

Adoption Green Car in Indonesia: Implementation VBN Theory

A Zaenudin Akbar ¹, Rini Kuswati ²

^{1,2}Management Study Program, Faculty of Economics and Business, Universitas Muhammadiyah Surakarta, Central Java, Indonesia

E-mail: b100200151@student.ums.ac.id ¹, rk108@ums.ac.id ²

*Correspondence author: b100200151@student.ums.ac.id

Article history: received March 22, 2024; revised March 26, 2024; accepted March 27, 2024

This article is licensed under a Creative Commons Attribution 4.0 International License



ABSTRACT

Electric cars have the potential to reduce greenhouse gas emissions and air pollution compared to fossil fuel cars. In green behavior research, a focus on electric cars can provide a better understanding of the preferences, motivations, and challenges individuals face in switching to these environmentally friendly cars. This research aims to analyze the influence of biospheric values on ascription of responsibility and willingness to adopt, analyze the influence of ascription of responsibility on personal norms and willingness to adopt, analyze personal norms on willingness to adopt and personal norms mediate the influence of ascription of responsibility on willingness to adopt. This research data was collected using a questionnaire because this research is research using quantitative methods. Data analysis in this research was carried out using the Partial Least Square (PLS) method using SmartPLS software version 3.0. The results of this research show that Biospheric Value has a significant positive effect on interest in adopting electric cars. Ascription Of Responsibility has a significant positive effect on Personal Norm. Biospheric Value has an insignificant negative effect on Willingness to Adopt. Ascription Of Responsibility has a significant positive effect on Willingness to Adopt. Personal Norm has a significant positive effect on Willingness to Adopt. Personal Norms can mediate the influence of Ascription of Responsibility on Willingness to Adopt.

Keywords: Electric Cars, Biospheric Value, Ascription of Responsibility, Willingness to Adopt, Personal Norm

INTRODUCTION

Research regarding the application of VBN (Value-Belief-Norm) theory in the context of interest in adopting electric cars is important because it aims to understand the factors that influence intention to adopt. VBN theory can help in understanding the factors that influence a person's interest in adopting an electric car. This theory combines individual values, beliefs, and social norms that play a role in shaping individual attitudes and behavior. Understanding these factors can identify barriers and drivers to electric car adoption and develop effective strategies to encourage wider adoption. Exploring the values associated with electric cars means that VBN Theory emphasizes the importance of individual values in shaping attitudes and behavior. The context of electric car adoption means that research applying VBN theory can help explore relevant values, such as environmental concern, energy efficiency, and dependence on fossil fuels. By understanding these values, we can design appropriate communication messages to influence consumer attitudes and behavior regarding electric cars (Kusmarini et al., 2020).

VBN theory also involves individual beliefs as factors that influence behavior. In the context of electric car adoption, research applying VBN theory can be helpful identify individual beliefs regarding electric cars, such as beliefs about electric car performance, the availability of charging infrastructure, and the price of electric cars.

Understanding these beliefs allows one to overcome misunderstandings or concerns that may be in consumers' minds and provide accurate information and appropriate solutions. Social norms are also an important element in VBN theory. In the context of electric car adoption, social norms can play a role in shaping individual attitudes and behavior. Research applying VBN theory can help us understand social norms related to electric cars, such as perceptions of support from family, friends, or

society in using electric cars. Considering social norms believes we can develop more effective strategies to change norms and increase interest in electric car adoption. Choosing research on electric cars in the context of this research has several reasons. Electric cars have the potential to reduce greenhouse gas emissions and air pollution compared to fossil fuel cars. In green behavior research, a focus on electric cars can provide a better understanding of the preferences, motivations, and challenges individuals face in switching to these environmentally friendly cars. As part of a global emissions reduction strategy, the adoption of electric cars can help achieve emissions reduction targets set by various countries and international organizations. Research on green behavior in the context of electric cars can help identify factors influencing the adoption and use of electric cars, as well as inform effective policies and measures to encourage this transition. Infrastructure in many countries for charging electric cars is still limited (Ilyas et al., 2020).

Research into green behavior in the context of electric cars can help understand the barriers and obstacles individuals face in using electric cars, as well as provide insight into how the development of better charging infrastructure can encourage wider adoption. The electric car market continues to grow rapidly with increasing adoption and related innovations. Green behavior research in the context of electric cars can help in understanding consumer preferences, user behavior and market needs related to electric cars. The findings in this research can provide valuable insight for automakers and other companies in developing products and services that better meet consumer demand. Sustainability and a sense of responsibility In an era that is increasingly aware of environmental issues, many individuals and organizations feel they must take responsibility for taking greener and more sustainable steps. Green behavior research on electric cars can help identify factors that influence individual decisions in choosing green vehicles and also encourage broader awareness and pro-environmental attitudes. This research aims to analyze the influence of biospheric values on ascription of responsibility and willingness to adopt, analyze the influence of ascription of responsibility on personal norms and willingness to adopt, analyze personal norms on willingness to adopt and personal norms mediate the influence of ascription of responsibility on willingness to adopt.

