

THE INFLUENCE OF PRICE VALUE AND PERCEIVED SAFETY ON PURCHASE INTENTION OF POLYTRON ELECTRIC MOTORCYCLE CONSUMERS IN BANDUNG CITY



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Abstract

This study examines the influence of price value and perceived safety on purchase intention among consumers of Polytron electric motorcycles in Bandung City, Indonesia. The research is motivated by a marked decline in Polytron's electric motorcycle sales following the termination of the government's electric vehicle subsidy program in December 2024. Using a quantitative approach with descriptive and verificative methods, data were collected from 110 respondents selected through non-probability purposive sampling, all of whom resided in Bandung, were at least 17 years old, and had prior exposure to or interest in Polytron electric motorcycles. Data were analyzed using validity and reliability tests, classical assumption tests, multiple linear regression, t-tests, F-tests, and the coefficient of determination. The results indicate that price value has a positive and significant effect on purchase intention, and perceived safety also has a positive and significant effect on purchase intention. Simultaneously, both variables significantly influence purchase intention, explaining 48.8% of its variance. Perceived safety emerged as the more dominant predictor. These findings suggest that fair pricing relative to benefits and strong perceptions of product safety are critical levers for stimulating electric motorcycle adoption in the post-subsidy era.

Keywords: Price Value, Perceived Safety, Purchase Intention, Polytron Electric Motorcycle

INTRODUCTION

The growing demand for efficient, low-operating-cost, and environmentally friendly transportation has accelerated the global shift toward electric vehicles, driven by emission-reduction targets and supportive government policy (Magfiroh, 2021). The automotive industry has responded through continuous innovation in electric mobility, with electric motorcycles representing a particularly important segment due to their lower emissions and lower operating costs compared to conventional motorcycles. One prominent player in this segment is PT Hartono Istana Teknologi (Polytron), an Indonesian electronics company established in 1975 that has since diversified into electric vehicles, launching its Fox-R electric motorcycle line in late 2022 as part of a broader business diversification strategy (Polytron, 2022).

Sales data for Polytron electric motorcycles between 2023 and 2025 reveal a concerning trend. Unit sales rose from approximately 18,000 in 2023 to 20,000 in 2024, but fell sharply in 2025, with realization reaching only around 11,000 units against a revised target of 13,500 units. This downturn is widely attributed to the reduction of government subsidies, weakening consumer purchasing power, and continued limitations in charging infrastructure (Dananjaya, 2025). The termination of the national electric motorcycle subsidy program in December 2024 had a particularly significant impact on the market. Reports indicate that Polytron's sales fell by as much as 50% year-to-date compared to the first quarter of 2024. In 2024, Polytron had commanded roughly 30% of the national subsidized electric motorcycle market, with 95% of its unit sales relying on a subsidy of IDR 7 million per unit; once this subsidy ended, many consumers postponed their purchase decisions, judging the unsubsidized price to be too high. In response, Polytron introduced a self-funded subsidy of the same amount to remain competitive, though this measure was intended only as a temporary bridge.

These developments point to a central problem: a decline in purchase intention among Polytron electric motorcycle consumers, driven substantially by external factors such as government policy and consumers' perceptions of economic value. To explain this phenomenon, the present study draws on a combination of grand theories: Consumer Value Theory together with UTAUT2 (an extension of the Technology Acceptance Model), Protection Motivation Theory combined with Perceived Risk Theory, and the Theory of Planned Behavior. Consumer Value Theory, incorporated into UTAUT2, explains price value as a rational, cost–benefit determinant of purchase intent, while Protection Motivation Theory combined with Perceived Risk Theory explains perceived safety as a risk-coping factor that builds consumer confidence toward new vehicle technology; together, the Theory of Planned Behavior frames purchase intention as the resulting behavioral outcome (Andrian & Selamat, 2022; Bauer, 1960).

