purchase intention arises in response to stimuli provided by companies, where each stimulus is specifically designed to encourage consumers to make purchases. Purchase intention occurs when consumers have been affected by the quality and information obtained about the product (Kotler & Armstrong, 2015; Priansa, 2017). According to (Kotler & Armstrong, 2018), there are three indicators to measure consumer purchase intention: the desire to buy, the likelihood of purchase, and the willingness to pay.

## Theoretical Frameworks and Hypothesis

To describe the correlation between variables in this study, it is necessary to design a theoretical framework that is used as the basis for the researcher's thinking. Previous research found that green perceived value (GPV) positively and significantly affects the purchase intention (PI) of inverter air conditioners in Surabaya. When consumers in Surabaya consider that inverter air conditioners provide significant environmental benefits compared to ordinary air conditioners and the environmentally friendly performance of the product is in line with their expectations, then their purchase intention for inverter air conditioners will increase (Rahardjo, 2015). Another study found that green perceived value (GPV) has a positive and significant impact on purchase intention (PI) in laundry businesses (Kresno & Wahyono, 2019). This means that the higher the quality and green value perceived by customers of laundry products, the greater the consumer's desire to buy. This study examines how green perceived value affects consumer purchase intention on Honda EM-1 electric motorcycle products. According to this, the author provides the first hypothesis:

H1: Green perceived value (GPV) positively affects the purchase intention (PI) of the Honda EM1 electric motorcycle.

The correlation between GPR (Green Perceived Risk) and PI (Purchase Intention) is negative (Dhewi et al., 2018). The higher the risk consumers feel towards environmentally friendly products, the lower their desire to buy them. Therefore, to increase purchase intention, companies should focus on strategies that can reduce or address this perception of risk, for example, by providing

clear information about product performance, warranty, or after-sales service support. Previous research on green perceived risk (GPR) has a negative and significant effect on purchase intention (PI) for low-cost green cars (Dhewi et al., 2018). This means that when consumers feel that environmentally friendly products, such as low-cost green cars, have high potential risks such as performance-related risks, long-term costs, or lack of supporting infrastructure, it will reduce consumer purchase intention. According to this, the author provides the second hypothesis:

H2: Green perceived risk (GPR) harms the purchase intention (PI) of the Honda EM1 electric motorcycle.

GPV refers to consumers' views on an environmentally friendly product's benefits or positive value. The higher the GPV, the more likely consumers are to be interested in buying the product because they believe that the product contributes positively to the environment (Djakasaputra & Pramono, 2020; Fauzi et al., 2024; Luo et al., 2022; Pandey & Syam, 2023). GT mediates the relationship between GPV and PI. The higher the GPV, the greater the trust formed, increasing purchase intent (Y. S. Chen & Chang, 2012). With green trust, perceived risks (e.g., low quality or false claims) can be minimized, thus affecting purchase intention (Ming Tsai & Chien, 2023b; Wahyumar et al., 2023; Wasaya et al., 2021). This means that the larger the GPV, the stronger the influence of GT in encouraging the intention to buy environmentally friendly products. According to this, the author provides the third hypothesis:

H3: Green Trust (GT) affects the relationship of green perceived value (GPV) to the purchase intention (PI) of the Honda EM1 electric motorcycle.

The relationship between GPR, GT, and PI is very relevant to understanding how consumers respond to environmentally friendly products that may come with certain uncertainties or risks. Green trust serves as a link to change risk perception into positive confidence. When consumers are confident that a product supports environmental goals without negatively impacting them, perceived risk is reduced, and trust in the product increases. High trust in eco-friendly products encourages consumers to buy because they feel confident that the product is in line with the claims and safe to use. Additionally, green trust helps reduce doubts that arise due to GPR, thereby increasing the likelihood of purchasing the product (Y. S. Chen & Chang, 2013b; Tarabieh, 2021; Vinta et al., 2016). Based on this, the author proposes the fourth hypothesis:

H4: Green Trust (GT) affects the relationship of green perceived risk (GPR) to the purchase intention (PI) of the Honda EM1 electric motorcycle.

Based on the explanation that has been described, the research paradigm can be described as follows:

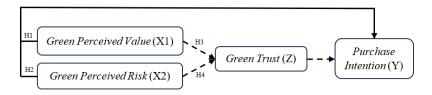


Figure 2. Research Paradigm

Nur Cahya and Paramita

# METHOD

The methods used in this study are quantitative, descriptive, and associative. Respondents have filled out research questions through questionnaires through Google Forms. The population of this study is people in the cities of Cimahi and Bandung, with a sample of 271 respondents and an age range of 20-35 years. Research data was collected using cross-sectional techniques or a one-shot study. Given the size of the population being studied and the uncertainty surrounding the occurrence of a phenomenon, the Lemeshow sampling method was used in this study with a 90% confidence level, a 5% margin of error, and a population proportion of p = 0.5. The minimum number of samples needed was 271 respondents.