Literature Review

Value Belief Norm

VBN theory (Value Belief Norm) is a theory discovered by Stern in 2000. VBN theory is a management approach that focuses on creating company value by maximizing shareholder value in the long term. As per VBN hypothesis, there are a straight capability that interfaces three degrees of investigation, in particular private qualities, convictions and standards that make sense of the most common way of framing favorable to natural way of behaving. In short, this theory says that a person's values affect how they view their environment, which in turn affects how aware they are of the consequences if the environment threatens other people, species, or the biosphere). Good environmental awareness behavior will provide a positive stimulus to the decision to purchase an environmentally friendly product and refers to the level of people's willingness to recognize and support the resolution of ecological problems (Kuswati, R. 2023). Familiarity with these outcomes will then cultivate the suspicion that the activities an individual takes can forestall the results or results that will emerge from their activities. According to Stern (2000), this way of thinking suggests that everyone will feel a moral obligation to take environmental action. Like the VBN theory which was developed from NAT theory, (Kaiser, et al, 1999) developed NAT theory by clarifying the feeling of moral obligation which is called personal norms in NAT theory into a feeling of responsibility. This was triggered because in the NAT theory it only focuses on the personal aspects of individuals without involving social aspects, so Kaiser added responsibility feelings as a variable that influences a person's intention to behave pro-environmentally. Apart from that, Kaiser also added two other variables, namely environmental

knowledge and environmental values as trigger variables for the intention to behave pro-environmentally. In conclusion, VBN theory has a positive and significant influence on green behavior in various contexts, such as green purchasing, pro-environmental behavior, green entrepreneurial intentions, low carbon dioxide transportation.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a model to foresee and make sense of how innovation clients acknowledge and utilize innovation connected with the client's work (Davis, 1989). Technological developments are increasingly rapid and accompanied by environmental conditions that are inversely proportional, where environmental conditions are increasingly worrying, especially pollution from vehicles. In the latter half of the 19th century and the beginning of the 20th, electric automobiles enjoyed a great deal of popularity. However, as internal combustion engine technology advanced and gasoline vehicles became increasingly affordable, electric automobiles lost that popularity. Electric vehicles enjoy a few potential benefits contrasted with customary gas powered motor vehicles. Mainly, electric vehicles don't deliver engine vehicle discharges. Albeit electric vehicles enjoy a few possible benefits as referenced above, inescapable utilization of electric vehicles has numerous hindrances and drawbacks. Until 2011, the cost of electric vehicles was still considerably more costly contrasted with common gas powered motor vehicles and crossover electric vehicles due to the exorbitant cost of lithium particle batteries. One more component that upsets the development of electric vehicle use is the predetermined number of charging stations for electric vehicles, in addition to drivers' apprehension that their vehicle batteries will run out before they arrive at their objective.

Biospheric Values

Biospheric values refer to the ecological, social and economic benefits that humans obtain from the natural systems and processes of the biosphere (Folke, 1997). These values are based on the recognition that human well-being is closely linked to the health and function of the natural environment. Biosphere values include tangible and intangible benefits, such as the provision of food, water, and other resources, as well as cultural and spiritual benefits, such as aesthetic enjoyment and recreational opportunities. They also include ecosystem services, such as air and water purification, carbon sequestration, and nutrient cycling, which are important for maintaining the health and resilience of the biosphere. Protecting and preserving the values of the biosphere is critical to ensuring the long-term sustainability of human society and the health of the planet. This requires a comprehensive understanding of the complex interactions between human activities and the natural environment, as well as a commitment to responsible management of the earth's resources.

Ascription Of Responsibility

Ascription Of Responsibility refers to the process of determining who is responsible for an outcome or event. Suggests that there are three factors that influence the ascription of responsibility, namely control, intentionality, and the consequences of actions (Jones and Davis, 1965). It is the process of identifying who is responsible for a particular event or situation, and assigning levels of responsibility based on individual actions or decisions. In legal terms, the assumption of responsibility can determine liability and the allocation of damages or penalties. This can inform judgments about moral responsibility and appropriate actions to address problems or concerns. Ascriptions of responsibility can be influenced by a variety of factors, including cultural norms, social structures, individual beliefs and values, and the availability of information. This is often a complex and contentious process, as different stakeholders may have different interpretations of the facts and different opinions about who should be responsible for certain events. Effective assignment of responsibility requires a fair and impartial assessment of the

facts and a commitment to transparency and accountability. This is an important aspect of promoting social justice and ensuring that individuals and organizations are held accountable for their actions and decisions. The higher the consumer's attitude of concern for the environment, the higher the consumer's interest in buying environmentally friendly products such as environmentally friendly economical vehicles such as electric cars (Wulandari et al., 2022).

Personal Norm

Personal norms are internal standards or guidelines that individuals use to determine their own behavior or evaluate the behavior of others. Personal norms can influence environmental behavior such as saving energy and reducing waste. They state that personal norms can be developed through education and environmental influences, and can be used as a tool to motivate pro-environmental behavior (Schultz et al, 1995). These norms are based on an individual's personal values, beliefs, and principles, and are often shaped by their upbringing, experiences, and social context. Personal norms can be distinguished from social norms, which are external rules and expectations imposed by society or a particular group. While social norms can influence a person's personal norms, personal norms are more individual and may differ from one person to another. Personal norms can motivate individuals to act in a certain way, even when there are no external rewards or punishments. For example, a person may have a personal norm to always tell the truth, even if it is not in his or her best interest to do so. These personal norms may be motivated by beliefs in the importance of honesty and integrity. Personal norms can also be a powerful tool for promoting pro-social behavior and positive change. When individuals adopt personal norms that promote compassion, empathy, and cooperation, they are more likely to engage in behaviors that benefit others and contribute to the greater good. Overall, personal norms are an important aspect of individual decision making and behavior, and can have a significant impact on personal and social outcomes.