Price value is expected to significantly affect purchase intention because when consumers judge that the price paid is commensurate with the benefits and quality received, their inclination to purchase increases. Likewise, perceived safety is expected to significantly affect purchase intention, since confidence in the performance and technological safety of an electric vehicle strengthens consumer trust and, in turn, purchase intent. Conversely, when price value is perceived as low, consumers may suspect that a lower price signals

compromises in safety standards, while low perceived safety is expected to weaken purchase intent due to the psychological barrier created by perceived risk (Hidayat et al., 2026).

Based on the sales trends and market phenomena described above, this study is designed to empirically analyze how price value and perceived safety, both individually and jointly, influence the purchase intention of Polytron electric motorcycle consumers in Bandung City. The specific objectives are: (1) to analyze the effect of price value on purchase intention; (2) to analyze the effect of perceived safety on purchase intention; and (3) to analyze the simultaneous effect of price value and perceived safety on purchase intention. Academically, this research is expected to enrich the marketing and consumer-behavior literature, particularly by re-testing UTAUT2 and value-perception frameworks in the context of environmentally friendly products. Specifically, while price value has been widely studied in Indonesian electric-vehicle research, empirical evidence on how perceived safety—particularly battery and charging-related risk perceptions—shapes purchase intention toward domestically produced electric motorcycles such as Polytron remains limited, and this gap is the specific focus this study addresses. Practically, the findings are intended to inform Polytron's marketing strategy—particularly regarding the balance between price and product benefits, safety-related education, and certification communication—as well as to provide input for government policy on subsidies, incentives, and safety regulation to support electric motorcycle adoption in Indonesia.

Bandung City was selected as the research location because of its relevant policy environment, growing charging infrastructure supported by the state electricity company (PLN), and consumer behavior patterns conducive to studying electric vehicle adoption.

REVIEW OF LITERATURE

Price Value

Price value refers to consumers' perception of the balance between the benefits received and the cost incurred to obtain a product. It has been defined as an evaluation of the correspondence between product benefits and the financial sacrifice made by the consumer: the greater the perceived benefit relative to cost, the higher the perceived price value. In the context of electric motorcycles, price value concerns consumers' assessment of whether the price offered corresponds to benefits such as reduced operating costs, electric vehicle technology, product quality, available features, and long-term economic advantages relative to conventional motorcycles. Price value is considered central to shaping consumer behavior—when consumers feel that the price paid is proportionate to the benefit received, purchase intention rises, whereas a perceived mismatch between price and benefit tends to suppress purchase intention. This value-based logic aligns with Consumer Value Theory and UTAUT2's price-value construct, which specifically predicts that the perceived cost–benefit trade-off, rather than price alone, drives technology-adoption intention—distinguishing it from earlier studies that treated price as a standalone deterrent rather than a relative judgment. In this study, price value is measured through three indicators: (1) the product's price is commensurate with its perceived benefits, (2) the product's price is considered fair relative to its quality, and (3) the product's price is commensurate with the overall value it delivers (Hidayat et al., 2026).

Perceived Safety

Perceived safety refers to consumers' perception of the level of safety associated with using a product. It reflects consumers' belief that a product is safe to use and capable of minimizing risks that may arise during use, encompassing perceptions of the security of a vehicle's technology, safety features, and the protection the product affords its user. In the context of electric motorcycles, perceived safety concerns consumer perceptions of battery system safety, the safety of the charging process, protection against risks such as short-circuiting, and the availability of safety features. Because electric vehicles remain a relatively new technology for much of the Indonesian population, perceived safety plays a particularly important role in purchase decisions: greater confidence in product safety corresponds to a higher likelihood of purchase, while doubts about safety tend to lead consumers to delay or avoid the purchase decision altogether. This is consistent with Protection Motivation Theory's threat-appraisal mechanism, though prior studies on electric vehicles have mostly examined safety in terms of physical crash risk; this study instead follows Pham and Tran (2025) in treating perceived safety as a technology-specific risk construct centered on battery and charging systems, which better fits the coping-appraisal process Protection Motivation Theory predicts for new-technology adoption. In this study, perceived safety is measured across five indicators: (1) safety of vehicle use under various riding conditions, (2) safety of the battery system, (3) safety of the charging process, (4) safety of vehicle features, and (5) trust in the brand's product-protection system (Pham & Tran, 2025; Sofya & Purwanto, 2021).

