The Journal of Asia Entrepreneurship and Sustainability RESEARCH ARTICLE

Packaging Elements and Private Label Purchase Decisions in India: The Mediating Roles of Perceived Quality, Trust, and Perceived Value

Ashok. R[1*], Chiranth K M [2], Shamanth N[3], Anil Kumar G[4], Kavitha B.N[5]
[1*]Research Scholar, [2 3 4 5] Assistant professor
[1 2 4 5] Department of Management Studies, Visvesvaraya Technological University, Belagavi, India.
[3]Department of Management Studies, Karnataka State Open University, Mysuru, India.

Abstract
This study investigates how packaging elements design, information, material, and convenience influence consumer purchase decisions for private label products in India. Grounded in cue utilization theory, signaling theory, perceived risk theory, and the stimulus-organism-response (SOR) framework, it proposes and tests an integrated conceptual model using structural equation modeling (SEM). Data from 380 consumers with prior private label purchase experience in organized retail settings were analyzed. Confirmatory factor analysis (CFA) established the reliability and validity of the measurement model.
The findings reveal that all packaging elements significantly enhance perceived quality, which in turn positively influences trust and perceived value. Perceived quality, trust, and perceived value each have significant positive effects on purchase decisions, with perceived value emerging as the strongest predictor ($\beta = 0.48$, $p < .001$). Mediation analysis using bootstrapping (5,000 resamples) shows that perceived value partially mediates the relationship between perceived quality and purchase decisions, and between trust and purchase decisions.
Overall, the study extends existing literature by integrating packaging and behavioral constructs within an SOR framework in an emerging market context, offering actionable insights for retailers and private-label managers.

Keywords: Packaging Elements; Perceived Quality; Trust; Perceived Value; Purchase Decision; Private Label Products; Structural Equation Modeling; Emerging Market.

JEL Classifications: D12;M31;L15;D91

Introduction

The organized retail sector in India has witnessed rapid expansion over the past two decades, with private-label products emerging as a key strategic tool for retailers seeking to enhance profitability, strengthen store loyalty, and differentiate themselves from their competitors (Nagarajan & Chandrachud, 2017). Private-label products, also referred to as store or retailer brands, are owned and sold exclusively by retailers and are typically positioned as value-for-money alternatives to national brands (Marlien et al., 2022). The Indian private-label market has grown substantially in recent years, with private-label products accounting for approximately 8%–10% of organized retail sales in India, with compound annual growth rates exceeding 20% in categories such as grocery, personal care, and household products (Puri et al., 2021). Industry estimates further indicate that the Indian private-label market is projected to reach USD 8 billion by 2026, driven by the rapid expansion of modern retail formats and shifting consumer preferences toward value-oriented purchases. In recent years, private-label products have gained significant importance, not only because of their lower prices but also because of substantive improvements in product quality, packaging design, and branding strategies(Sarkar et al., 2016). As competition between retailers and national brand manufacturers intensifies, retailers increasingly leverage packaging as a strategic marketing tool to influence consumer perceptions and purchase decisions (Tan & Abdullah, 2022).

Packaging is no longer viewed merely as a protective container; rather, it is widely recognized as an important marketing communication medium that influences consumer perception, product evaluation, and purchase decisions at the point of sale(Khan et al., 2022). Packaging serves multiple functions, including protection, information communication, convenience facilitation, and quality signaling(Alhamdi, 2020). Specific packaging elements, such as packaging design, information, material, and convenience, provide visual, informational, and functional cues that collectively shape how consumers perceive product quality, trust the product, and evaluate its value (Rastogi, 2023). According to cue utilization and signaling theories, consumers rely on extrinsic cues, such as packaging, when intrinsic product attributes cannot be evaluated prior to purchase(Javeed et al., 2022). This reliance is particularly pronounced for private-label products, where brand familiarity is comparatively low, and consumers depend heavily on packaging cues to evaluate product quality (Hwang, 2020).

Previous research on consumer behavior and retailing has established that perceived quality, trust,

and perceived value are among the most critical antecedents of consumer purchase decisions (Oebit & Juniarti, 2023). Perceived quality reflects consumers subjective evaluation of product superiority or excellence (Abu Barakat, 2024), trust reflects consumers' confidence that a product will perform as expected, and perceived value represents the overall assessment of benefits received relative to the cost paid (Jung & Choo, 2024). Perceived value theory posits that consumers make purchase decisions based on the trade-off between perceived benefits and perceived costs(He, 2024), whereas trust theory suggests that trust reduces perceived risk and enhances consumer confidence in the product (Carnevale et al., 2018).

Despite the growing strategic importance of private-label products in emerging markets, the mechanisms through which packaging elements influence consumer purchase decisions remain insufficiently understood (Rastogi, 2023). Consumers often perceive private-label products as inferior in quality and less trustworthy than national brands, even when their formulations are similar (Kadirov, 2020). Prior research has predominantly focused on national brands, with considerably fewer studies examining how specific packaging elements shape consumer perceptions in the private-label context (Hwang & Kim, 2021). The mediating mechanisms of perceived quality, trust, and perceived value in a single integrated model have received limited attention (Ding, 2025). Furthermore, most empirical work has been conducted in developed Western markets, with evidence from large emerging economies such as India being sparse (Aadya, 2025).

This study addresses these theoretical and empirical gaps by developing and testing an integrated conceptual model that simultaneously examines how the four packaging elements influence consumer purchase decisions through perceived quality, trust, and perceived value in the context of Indian private-label brands. This study makes four distinct contributions to the existing literature. First, it extends packaging research to the private-label context by incorporating multiple packaging dimensions rather than treating packaging as a unidimensional construct. Second, it integrates cue utilization theory, signaling theory, perceived risk theory, perceived value theory, and the SOR model into a unified theoretical framework, providing a more comprehensive explanation of packaging-driven consumer behaviors. Third, it tests perceived value as a mediator connecting both perceived quality and trust to purchase decisions within a single structural model, a relationship configuration that has not been examined in previous private-label studies. Fourth, it provides empirical evidence from India, an important but understudied emerging market, contributing to the growing body of retail research in non-Western contexts.

2. Literature Review and Hypotheses Development

2.1 Theoretical Background

This study is grounded in five interrelated theoretical perspectives that collectively explain how packaging influences consumer perceptions and behavioral outcomes. The first is cue utilization theory (Srivastava & Rastogi, 2026), which posits that consumers use extrinsic cues, such as packaging, brand name, price, and store image, to infer product quality when intrinsic attributes cannot be inspected prior to purchase. This theory is particularly applicable in the private-label context, where low brand equity renders extrinsic cues more influential(Ren & Tengku Anuar, 2024).

The theoretical foundation of this study is signaling theory, which argues that sellers use observable market signals, including packaging design and information quality, to communicate unobservable product attributes to consumers, thereby reducing information asymmetry (Kulkarni et al., 2026). In the context of private-label products, high-quality packaging may serve as a credible signal of product reliability and quality, substituting the reputational cues that national brand names typically provide (Aadya, 2025).

