



FACTORS INFLUENCING THE INTENTION TO PURCHASE BYD ELECTRIC CARS IN INDONESIA USING THE STIMULUS-ORGANISM-RESPONSE (S-O-R) THEORY APPROACH

M. Alimul Kabir Albant¹, Mahrinasari MS², Dorothy RH Pandjaitan³

¹ Magister of Management, Faculty of Economics and Business, University of Lampung, Indonesia

^{2,3}Lecturer, Faculty of Economics and Business, Lampung University, Indonesia

Abstract: The objective of this study is to examine the impact of brand identity, country of origin, perceived risk, and brand image on purchase intention among prospective BYD electric car consumers in Indonesia. The accelerated adoption of electric vehicles (EVs) and the preeminence of emerging brands such as BYD underscore the imperative for a comprehensive understanding of consumer psychological factors within the transformative automotive market. A quantitative approach was employed through an online survey involving 200 respondents across Indonesia who expressed interest in electric vehicles. The data collection period spanned from February to May of 2025. The analysis was conducted using Structural Equation Modeling (SEM) with SmartPLS 4 software. The findings of the study suggest that brand image is the most substantial positive predictor of purchase intention. The brand identity of the aforementioned brand is a critical component in the establishment of its strong brand image, a factor that has been demonstrated to effectively mitigate perceived risk. Contrary to the hypothesis, the study found that neither country of origin nor perceived risk had a significant direct influence on purchase intention. These findings underscore the significance of strategies that prioritize the cultivation of internal brand strength, encompassing identity and image, as the most efficacious approach to stimulate purchase intention within the competitive Indonesian EV market.

Key Words: Purchase Intention, Brand Image, Brand Identity, Perceived Risk, Electric Vehicles, BYD

1.INTRODUCTION

This Amidst the ongoing climate crisis, the electrification of vehicles is widely regarded as one of the most effective and strategic solutions for reducing CO₂ emissions from the transportation sector (Subramanian and Wang, 2021). Various studies have demonstrated the significant potential of battery electric vehicles (BEVs) to reduce overall greenhouse gas emissions compared to conventional fossil fuel-powered cars. As an example, a study conducted by Yale University supports that total indirect emissions from electric vehicles are much lower (Yale University, 2021), while Chinese case study indicates 1% growth in EV sales in a city can lead to 0.096% reduction in CO₂ emissions (Zhao et al., 2023)

The Indonesian government has launched a comprehensive Electric Vehicle Plan and Strategy in recognition of this potential, in line with its commitment to achieve net-zero emissions by 2060 (Tachev, 2023; Uchida et al., 2023). Ambitious targets have been set to achieve 2.2 million electric vehicles on the roads by 2030, supported by various fiscal incentives such as tax breaks and monetary subsidies (Uchida et al., 2023; Tachev, 2023). This initiative has contributed to the substantial expansion of the EV market in Indonesia, with projections indicating that the nation is poised to dominate EV sales within the ASEAN region by 2035 (Mah, 2023).

Consequently, fuel consumption and CO₂ emissions are projected to continue declining (Peters et al., 2011). At this pivotal juncture in the evolution of Indonesia's automotive industry, conducting exhaustive research on the factors propelling consumer adoption of electric vehicles will exert a substantial influence. Recent data from the Indonesian Automotive Industry Association (GAIKINDO) reveals an extraordinary phenomenon, where throughout 2024, BYD, as a new entrant, managed to record sales of 14,243 units and immediately claimed the position as the best-selling electric vehicle brand in Indonesia (Gaikindo, 2024). Therefore, by taking BYD as a phenomenal case study, this research analyses the psychological factors influencing consumer adoption of electric vehicles in Indonesia and tests the relationships between these factors. The objective of this study is to ascertain the pivotal factors influencing consumer purchase intent, thereby providing valuable insights to accelerate and foster positive development in the electric vehicle industry in Indonesia.

Nonetheless, there is still a noticeable gap between the Indonesian electric vehicle market's actual condition and its theoretical potential. While there is growth in the adoption of electric vehicles, their share of the market still remains very small, only 4.99% of total national automotive sales in 2024 (Gaikindo, 2024). This interpretation is supported by Litbang Kompas survey results that showed only 5.5% of Indonesians were willing to embrace an electric vehicle, with the most pronounced interest coming from the regions of Java and Sumatra (Kompas, 2024). So, this indicates that a major adopting factor would be psychologically based consumer perception which would prevent widespread acceptance.

As we address these problems, a noteworthy change is the shift towards Chinese electric vehicle (EV) manufacturers. Evaluation of the sales data between 2022 and 2025 shows that Chinese brands have consistently dominated the Indonesian EV market (Gaikindo, 2025). Notably, BYD joined the passenger vehicle market in 2024 and has experienced tremendous growth, allowing it to quickly claim dominance in the Indonesian market (Gaikindo, 2024). The questions surrounding BYD's rapid success are what factors influence consumer loyalty to this brand amidst difficulties related to EV adoption and stereotypes associated with its country of origin?