Purchase Intention

Purchase intention describes consumers' tendency to buy a particular product in the future. It has been characterized as the subjective likelihood that a consumer will purchase a product based on their evaluation of it, and alternatively as the psychological readiness of a consumer to make a purchase after weighing various product-related considerations. In the context of Polytron electric motorcycles, purchase intention reflects consumers' desire and tendency to buy the product following an evaluation of its benefits, price, safety, quality, and other characteristics. A high level of purchase intention indicates a greater likelihood that a company will convert that intention into an actual sale. In this study, purchase intention is measured through indicators capturing (1) the desire to purchase in the near future, (2) willingness to consider the purchase, (3) the likelihood of future purchase, and (4) willingness to recommend the product to others (Lin & Shen, 2023).

RESEARCH METHOD

This study adopts a quantitative research method with descriptive and verificative approaches, designed to test previously formulated hypotheses regarding the relationships among price value, perceived safety, and purchase intention. The object of the research is the Polytron electric motorcycle, and the unit of analysis comprises consumers who have sought information about, are aware of, or are considering the purchase of a Polytron electric motorcycle, with a minimum age of 17 years (Ghozali, 2011).

The sampling technique employed was non-probability sampling using a purposive sampling approach, in which respondents were deliberately selected based on criteria ensuring they could provide relevant information for the study. The criteria for respondent

selection were being at least 17 years of age, residing in Bandung City, being aware of or having seen promotions for Polytron electric motorcycles, and having sought information about or expressed interest in electric vehicles. The sample size totaled 110 respondents, exceeding the minimum sample requirement of ten times the number of research indicators—following the rule of thumb that the sample size should be at least ten times the number of measured indicators (17 indicators across the three variables in this study), as commonly applied in regression-based survey research (Hair et al., 2019)—and therefore considered adequate for the multiple regression analysis employed. The questionnaire items were adapted from previously validated instruments—price value from Hidayat et al. (2026), perceived safety from Pham and Tran (2025) and Sofya and Purwanto (2021), and purchase intention from Lin and Shen (2023)—with minor wording adjustments to fit the Polytron electric-motorcycle context. Data collection took place over four weeks, from March to April 2026, through an online questionnaire distributed via Google Forms, chosen for its efficiency in reaching respondents matching the specified criteria within a relatively short period (Gholami et al., 2020).

The study involves three variables: price value and perceived safety as independent variables, and purchase intention as the dependent variable, each measured using a five-point Likert scale ranging from "strongly disagree" to "strongly agree." Data were collected using an online questionnaire, chosen for its capacity to measure psychological constructs such as price value, perceived safety, and purchase intention in a structured, quantitative manner while efficiently reaching a large number of respondents. Once collected, the data were processed through several sequential stages: coding, in which numerical codes were assigned to each response to facilitate data entry; data entry, in which the coded responses were input into statistical software; data editing, in which the data were checked for completeness, consistency, and validity; and data transformation, in which the data were converted into the format required for subsequent analysis (Sugiyono, 2024).

Data analysis comprised descriptive analysis, instrument quality testing, classical assumption testing, and multiple linear regression analysis, all processed using SPSS version 26. Descriptive analysis was used to characterize respondents and describe the distribution of responses for each variable, categorized into five interval levels—very low, low, moderate, high, and very high—based on Likert-scale interval scoring. Validity testing employed Pearson product-moment correlation, with an item considered valid if its calculated *r*-value exceeded the critical *r*-table value of 0.1865 for a sample of 110 respondents, while reliability testing used Cronbach's Alpha with a threshold of 0.60 for acceptable internal consistency. Classical assumption testing included a normality test using the One-Sample Kolmogorov-Smirnov Test, a multicollinearity test based on tolerance and Variance Inflation Factor values, and a heteroscedasticity test using the Glejser method, all necessary to ensure that the regression model would produce unbiased and valid parameter estimates (Sugiyono., 2018).