Willingness To Adopt

Willingness to adopt refers to a person's readiness or openness to accept and implement new ideas, behaviors, or technologies. Willingness to adopt or readiness to adopt is "a willingness to try something new, whether in the form of ideas or actions" (Rogers, 1962). Having a willingness to adopt can be an important trait in today's rapidly changing world, where new technologies and ideas emerge frequently. This allows individuals to remain competitive and relevant by adapting to changing circumstances and staying up-to-date with the latest developments in their field. In summary, the willingness to adopt is a valuable characteristic that allows individuals to thrive in today's ever-evolving world. Aim to buy harmless to the ecosystem items is one sort of harmless to the ecosystem conduct that reflects purchaser worry for the climate (Wachidatun Tara Gading et al., 2024).

Hypothesis Development

1. The Influence of Biospheric Values on Personal Norms

This research shows that there is a positive and significant influence between Biospheric Value on Personal Norms regarding interest in adopting electric cars among the general public. This research is in line with the results found by (Wedayanti and Ardani 2020). With this, it can be seen that Biospheric Value can help build positive Personal Norms, because the general public is more likely to be interested in adopting electric cars.

2. Influence of Ascription of Responsibility on Personal Norms

The influence of the Ascription of Responsibility on Personal Norms shows positive and significant results, supported by research conducted by (Justica & Lestari, 2021). An Ascription of

Responsibility can increase the trust of the general public and help introduce electric cars as environmentally friendly vehicles.

3. Influence of Biospheric Value on Willingness To Adopt

The influence of Biospheric Value on Willingness to Adopt shows negative and insignificant results. It is felt that Biospheric Value cannot increase consumer interest in adopting electric cars. These outcomes are consistent with research carried out by (Santoso et al, 2019).

4. Effect of Ascription Of Responsibility on Willingness To Adopt

The next results show that the Ascription of Responsibility has a positive effect on Willingness to Adopt. Supported by research conducted (Alinda, D. N., & Hambalah, F. 2022). With this, it can be seen that the Ascription of Responsibility can motivate the general public to adopt electric cars.

5. Influence of Personal Norms on Willingness To Adopt

This research shows that there is a positive and significant influence between Personal Norm and Willingness to Adopt. This research is in line with the results found by (Manalu and Akbar, 2020) stating that the general public's perception of personal norms has a strong impact on the decision to adopt electric cars.

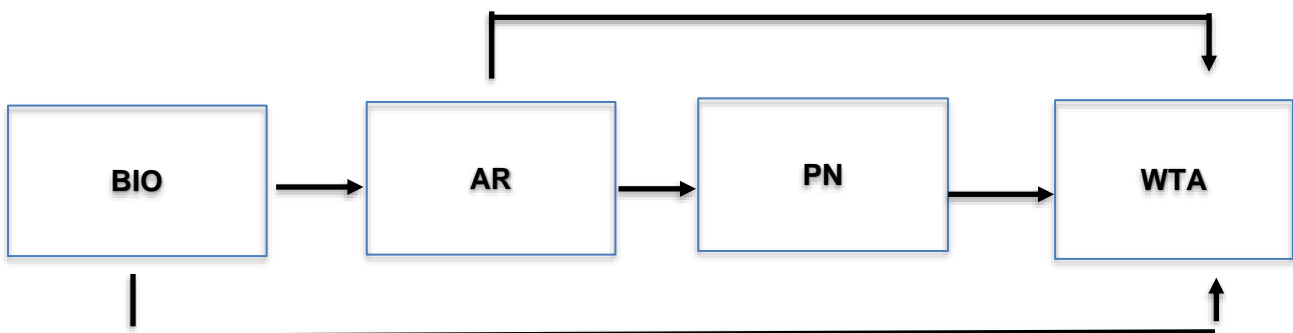
6. Do Personal Norms mediate the influence of Ascription Of Responsibility on Willingness To Adopt

Personal Norms can function as a mediator between Ascription of Responsibility and Willingness to Adopt, and can help explain why some individuals are more likely to take actions that are in accordance with their personal values rather than actions that are considered appropriate by others or by society at large. Therefore, the results can be drawn, namely that Personal Norms can mediate the influence of Ascription of Responsibility on Willingness to Adopt.

7. The influence of Personal Norms mediates the relationship between Biospheric Value and Willingness To Adopt

Statistical results show that Personal Norm mediates the influence of Biospheric Value on Willingness to Adopt. These outcomes demonstrate the reality of the speculation which expresses that Individual Norm intercedes the impact of Biospheric Worth on Readiness to Take on. These outcomes are in accordance with research directed by Chen et al., (2019) which shows that Individual Norm intervenes the connection between Biospheric Worth and Readiness to Embrace.

FRAMEWORK



Pict .1 Framework

Information:*Biospheric Values (Bio)**Ascription Of Responsibility (AR)**Personal Norm (PN)**Willingness To Adopt (WTA)***RESEARCH METHOD**

The type of research that will be carried out is quantitative research using survey methods. The population in this study is the general public. The sample size for this research was 140 respondents from the general public. This research data was collected using a questionnaire because this research is research using quantitative methods. Data analysis in this research was carried out using the Partial Least Square (PLS) method using SmartPLS version 3.0 software. PLS-SEM is used because in empirical research human resource management has been widely used to test hypotheses proposed in a study (Ringle et al., 2020).