Perceived risk theory recognizes that consumers experience functional, financial, and psychological risks when evaluating products that they cannot fully assess before purchasing (Lewis, 2015). Packaging information and material quality can mitigate this risk by providing credible performance assurances, which, in turn, enhance consumer trust and perceived value (Yung, 2023). Perceived value theory suggests that consumers evaluate products based on a cognitive trade-off between perceived benefits, including quality and trust, and perceived costs, with a higher perceived value increasing the likelihood of purchase intention (He, 2024).

The stimulus–organism–response (SOR) framework provides an overarching model architecture. In this study, packaging elements constitute the external stimulus (S), perceived quality, trust, and perceived value represent the internal organism-level evaluations (O), and purchase decisions constitute the behavioral response (R). Together, these five theories provide an integrated and mutually reinforcing theoretical foundation for the proposed model(Wang et al., 2026).

2.2 Packaging Elements and Perceived Quality

Packaging is widely considered the most influential extrinsic quality cue at the point of purchase (Sivasothey et al., 2024). Consumers rely heavily on packaging cues to form quality judgments, particularly in product categories where intrinsic

evaluation is difficult before consumption (Hochreiter et al., 2023). However, prior research has predominantly focused on national brands, with fewer studies investigating how packaging dimensions influence the quality perceptions of private-label products (Pérez-Santamaría et al., 2019).

Packaging design, encompassing visual elements such as color, graphics, typography, and shape, creates immediate perceptual impressions that serve as powerful quality signals(Verma, 2024). Empirical evidence consistently shows that aesthetically sophisticated packaging design elevates perceived product quality and enhances purchase likelihood(Singh, 2024). Packaging information, including product ingredients, usage instructions, nutritional data, and certifications, performs an informational quality-signaling function by reducing consumer uncertainty (Ankiel & Grzybowska-Brzezińska, 2020). Consumers who encounter clear, comprehensive, and trustworthy on-pack information tend to form more favorable quality evaluations. Packaging material quality signals product safety, durability, and manufacturing standards (Sabri et al., 2020). Tactile and visual assessments of packaging materials are frequently used as proxies for product quality, especially when consumers lack other evaluative bases (S. Wang et al., 2026). Packaging convenience, including ease of opening, handling, reseal ability, and storage, serves as a functional quality indicator, reflecting product care and consumer orientation. Convenience-enhancing packaging features have been shown to positively influence quality perceptions across multiple product categories (Brozović et al., 2021). Based on this evidence, the following hypotheses are proposed:

H1: Packaging design positively influences the perceived quality of private-label products.

H2: Packaging information positively influences the perceived quality of private label products.

H3: Packaging materials positively influence the perceived quality of private label products.

H4: Packaging convenience positively influences the perceived quality of private label products.

2.3 Perceived Quality and Trust

Trust is defined as the confidence that a product or brand will reliably deliver its promised benefits. In consumer markets, trust is closely contingent on perceived quality: higher quality perceptions reduce functional and psychological risks, thereby fostering greater consumer confidence in the product (Zsigmondová et al., 2021). This relationship is especially salient for private-label products, which have historically suffered from a trust deficit relative to national brands because of limited brand history and lower marketing investment(Rudzewicz & Strychalska-Rudzewicz, 2021). Prior studies have confirmed that when private-label product quality meets or exceeds consumer expectations, trust levels increase substantially(Munuera-Aleman et al., 2003). Extending this logic within a packaging-mediated context, perceived quality inferred from packaging cues is proposed to translate into elevated trust.

H5: Perceived quality positively influences consumer trust in private label products.

2.4 Perceived Quality and Perceived Value

Perceived value is a consumer's overall assessment of the utility of a product based on perceptions of what is received versus what is provided. Quality has consistently been identified as the primary benefit component of the value equation (Samudro et al., 2020). When consumers perceive a private-label product to be of high quality, the perceived benefit-to-cost ratio improves, resulting in an elevated perceived value. This relationship has been empirically supported across diverse categories (He, 2024). In the private-label context, improving perceived quality has been shown to be one of the most effective strategies for closing the value gap between private-label and national brands (Mathur & Gangwani, 2021).

H6: Perceived quality positively influences the perceived value of private-label products.

2.5 Trust and Perceived Value

Trust enhances perceived value by reducing the psychological and financial risks associated with a purchase, thereby increasing the effective benefits that consumers attribute to products (Mathur & Gangwani, 2021). When consumers trust a private-label product, they require less cognitive effort to evaluate risk, which lowers perceived costs and increases their overall value perception. This trust-value relationship is particularly important in markets where product experience is limited and uncertainty is high, such as in the Indian organized retail market (Mathur & Gangwani, 2021).

H7: Trust positively influences the perceived value of private label products.

2.6 Effects on Purchase Decision

Consumer purchase decisions in the private-label context are influenced by the joint operation of perceived quality, trust, and perceived value. Consistent with the SOR framework, these internal cognitive evaluations function as mediators between environmental stimuli and behavioral responses (Huda et al., 2024). Empirical evidence indicates that perceived quality directly influences purchase likelihood by enhancing consumer confidence in a

product's performance. Trust reduces purchase hesitation and perceived risk, making consumers more willing to commit to private-label purchases (Mathur & Gangwani, 2021). Perceived value consistently emerges as the strongest driver of purchase decisions, as value-conscious consumers in price-sensitive emerging markets are particularly responsive to favorable perceptions of it.

H8: Perceived quality positively influences consumer purchase decisions.

H9: Trust positively influences consumer purchase decision-making.

H10: Perceived value positively influences consumer purchase decision.

2.7 Mediating Role of Perceived Value

Perceived value has been theoretically and empirically established as a key mediator in consumer decision-making chains. Prior research demonstrates that quality-to-purchase relationships are frequently channeled through perceived value because quality improvements raise perceived benefits, which in turn elevate value assessments and finally drive purchase behavior (He, 2024). However, prior packaging and private-label studies have typically tested only direct quality-purchase relationships, thereby omitting the mediating mechanism of perceived value. Similarly, while (Gandhi et al., 2023) trust-value linkages have been examined in service contexts (Guo & Rohani, 2025), this pathway has received negligible attention in product packaging and private-label research. This study addresses this gap by proposing:

H11: Perceived value mediates the relationship between perceived quality and purchasing decisions.

H12: Perceived value mediates the relationship between trust and purchasing decisions.

3. Conceptual Framework

Figure 1 illustrates the proposed conceptual model. Four packaging elements (PD, PI, PM, and PC) function as exogenous constructs that influence perceived quality (PQ), which, in turn, affects trust (TR) and perceived value (PV). Trust is also proposed to influence perceived value. Perceived quality, trust, and perceived value directly influence purchase decisions (PDcn). Perceived value is positioned as a mediator between perceived quality and purchase decisions (H11) and between trust and purchase decisions (H12). This configuration is consistent with the SOR framework, in which packaging elements represent the stimulus, perceived quality, trust, and perceived value represent organism-level evaluations, and the purchase decision represents a behavioral response. The full set of hypothesized paths (H1-H12) is illustrated in Figure 1

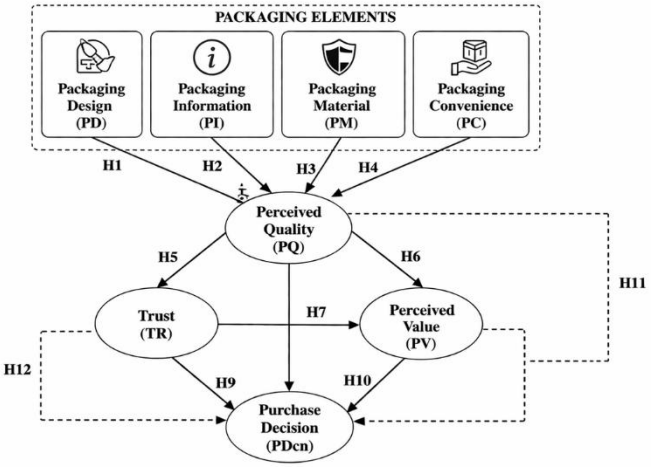

Figure 1. Conceptual model.