The variance gap is the central issue on this study. While studies have been made to look into factors like environmental rewards and social supportive policies which motivate people to make purchases (Abbasi et al., 2021; Degirmenci and Breitner, 2017), works focusing on psychological factors such as brand equity, risk associated with buying and country of origin for leading Chinese brands like BYD in Indonesia are quite rare. Previous research has emphasized the importance of these factors as standalone elements (Mao et al., 2020; Hsieh et al., 2017). Still, a systematic framework that captures interrelations among these four variables using BYD as a case study in Indonesia has yet to be formulated.

To understand fully why this phenomenon occurs, this study uses Stimulus-Organism-Response (S-O-R) theory model by Mehrabian & Russel from 1975. In this framework, Brand Identity and Country of Origin serve as external "Stimuli" impacting consumers' internal states (Li et al., 2023; Moghaddam et al., 2022)). "Organism" in this context refers to Psychological 'Perceived Risk' and 'Brand Image,' which form the organism 's' internal state.' (Mkedder. 2021; Malarvizhi et al., 2022; Kumar et al., 2021) The last consumer reaction referred to is "response" which is measured by intention to purchase (Dabbous and Barakat, 2020; Zhu et al., 2020 The S-O-R framework helps us understand how consumers think and feel about brands and countries. This information can help us understand why people want to buy certain products.

Therefore, the novelty and significance of this study lie in three main aspects. First, this study is one of the first studies to specifically and comprehensively test the S-O-R model on the BYD brand, which is currently a phenomenal new market leader in Indonesia. Second, this study provides a deep contextual understanding of consumer behavior in developing markets like Indonesia, which is transitioning toward electrification. Third, the findings will contribute theoretically to marketing literature and provide valuable and actionable managerial implications for industry practitioners, particularly Chinese brands like BYD, in designing strategies to overcome psychological barriers and accelerate the adoption of electric vehicles in Indonesia.

2. LITERATURE REVIEW

2.1 Brand Identity

Brand identity is a pivotal strategic concept, defined as the perception of how a company wants to be identified. It is shaped by fundamental elements such as culture, vision, personality, and market position (Mindrut, Manolica, and Roman, 2015). This identity is communicated through various components, including logos and marketing materials. The purpose of these components is to create a positive and convincing brand image in the minds of consumers (Bosch et al., 2006).

A strong brand identity has twofold impacts: constructive and protective. Research consistently shows that a strong brand identity positively influences consumers' perceived brand image (Bosch et al., 2006; Jiang et al., 2021) and directly increases purchase intent (Mao et al., 2020; Chen et al., 2021; Zhao & Qiaohong, 2022). At the same time, a well-established brand identity functions protectively by reducing perceived risk. Consumers perceive well-known brands as more trustworthy, which significantly reduces their doubts (Pusa & Uusitalo, 2014; Jiang et al., 2021). Based on evidence from the literature, the following hypothesis is formulated:

H1: Brand identity exerts a positive and significant influence on the purchase intention.

H2: Brand identity exerts a positive and significant influence on the brand image.

H3: Brand identity exerts a negative and significant influence on the perceived risk.

2.2 Country of Origin

Pegan et al. (2022), as cited in Islam and Hussain (2023), describe the impact of country of origin on product perception, quality and risk assessment, noting differences between developed and developing economies. Perception around products from less developed countries tends to be high risk and low quality. In addition to this, Li et al. (2020) as discussed by Islam and Hussain (2023) expounded that there is a varying degree of perceived risk with regard to products and the economic status of the country they originate from. Moreover, consumers utilize COO to measure product value which diminishes risk perception while buying (Adina, Gabriela, & Rosana-Denisa, 2015). COO significantly influences various dimensions of perceived risk including social risk, performance risk, financial risk among others (Basha, Sweeney & Soutar 2015).

The Country of Origin (COO) affects deeply customer's image concerning a certain brand because it shapes their thoughts even before they engage with the product. This effect is changing; unknown brands may enjoy advantages associated with positive image arising from country of

origin whereas famous brands suffer loss when their production relocates to low reputation countries (Koubaa, 2008). Numerous market situations have shown that the image associated with COO has a considerable impact on brand picture, illustrating how important alignment is between both factors in marketing approaches (Haque et al., 2015). Moreover, the influence is especially strong for brands from developed and reputable countries which tend to more easily evoke positive perceptions among consumers (Hien et al., 2020).

The Country of Origin (COO) Remains to be one of dominant factors determining the consumers purchase intention in this era of globalisation (Rezvani et al., 2012). This concept works by forming perception and attitude towards a certain product (Nellikunnel et al., 2017), where several factors related to COO like country reputation and perception about the quality of products has been proven to affect purchasing decisions (Yunus and Rashid, 2016). For luxury items that are high in demand such as cars, the perceived importance of COO tends to rise significantly (Abdolvand and Forough, 2017; Adenan et al., 2018). These attitudes are further shaped by age cohorts, notably millennials who perceive brands manufactured in developed countries as more reputable and higher value offerings qualitatively (Shaari, Hamid, & Mabkhot, 2022). This perception ultimately influences their purchasing decisions. Based on evidence from the literature, the following hypothesis is formulated:

H4: The country of origin exerts a negative and significant influence on perceived risk.

H5: The country of origin exerts a substantial and positive influence on brand image.

H6: The country of origin exerts a significant and positive influence on purchase intention.