Sampling technique

In this study, non-probability sampling was applied with a purposive sampling technique, including a sampling technique which was carried out by determining a sample from a population based on certain criteria, namely age, education level, occupation, income and gender of respondents who had filled out the questionnaire.

Validity and Reliability Test

Validity testing is used to measure whether a questionnaire is valid or not. A questionnaire will be believed to be valid if the questionnaire statement can explain something that the questionnaire wants to measure. Meanwhile, the reliability test aims to identify how good the results of measurements with similar objects will produce similar data. In this research, we look for the level of reliability by applying the help of the Smart Pls program. With a Cronbach Alpha value of more than 0.6 the data can be said to be reliable, if the Cronbach Alpha value is less than 0.6 the data is said to be unreliable.

Hypothesis Testing

This research develops the following hypothesis:

H1: It is suspected that the Biospheric Values variable has a significant effect on the Ascription of Responsibility

H2: It is suspected that the Ascription of Responsibility variable has a significant effect on Personal Norm

H3: It is suspected that the Personal Norm variable has a significant effect on Willingness to Adopt

H4: It is suspected that the Ascription of Responsibility variable has no significant effect on Willingness to Adopt

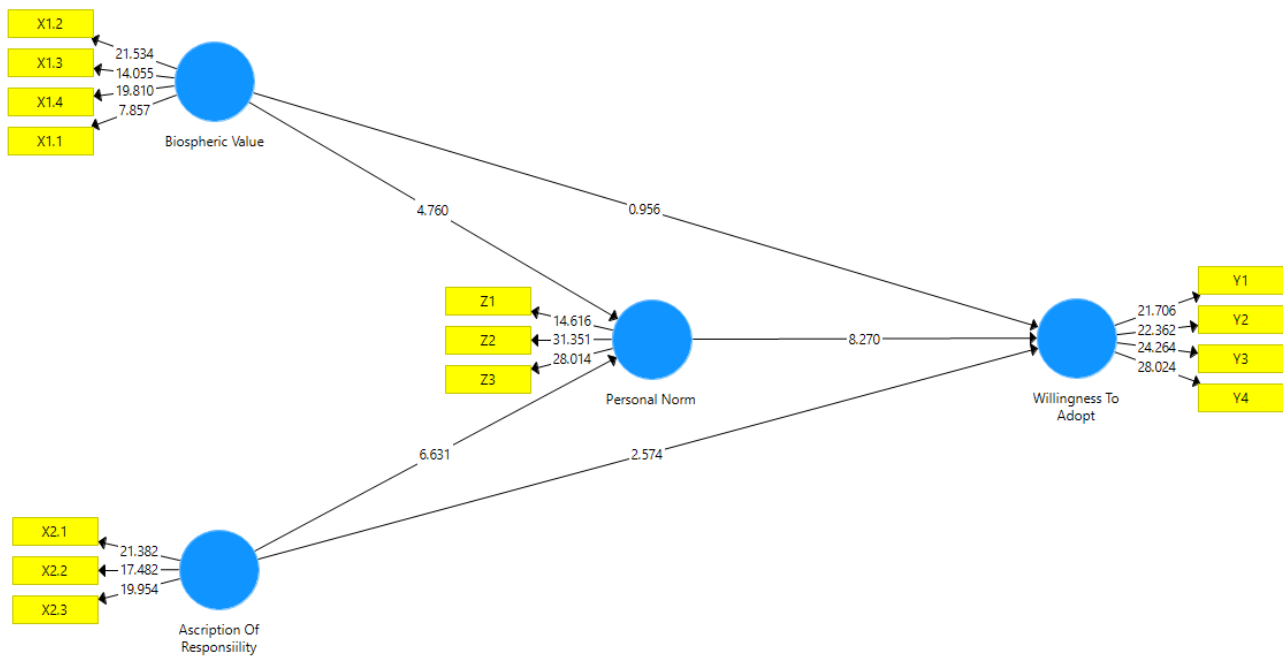
H5: It is suspected that the Biospheric Values variable has a significant effect on Willingness to Adopt

H6: It is suspected that Personal Norms can mediate the influence of the Ascription of Responsibility on Willingness to Adopt

RESULT AND DISCUSSION

This section presents the findings from research based on predetermined hypotheses. The results are explained into several parts of the statement in this research. The first part provides information related to respondents who were used as informants in the research, the second part contains the findings of the Biospheric Value research, the third part is about Ascription of Responsibility, the fourth part is about Personal Norms as an intervening variable, and the fifth part is about Willingness to Adopt.

Outer Model Analysis



Pict 1. Outer Model

The specifications of the relationship between latent variables and their indicators are determined through outer model testing. This test incorporates legitimacy, unwavering quality and multicollinearity.

1. Convergen Validity

A marker is pronounced to meet focalized legitimacy in the great class assuming the external stacking esteem is > 0.7. Coming up next are the external stacking values for every pointer on the examination factors.