Note: PD = packaging design; PI = packaging information; PM = packaging material; PC = packaging convenience; PQ = perceived quality; TR = trust; PV = perceived value; PDcn = purchase decision. Single-headed arrows represent hypothesized directional paths (H1–H12).

The model is grounded in the stimulus–organism–response (SOR) framework, packaging elements (PD, PI, PM, PC) constitute the stimulus (S); perceived quality, trust, and perceived value represent organism-level cognitive evaluations (O); and purchase decision constitutes the behavioral response (R). Dashed arrows indicate the mediation paths tested under H11 and H12.

4. Methodology

4.1 Research Design

This study employed a quantitative cross-sectional survey design to test the proposed conceptual model. The survey methodology was appropriate for this study because it enables efficient data collection from a large number of respondents and supports the examination of hypothesized relationships among multiple latent constructs. Structural

equation modeling (SEM) was selected as the primary analytical technique because it allows the simultaneous estimation of multiple regression equations, accounts for measurement errors, and enables the testing of both direct and indirect (mediation) effects. The two-stage approach recommended by) was followed (Schamberger et al., 2025) was followed. The measurement model was first evaluated using confirmatory factor analysis (CFA), followed by structural model testing.

Data were collected using convenience sampling because of time and accessibility constraints. Convenience sampling is commonly adopted in consumer behavior research when the research objective is to test theoretical relationships rather than to produce population-representative parameter estimates (Memon et al., 2025). Respondents were approached at supermarkets, retail stores, and shopping malls in urban India. A screening question confirmed that only consumers with prior experience purchasing private-label products were included in the study. Before participation, the respondents were fully informed of the study's purpose and assured of anonymity and confidentiality. Participation was entirely voluntary, and informed consent was obtained from all the participants. Ethical guidelines consistent with institutional research standards were followed throughout the data collection.

4.2 Sample and Data Collection

Data were collected from consumers who had previously purchased private-label products from organized retail outlets. A total of 450 structured questionnaires were distributed, of which 412 were returned (response rate: 91.6%). After eliminating 32 questionnaires with incomplete responses or missing data, a final usable sample of 380 was retained for analysis. This sample size exceeds the minimum threshold of 200 recommended for the structural equation model (SEM) analysis and satisfies the 10:1 indicator-to-respondent ratio criterion (Priyanath et al., 2020).

Table 1: Demographic Profile of Respondents (N = 380)

Category	*Group*	*Number (N)*	*Percentage*
Gender	Male	205	54%
	Female	175	46%
Age	18–25	91	24%
	26–35	137	36%
	36–45	87	23%
	Above 45	65	17%
Education	Higher Secondary	53	14%
	Bachelor's Degree	182	48%
	Master's Degree	114	30%
Monthly Income (INR)	Below 25,000	106	28%
	25,000–50,000	129	34%
	50,000–75,000	84	22%
	Above 75,000	61	16%
Total		**380**	**100%**

The demographic composition of the sample is shown in Table 1. The sample comprised 54% male and 46% female participants. The dominant age group was 26–35 years (36%), and the most common education level was a bachelor's degree (48%). The most prevalent monthly household income was between INR 25,000 and 50,000 (34% of participants).

4.3 Measurement Instrument

All measurement items were adapted from previously validated scales to ensure content validity and construct reliability. Packaging elements were operationalized as a multidimensional construct with four sub-dimensions: packaging design (3 items), packaging information (3 items), packaging material (3 items), and packaging convenience (3 items), yielding 12 items in total. These items were adapted from (Patel et al., 2024) and captured visual attractiveness, information clarity, material quality, and ease of handling, respectively. Perceived quality was measured using three items adapted from (Konstantoglou et al., 2020) that assessed consumers' overall evaluations of product excellence. Trust was measured using three items adapted from (A Alsoufi, 2023) that captured confidence and reliability perceptions toward the product. Perceived value was measured using three items adapted from (Gómez et al., 2015) that assessed value for money and overall product worth. Purchase decisions were measured using three

items adapted from (Ranjbarian et al., 2010) that measured purchase decisions and willingness to recommend.

Table 2: Measurement Items and Standardized Factor Loadings

Construct	*Item Code*	*Standardized Loading*
Packaging Design (PD)	PE1	0.74
	PE2	0.78
	PE3	0.72
Packaging Information (PI)	PE4	0.8
	PE5	0.79
	PE6	0.76
Packaging Material (PM)	PE7	0.77
	PE8	0.73
	PE9	0.71
Packaging Convenience (PC)	PE10	0.7
	PE11	0.75
	PE12	0.74
Perceived Quality	PQ1	0.82
	PQ2	0.84
	PQ3	0.78
Trust	TR1	0.81
	TR2	0.83
	TR3	0.79
Perceived Value	PV1	0.84
	PV2	0.8
	PV3	0.83
Purchase Decision	PD1	0.88
	PD2	0.86
	PD3	0.87

Note: All factor loadings were statistically significant ($p < .001$). Loadings ≥ 0.50 satisfied the convergent validity criterion.

All 24 items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to the main analysis, data normality was assessed by examining the skewness and kurtosis values for all items. Skewness values ranged from −0.76 to 0.84, and kurtosis values ranged from −1.12 to 1.23, all within the acceptable thresholds of ±2 for skewness and ±7 for kurtosis recommended by (Winter & Dodou, 2019), confirming that the data were approximately normally distributed and suitable for covariance-based SEM. A pilot study was conducted with 30 respondents to assess item clarity and questionnaire readability. Minor wording adjustments were made based on the pilot feedback. The final measurement items and their standardized factor loadings from the CFA are presented in Table 2. Reliability and convergent validity statistics are reported in Table 3

4.4 Common Method Bias

Given the cross-sectional and self-reported nature of the data, common method bias (CMB) was assessed using Harman's single-factor test. All items were entered into an exploratory factor analysis, and the first unrotated factor accounted for 24.3% of the total variance, well below the threshold of 50%, suggesting that CMB does not pose a significant threat to the validity of the findings (Saptoto et al., 2026). Additionally, procedural remedies were employed, including ensuring respondent anonymity, randomizing item order across constructs, and using reverse-coded items to reduce response set bias (Chen & Ding, 2025).

5. Results

5.1 Measurement Model

The measurement model was evaluated using CFA in AMOS (version 26). As presented in Table 3, Cronbach's alpha values ranged from 0.83 to 0.89, and the composite reliability (CR) values ranged from 0.86 to 0.91, both exceeding the threshold of 0.70, confirming internal consistency(Cheung et al., 2023).