2.3 Perceived Risk

Marketing literature underscores the intricate relationship between perceived risk and brand image. One perspective posits that a robust brand image serves to mitigate various perceived risks experienced by consumers (Aghekyan-Simonian et al., 2012; Cakmak, 2016). However, in the context of emerging industries with technologies considered to be in their nascent stages, such as electric vehicles, the inverse viewpoint is more pertinent. In these cases, high perceived risk emerges as the predominant factor that negatively impacts brand image (Jiang et al., 2021).

Perceived risk is defined as the uncertainty faced by consumers when they are unable to predict the consequences of their purchasing decisions (Yee and San, 2011), which includes various components such as financial, performance, and social risks (Jacoby, 1972). This level of risk exerts a substantial influence on consumer behavior and risk avoidance strategies (Dowling and

Staelin, 1994; Matos, Ituassu, and Rossi, 2007). A plethora of studies across various contexts—ranging from the realm of intangible products, as exemplified by Airbnb (Jun, 2020), to the automotive industry (Yee and San, 2011)—have consistently corroborated the substantial negative repercussions of Perceived Risk on attitudes and Purchase Intention (Tseng et al., 2021). Based on evidence from the literature, the following hypothesis is formulated:

H7: Perceived Risk has a negative and significant influence on Brand Image.

H8: Perceived Risk has a negative and significant influence on Purchase Intention.

2.4 Brand Image

Brand image is a well-accepted indicator of purchase intention across different industry settings, as supported by sustained recall in marketing literature. Defined and researched extensively, the brand image brings with it some level of recognition which drives consumer spending (Lien et al., 2015; Kala and Chaubey, 2018) and explains a notable portion of the expenditure's variation (Shafiee et al., 2014; Agmeka et al., 2019; Moslehpour et al., 2022). Perhaps most telling is this influence in the automotive sector. Studies conducted on Iran's automotive industry as well as the Proton brand show consumers often track their intended purchase to the brand's image (Jalilvand and Samiei, 2012; Sulaiman and Chau, 2021). Based on evidence from the literature, the following hypothesis is formulated:

H9: Perceived Risk has a negative and significant influence on Brand Image. Security has a significant effect

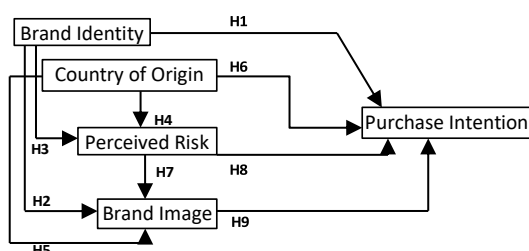


Fig -1: Conceptual Framework

3. METHODOLOGY

This research has a quantitative approach focusing on testing models by analyzing hypothesized variable relationships. The data collection method was using an online questionnaire containing Likert scale questions with a range of one to five regarding the respondents' views. The sample population for this research were Indonesians who owned conventional cars and showed interest in purchasing electric cars. Following the recommendations set forth by Hair et al. (2019) regarding SEM, this study's sample size comprised of 200 respondents. The timeframe for the data collection and distribution was February to

May 2025. The analysis was performed using Structural Equation Modeling which was done through SmartPLS 4.

4. RESULT AND DISCUSSION

4.1 Convergent Validity Result

The validity convergence test measuring the relationship between manifest variables (measurement indicators) within a construct. Convergent validity is determined by the loading factor values for each indicator. Hair et al. (2019) recommend that a loading factor of at least 0.70 and an average variance extracted (AVE) of at least 0.50 be used.

Table -1: Convergent Validity Result

VARIABLE	INDICATOR	LOADING FACTOR	AVE	Ket
<i>Brand Identity</i>	BI1	0,871	0,571	Valid
	BI2	0,810		Valid
	BI3	0,802		Valid
	BI4	0,813		Valid
	BI5	0,820		Valid
<i>Country of Origin</i>	CO1	0,800	0,579	Valid
	CO2	0,745		Valid
	CO3	0,762		Valid
	CO4	0,724		Valid
	CO5	0,725		Valid
	CO6	0,828		Valid
<i>Brand Image</i>	BIF1	0,727	0,562	Valid
	BIF2	0,735		Valid
	BIF3	0,803		Valid
	BIF4	0,744		Valid
<i>Perceived Risk</i>	PR1	0,800	0,575	Valid
	PR2	0,722		Valid
	PR3	0,822		Valid
	PR4	0,824		Valid
	PR5	0,771		Valid
	PR6	0,749		Valid
	PR7	0,800		Valid
	PR8	0,722		Valid
<i>Purchase Intention</i>	PI1	0,779	0,547	Valid
	PI2	0,763		Valid
	PI3	0,796		Valid
	PI4	0,751		Valid
	PI5	0,703		Valid
	PI6	0,702		Valid
	PI7	0,701		Valid

From Table 1 it can be seen that all loading factor values are above 0.70 as well as AVE exceeding 0.50. Hence, we may conclude with confidence that the indicators are reliable and valid for measuring their corresponding constructs.

4.2 Discriminant Validity Result

The Fornell-Larcker Criterion, Cross Loadings and Heterotrait-Monotrait Ratio (HTMT) were used to

evaluate the discriminant validity of the model.