Multiple linear regression analysis was then used to test the relationship among the variables, following the model $Y = a + b_1X_1 + b_2X_2$, where *Y* represents purchase intention, *a* is the constant, *b*₁ and *b*₂ are the regression coefficients for price value and perceived safety respectively, and *X*₁ and *X*₂ represent price value and perceived safety. Hypothesis testing was conducted using the partial *t*-test, the simultaneous *F*-test, and the coefficient of determination, all evaluated at a 5% significance level. Three hypotheses were tested in this study: that price value has a significant effect on the purchase intention of Polytron electric

motorcycle consumers, that perceived safety has a significant effect on the purchase intention of Polytron electric motorcycle consumers, and that price value and perceived safety simultaneously have a significant effect on the purchase intention of Polytron electric motorcycle consumers (Hu et al., 2025).

RESULTS AND DISCUSSION

Respondent Profile

Of the 110 respondents, all resided in Bandung City, consistent with the sampling criteria. The sample was dominated by males (80.9%) compared to females (19.1%). By age, the largest group was 21–26 years old (53.6%), followed by respondents over 45 years old (21.8%), 17–20 years old (12.7%), 27–32 years old (8.2%), and smaller shares aged 33–38 and 39–44 (1.8% each). By occupation, students (mahasiswa) formed the largest group (43.6%), followed by private employees (19.1%), entrepreneurs (10%), and other occupational categories in smaller proportions. Regarding experience with electric vehicles, 43.6% of respondents had tried an electric vehicle (e.g., through a test drive or borrowing one), 35.5% had never used one, 14.5% had owned or currently owned an electric vehicle, and 6.4% used one regularly.

Table 1.
Respondent Profile

Category	n	%
Gender		
Male	89	80.9
Female	21	19.1
Age		
17–20 years	14	12.7
21–26 years	59	53.6
27–32 years	9	8.2
33–38 years	2	1.8
39–44 years	2	1.8
>45 years	24	21.8
Domicile		
Bandung City	110	100
Occupation		
Student (mahasiswa)	48	43.6
Private employee	21	19.1
Entrepreneur	11	10.0
Other	19	17.3
High school student (pelajar)	5	4.5
Civil servant	3	2.7

Category	n	%
Housewife	2	1.8
Laborer	1	0.9
EV Experience		
Never used	39	35.5
Tried (test drive/borrowed)	48	43.6
Used regularly	7	6.4
Owned/owns	16	14.5

This profile indicates that the typical respondent was a male student aged 21–26 who had at least some direct experience with electric vehicles, suggesting that respondents possessed sufficiently relevant knowledge to provide informed evaluations of the study's constructs.

Validity and Reliability Test Results

Validity testing showed that all items across the three variables produced calculated r-values exceeding the critical value of 0.1865, with $p < .001$, confirming that all items were valid. Reliability testing showed Cronbach's Alpha values above the 0.60 threshold for all three variables, indicating internally consistent measurement.

Table 2.
Validity and Reliability Test Results

Variable	Item r-value range	Cronbach's Alpha
Price Value (X1)	0.788 – 0.857	0.777
Perceived Safety (X2)	0.704 – 0.771	0.781
Purchase Intention (Y)	0.786 – 0.826	0.716

Classical Assumption Test Results

The normality test yielded a significance value of 0.143 (> 0.05), indicating that the regression residuals were normally distributed. The multicollinearity test produced a tolerance value of 0.571 and a VIF of 1.752 for both independent variables, well within acceptable thresholds (tolerance > 0.10 ; VIF < 10), indicating no multicollinearity. The heteroscedasticity test (Glejser method) yielded significance values of 0.977 for price value and 0.062 for perceived safety, both above 0.05, indicating no heteroscedasticity.

Table 3.
Classical Assumption Test Results

Test	Criterion	Result	Interpretation
Normality	Sig. ≥ 0.05	Sig. = 0.143	Residuals normally distributed
Multicollinearity	Tolerance > 0.10 ; VIF < 10	Tolerance = 0.571; VIF = 1.752 (both variables)	No multicollinearity

Test	Criterion	Result	Interpretation
Heteroscedasticity	Sig. ≥ 0.05	X1 Sig. = 0.977; X2 Sig. = 0.062	No heteroscedasticity

These results confirm that the regression model satisfies the classical assumptions required for valid inference.