Table 3: Reliability and Convergent Validity Statistics

Construct	*Cronbach's Alpha (α)*	*Composite Reliability (CR)*	*AVE*
Packaging Elements	0.88	0.90	0.58
Perceived Quality	0.85	0.87	0.69
Trust	0.83	0.86	0.67
Perceived Value	0.85	0.88	0.70
Purchase Decision	0.89	0.91	0.76

Note: α = Cronbach's alpha; CR = composite reliability; AVE = average variance extracted. Recommended thresholds: α > .70, CR > .70, and AVE > .50

As presented in Table 3, Cronbach's alpha values ranged from 0.83 to 0.89, and composite reliability (CR) values ranged from 0.86 to 0.91, both exceeding the threshold of 0.70, thus confirming internal consistency. The average variance extracted (AVE) values ranged from 0.58 to 0.76, all surpassing the 0.50 criterion, indicating adequate convergent validity at the construct level (Dos Santos & Cirillo, 2021). Discriminant validity was assessed using the Fornell–Larker criterion. As shown in Table 4, the square root of the AVE for each construct exceeded all inter-construct correlations, confirming the discriminant validity.

Table 4: Correlation Matrix and Discriminant Validity

Construct	*1*	*2*	*3*	*4*	*5*
Packaging Elements	**0.76**				
Perceived Quality	0.62	**0.83**			
Trust	0.55	0.68	**0.82**		
Perceived Value	0.53	0.66	0.69	**0.84**	
Purchase Decision	0.49	0.64	0.67	0.72	**0.87**

Note: Diagonal values in bold = square root of AVE.; off-diagonal values = inter-construct correlations. Discriminant validity is supported when the diagonal values exceed the corresponding row and column correlations.

The highest inter-construct correlation was between perceived value and purchase decisions (r = 0.72), which is still lower than the square root of the AVE for both constructs (0.84 and 0.87, respectively), indicating that each construct captures unique variance. Collectively, the measurement model demonstrated satisfactory reliability, convergent validity, and discriminant validity, supporting the suitability of the constructs for testing the structural model.

5.2 Structural Model and Hypothesis Testing

The structural model was estimated after the measurement model was satisfactorily confirmed. Model fit was assessed using multiple fit indices, as recommended by (S & Mohanasundaram, 2024): $\chi^2/df = 2.41$ (< 3.0); CFI = 0.94 (> 0.90); TLI = 0.93 (> 0.90); IFI = 0.94 (> 0.90); NFI = 0.92 (> 0.90); and RMSEA = 0.067 (< 0.08). These values collectively indicate a good model fit. The structural path estimates, t-values, significance levels, and hypothesis decisions are shown in Table 5. The results indicate that packaging design (β = 0.28, t = 3.96, p < .01), packaging information (β = 0.31, t = 4.42, p < .01), packaging material (β = 0.22, t = 3.18, p < .05), and packaging convenience (β = 0.19, t = 2.87, p < .05) exert significant positive effects on perceived quality, thereby supporting H1 through H4. Among the four packaging elements, packaging information demonstrated the strongest influence on perceived quality (β = 0.31), consistent with the informational quality signaling proposition of signaling theory (Srivastava & Rastogi, 2026),Perceived quality had a significant positive effect on trust (β = 0.58, t = 8.64, p < .001), supporting H5, and on perceived value (β = 0.44, t = 6.52, p < .001), supporting H6. Trust also significantly influenced PV (β = 0.47, t = 6.88, p < .001), supporting H7. Regarding the antecedents of

purchase decisions, perceived quality (β = 0.27, p < .01), trust (β = 0.29, p < .01), and perceived value (β = 0.48, p < .001) exerted significant positive effects, supporting H8, H9, and H10, respectively. Perceived value had the strongest direct effect on purchase decisions, consistent with value-conscious consumer behavior in price-sensitive emerging markets.

Table 5: Structural Model Results and Hypothesis Testing

Hypothesis	*Structural Path*	*Std. β*	*t-value*	*p-value*	*Decision*
H1	Packaging Design → Perceived Quality	0.28	3.96	< .01	Supported
H2	Packaging Information → Perceived Quality	0.31	4.42	< .01	Supported
H3	Packaging Material → Perceived Quality	0.22	3.18	< .05	Supported
H4	Packaging Convenience → Perceived Quality	0.19	2.87	< .05	Supported
H5	Perceived Quality → Trust	0.58	8.64	< .001	Supported
H6	Perceived Quality → Perceived Value	0.44	6.52	< .001	Supported
H7	Trust → Perceived Value	0.47	6.88	< .001	Supported
H8	Perceived Quality → Purchase Decision	0.27	3.72	< .01	Supported
H9	Trust → Purchase Decision	0.29	4.05	< .01	Supported
H10	Perceived Value → Purchase Decision	0.48	6.91	< .001	Supported

Note: β = standardized path coefficient. t-values > 1.96 is Significance at p < .05; > 2.58 at p < .01; > 3.29 at p < .00

5.3 Variance Explained and Model Fit

The structural model explained the substantial variance in all endogenous constructs, as summarized in Table 6. The model accounted for 52% of the variance in perceived quality (R^2 = 0.52), 34% in trust (R^2 = 0.34), 55% in perceived value (R^2 = 0.55), and 64% in purchase decisions (R^2 = 0.64). The R^2 value of 0.64 for purchase decisions is Notably high by the standards of consumer behavior research (Rafi, 2025), this underscores the strong collective explanatory power of perceived quality, trust, and perceived value. Figure 2: The structural model with standardized path coefficients presents the full structural model with estimated standardized path coefficients, providing a visual summary of all supported hypothesized relationships

Table 6: Variance Explained (R^2) and Structural Model Fit Indices

Endogenous Construct	*R^2*	*Variance Explained*
Perceived Quality (PQ)	0.52	52%
Trust (TR)	0.34	34%
Perceived Value (PV)	0.55	55%
Purchase Decision (PDcn)	0.64	64%
Model Fit Indices: *χ^2/df = 2.41; CFI = 0.94; TLI = 0.93; IFI = 0.94; NFI = 0.92; RMSEA = 0.067*		

Note: CFI, comparative fit index; TLI, Tucker–Lewis index; IFI, incremental fit index; NFI, normed fit index; RMSEA, root mean square error of approximation. The acceptable thresholds were CFI, TLI, and IFI/NFI > .90, and RMSEA < .08 (Rifenbark & Jorgensen, 2023).