Table -2: Discriminant Validity Result

	BI	BIM	COO	PR	PI
BI					
BIM	0.741				
COO	0.716	0.825			
PR	0.208	0.537	0.638		
PI	0.697	0.223	0.281	0.312	

As shown in Table 2, the values for HTMT under inter-construct relationships are all below 0.90 suggesting that the indicator constructs have adequate discriminant validity.

4.3 Reliability Result

The reliability of the scale was assessed through Cronbach's Alpha (CA) and Composite Reliability (CR). The baseline CA > 0.70 and CR > 0.70 were proposed by Hair et al., (2014).

Table -3: Reliability Result

VARIABLE	CRONBACH'S ALPHA	COMPOSITE REALIABILITY	RESULT
Brand Identity	0.811	0.869	Reliabel
Brand Image	0.935	0.943	Reliabel
Country of Origin	0.878	0.906	Reliabel
Perceived Risk	0.873	0.902	Reliabel
Purchase Intention	0.849	0.881	Reliabel

The data illustrated in Table 3 suggests that all of the constructs demonstrate Cronbach's Alpha scores above 0.70 which indicates strong internal consistency. Moreover, all Composite Reliability scores surpass the threshold of 0.70 confirming these constructs are reliable measures of the latent variables they assess.

4.4 Coefficient Determination (R²) Result

The coefficient of determination (R²) is a statistical measure that quantifies the impact of specific latent independent factors on latent dependent variables.

Table -4: Coefficient Determination (R²) Result

	R-Square	R-Square Adjusted
Purchase Intention	0.928	0.926
Brand Image	0.726	0.723
Perceived Risk	0.596	0.588

The Internal Structure Model Evaluation (Table 4) shows that independent components explain 92.8% of the variation in e-loyalty (R² = 0.928). Similarly, Brand Image

and Perceived Risk show R² values of 0.726 and 0.596, meaning that the contributing elements explain 72.6% and 59.6% of the variance.

4.5 Effect Size (F²) Result

Hair (2022) proposes three thresholds for interpreting impact size: The magnitude of the effect (F²) is categorized as follows: F² > 0.02 (little effect), F² ≥ 0.15 (moderate effect), and F² ≥ 0.35 (big effect).

Table -5: Effect Size (F²)Result

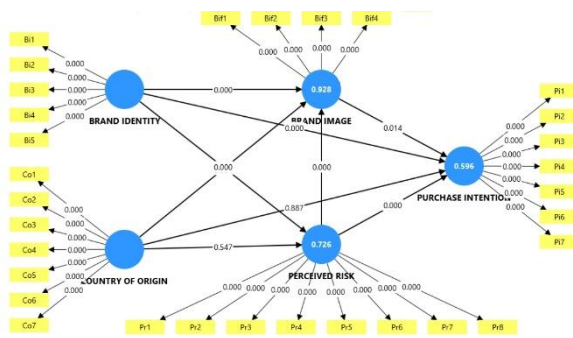
Variable	Effect Size (F ²)
Brand Identity -> Purchase Intention	0.023
Brand Identity -> Brand Image	0.726
Brand Identity -> Perceived Risk	0.428
Country of Origin -> Perceived Risk	0.006
Country of Origin -> Brand Image	0.098
Country of Origin -> Purchase Intention	0.000
Perceived Risk -> Brand Image	0.276
Brand Image -> Purchase Intention	0.042

As demonstrated in Table 5, a considerable number of connections exhibit substantial effect sizes. However, certain linkages have only minor or insignificant impacts, suggesting that particular ties within the model may require additional strengthening to increase overall explanatory power.

4.6 Hypothesis Testing

Table -6: Hypothesis Testing Result

Hypothesis		Original sample (O)	T statistics (O/STDEV)	P values	Result
H1	Brand Identity -> Purchase Intention	0.324	1.682	0.000	Accepted
H2	Brand Identity -> Brand Image	0.547	7.235	0.000	Accepted
H3	Brand Identity -> Perceived Risk	-0.771	5.516	0.000	Accepted
H4	Country of Origin -> Perceived Risk	0.090	0.603	0.547	Rejected
H5	Country of Origin -> Brand Image	0.191	3.182	0.001	Accepted
H6	Country of Origin -> Purchase Intention	0.020	0.143	0.887	Rejected
H7	Perceived Risk -> Brand Image	0.270	5.529	0.000	Rejected
H8	Perceived Risk -> Purchase Intention	-0.008	1.665	0.000	Accepted
H9	Brand Image -> Purchase Intention	0.483	2.466	0.014	Accepted

Fig -1: Bootstrapping results in Smartpls 4

The Effect of Brand Identity on Purchase Intention

The findings of the study demonstrate a positive and significant relationship between brand identity and purchase intention, as evidenced by a path coefficient value of +0.324, a T-statistic of 1.682, and a p-value of 0.000. This finding confirms that a robust and favorable brand identity plays a pivotal role in directly driving and enhancing consumers' purchase intentions toward BYD electric vehicles. Such findings support earlier studies conducted by Mao et al. (2020); Chen et al. (2021), Zhao and Qiaohong (2022) in which, consumers tend to purchase from brands with well-established clear identities and brand prevalence.