The data from the variables in this study was analyzed using structural equation modeling (SEM) with Smart PLS version 3.0. The data is analyzed using PLS software, which includes outer model and inner model analysis. The outer model analysis can be explained by convergent validity, discriminant validity, and composite reliability. In contrast, R-Square, F-Square, Model Fit Test, Path, and Hypothesis Testing explain the inner model analysis.

# **RESULT AND DISCUSSION**

First, 191 (70.5%) respondents were male and 80 (29.5%) were female, with respondents aged 19-25 years accounting for approximately 222 (82%). The majority of respondents, 182 in total, were students (67%), followed by 50 private employees (18.4%) with an average income of less than three million rupiah (45%), or 122 people.

# **Convergent Validity**

Each construction indicator's loading factor value set indicates a convergent validity test. Validity is associated with indicators with a loading factor greater than 0.7. (Hair et al., 2019).

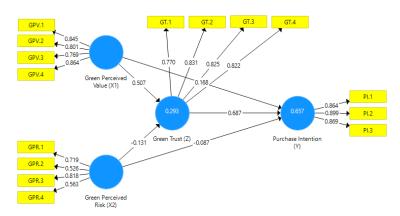


Figure 3. Convergent Validity

Figure 3 displays the results of the convergent validity calculation. It reveals that all research variables have a loading factor greater than 0.70, which indicates that the indicator is correct and meets the specifications.

Nur Cahya and Paramita

#### **Discriminant Validity**

Calculating cross-loadings is appropriate to determine discriminant validity. The value of crossloadings indicates whether or not the construct has sufficient discrimination. The variable should have the highest cross-loading value compared to other constructions.

	GPV	GPR	GT	PI
GPV.1	0.845	-0.147	0.469	0.451
GPV.2	0.801	-0.082	0.390	0.393
GPV.3	0.769	-0.078	0.372	0.393
GPV.4	0.864	-0.136	0.480	0.522
GPR.1	-0.138	0.719	-0.155	-0.166
GPR.2	-0.091	0.526	-0.051	-0.133
GPR.3	-0.073	0.818	-0.199	-0.232
GPR.4	-0.094	0.563	-0.050	-0.064
GT.1	0.479	-0.133	0.770	0.570
GT.2	0.442	-0.148	0.831	0.566
GT.3	0.368	-0.194	0.825	0.708
GT.4	0.424	-0.175	0.822	0.716
PI.1	0.441	-0.211	0.718	0.864
PI.2	0.483	-0.211	0.684	0.899
PI.3	0.500	-0.233	0.684	0.869

Table 1. Discriminant Validity

## **Composite Reliability**

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
GPV	0.838	0.892	0.673
GPR	0.618	0.756	0.445
GT	0.829	0.886	0.660
PI	0.850	0.909	0.770

Reliability is used to analyze the consistency of results obtained from many measurements. The reliability of the decent composite and the extracted mean-variance score (AVE) should be greater than 0.7. Meanwhile, the AVE value must exceed 0.5 (Hair et al., 2019). Cronbach's alpha, composite reliability, and AVE values from Table 2 all meet the requirements. Thus, variable construction can be considered reliable.

## **R** Square

The influence of endogenous factors on other variables was found using R-square. The R-squared value is expected to be between zero and one. R-squared values of 0.75, 0.50, and 0.25 indicate that the model is strong, moderate, or weak.

Nur Cahya and Paramita

Table 3. R Square			
	R Square		
GT	0.293		
PI	0.657		

According to the table above, the green trust variable has an R-square value of 0.293 (weak category), accounting for 29.3% of the GPV and GPR variables. Meanwhile, PI has an R-square value of 0.657 (moderate), indicating that GPV and risk account for 65.7% of purchase intention.

#### F Square

The f-square test determined how the predictor variable affected the dependent variable. The latent variable predictor yields an f-square value of 0.02 (small), 0.15 (medium), and 0.35 (large). The f-square findings are displayed following the data processing results.

Table 4.	F Square
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	GT	PI
GPV	0.357	0.060
GPR	0.024	0.021
GT		0.973

The value of f-Square GPV for  $\overline{\text{GT} \text{ is } 0.357}$  (large) and 0.060 (weak) for purchase intention. Then, the f-square green perceived risk towards green trust is 0.024 (weak), and purchase intention is 0.021 (weak). Meanwhile, the GT (Green Trust) variable greatly affects PI (Purchase Intention), as shown by the f-square value 0.973.

## Model Fit Test

Before hypothesis testing, a model fit test was performed using a fit model. The standardized root mean square residual (SRMR) and normal fit index (NFI) are used to determine whether or not the model is matched.