Table 1. Outer Loading Mark

Variabel	Indikator	Outer Loading
Biospheric Value	X1.1	0,646
	X1.2	0,760
	X1.3	0,741
	X1.4	0,774
Ascription Of Responsibility	X2.1	0,789
	X2.2	0,753
	X2.3	0,782
Personal Norm	Z1	0,725
	Z2	0,818
	Z3	0,799
Willingness To Adopt	Y1	0,778
	Y2	0,791
	Y3	0,808
	Y4	0,820

Source: Processed Primary Data (2023)

In view of the table above, it is realized that a considerable lot of the markers for each examination variable have an external stacking worth of > 0.7 . Notwithstanding, as indicated by (Jawline, 1998) an estimation size of stacking upsides of 0.5 to 0.6 is viewed as adequate to meet the necessities for concurrent legitimacy. The information above shows that there are no factor pointers whose external stacking esteem is underneath 0.5, so all markers are announced reasonable or legitimate for research use and can be utilized for additional investigation.

Aside from taking a gander at the external stacking esteem, concurrent legitimacy can likewise be surveyed by taking a gander at the AVE (Normal Fluctuation Separated) esteem > 0.5 with the goal that it very well may be supposed to be substantial utilizing united legitimacy (Fornell and Larcker, 1981). Coming up next are the AVE values for every one of the exploration factors:

Table 2. Average Variance Extracted Mark

Variabel	Average Variance Extracted
Biospheric Value (X1)	0,536
Personal Norm (Z)	0,610
Willingness To Adopt (Y)	0,639
Ascription Of Responsibility (X2)	0,600

Source: Processed Primary Data (2023)

In view of the table over, every variable in this study shows an AVE (Normal Fluctuation Removed) esteem, to be specific > 0.5 . Every variable in this exploration has its own worth for Biospheric Value of 0.536, Personal Norm of 0.610, Willingness to Adopt 0.639, and Ascription of Responsibility of 0.600. This demonstrates that the discriminant validity of this study's variables is valid.

2. Discriminant Validity

Cross loading values are used for the discriminant validity test. If the indicator's cross loading value on the variable is greater than that on other variables, it is said to meet discriminant validity (Chin, 1998).

Table 3. Cross Loading

Indikator	Biospheric Value (X1)	Ascription Of Responsibility (X2)	Personal Norm (Z)	Willingness To Adopt (Y)
X1.1	0,646	0,309	0,240	0,196
X1.2	0,760	0,424	0,439	0,454
X1.3	0,741	0,322	0,420	0,299
X1.4	0,774	0,389	0,406	0,370
X2.1	0,314	0,789	0,498	0,454
X2.2	0,359	0,753	0,382	0,377
X2.3	0,483	0,782	0,495	0,491
Z.1	0,399	0,375	0,725	0,493
Z.2	0,346	0,531	0,818	0,610
Z.3	0,499	0,483	0,799	0,616
Y.1	0,457	0,477	0,550	0,778
Y.2	0,377	0,471	0,548	0,791
Y.3	0,339	0,432	0,644	0,808
Y.4	0,347	0,460	0,612	0,820

On the basis of the data in the table above, it can be seen that, in comparison to the cross loading values on the other variables, each indicator in the research variable has the largest cross loading value on the variable it forms. In view of the outcomes got, it very well may be expressed that the markers utilized in this exploration have great discriminant legitimacy in arranging their separate factors.

3. Reability Test (*Composite Reability and Cronbach Alpha*)

Cronbach Alpha and Composite Reliability were used for reliability testing in this study. The part that is used to determine how reliable indicators on a variable are is called composite reliability. A variable can be pronounced to meet composite unwavering quality on the off chance that it has a composite dependability esteem > 0.7. A statistical technique called Cronbach's Alpha is used to measure the internal consistency of instrument reliability tests or psychometric data. As per (Cronbach, 1951) a develop is supposed to be solid on the off chance that the Cronbach alpha worth is more than 0.60.

Table 4. Composite Reability and Cronbach Alpha

Variabel	Composite reliability	Cronbach Alpha
Biospheric Value (X1)	0,821	0,718
Personal Norm (Z)	0,824	0,681
Willingness To Adopt (Y)	0,847	0,811
Ascription Of Responsibility (X2)	0,876	0,675

It can be seen from the table above that the composite reliability value for all of the research variables is greater than 0.7. The Biospheric Worth is 0.821, Individual Norm is 0.824, Readiness to Embrace is 0.847, and Credit of Liability is 0.876. This shows that every variable has met composite dependability so it tends to be inferred that all factors have an elevated degree of unwavering quality.

In view of the table above, it shows that the Cronbach alpha incentive for all factors in this study is above > 0.6, and that implies that the Cronbach alpha worth meets the necessities so the whole build can be supposed to be dependable.

4. Multicollinearity Test

The multicollinearity test should be visible from the resistance worth and change expansion factor (VIF). A cutoff value that demonstrates a tolerance value greater than 0.1 or the same as a VIF value less than 5 can be used to identify multicollinearity.