The Effect of Brand Identity on Brand Image

The study results suggest that brand identity and brand image have a positive correlation with each other while also being statistically significant for BYD brand. This hypothesis can be accepted and has a positive path coefficient of +0.547, very high T-statistic value 7.235, and p-value equal to 0.000. Thus, it is verified that BYD's strategic efforts in building brand identity with its vision, communication, design and technology have successfully been able to create strong and positive brand image of BYD as an advanced technology automobile manufacturer within consumers' mind. Moreover, these findings are in agreement with prior research which also indicate that brand identity remains one of the most essential elements on which several industrial brands build their images (Mindrut et al., 2015; Bosch et al., 2006; Jiang et al., 2021)

The Effect Brand Identity on Perceived Risk

Hypothesis testing results show that brand identity negatively influences the perception of risk associated with owning a BYD electric car—albeit there is low perception of risk attached. This relationship is confirmed by a path coefficient value of -0.771, T-statistic value at 5.516, P value at 0.000. From these findings it can be said that BYD brand identity does reduce customer uncertainty and risk associated with the product purchase. These findings support earlier work where

strong perceived brand identity was found to reduce perceived risk across industry sectors (Pusa and Uusitalo, 2014; Jiang et al., 2021).

The Effect of Country of Origin on Perceived Risk

As for H4 testing, Country of Origin (COO) does not significantly influence Perceived Risk in relation to BYD electric cars, corroborated by a T-statistic value of 0.603 which is below the mark of 1.645 and P-value equal to 0.547 surpassing significance cut-off at .05. The modest positive path coefficient reinforcing this hypothesis at +0.090 strengthens Country of Origin (China) further proposing it could lessen perceived consumer risk. This outcome, therefore, disproves hypothesis H4. While previous studies suggest that COO affects risk perception (Pegan et al., 2022; Li et al., 2020), this particular finding indicates that to some extent, for Indonesian consumers, other more salient considerations like brand image or the product's reputation and its quality likely dominate over risk perception

The Effect of Country of Origin on Brand Image

Findings from H5 highlight that the Country of Origin (COO) impacts significantly and positively on the Brand Image for BYD mark. By using a positive path coefficient value of +0.191, a T-statistic value of 3.182 which is greater than critical T-value of 1.645, and P-value of 0.001 which is lower than .05, supports this claim strongly. The findings further suggest that Indonesian consumers' perception of China as BYD's country of origin greatly influences the brand image in Indonesia confirming the H5 hypothesis. This confirms previous works emphasizing COO's impact on brand image across multiple markets (Koubaa, 2008; Haque et al., 2015; Hien et al., 2020).

The Effect of Country of Origin on Purchase Intention

The results obtained from the hypothesis testing indicate that the Country of Origin (COO) variable did not have a statistically significant influence on the purchase intention of BYD automobiles. This is supported by a T-statistic value of 0.143, which is less than 1.96, and a P-value of 0.887, well over 0.05. Although there is almost no association as demonstrated by the path coefficient with a positive value (+0.020), all the findings remain consolidated towards disregarding the country of origin being a decisive factor to increase consumer purchase intention for BYD automobiles and thus rejecting Hypothesis This contradicts earlier research highlighting the COO's role in buying behavior (Rezvani et al., 2012; Yunus and Rashid, 2016; Abdolvand and Forough, 2017) which in the case of BYD does imply that other factors like product quality combined with more

aggressive marketing strategies are more influential than consumer expectations in Indonesia

The Effect of Perceived Risk on Brand Image

The results from the testing of the hypotheses show consistent with their expectations and proof can be found in a negative and significant relationship between perceived risk and brand image. This claim is true since there is strong statistical evidence as shown by a positive path coefficient value of -0.270 with t-statistic of 5.529 and p-value of 0.000. So, Hypothesis 11 is accepted now. The finding supports previous researches conducted by Jiang et al., 2021 where they noted an interesting situation/special feature that higher perceived risks are associated with more positively viewed brand images

The Effect of Perceived Risk on Purchase Intention

From these hypothesis test results it can be concluded further that Perceived Risk negatively impacts Purchase Intention toward BYD electric cars, thus affirming H8. The strength of the argument is supported by a T-statistic of 1.665, which surpasses the critical threshold of 1.645, along with a P-value of 0.000, which is significantly lower than the 0.05 mark. Such results are in line with earlier studies that show perceived risk negatively impacts consumer purchasing intention (Jacoby, 1972; Yee and San, 2011; Jiang et al., 2021).

The Effect of Brand Image on Purchase Intention

Based on the hypothesis testing results, it is demonstrated that brand image positively and significantly influences purchase intention for BYD electric cars and thus supports H9. This proposition was thoroughly validated by empirical evidence including a positive path coefficient (affective index) of +0.483 and a T-statistic value of 2.466, which exceeds the critical T-value of 1.645 coupled with a P-value of 0.014 (below 0.05). This study finds strong evidence for the relationship between the brand image equity of BYD and consumers' intentions to buy its products. To put it simply, strengthened perceptions regarding image positively influence purchase intentions (Lien et al., 2015; Shafiee et al., 2014) this aligns well with existing literature about drivers of purchase intention and specifically within auto brands focused context (Jalilvand and Samiei, 2012).