Table 5. Model Fit

	Saturated	Estimated
	Model	Model
SRMR	0.073	0.073
d_ULS	0.647	0.647
d_G	0.272	0.272
Chi-Square	445.311	445.311
NFI	0.763	0.763

Table 5 clearly shows that the SRMR value of 0.073 is less than 0.10, and the NFI value of 0.763 is between 0.00 and 1.00, indicating that the model is declared fit and the hypothesis can be tested statistically.

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## Path Analysis and Hypothesis Testing

## **Direct Effect Test**

Testing of the hypothesis, as evidenced by t-statistics and path coefficients. The path coefficient describes the relationship between constructs, while the t-statistical value indicates the importance of constructs. The t-statistical value used is 1.98 (alpha 5%). The criteria for accepting or rejecting the hypothesis are as follows: Ha is accepted; H0 is rejected.

	Path Coefficients	T Statistics	P Values	Hypothesis Result
GPV - PI	0.168	3.028	0.003	Accepted
GPR - PI	-0.087	2.096	0.037	Accepted
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Table 6.	Direct	Effect	Test
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Based on the table of direct influence test results above, the following are the test findings for each hypothesis as follows:

- GPV (Green Perceived Value) positively and significantly impacts PI (Purchase Intention). This is supported by a path coefficient value of 0.168. Data processing produced P values of 0.003 < 0.05 and statistical T values of 3.028 > 1.98. Thus, the study's first hypothesis (H1) has been accepted. These findings support the research (Dhewi et al., 2018; Hudayah et al., 2023; Kresno & Wahyono, 2019).
- 2. GPR (Green Perceived Risk) negatively impacts PI (Purchase Intention). This is supported by a path coefficient value of -0.087. Data processing produced a statistical T value that exceeded the table T value (2.096 > 1.98) with P values of 0.037 < 0.05. Thus, the second hypothesis of the study (H2) was accepted. These findings support the research (Dutta & Hwang, 2021; Lou et al., 2022; Vutukuri, 2023).

## Indirect Effect Test

	Path Coefficients	T Statistics	P Values	Hypothesis Result
GPV - GT - PI	0.348	8.107	0.000	Accepted
GPR - GT - PI	-0.090	2.332	0.020	Accepted

Based on the table of indirect influence test results above, the following are the test findings for each hypothesis as follows:

- Green trust mediates the relationship between green perceived value and purchase intention. This is supported by a path coefficient value of 0.348. Data processing produced P values of 0.000 < 0.05 and statistical T values of 8.107 > 1.98. Thus, the third hypothesis of the study (H3) was accepted. These findings support the research (Ming Tsai & Chien, 2023b; Wahyumar et al., 2023; Wasaya et al., 2021).
- 2. Green trust mediates the relationship between green perceived risk and purchase intention. This is supported by a path coefficient value of -0.090. Data processing produced a

statistical T value of 2.332 > 1.98 with P values of 0.020 < 0.05. Thus, the fourth hypothesis of the study (H4) was accepted. These findings support the research (Y. S. Chen & Chang, 2013b; Tarabieh, 2021; Vinta et al., 2016).

# DISCUSSION

The first research hypothesis (H1) has been accepted. GPV can help consumers overcome doubts about the higher price of electric motorcycles. With the perception that the product is energy-efficient or environmentally friendly, consumers are more likely to overlook risk perceptions and can develop an interest in purchasing environmentally friendly products. Respondents generally have a positive view of the environmental value of the Honda EM1. This motorcycle provides good ecological benefits, a sense of pride and a modern impression for its users. However, the ecological benefits of this product still need to be communicated more effectively. Honda can emphasize a modern lifestyle and innovative technology in its marketing strategy to enhance the product's appeal. In addition, communication regarding this electric motorcycle's environmental benefits and technological advantages needs to be strengthened so that consumer perception of this product becomes more appealing and ultimately increases their purchase intention. These findings support the research (Dhewi et al., 2018; Hudayah et al., 2023; Kresno & Wahyono, 2019).

GPR makes consumers feel uncertain or uncomfortable about buying electric motorcycles, reducing their likelihood of purchasing. Consumers who perceive a high risk associated with ecofriendly products are more likely to postpone their purchase or choose conventional products that they consider more reliable. Consumers may worry that environmentally friendly products, such as electric motorcycles or other items with eco-friendly labels, will not be as reliable as conventional products. These concerns can include issues such as the lack of supporting infrastructure (for example, charging stations for electric motorcycles), uncertainty about the product's lifespan, or the perception that these products are more expensive in the long run without providing comparable benefits. Financial and performance risks are the main obstacles in purchasing electric vehicles; to reduce these risks, manufacturers can provide after-sales warranties, offer education, or give direct product demonstrations to consumers. If Honda succeeds in reducing this perception of risk, the adoption of electric vehicles in Indonesia will increase more rapidly. Thus, the second hypothesis of the study (H2) is accepted. These findings support the research (Dutta & Hwang, 2021; Lou et al., 2022; Vutukuri, 2023).