Descriptive Statistics

Descriptive analysis showed that price value achieved an overall mean of 3.73, categorized as high, indicating that respondents generally perceived Polytron electric motorcycle pricing as commensurate with the benefits received. Perceived safety achieved an overall mean of 3.79, also categorized as high, with the item on brand reputation and trust in product safety receiving the highest individual score (mean 4.03). Purchase intention achieved an overall mean of 3.44, categorized as high, though the item concerning immediate purchase intent scored comparatively lower (mean 3.11) than items concerning recommendation and serious consideration of purchase.

Table 4.
Descriptive Statistics of Research Variables

Variable	Mean range	Overall mean	Category
Price Value (X1)	3.71 – 3.74	3.73	High
Perceived Safety (X2)	3.58 – 4.03	3.79	High
Purchase Intention (Y)	3.11 – 3.73	3.44	High

These results suggest that, despite the sharp decline in actual sales following the subsidy's termination, consumers' underlying attitudes toward Polytron electric motorcycles—in terms of price fairness, safety, and general intention to purchase—remain favorable, pointing to a gap between latent purchase intention and its conversion into actual purchase behavior.

Multiple Regression Results

The regression analysis produced the equation:

$$Y = -0.486 + 0.237X_1 + 0.423X_2$$

The constant of -0.486 has no substantive interpretation, since the independent variables (measured on a 1–5 Likert scale) cannot realistically take a value of zero; it is merely a mathematical artifact of the regression model. The coefficient for price value (0.237) indicates that each one-unit increase in price value is associated with a 0.237-unit increase in purchase intention, holding perceived safety constant. The coefficient for perceived safety (0.423) indicates that each one-unit increase in perceived safety is associated with a 0.423-unit increase in purchase intention, holding price value constant. Because the coefficient for perceived safety is larger than that for price value, perceived safety exerts a relatively stronger influence on purchase intention within this model.

Table 5.
Multiple Linear Regression Results

Model	B	Std. Error	Beta	t	Sig.
(Constant)	−0.486	1.087	—	−0.447	.656
Price Value (X1)	0.237	0.116	0.188	2.050	.043
Perceived Safety (X2)	0.423	0.069	0.561	6.131	< .001

Dependent variable: Purchase Intention

Coefficient of Determination, F-test, and Hypothesis Testing

The coefficient of determination (R^2) was 0.488, indicating that price value and perceived safety jointly explain 48.8% of the variance in purchase intention, with the remaining 51.2% attributable to factors outside the model. In practical terms, an R^2 of 0.488 indicates moderate rather than strong explanatory power: price value and perceived safety are meaningful but partial drivers of purchase intention, and roughly half of consumers' purchasing intent is shaped by factors this model does not capture, such as subsidy policy, charging infrastructure, and broader brand trust. The adjusted R^2 was 0.479. The F-test produced an F-value of 51.044 with a significance level of $p < .001$, confirming that the regression model as a whole is statistically significant and that price value and perceived safety jointly and significantly influence purchase intention (Yu, 2023).

For the partial (t) tests: price value produced a t-value of 2.050 with a significance of 0.043 (< 0.05), leading to rejection of H_{01} and acceptance of H_1 —price value has a significant effect on purchase intention. Perceived safety produced a t-value of 6.131 with a significance of $p < .001$, leading to rejection of H_{02} and acceptance of H_2 —perceived safety has a significant effect on purchase intention. The F-test result (51.044, $p < .001$) supports rejection of H_{03} and acceptance of H_3 —price value and perceived safety simultaneously and significantly affect purchase intention.