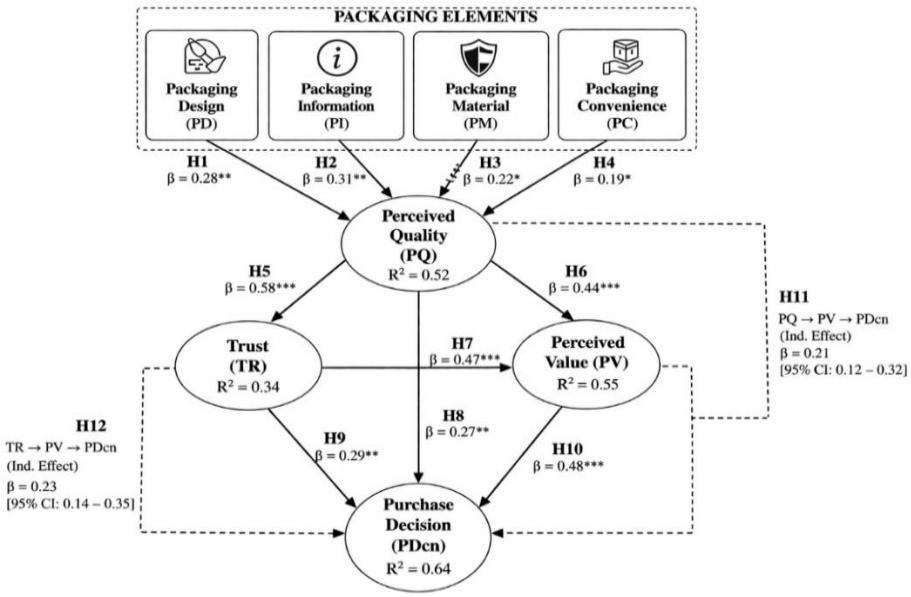

Figure 2: Structural model with standardized path coefficients

Note: Values on the paths are standardized regression coefficients (β). All depicted paths are statistically significant at $p < .05$ or better. The R^2 values are shown inside each endogenous construct box: PQ (R^2 = 0.52), TR (R^2 = 0.34), PV (R^2 = 0.55), and PDcn (R^2 = 0.64). Model fit: χ^2/df = 2.41; CFI = 0.94; TLI = 0.93; RMSEA = 0.067. The abbreviations are shown in Figure 1.

5.4 Mediation Analysis

Mediation analysis was conducted using a bootstrapping procedure with 5,000 resamples as previously recommended. Bootstrapped confidence intervals that exclude zero provide stronger Evidence of mediation is more robust than the traditional causal steps and is robust to the non-normality of indirect effect sampling distributions (Tibbe & Montoya, 2022) Table 7 presents the results of the mediation analysis.

Table 7: Mediation Analysis Results via Bootstrapping (5,000 Resamples)

Hypothesis	*Indirect Path*	*Indirect β*	*95% CI*	*Decision*
H11	Perceived Quality → Perceived Value → Purchase Decision	0.21	[0.12, 0.32]	Supported
H12	Trust → Perceived Value → Purchase Decision	0.23	[0.14, 0.35]	Supported

Note: 95% CI = bias-corrected bootstrap confidence interval. Confidence intervals that did not include zero indicated statistically significant indirect effects.

The indirect effect of perceived quality on purchase decisions through perceived value was statistically significant (β = 0.21, 95% CI [0.12, 0.32]), confirming partial mediation and supporting H11. Similarly, the indirect effect of trust on purchase decisions through perceived value was significant (β = 0.23, 95% CI [0.14, 0.35]), confirming partial mediation and supporting H12. The retention of significant direct effects alongside significant indirect effects confirms partial rather than full mediation in both cases (Fratama et al., 2023).These results indicate that perceived value serves as an important but incomplete mediating mechanism between upstream cognitive evaluations (perceived quality and trust) and downstream purchase behavior (PB).

6. Discussion

This study examines how packaging elements influence consumer purchase decisions for private-label products in India through the mediating mechanisms of perceived quality, trust, and perceived value. The results support all 12 hypotheses, providing comprehensive support for the proposed integrated SOR-based model. These findings advance the literature in several ways.

The finding that all four packaging elements significantly influence perceived quality (H1–H4,Table 5) is consistent with prior research demonstrating the packaging quality-signaling function.This finding supports cue utilization theory by confirming that consumers systematically rely on extrinsic packaging cues' design, information, material, and convenience to infer product quality

when intrinsic evaluation is not possible prior to purchase (Ren & Tengku Anuar, 2024). Notably, packaging information emerged as the strongest predictor of perceived quality (β = 0.31), followed by packaging design (β = 0.28), packaging material (β = 0.22), and packaging convenience (β = 0.19). This finding extends earlier work by(Ankiel & Grzybowska-Brzezińska, 2020), who emphasized the informational dimension of packaging in emerging Asian markets, by demonstrating that this informational primacy specifically holds within the private-label context in India. However, the present study differs from (Sharma et al., 2024), who found visual design to be the dominant quality cue. This divergence suggests that Indian private-label consumers place comparatively greater emphasis on information content possibly because they lack prior brand experience and require detailed on-pack information to reduce purchase uncertainty (Saha, 2020). This finding is also consistent with, who reported that informational packaging cues assume greater importance in low-brand-equity environments across Southeast Asian markets.

The significant positive effect of perceived quality on trust (H5, β = 0.58,Table 5) aligns with the findings of (Yung, 2023)who demonstrated that quality perceptions are foundational to brand trust across product categories. This finding supports the perceived risk theory, confirming that quality perceptions reduce the functional risk associated with private-label purchases, thereby fostering trust. The perceived quality coefficient observed here (β = 0.58) may reflect the heightened trust deficit that private-label products face in the Indian market relative to established national brands. This finding extends the work of who established quality-trust linkages in national-brand contexts to the private-label domain, suggesting that the quality-trust mechanism is generalized across brand-equity levels. This study differs from that who found that perceived risk moderated rather than mediated the quality-trust relationship by demonstrating a direct and robust quality-to-trust path within a unified structural equation model (SEM) framework.

The significant effects of perceived quality (H6, β = 0.44) and trust (H7, β = 0.47) on perceived value (Table 5) are consistent with the theoretical propositions of and the empirical findings of (Iqbal & Elahi, 2024). This finding supports perceived value theory (Saima et al., 2025) by confirming that both quality-based benefits and trust-based risk reduction operate as distinct but complementary contributors to the overall value assessment that consumers form for private-label products. This study extends prior work by showing that trust contributes to value perceptions approximately as strongly as quality does in the private-label context, a finding that has not been documented in the packaging literature. This finding extends the service-based trust-value model to a product packaging method, indicating that the trust-to-value mechanism transcends service environments and operates with comparable strength in organized retail. This result underscores the importance of trust as both a direct driver of purchase behavior and an indirect enhancer of value perceptions Notably, this study differs from the finding that quality is a substantially stronger value predictor than trust in service contexts, suggesting that in a private-label product setting, trust assumes a more prominent role in value formation.

Regarding purchase decision antecedents (H8–H10, Table 5), perceived value emerged as the strongest predictor (β = 0.48), followed by trust (β = 0.29) and perceived quality (β = 0.27). This finding supports the value-dominant decision framework proposed by (Rafi, 2025), confirming that consumers overall benefit-cost assessments are the proximal driver of behavioral outcomes in private-label purchase contexts. This pattern replicates the value-dominant decision structure reported by (Nikolov & Gustafson, 2020) in price-sensitive emerging market contexts and is consistent with the observation that Indian consumers are particularly value-conscious when evaluating private-label alternatives. This finding also extends the work by providing structural evidence that value perceptions, rather than price alone, determine private-label choices, and is an important distinction for retail strategy in high-growth markets such as India. The total variance explained in the purchase decision (R^2 = 0.64, Table 6) substantially exceeds the R^2 values reported in comparable private-label studies, suggesting that the integrated SOR model developed here provides superior explanatory coverage.