Consumer perception of a product's environmental value directly increases purchase intention and strengthens their trust in the product, ultimately driving greater purchase intention. In this study, although GPV directly impacts purchase intention ( $\beta = 0.168$ , p = 0.003), its indirect influence through green trust is much stronger ( $\beta = 0.348$ , p = 0.000). This indicates that although consumers perceive the Honda EM1 as an environmentally friendly vehicle, they are more inclined to purchase it if they have a high confidence level in the product's sustainability claims. Consumers will be more motivated to buy if their expectations regarding the product's environmental benefits are met through trust. Trust becomes the main element in building a long-term relationship between customers and the brand. Therefore, Honda must increase information transparency regarding energy efficiency and CO<sub>2</sub> emission reduction. Additionally, using environmental

certifications from independent agencies can help strengthen consumer trust in this product. This means that consumer trust in green products becomes a key factor that enhances the relationship between perceived environmental value and purchase intention. Honda must use a trust-based approach in marketing its electric vehicles through product trials (test drives), customer loyalty programs, and collaboration with environmental organizations. Thus, the third hypothesis of the study (H3) is accepted. These findings support the research (Ming Tsai & Chien, 2023; Wasaya et al., 2021).

Referring to the perceived risks by consumers, such as concerns about product performance, price, or benefits not meeting expectations, can be reduced when consumers have high confidence in environmentally friendly products and ultimately can increase purchase intention. Consumers tend to avoid products that have a high level of uncertainty. In this study, although green perceived risk directly impacts purchase intention ( $\beta = -0.131$ , p = 0.014), its indirect effect through green trust also proved significant ( $\beta = -0.090$ , p = 0.020). This indicates that a high perception of risk can reduce purchase intention, and the impact becomes greater when trust in the product also decreases. Consumers tend to delay purchasing decisions when there is uncertainty regarding product performance. However, trust in the brand can help reduce the negative impact of risk if the company provides clear signals regarding the quality and safety of the product. Honda can strengthen after-sales guarantees by offering battery warranties of up to 5-8 years to address this. In addition, expanding the after-sales service network can help reduce consumer doubts regarding the maintenance of electric vehicles. Honda can also compare operational costs between electric motorcycles and gasoline-powered ones so that consumers can understand the long-term benefits. Additionally, involving automotive experts or influencers in green technology to objectively explain the advantages of batteries and vehicle performance can increase consumer trust and reduce concerns. Thus, the fourth hypothesis of the study (H4) is accepted and supports the research (Y. S. Chen & Chang, 2013; Tarabieh, 2021; Vinta et al., 2016).

# CONCLUSION

The results of this study revealed that all four proposed hypotheses demonstrated a significant influence on consumer behaviour. Green Perceived Value (GPV) positively influenced Purchase Intention (PI) by 16.8%, indicating that consumers are more likely to purchase environmentally friendly products when they recognize clear green benefits. Conversely, Green Perceived Risk (GPR) was found to reduce Purchase Intention by 8%, showing that concerns over performance or reliability can deter potential buyers. Notably, Green Trust (GT) plays a crucial moderating role: it strengthens the influence of GPV on PI by 34.8% and simultaneously mitigates the negative impact of GPR on PI by 9%. These findings underscore the pivotal role of Green Trust in bridging the gap between perceived value and perceived risk in shaping consumer intentions to purchase green products.

Based on these insights, several recommendations are proposed. First, maximizing the perception of green value is essential. Companies should communicate the environmental benefits of their products—such as reduced carbon emissions or improved energy efficiency—and emphasize features that support sustainability, like enhanced battery technology or eco-friendly designs. Second, to lower perceived risk, businesses should offer warranties or free trials to address

concerns about performance and provide transparent information through environmental certifications or customer reviews. Third, increasing Green Trust should be a central strategy to boost purchase intentions. This can be achieved by ensuring transparency in production processes, utilizing environmentally friendly materials, launching environmental campaigns, and sharing user testimonials or case studies.

Furthermore, beyond GPV, GPR, and GT, other factors such as product price, consumer environmental awareness, and social norms may also influence purchase intention, and future research should consider integrating these variables for a more holistic understanding. In addition, GPV and GPR can be broken down into more specific dimensions—such as perceived product performance, pricing, or immediate environmental benefits—to identify which aspects most significantly affect Green Trust and Purchase Intention. Lastly, a cross-cultural study is recommended to examine whether the relationships between GPV, GPR, GT, and PI are consistent across different national contexts, as cultural perspectives on green products may vary significantly.

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