5 CONCLUSION

This research investigates the factors affecting purchase intention for BYD electric cars in Indonesia. It focuses on brand identity, perceived risk, image, and country of origin (COO) through a BYD focused Indonesia case study using Jiang et al. 2021 and Islam &

Hussain 2023 works as a conceptual framework. The analysis results suggest that a strong brand image most significantly drives consumer purchase intention. The positive brand image is maintained by implementing strong brand identity which helps reduce perceived risk. Interestingly, OC and self-perceived risk as two external factors did not exert any significant direct effect towards the purchase intention. This implies that Indonesian consumers are predominantly influenced by internal brand equity rather than stereotypes about the country of origin or general risk concerns.

REFERENCES

- Abbasi, H. A., Johl, S. K., Shaari, Z. B., Moughal, W., Mazhar, M., Musarat, M. A., & Borovkov, A. (2021). Consumer motivation by using unified theory of acceptance and use of technology towards electric vehicles. *Sustainability*, 13(21), 12177. <https://doi.org/10.3390/su132112177>
- Abdolvand, M. A., & Forough, A. (2017). Investigation the effect of country-of-origin on consumer perception and purchase intention of luxury brands: Case study – Luxury branded of Switzer watches. *Journal of Accounting & Marketing*, 6(1), Article 255. <https://doi.org/10.4172/2168-9601.1000255>
- Adenan, M. A., Ali, J. K., & Rahman, D. H. (2018). Country of origin, brand image and high involvement product towards customer purchase intention: Empirical evidence of East Malaysian consumer. *Jurnal Manajemen dan Kewirausahaan*, 20(1), 63–72. <https://doi.org/10.9744/jmk.20.1.63-72>
- Adenan, M. A., Ali, J. K., & Rahman, D. H. (2018). Country of origin, brand image and high involvement product towards customer purchase intention: Empirical evidence of East Malaysian consumer. *Jurnal Manajemen dan Kewirausahaan*, 20(1), 63–72. <https://doi.org/10.9744/jmk.20.1.63-72>
- Adina, C., Gabriela, C., & Roxana-Denisa, S. (2015). Country-of-origin effects on perceived brand positioning. *Procedia Economics and Finance*, 23, 422–427. [https://doi.org/10.1016/S2212-5671\(15\)00383-4](https://doi.org/10.1016/S2212-5671(15)00383-4)
- Aghekyan-Simonian, M., Forsythe, S., Kwon, W., & Chattaraman, V. (2012). The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. *Journal of Retailing and Consumer Services*, 19(3), 325–331. <https://doi.org/10.1016/j.jretconser.2012.03.006>
- Agmeka, F., Wathoni, R., & Santoso, A. (2019). The influence of discount framing towards brand reputation and brand image on purchase intention and actual behavior in e-commerce. *Procedia Computer Science*, 161, 851–858. <https://doi.org/10.1016/j.procs.2019.11.192>