Table 6.
Hypothesis Testing Summary

Hypothesis	Relationship	Test statistic	Sig.	R^2	Decision
H1	Price value → Purchase intention	$t = 2.050$	.043	—	H_0 rejected
H2	Perceived safety → Purchase intention	$t = 6.131$	< .001	—	H_0 rejected
H3	Price value & perceived safety → Purchase intention (simultaneous)	$F = 51.044$	< .001	0.488	H_0 rejected

Discussion

The finding that price value significantly influences purchase intention (H_1 accepted) is consistent with prior research showing that consumers' perception of value for money is a robust predictor of purchase behavior across product categories, including e-commerce and electric vehicle contexts (Hidayat et al., 2026; Mitchell, 1999). This finding is also consistent

with previous research indicating that price perception can influence consumers' purchasing decisions and repurchase intentions (Mustama & Nurmansyah, 2025; Kulsum & Nurmansyah, 2025). This finding supports Consumer Value Theory and its incorporation into UTAUT2, which posit that consumers evaluate technology adoption decisions in terms of the trade-off between benefits received and costs incurred. Practically, this result implies that as Polytron consumers perceive the price of the motorcycle as increasingly proportionate to its benefits—efficiency, technology, and long-term savings—their intention to purchase strengthens accordingly (Han & Han, 2023; Hidayat et al., 2026).

The finding that perceived safety significantly influences purchase intention (H2 accepted), and does so more strongly than price value (Pamidimukkala et al., 2024), aligns with prior studies on electric vehicle adoption showing that consumer trust in vehicle safety substantially shapes purchase intent. This result is consistent with the integration of Protection Motivation Theory and Perceived Risk Theory used in this study: because electric motorcycles represent a relatively unfamiliar technology for many Indonesian consumers, perceived risks related to battery safety, charging processes, and overall reliability weigh heavily on the purchase decision (Maghfiroh et al., 2021; Nurdifah, 2025). In standardized terms, perceived safety's effect ($\beta = 0.561$) is roughly three times the magnitude of price value's effect ($\beta = 0.188$), indicating that, unit for unit, safety perception exerts substantially greater pull on purchase intention than pricing perception—a gap sizeable enough to warrant prioritizing safety communication over price positioning in marketing strategy. The particularly high mean score for the item on brand reputation and trust in Polytron's safety systems suggests that brand-level trust functions as a key safety cue for consumers evaluating a still-emerging technology category (Pamidimukkala et al., 2024).

The simultaneous significance of both variables (H3 accepted) reinforces the theoretical framing of this study: price value represents the rational, economic-cognitive dimension of the purchase decision, while perceived safety represents the risk-coping, psychological dimension (Venkatesh et al., 2003; Rogers, 1975), and together—consistent with the Theory of Planned Behavior—they shape the behavioral intention to purchase. With an R^2 of 0.488, the model demonstrates a moderately strong explanatory power, though it also indicates that slightly more than half of the variance in purchase intention is explained by factors outside the two variables studied, such as government subsidy policy, charging infrastructure availability, or brand trust more broadly (Ramadhan et al., 2025).

Notably, despite these favorable perceptions—price value, perceived safety, and purchase intention were all categorized as "high"—actual sales data show a substantial decline following the termination of government subsidies. This divergence suggests that positive attitudinal orientations toward the product do not automatically translate into completed purchases, and that external structural factors (Dananjaya, 2025; Nurdifah, 2025), particularly the affordability gap created by the loss of subsidies, may act as a significant barrier between intention and actual purchase behavior. This observation is consistent with the broader market reports indicating that many consumers postponed purchases specifically due to price concerns following subsidy termination, even while their underlying evaluation of the product's value and safety remained positive (Zeithaml, 1988).

Research Limitation

This study has several limitations. First, the respondents were limited to consumers in Bandung City; therefore, the findings cannot be generalized to consumers in other regions

of Indonesia. Second, this study employed a cross-sectional design, in which data were collected at a single point in time, preventing the observation of changes in consumer purchase intention over time. Third, the data were collected using self-administered questionnaires, making the results susceptible to self-report bias and subjective perceptions. Finally, this study examined only two independent variables, namely price value and perceived safety, whereas other factors such as government subsidy policy, charging infrastructure, brand trust, environmental awareness, and social influence may also influence consumers' purchase intention toward electric motorcycles.