The mediation findings (H11–H12, Table 7) provide important new insights that have not been captured in the packaging and PL literature to date. The partial mediation of perceived value in both the quality purchase (β = 0.21, 95% CI [0.12, 0.32]) and trust–purchase (β = 0.23, 95% CI [0.14, 0.35]) pathways confirmed that these antecedents operate through both direct and value-mediated routes to influence purchase behavior. This finding supports the theoretical proposition that perceived value acts as a key cognitive bridge in consumer decision chains and provides structural evidence that quality and trust generate independent value-formation pathways, leading to purchases. This finding extends the mediation findings of (Maharani et al., 2021) from packaging contexts to the packaging domain and directly responds to the call for research examining mediating mechanisms in packaging behavior relationships. This study differs from earlier PL studies by testing only direct quality purchase paths without modeling the value-mediated route, thereby providing a more complete and theoretically grounded account of how

packaging ultimately drives purchase behavior.

Collectively, these findings support the applicability of the SOR framework in explaining how packaging stimuli drive purchase behavior through sequential internal evaluations. The model's strong fit indices (Table 6) and high explanatory variance confirm the theoretical coherence and empirical robustness of the integrated framework.

7. Theoretical Implications

This study makes four substantive theoretical contributions to the consumer behavior, packaging, and private-label literature. First, this study contributes to the packaging literature by demonstrating that packaging elements influence purchase decisions indirectly through perceived quality, trust, and perceived value within a stimulus–organism–response framework, rather than exclusively through direct pathways, as assumed in most prior work(Naseri et al., 2024).By specifying this sequential mediation chain, this study provides a more fine-grained theoretical account of how on-shelf packaging cues translate into behavioral outcomes.

This study extends private-label research by establishing packaging multidimensionality as a determinant of quality perceptions, trust, and value in a non-Western emerging market. Prior private-label studies have focused predominantly on price perception, store image, and brand familiarity as drivers of consumer evaluation (Rastogi, 2023), while largely overlooking packaging as a multi-element quality cue system. The present findings suggest that retailers can systematically exploit different packaging dimensions to address these perceptual gaps.

This study contributes to perceived value theory by demonstrating that in the private-label context, both quality-based and trust-based value formation operate through partial rather than full mediation. This nuanced finding implies that quality and trust retain independent direct effects on purchase decisions beyond their value-mediated effects, enriching the theoretical understanding of how multiple cognitive evaluations jointly determine consumer choices.

By integrating cue utilization theory, signaling theory, perceived risk theory, perceived value theory, and the SOR model, this study develops a pluralistic theoretical framework that is more comprehensive than single theory accounts. This approach responds to calls in the literature for theoretical integration in packaging research (Naseri et al., 2024) and provides a replicable model architecture for future studies in other product categories and contexts to build on.

8. Managerial Implications

Retailers in emerging markets should prioritize clear, accurate, and visually appealing packaging, as information (β = 0.31, Table 5) and design (β = 0.28, Table 5) strongly influence perceived quality. High-quality packaging signals credibility, especially for new private-label products. Because perceived quality drives trust (β = 0.58, Table 5) and trust affects purchase decisions (β = 0.29, Table 5), maintaining consistent quality and transparency is essential. Perceived value (β = 0.48, Table 5) remains the strongest purchase driver; therefore, retailers should emphasize value holistically, not just low price. Packaging improvements create multiplier effects (Table 7) by enhancing quality, trust, and value perceptions, ultimately increasing the likelihood of purchase.

9. Conclusion

This study examined the influence of packaging elements on consumers' purchase decisions for private-label products in India by testing an integrated model that incorporates perceived quality, trust, and perceived value as mediating constructs within the SOR framework. The results of structural equation modeling confirmed all 12 hypotheses, demonstrating that packaging design, packaging information, packaging material, and packaging convenience collectively and significantly shaped perceived quality. Perceived quality enhances both trust and perceived value, and all three positively influence purchase decisions, with perceived value serving as the dominant predictor. Mediation analysis confirmed that perceived value partially mediated the effects of perceived quality and trust on purchase decisions.

This study advances the theoretical understanding of packaging-driven consumer behavior in the private-label context by specifying the sequential cognitive chain from packaging stimuli to purchase responses and providing empirical evidence from an important but understudied emerging market. These findings offer concrete strategic guidance for private-label retailers seeking to leverage packaging as a value-creation tool.

10. Limitations and Future Research

The findings of this study are constrained by convenience sampling, a cross-sectional design, and self-reported data, which limit generalizability and causal inference. Therefore, future research should adopt probability sampling, longitudinal or experimental methods, and broader models that incorporate category-specific, cross-cultural, and additional variables such as store image, price consciousness, and sustainability perceptions.

References

A Alsoufi, M. (2023). تأثير خصائص التعبئة والتغليف على تقييم المستهلك للمنتجات الغذائية. *Iraqi Journal of Market Research and Consumer Protection*, *15*(2), 15–22. https://doi.org/10.28936/jmracpc15.2.2023.(2)

Aadya, A. (2025). An Empirical Study on the Impact of Packaging, Labeling, and Branding Strategies on Consumer Perception. *INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT*, *09*(10), 1–9. https://doi.org/10.55041/ijsrem53245

Abu Barakat, A. S. A.-L. (2024). The ultimate power of perceived quality. *The Arab Journal of Scientific Research*, *8*(9), 23–70. https://doi.org/10.21608/ajsr.2024.390106

Alhamdi, F. M. (2020). Role of packaging in consumer buying behavior. *Management Science Letters*, *10*(6), 1191–1196. https://doi.org/10.5267/j.msl.2019.11.040

Ankiel, M., & Grzybowska-Brzezińska, M. (2020). Informative Value of Packaging as a Determinant of Food Purchase. *Marketing of Scientific and Research Organizations*, *36*(2), 31–44. https://doi.org/10.2478/minib-2020-0015

Brozović, M., Kovačević, D., & Bota, J. (2021). Consumer Satisfaction With Packaging Materials: Kano Model Analysis Approach. *Tehnicki Vjesnik - Technical Gazette*, *28*(4). https://doi.org/10.17559/tv-20200831093518

Carnevale, M., Loureiro, Y. K., & Kabadayi, S. (2018). Customer Value Creation for Risky Products: The Role of Brand Trust and Trusting Beliefs. *Journal of Creating Value*, *4*(1), 1–21. https://doi.org/10.1177/2394964317752731

Chen, C.-F., & Ding, C. G. (2025). An improvement in the detection of common method biases. *Quality & Quantity*, *60*(1), 791–815. https://doi.org/10.1007/s11135-025-02167-x

Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2023). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, *41*(2), 745–783. https://doi.org/10.1007/s10490-023-09871-y

Ding, J. (2025). The impact of branding and packaging on consumer purchasing behavior. *Economics & Business Management*, 155. https://doi.org/10.63313/ebm.9015

Dos Santos, P. M., & Cirillo, M. Â. (2021). Construction of the average variance extracted index for construct validation in structural equation models with adaptive regressions. *Communications in Statistics - Simulation and Computation*, *ahead-of-print*(ahead-of-print), 1639–1650. https://doi.org/10.1080/03610918.2021.1888122