- Ahmed, Z., & Johnson, J. P. (2004). Does country of origin matter for low-involvement products? *International Marketing Review*, 21(1), 102–120. <https://doi.org/10.1108/02651330410522925>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Andersson, O., & Pal, B. (2021). The greenhouse gas emissions of an electrified vehicle combined with renewable fuels: Life cycle assessment and policy implications. *Applied Energy*, 299, 116621. <https://doi.org/10.1016/j.apenergy.2021.116621>
- Arif, S. M., Lie, T. T., Seet, B. C., Ayyadi, S., & Jensen, K. (2021). Review of electric vehicle technologies, charging methods, standards and optimization techniques. *Electronics*, 10(16), 1910. <https://doi.org/10.3390/electronics10161910>
- Baek, T. H., Kim, J., & Hyunjae, J. (2010). The differential roles of brand credibility and brand prestige in consumer brand choice. *Psychology & Marketing*, 27(7), 662–678. <https://doi.org/10.1002/mar.20350>
- Basha, N. K., Sweeney, J. C., & Soutar, G. (2015). Effects of country and delivery mode on perceived risk in international higher education. *Journal of Marketing for Higher Education*, 25(2), 171–203. <https://doi.org/10.1080/08841241.2015.1031313>
- Bernard, K., & Munasinghe, S. (2020). The influence of Facebook marketing on consumer buying intention of clothing: Evidence from young adults. *Archives of Business Research*, 8(9), 191–206. <https://doi.org/10.14738/abr.89.8992>
- Bettman, J. R. (1973). Perceived risk and its components: A model and empirical test. *Journal of Marketing Research*, 10(2), 184–190. <https://doi.org/10.2307/3149824>
- Bilkey, W. J., & Nes, E. (1982). Country-of-origin effects on product evaluations. *Journal of International Business Studies*, 13(1), 89–100. <https://doi.org/10.1057/palgrave.jibs.8490539>
- Blanco-Encomienda, F. J., Chen, S., & Molina-Muñoz, D. (2023). The influence of country-of-origin on consumers' purchase intention: A study of the Chinese smartphone market. *Asia Pacific Journal of Marketing and Logistics*. <https://doi.org/10.1108/APJML-05-2023-0462>
- Bosch, J., Venter, E., Han, Y., & Boshoff, C. (2006). The impact of brand identity on the perceived brand image of a merged higher education institution: Part one. *Management Dynamics*, 15(3), 10–29.
- Broom, D., & Gray, A. (2022, October 25). What is the Paris Agreement? Everything you need to know. Retrieved from World Economic Forum: <https://www.weforum.org/agenda/2020/11/paris-agreement-climate-change-us-biden>
- Cakmak I. (2016). The role of brand awareness on brand image, perceived quality and effect on risk in create brand trust. *Global Journal on Humanities & Social Sciences*, 2(2), 183–192. <https://doi.org/10.18844/prosoc.v2i2.441>
- Chen, J., Zhang, Z., Zhao, C., Zhang, S., Guo, W., Lu, C., & Sun, X. (2024). Research on the purchase intention of electric vehicles based on customer evaluation and personal information. *World Electric Vehicle Journal*, 15(1), Article 9. <https://doi.org/10.3390/wevj15010009>
- Chen X., Shen, X., Huang, X., & Li, Y. (2021). Research on social media content marketing: An empirical analysis based on China's 10 metropolis for Korean brands. *SAGE Open*, 11(4), 1–18. <https://doi.org/10.1177/21582440211052951>
- Cooper, D., & Schindler, P. (2013). *Business research methods* (12th ed.). New York, NY: McGraw-Hill/Irwin.
- Counterpoint. (2024, May 13). Global EV sales jump 18% in Q1 2024 on PHEV momentum, China leads with 28% YoY growth. Retrieved from <https://www.counterpointresearch.com/insights/global-ev-market-q1-2024/>
- Dabbous, A., & Barakat, K. A. (2020). Bridging the online offline gap: Assessing the impact of brands' social network content quality on brand awareness and purchase intention. *Journal of Retailing and Consumer Services*, 53, 101966. <https://doi.org/10.1016/j.jretconser.2019.101966>
- Damara, D. (2021, July 24). 4 tahun Wuling di Indonesia, intip realisasi investasi hingga inovasinya. Retrieved from <https://otomotif.bisnis.com/read/20210724/275/1421379/4-tahun-wuling-di-indonesia-intip-realisasi-investasi-hingga-inovasinya>
- De Matos, C. A., Ituassu, C. T., Alberto, C. F., & Rossi, C. A. V. (2007). Consumer attitudes toward counterfeits: A review and extension. *Journal of Consumer Marketing*, 24(1), 36–47. <https://doi.org/10.1108/07363760710720975>
- Degirmenci, K., & Breitner, M. H. (2017). Consumer purchase intentions for electric vehicles: Is green more important than price and range? *Transportation Research Part D: Transport and Environment*, 51, 250–260. <https://doi.org/10.1016/j.trd.2017.01.001>
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product

evaluations. *Journal of Marketing Research*, 28(3), 307–319.

Dowling, G. R., & Staelin, R. (1994). A model of perceived risk and intended risk-handling activity. *Journal of Consumer Research*, 21(1), 119–134.

Dutta, B., & Hwang, H.-G. (2021). Consumers' purchase intentions of green electric vehicles: The influence of consumers' technological and environmental considerations. *Sustainability*, 13(21), 12025. <https://doi.org/10.3390/su132112025>

Economic Research Institute for ASEAN and East Asia. (2024). *Potential utilisation of fuel ammonia in ASEAN countries*. Jakarta: Economic Research Institute for ASEAN and East Asia.

Enda. (2024, February 20). Daftar mobil listrik Wuling di Indonesia, Wuling Cloud EV melengkapi lini A B C. Retrieved from <https://www.autofun.co.id/berita/daftar-mobil-listrik-wuling-di-indonesia-wuling-cloud-ev-melengkapi-lini-a-b-c-77597>

Eng, T.-Y., Ozdemir, S., & Michelson, G. (2016). Brand origin and country of production congruity: Evidence from the UK and China. *Journal of Business Research*, 69(12), 5703–5711. <https://doi.org/10.1016/j.jbusres.2016.01.045>

Foroudi, P., Dinnie, K., Kitchen, P. J., Melewar, T. C., & Foroudi, M. M. (2017). IMC antecedents and the consequences of planned brand identity in higher education. *European Journal of Marketing*, 51(3), 528–550. <https://doi.org/10.1108/EJM-08-2015-0527>
Gabungan Industri Kendaraan Bermotor Indonesia. (2024, January 10). Penjualan mobil domestik melambat sepanjang 2023. Retrieved from <https://gaikindo.or.id/penjualan-mobil-domestik-melambat-sepanjang-2023/>

Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 25(3), 351–370. <https://doi.org/10.2307/3250921>

Chang, H. H., & Chen, S. W. (2008). The impact of customer interface quality, satisfaction and switching costs on e-loyalty: Internet experience as a moderator. *Computers in Human Behavior*, 24(6), 2927–2944. <https://doi.org/10.1016/j.chb.2008.04.014>

Gong, Y., Xiao, J., Tang, X., & Li, J. (2023). How sustainable marketing influences the customer engagement and sustainable purchase intention? The moderating role of corporate social responsibility. *Frontiers in Psychology*, 14, Article 1128686.

<https://doi.org/10.3389/fpsyg.2023.1128686>

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). *Multivariate data analysis* (8th ed.). Hampshire, UK: Annabel Ainscow.