CONCLUSION

This study examined the influence of price value and perceived safety on the purchase intention of Polytron electric motorcycle consumers in Bandung City, using a quantitative approach with 110 respondents selected through purposive sampling. The findings can be summarized as follows. First, consumers' perception of price value was categorized as high, indicating that respondents generally consider the price of Polytron electric motorcycles to be commensurate with the operational benefits and overall quality received. Second, consumers' perception of perceived safety was also categorized as high, with the greatest confidence placed in Polytron's brand reputation and the reliability of technical safety features such as the battery and charging systems. Third, the level of purchase intention was categorized as high overall, though tempered by external factors such as subsidy policy and economic conditions that may still constrain actual purchase behavior. Fourth, price value was found to have a significant partial effect on purchase intention. Fifth, perceived safety was found to have a significant partial effect on purchase intention and emerged as the more dominant of the two predictors. Sixth, price value and perceived safety were found to have a significant simultaneous effect on purchase intention, jointly explaining 48.8% of its variance.

Scientific Implications

This study provides several scientific implications for the development of consumer behavior and electric vehicle adoption research. First, the significant positive effect of price value on purchase intention provides empirical support for Consumer Value Theory and the value-based perspective incorporated into UTAUT2, indicating that consumers' evaluations of whether the price of an electric motorcycle is proportionate to its benefits can shape their intention to purchase. This finding reinforces previous research suggesting that perceived value is an important determinant of electric vehicle purchase intention. Second, the significant effect of perceived safety on purchase intention, with perceived safety emerging as the stronger predictor than price value, extends the understanding of electric motorcycle adoption by highlighting the importance of safety-related perceptions in consumers' behavioral intentions. This finding suggests that the evaluation of emerging vehicle technologies involves not only economic considerations but also consumers' perceptions of risk, protection, and confidence in product safety. Third, the simultaneous significance of price value and perceived safety, with an R^2 of 0.488, demonstrates that economic value and safety perceptions jointly provide meaningful explanatory power for purchase intention, while also indicating that other factors remain relevant in explaining consumer behavior. Thus, this study contributes empirical evidence to the growing literature on electric vehicle

adoption by applying a combined value- and risk-oriented perspective to electric motorcycle consumers in the Indonesian context, particularly in Bandung City.

These findings carry both scientific and managerial implications. Scientifically, future research is encouraged to extend the geographic scope beyond Bandung City to test the consistency of this model, to adopt mixed-methods approaches that combine quantitative analysis with in-depth interviews to uncover deeper psychological motivations behind purchase intention, and to incorporate additional external variables relevant to current market dynamics, such as government incentives, charging infrastructure availability, or brand trust. Managerially, given that perceived safety was the most dominant factor in this study, Polytron is encouraged to strengthen marketing communication that emphasizes battery durability, waterproof certification, and short-circuit protection systems to continue alleviating consumer concerns about new vehicle technology. Regarding price value, the company is encouraged to sustain or refine its self-funded subsidy program and to more widely promote battery-leasing schemes to reduce the upfront cost burden, particularly for younger and student consumer segments. Finally, to convert the currently high level of purchase intention into actual purchase decisions, the company is encouraged to expand test-drive opportunities at campuses, shopping centers, and other strategic locations, as direct product experience can strengthen consumer confidence in performance, comfort, and safety.

Managerial Implications

From a managerial perspective, these findings provide several implications for Polytron and other electric motorcycle manufacturers. Given that perceived safety was the most dominant factor in this study, Polytron is encouraged to strengthen marketing communication that emphasizes battery durability, waterproof certification, and short-circuit protection systems to alleviate consumer concerns about new vehicle technology. Regarding price value, the company is encouraged to sustain or refine its self-funded subsidy program and promote battery-leasing schemes to reduce the upfront cost burden, particularly for younger and student consumer segments. Finally, to convert the relatively high purchase intention into actual purchase decisions, Polytron is encouraged to expand test-drive opportunities at campuses, shopping centers, and other strategic locations, allowing consumers to directly experience the product's performance, comfort, and safety.

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