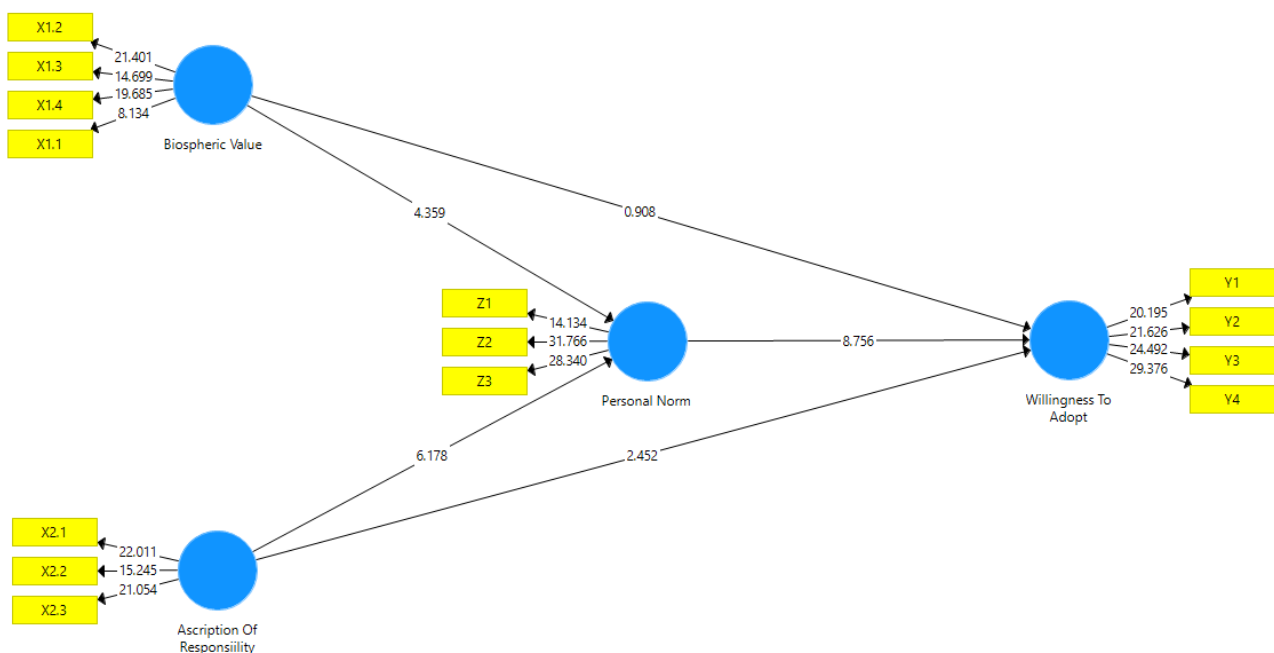
Table 6. Collinearity Statistic (VIF)

Variabel	Willingness To Adopt	Ascription Of Responsibility
Biospheric Value	1,333	1,677
Personal Norm	1,333	1,502
Willingness To Adopt		1,753
Ascription Of Responsibility		

From the table over, the consequences of the Collinearity Measurements (VIF) to see the test for every variable have a removed worth > 0.1 or equivalent to a VIF esteem < 5, so this doesn't disregard the multicollinearity test.

Inner Model Analysis

Internal models are utilized to test the impact between one dormant variable and other idle factors. Measurement of the values of the R2 (R-Square), Godness of Fit (Gof), and Path Coefficient are the three types of analyses that can be used for inner model testing.



Pict 2. Inner Model

1. Goodness Of Fit

Table 7. R-square

Contract	R-square	R-square Adjusted
Personal Norm	0,430	0,422
Willingness To Adopt	0,575	0,567

The results from the table above, the R-square of the Personal Norm variable is 0.430, which means that the Biospheric Value and Ascription of Responsibility variables together influence trust by 0.430 or 43% in the low category, the rest is explained by other independent variables outside the model. Meanwhile, the value of Willingness to Adopt involvement is 0.575 or 57.5%, which means that the independent variables, namely the Biospheric Value and Ascription of Responsibility variables, together influence trust by 57.5% in the medium category, the rest is explained by other independent variables outside the research discussed. Good of fit research can be determined from the Q square value. By using the following calculations:

$$\begin{aligned}
 Q\text{-square} &= 1-(1-R^2_1) \times (1-R^2_2) \\
 &= 1-(1-0,430) \times (1-0,575) \\
 &= 1-(0,57 \times 0,425) \\
 &= 1-0,24225 \\
 &= 0,75775
 \end{aligned}$$

In view of the estimation results over, the Q-square worth acquired is 0.9617 or 96.17%, demonstrating that the information that can be made sense of by the examination model is 96.17%. While other factors outside of this research account for the remaining 3.38 percent. This research model therefore possesses acceptable goodness of fit.

2. Path Coefficient Test

Table 8. Path Coefisien (Direct Effect)

Hypotesis	Original Sample	t-Statistics	P Values	Information	
Biospheric Value (X1) -> Personal Norm (Z)	H1	0,310	4,359	0,000	Significant Positive
Ascription Of Responsibility (X2) -> Personal Norm (Z)	H2	0,443	6,178	0,000	Significant Positive
Biospheric Value (X1) -> Willingness To Adopt (Y)	H3	0,065	0,908	0,364	Negative Not Significant
Ascription Of Responsibility (X2) -> Willingness To Adopt (Y)	H4	0,189	2,452	0,015	Significant Positive
Personal Norm (Z) -> Willingness To Adopt (Y)	H5	0,591	8,576	0,000	Significant Positive

The main speculation tests whether Biospheric Worth affects Individual Norm. The t-statistic value is 4.359, the influence size is 0.310, and the p-value is 0.000, as shown in the table above. Given

a p-value of less than 0.05 and a t-measurement value greater than 1.96, it is likely that the primary conjecture is accepted.