Fratama, F., Pardede, R., Samara, A., & Susanti, M. (2023). The Influence of Trust and Perceived Usefulness on Purchase Intention with Price Mediation. *International Journal of Economics (IJEC)*, *2*(2), 833–840. https://doi.org/10.55299/ijec.v2i2.660

Gandhi, M., Ubba, S., & Jyoti, J. (2023). Effect of Consumer Value Perception on Consumer Purchase Intention: A Case of Private Label Apparels. *Global Business Review*. https://doi.org/10.1177/09721509231166256

Gómez, M., Martín-Consuegra, D., & Molina, A. (2015). The importance of packaging in purchase and usage behaviour. *International Journal of Consumer Studies*, *39*(3), 203–211. https://doi.org/10.1111/ijcs.12168

Guo, L., & Rohani, E. I. (2025). RESEARCH ON THE PRIVATE DOMAIN TRAFFIC RESHAPING GREEN AGRICULTURAL PRODUCT BUYING INTENTION. *The EUrASEANs: Journal on Global Socio-Economic Dynamics*, *4(53)*, 211–219. https://doi.org/10.35678/2539-5645.4(53).2025.211-219

He, Q. (2024). A Review of Research on Consumer Perceived Value. *Accounting and Corporate Management*, *6*(3). https://doi.org/10.23977/acccm.2024.060302

Hochreiter, V., Benedetto, C., & Loesch, M. (2023). The Stimulus-Organism-Response (S-O-R) Paradigm as a Guiding Principle in Environmental Psychology: Comparison of its Usage in Consumer Behavior and Organizational Culture and Leadership Theory. *Journal of Entrepreneurship and Business Development*, *3*(1), 7–16. https://doi.org/10.18775/jebd.31.5001

Huda, J., Zaman, S., & Alam, S. (2024). The Impact of Marketing, Brand Perception, and Engagement on Purchase Intentions. *Social Science Review Archives*, *2*(2), 2378–2395. https://doi.org/10.70670/sra.v3i2.577

Hwang, J. (2020). *Exploration of the Role of Packaging Design for Multi-tier Private Brands: An Abstract* (pp. 59–60). Springer. https://doi.org/10.1007/978-3-030-39165-2_25

Hwang, J., & Kim, S. (2021). The effects of packaging design of private brands on consumers' responses.

Psychology & Marketing, *39*(4), 777–796. https://doi.org/10.1002/mar.21620

Javeed, A., Aljuaid, M., Khan, Z., Mahmood, Z., & Shahid, D. (2022). Role of Extrinsic Cues in the Formation of Quality Perceptions. *Frontiers in Psychology*, *13*(Suppl 1), 913836. https://doi.org/10.3389/fpsyg.2022.913836

Jung, M. K., & Choo, H. J. (2024). 이커머스 플랫폼의 지각된 가치가 판매자에 대한 신뢰에 미치는 영향*. *Journal of Channel and Retailing*, *29*(1), 45–63. https://doi.org/10.17657/jcr.2024.1.31.3

Kadirov, D. (2020). *Private labels ain't bona fide! Perceived authenticity and willingness to pay a price premium for national brands over private labels*. https://doi.org/10.26686/wgtn.12786668.v1

Khan, H., Lee, R., & Chrysochou, P. (2022). *Marketing Role of Packaging* (pp. 11–17). Routledge. https://doi.org/10.4324/9781003000822-3

Konstantoglou, A., Folinas, D., & Fotiadis, T. (2020). Comparison of consumers and industry managers concerning food packaging elements. *British Food Journal*, *123*(3), 1103–1120. https://doi.org/10.1108/bfj-04-2020-0295

Kulkarni, S. D., Dharmadhikari, A. P., Kale, S. B., Chide, P. R., & Choudhari, T. S. (2026). Effects on Consumer Buying Behaviour with Respect to Packaging of the Product. *International Journal on Research and Development - A Management Review*, *15*(2), 320–324. https://doi.org/10.65521/ijrdmr.v15i2.3297

Lewis, B. R. (2015). Perceived Risk. In *Wiley Encyclopedia of Management* (pp. 1–2). Wiley. https://doi.org/10.1002/9781118785317.weom090560

Maharani, N., Helmi, A., Mulyana, A., & Hasan, M. (2021, January 1). Customer Value and Intention to Buy Private Label Products. *Advances in Social Science, Education and Humanities Research/Advances in Social Science, Education and Humanities Research*. https://doi.org/10.2991/assehr.k.210617.021

Marlien, R. A., Kasmari, K., Suteja, B., & Basiya, R. (2022). PRIVATE LABEL: QUALITY AND LOYALTY. *Fokus Ekonomi : Jurnal Ilmiah Ekonomi*, *17*(1), 1–17. https://doi.org/10.34152/fe.17.1.1-17

Mathur, M., & Gangwani, S. (2021). Mediating Role of Perceived Value on the Relationship Among Perceived Risks, Perceived Quality, and Purchase Intention of Private Label Brands. *International Journal of Applied Management and Technology*, *20*(1). https://doi.org/10.5590/ijamt.2021.20.1.04

Memon, M., Thurasamy, R., Ting, H., & Cheah, J.-H. (2025). CONVENIENCE SAMPLING: A REVIEW AND GUIDELINES FOR QUANTITATIVE RESEARCH. *Journal of Applied Structural Equation Modeling*, *9*(2), 1–15. https://doi.org/10.47263/jasem.9(2)01

Munuera-Aleman, J. L., Delgado-Ballester, E., & Yague-Guillen, M. J. (2003). Development and Validation of a Brand Trust Scale. *International Journal of Market Research*, *45*(1), 1–18. https://doi.org/10.1177/147078530304500103

Nagarajan, R., & Chandrachud, D. S. (2017). Prophecy of Private Label Branding in India. *IOSR Journal of Humanities and Social Science*, *22*(4), 53–57. https://doi.org/10.9790/0837-2204015357

Naseri, R. N. N., Mohd Esa, M., Yahya, W. K., Muthusamy, G., Ibrahim, R., & Jais, Z. (2024). A Conceptual Framework of the Influence of Packaging Design on Purchase Intention. *International Journal of Art and Design*, *8*(2/SI), 80–87. https://doi.org/10.24191/ijad.v8i2/si.3021

Nikolov, A. N., & Gustafson, B. (2020). *Consumer Values: A Hidden Motivator of Private Label Consumption* (pp. 1–11). Springer. https://doi.org/10.1007/978-3-030-47764-6_1

Oebit, C. E. S., & Juniarti, S. (2023). Measurement of Determinants of Purchase Decision on Retail Products. *International Journal of Research and Innovation in Social Science*, *7*(8), 482–492. https://doi.org/10.47772/ijriss.2023.7834

Patel, M., Chauhan, R., Patel, H., Kalariya, K., & Soni, P. (2024). Packaging Perception: Unveiling Consumer Insights for Brand Success. *Journal of Business Economics and Agribusiness*, *1*(3), 1–11. https://doi.org/10.47134/jbea.v1i3.296

Pérez-Santamaría, S., Martos-Partal, M., & Garrido-Morgado, Á. (2019). Identifying a private-label supplier on national brand. *Journal of Product & Brand Management*, *28*(3), 432–443. https://doi.org/10.1108/jpbm-06-2018-1908