Hair J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R*. Cham, Switzerland: Springer Nature

He Z., Zhou, Y., Wang, J., & others. (2023). Influence of emotion on purchase intention of electric vehicles: A comparative study of consumers with different income levels. *Current Psychology*, 42, 21704–21719. <https://doi.org/10.1007/s12144-022-03253-1>

Hien N., Phuong, N., Tran, T., & Thang, L. (2020). The effect of country-of-origin image on purchase intention: The mediating role of brand image and brand evaluation. *Management Science Letters*, 10(6), 1205–1212. <https://doi.org/10.5267/j.msl.2019.11.038>

Hoang, T. T., Pham, T. H., & Vu, T. M. H. (2022). Examining customer purchase decision towards battery electric vehicles in Vietnam market: A combination of self-interested and pro-environmental approach. *Cogent Business & Management*, 9(1), Article 2141671. <https://doi.org/10.1080/23311975.2022.2141671>

International Energy Agency. (2024). *CO₂ emissions in 2023*. Paris: IEA. Retrieved from <https://www.iea.org/reports/co2-emissions-in-2023>

Islam, T., & Hussain, M. (2023). How consumer uncertainty intervene country of origin image and consumer purchase intention? The moderating role of brand image. *International Journal of Emerging Markets*, 18(11), 5049–5067. <https://doi.org/10.1108/IJOEM-08-2021-1194>

Appendix Questionnaire:

Name:

Age

1. Under 30
2. 31 to 40
3. 41 to 50
4. Above 50

Gender

1. Male
2. Female

Education:

1. High School diploma or lower education
2. Diploma 1
3. Diploma 3
4. Bachelor's degree
5. Master's degree
6. Others

Work Experience:

1. Under 5 years
2. 6 to 15 years
3. 16 to 25 years
4. 26 to 30 years
5. Above 30 years

What is your occupation?

- a. Employee
- b. Private employee
- c. Entrepreneur
- d. Freelancer
- e. Student

Have you ever bought a car (gasoline/diesel/electric) before?

- a. Yes (If yes, continue)
- b. No (If no, exit)

Have you ever looked for information about electric cars?

- a. Yes
- b. No

If you had the opportunity to choose, which Chinese electric car brand would you be interested in buying?

- c. BYD
- d. Wuling

Where is the BYD electric car from?

- a. China (Proceed to the BYD construction question)
- b. Korea

Items	Reference
BRAND IDENTITY 1. BI1: I feel that driving a BYD electric car reflects my social status. 2. BI2: I feel that driving a BYD electric car allows me to gain respect. 3. BI3: I feel a strong connection to BYD electric cars. 4. BI4: I feel that the personality of BYD electric cars suits my taste. 5. BI5: I would feel proud if BYD electric cars achieved something	Chen, Shen, Huang, & Li, 2021; Jian, Wei, Guan, & Yang, 2021
COUNTRY OF ORIGIN 1. COO1: I feel that the country of origin of BYD electric cars is innovative in manufacturing. 2. COO2: I feel that the country of origin of BYD electric cars is technologically advanced. 3. COO3: I feel that the country of origin of BYD electric cars excels in design. 4. COO4: I feel that the country of origin of BYD electric cars is a country that produces high-quality jobs. 5. COO5: I feel that the country of origin of BYD electric cars is seen as a developed country. 6. COO6: I feel that the country of origin of BYD electric cars is creative in its production activities. 7. COO7: I feel that the country of origin of BYD electric cars has high-quality professional experts.	Hien, Phoung, Tran, & Thang, 2020; Yasin, Noor, & Mohamad, 2007
PERCEIVED RISK 1. PR1: I feel that buying a BYD electric car carries a high risk. 2. PR2: I feel that there is a high possibility that a BYD car will not perform as expected. 3. PR3: I feel that spending money on an electric car may be a bad decision. 4. PR4: I need a lot of information about BYD electric cars before I buy one. 5. PR5: I never knew how good BYD electric cars were before I bought one. 6. PR6: I feel that the quality of BYD electric cars is not worth the price. 7. PR7: I feel that BYD cars have not met my expectations. 8. PR8: I am worried that buying a BYD electric car will cause problems.	Baek, Kim, & Hyunjae, 2010; Jiang, Wei, Guan, & Yang, 2021; De Matos, Ituassu, Alberto, & Rossi, 2007
BRAND IMAGE 1. BIF1: I feel that BYD electric cars are a good choice of vehicle for my needs. 2. BIF2: I feel that BYD electric cars are what I would expect from an electric car. 3. BIF3: I feel positive about BYD cars. 4. BIF4: I feel that BYD electric cars meet my needs.	Jian, Wei, Guan, & Yang, 2021; Shafiee, Sanayei, Shahin, & Dolatabadi, 2014
PURCHASE INTENTION 1. PI1: I would buy a BYD electric car over other available brands. 2. PI2: I would recommend BYD electric cars to others. 3. PI3: I intend to buy a BYD electric car in the future. 4. PI4: I have a desire to buy a BYD electric car. 5. PI5: I am very interested in buying a BYD electric car. 6. PI6: There is a high possibility that I will buy a BYD electric car. 7. PI7: I would recommend a BYD electric car to my friends if I bought one.	Kalla & Chaubey, 2018; Suhud, Allan, Rahayu, & Prihandono, 2022