The subsequent speculation tests whether the Credit of Liability is positive and critical towards Individual Standards. The t-statistic value is 6.178, the effect size is 0.443, and the p-value is 0.000, as shown in the table above. Given a p-value of less than 0.05 and a t-measurement value greater than 1.96, it is likely that the primary conjecture is accepted.

The third speculation tests whether Biospheric Worth affects Ability to Embrace. The impact size is 0.065, the p-worth is 0.364, and the t-measurement esteem is 0.908, as can be seen in the above table. The third hypothesis cannot be rejected if the t-statistic is greater than 1.96 and the p-value is greater than 0.05.

The fourth speculation tests whether the Credit of Liability significantly affects Readiness to Take on. The impact size is 0.189, the p-worth is 0.015, and the t-measurement esteem is 2.452, as can be seen in the above table. Given a p-value of less than 0.05 and a t-measurement value greater than 1.96, it is likely that the primary conjecture is accepted.

The fifth speculation tests whether Individual Norm meaningfully affects Ability to Embrace. The t-statistic value is 8.576, with a large influence of 0.591 and a p-value of 0.000, as shown in the table above. Given a p-value of less than 0.05 and a t-measurement value greater than 1.96, it is likely that the primary conjecture is accepted.

1. *Indirect Effect Test*

Table 9. Indirect Effect

<i>Indirect Effect</i>	<i>Original Sample</i>	<i>t-Statistics</i>	<i>P Values</i>	<i>Keterangan</i>
Ascription Of Responsibility (X2) -> Personal Norm (Z) -> Willingness To Adopt (Y)	0,261	5,329	0,000	Significant Positive
Biospheric Value (X1) -> Personal Norm (Z) -> Willingness To Adopt (Y)	0,183	3,805	0,000	Significant Positive

The sixth speculation tests whether Individual Norm intercedes the connection between Credit of Liability and Eagerness to Embrace. In view of the table above, It demonstrates that the t-value is 5.329, which indicates a value greater than 1.96 and a p value of 0.000, which indicates a value less than 0.05. So it can be concluded that the Ascription of Responsibility towards Willingness to Adopt can be partially mediated by Personal Norms.

The seventh speculation tests whether Individual Norm intervenes the connection between Biospheric Worth and Ability to Take on. In view of the table above, it shows that the t-estimation regard is 3.805, and that infers >1.96 with a p worth of 0.000, and that suggests <0.05. So it can be concluded that Biospheric Value towards Willingness to Adopt can be partially mediated by Personal Norms.

CONCLUSION

Biospheric Value has a significant positive effect on interest in adopting electric cars so that the first hypothesis is supported. The second hypothesis is supported by the fact that Affirmation of Responsibility has a significant positive effect on Personal Norm. The third hypothesis is not supported because the negative impact of Biospheric Value on Willingness to Adopt is not significant. Credit Of Liability meaningfully affects Eagerness To Embrace with the goal that the fourth speculation is upheld. Individual Norm affects Ability To Take on so the fifth speculation is upheld. Individual Standards can intercede the impact of Attribution Of Obligation on Eagerness To Take on.

REFERENCES:

- Ajzen, I. and Fishbein, M. (1977), "Attitude-behaviorrelations: a theoretical analysis and review of empirical research", *Psychological Bulletin*, Vol. 84 No. 5, pp. 888-918.
- Bamberg, S. and Schmidt, P. (2003), "Incentives, morality, or habit? Predicting students' car use for university routes with the models of Ajzen, Schwartz, and Triandis", *Environment and Behavior*, Vol. 35 No. 2, pp. 264-85.
- Barr, S. (2007), "Factors influencing environmental attitudes and behaviors: A UK case study of household waste management", *Environment and Behavior*, Vol. 39 No. 4, pp. 435-73.
- Cowart, K.O., Fox, G.L. and Wilson, A.E. (2008), "A structural look at consumer innovativeness and self-congruence in new product purchases", *Psychology and Marketing*, Vol. 25 No. 12, pp. 1111-30.
- Dahlstrand, U. and Biel, A. (1997), "Pro-environmental habits: propensity levels in behavioral change", *Journal of Applied Social Psychology*, Vol. 27 No. 7, pp. 588-601.
- Eriksson, L., Garvill, J. and Nordlund, A.M. (2006), "Acceptability of travel demand management measures: the importance of problem awareness, personal norm, freedom, and fairness", *Journal of Environmental Psychology*, Vol. 26 No. 1, pp. 15-26.
- Eriksson, L., Garvill, J. and Nordlund, A.M. (2008), "Interrupting habitual car use: the importance of car habit strength and moral motivation for personal car use reduction", *Transportation Research Part F: Traffic Psychology and Behaviour*, Vol. 11 No. 1, pp. 10-23.
- Eurobarometer (2008), "Special Eurobarometer 300/Wave 69.2: 'Europeans' attitudes towards climate change", available at: European Commission: http://ec.europa.eu/public_opinion/archives/ebs/ebs_300_full_en.pdf (accessed 30 September 2008).
- European Commission (2007), "Biofuels progress report: report on the progress made in the use of biofuels and other renewable fuels in the member states of the European Union", European Commission, available at: http://ec.europa.eu/energy/energy_policy/doc/07_biofuels_progress_report_en.pdf (accessed 30 September 2008).
- Fraj, E. and Martinez, E. (2006), "Environmental values and lifestyles as determining factors of ecological consumer behaviour: an empirical analysis", *Journal of Consumer Marketing*, Vol. 23 No. 3, pp. 133-44.
- Gardner, B. and Abraham, C. (2007), "What drives car use? A grounded theory analysis of commuters' reasons for driving", *Transportation Research Part F: Traffic Psychology and Behaviour*, Vol. 10 No. 3, pp. 187-200.
- Hage, O., So" derholm, P. and Berglund, C. (2009), "Norms and economic motivation in household recycling: empirical evidence from Sweden", *Resources, Conservation and Recycling*, Vol. 53 No. 3, pp. 155-65.
- Justica, A., & Lestari, M. T. (2021). Pengaruh Brand Ambassador Nct 127 Terhadap Brand Image Produk Nu Green Tea. *eProceedings of Management*, 8(3).
- Kaiser, F. G., & Shimoda, T. A. (1999). Responsibility as a predictor of ecological behaviour. *Journal of environmental psychology*, 19(3), 243-253.
- Lee, K. (2009), "Gender differences in Hong Kong adolescent consumers' green purchasing behavior", *Journal of Consumer Marketing*, Vol. 26 No. 2, pp. 87-96.
- McKenzie-Mohr, D. (2000), "Fostering sustainable behavior through community-based social marketing", *American Psychologist*, Vol. 55 No. 5, pp. 531-54.