Priyanath, H. M. S., Rvspk, R., & Rgn, M. (2020). Methods and Rule-of-Thumbs in The Determination of Minimum Sample Size When Appling Structural Equation Modelling: A Review. *JOURNAL OF SOCIAL SCIENCE RESEARCH*, *15*, 102–107. https://doi.org/10.24297/jssr.v15i.8670

Puri, S., Qamar, A., & Goyal, S. (2021). Private labels and national brands: the case of India. *International Journal of Business and Globalisation*, *27*(4), 513. https://doi.org/10.1504/ijbg.2021.113793

Rafi, S. K. (2025). From Trust to Transaction:

Exploring the Interplay of Brand Loyalty, Perception, Product Quality, and Price in Shaping Buying Decisions. *IBT- JOURNAL OF BUSINESS STUDIES*, *21*(1), 116–138. https://doi.org/10.46745/ilma.jbs.2025.21.01.05

Ranjbarian, B., Mahmoodi, S., & Shahin, A. (2010). Packaging elements and consumer buying decisions. *International Journal of Business Innovation and Research*, *4*(4), 376. https://doi.org/10.1504/ijbir.2010.033353

Rastogi, S. (2023). A study on the effect of product packaging elements on consumer buying behaviour. *International Journal of Development Research*, 63754–63761. https://doi.org/10.37118/ijdr.27170.09.2023

Ren, C., & Tengku Anuar, T. F. (2024). PACKAGING'S LMPACT ON CONSUMER PURCHASE INTENTION: A COMPREHENSIVE REVIEW. *International Journal of Entrepreneurship and Management Practices*, *7*(24), 212–219. https://doi.org/10.35631/ijemp.724014

Rudzewicz, A., & Strychalska-Rudzewicz, A. (2021). The Influence of Brand Trust on Consumer Loyalty. *EUROPEAN RESEARCH STUDIES JOURNAL*, *24*(Special Issue 3), 454–470. https://doi.org/10.35808/ersj/2439

S, S., & Mohanasundaram, T. (2024). Fit Indices in Structural Equation Modeling and Confirmatory Factor Analysis: Reporting Guidelines. *Asian Journal of Economics, Business and Accounting*, *24*(7), 561–577. https://doi.org/10.9734/ajeba/2024/v24i71430

Sabri, O., Doan, H. V., Malek, F., & Bachouche, H. (2020). When is transparent packaging beneficial? *International Journal of Retail & Distribution Management*, *48*(8), 781–801. https://doi.org/10.1108/ijrdm-03-2019-0097

Saha, S. P. (2020). Impact of Product Packaging on Consumer Buying Decision. *Journal of Engineering and Science Research*, *4*(2), 17–22. https://doi.org/10.26666/rmp.jesr.2020.2.4

Saima, S., Gupta, J., & Ravindran, V. (2025). *Impact of Packaging on Purchase Decisions* (pp. 296–300). Routledge. https://doi.org/10.1201/9781003684657-50

Samudro, A., Sumarwan, U., Simanjuntak, M., & Yusuf, E. Z. (2020). Assessing the effects of perceived quality and perceived value on customer satisfaction. *Management Science Letters*, *10*(5), 1077–1084. https://doi.org/10.5267/j.msl.2019.11.001

Saptoto, R., Dima Hanif, F., Giselle Stephany Simanjuntak, J., & Rahman Afandi, A. (2026). Mapping Common Method Bias (CMB) in Quantitative Social Research: A Scoping Review of Identification and Control Strategies. *ANIMA Indonesian Psychological Journal*, *41*(1), E05. https://doi.org/10.24123/aipj.v41i1.8042

Sarkar, S., Sharma, D., & Kalro, A. D. (2016). Private label brands in an emerging economy: an exploratory study in India. *International Journal of Retail & Distribution Management*, *44*(2), 203–222. https://doi.org/10.1108/ijrdm-07-2015-0102

Schamberger, T., Schuberth, F., Henseler, J., & Rosseel, Y. (2025). Factor- and Composite-Based Structural Equation Modeling -- A New Approach to Incorporate Composites in the Traditional SEM Framework. In *ArXiv.org*. American Chemical Society. https://doi.org/10.48550/arxiv.2508.06112

Sharma, M., Mongia, A., Pareek, R., & Kumari, L. (2024). *How Does Product Packaging Affect Consumers' Buying Decisions?* (pp. 275–290). Igi Global. https://doi.org/10.4018/979-8-3693-9351-2.ch012

Singh, N. (2024). IMPACT OF PACKAGING DESIGN ON CONSUMER PURCHASING DECISIONS. *INTERANTIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT*, *08*(04), 1–5. https://doi.org/10.55041/ijsrem32740

Sivasothey, J. A., Yeo, S. F., & Tan, C. L. (2024). Assessing the Applicability and Reliability of the SOR Theory in the Healthcare Sector: A Comprehensive Review of Recent Research. *paperASIA*, *40*(1(b)), 1–12. https://doi.org/10.59953/paperasia.v40i1(b).55

Srivastava, P. (Dr.) A., & Rastogi, A. (2026). Role of Product Packaging in Influencing Customer Purchase Intent. *INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT*, *10*(03), 1–9. https://doi.org/10.55041/ijsrem57825

Tan, S. M., & Abdullah, F. (2022). Packaging as a Brand Builder. *International Journal of Academic Research in Business and Social Sciences*, *12*(5). https://doi.org/10.6007/ijarbss/v12-i5/13287

Tibbe, T. D., & Montoya, A. K. (2022). Correcting the Bias Correction for the Bootstrap Confidence Interval in Mediation Analysis. *Frontiers in Psychology*, *13*, 810258. https://doi.org/10.3389/fpsyg.2022.810258

Verma, M. (2024). IMPACT OF PACKAGING DESIGN ON CONSUMER PURCHASING DECISIONS.

INTERANTIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT, *08*(04), 1–5. https://doi.org/10.55041/ijsrem32739

Wang, I.-C., Jiang, Y.-R., Wang, Y.-W., & Li, C.-Y. (2024). Exploring the Multisensory Attractiveness of Cosmetic Packaging: A Study of Visual and Tactile Design Elements and Attractiveness Factors. *Sustainability*, *16*(13), 5716. https://doi.org/10.3390/su16135716

Wang, S., Shi, D., & Wang, L. (2026). *The Stimulus-Organism-Response (SOR) Model* (pp. 425–429). Cabi. https://doi.org/10.1079/9781800625822.0063

Winter, J., & Dodou, D. (2019). Five-Point Likert Items: t test versus Mann-Whitney-Wilcoxon (Addendum added October 2012). *Practical Assessment, Research and Evaluation*, *15*(1), 11–12. https://doi.org/10.7275/bj1p-ts64

Yung, X. Y. (2023). The Positive Role of Packaging in Consumer Behavior. *Advances in Economics Management and Political Sciences*, *63*(1), 293–300. https://doi.org/10.54254/2754-1169/63/20231445

Zsigmondová, A., Zsigmond, T., & Machová, R. (2021). Theoretical Background to the Role of Trust in Marketing. *SHS Web of Conferences*, *115*, 03019. https://doi.org/10.1051/shsconf/202111503019