- Nordlund, A.M. and Garvill, J. (2002), "Value structures behind proenvironmental behavior", *Environment and Behavior*, Vol. 34 No. 6, pp. 740-56.
- Nordlund, A.M. and Garvill, J. (2003), "Effects of values, problem awareness, and personal norm on willingness to reduce personal car use", *Journal of Environmental Psychology*, Vol. 23 No. 4, pp. 339-47.
- Pickett-Baker, J. and Ozaki, R. (2008), "Pro-environmental products: marketing influence on consumer purchase decision", *Journal of Consumer Marketing*, Vol. 25 No. 5, pp. 281-93.
- Poortinga, W., Steg, L. and Vlek, C. (2004), "Values, environmental concern, and environmental behavior: a study into household energy use", *Environment and Behavior*, Vol. 36 No. 1, pp. 70-93.
- Roberts, J.A. (1996), "Green consumers in the 1990s: profile and implications for advertising", *Journal of Business Research*, Vol. 36 No. 3, pp. 217-31.
- Steg, L., Dreijerink, L. and Abrahamse, W. (2005), "Factors influencing the acceptability of energy policies: a test of VBN theory", *Journal of Environmental Psychology*, Vol. 25 No. 4, pp. 415-25.
- Santoso, D. A., Erdiansyah, R., & Pribadi, M. A. (2019). Pengaruh Brand Awareness dan Brand Image terhadap Minat Beli Produk Kecantikan Innisfree. *Prologia*, 2 (2), 286.
- Stern, P.C. (1992), "What psychology knows about energy conservation", *American Psychologist*, Vol. 47 No. 10, pp. 1224-32.
- Stern, P.C. (2000), "Toward a coherent theory of environmentally significant behavior", *Journal of Social Issues*, Vol. 56 No. 3, pp. 407-24.
- Tellis, G.J., Yin, E. and Bell, S. (2009), "Global consumer innovativeness: cross-country differences and demographic commonalities", *Journal of International Marketing*, Vol. 17 No. 2, pp. 1-22.
- Thøgersen, J. and Møller, B. (2008), "Breaking car use habits: the effectiveness of a free one-month travelcard", *Transportation*, Vol. 35 No. 3, pp. 329-45.
- UNEP (2007), *Global Environment Outlook (GEO 4): Environment for Development*, United Nations Environment Programme (UNEP) Report.
- Verplanken, B. and Orbell, S. (2003), "Reflections on past behavior: a self-report index of habit strength", *Journal of Applied Social Psychology*, Vol. 33 No. 6, pp. 1313-30.
- Verplanken, B., Aarts, H. and VanKnippenberg, A. (1997), "Habit, information acquisition, and the process of making travel mode choices", *European Journal of Social Psychology*, Vol. 27 No. 5, pp. 539-60.
- Gading, W. T., Kuswati, R., Achmad, N., & Lestari, W. D. (2024). Does Attitude Matters in the Relationship of Green Brand Position and Green Brand Knowledge on Switching Intention of Green Product?. *Journal of Business and Management Studies*, 6(1), 182-193.
- Kuswati, R. (2023, January). Pengaruh Pengetahuan Lingkungan dan Persepsi Risiko Lingkungan Terhadap Konsumsi Berkelanjutan yang dimediasi oleh Kepedulian Lingkungan. In *Prosiding University Research Colloquium* (pp. 548-564).
- Wedayanti, K. A., & Ardani, I. G. A. K. S. (2020). Peran brand image memediasi pengaruh electronic word of mouth dan brand awareness terhadap niat beli. *E-Jurnal Manajemen Universitas Udayana*, 9(6), 2434.
- Wulandari, Y. A., Kuswati, R., Wijayanti, N. A., Qudsiyah, Y. S., & Aini, L. K. (2023, January). Pengaruh Altruistik terhadap Pembelian Hijau: Peran Pemediasi Sikap Eco-Social. In *Prosiding University Research Colloquium* (pp. 952-960).