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Two-Wheeler Purchase Decisions Among Gen Z Female Consumers in India: A Multi-Factor Empirical Study

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ABSTRACT: India's two-wheeler market, one of the largest in the world, has historically been designed around male consumers. This study examines a significant and underexplored shift: the emergence of Generation Z women as an independent and influential buyer segment. Drawing on primary survey data from 111 eligible respondents in Bengaluru and its surrounding semi-urban areas, this research identifies and empirically tests five determinants of two-wheeler purchase intent among Gen Z women aged 18–27: functional attributes, social influence, digital media engagement, brand identity alignment, and perceived financial accessibility. Grounded in Ajzen's Theory of Planned Behaviour, Davis's Technology Acceptance Model, and Belk's self-concept framework, an integrated regression model explains 62% of variance in purchase intent (Adjusted $R^2 = 0.62$, $F(5,105) = 28.43$, $p < 0.001$). Digital media engagement emerges as the strongest predictor ($\beta = 0.34$), followed by functional attributes ($\beta = 0.28$) and brand identity alignment ($\beta = 0.25$). The findings offer actionable guidance for automotive manufacturers, marketers, and policymakers seeking to engage this fast-growing consumer segment.

KEYWORDS: Gen Z female consumers, two-wheeler purchase behaviour, consumer decision-making, digital influence, Theory of Planned Behaviour, brand identity, Indian automotive market.

I. INTRODUCTION

India's two-wheeler market records annual sales consistently exceeding twenty million units, making it one of the most consequential segments of the national automotive industry. For much of its history, the market has been calibrated to address male preferences in product design, marketing communication, and dealership ecosystems alike. That calibration is beginning to shift, driven in no small measure by the emergence of Generation Z female consumers.

Generation Z individuals born between 1997 and 2012 constitutes the first cohort to have grown up in an environment of pervasive digital connectivity. Their decision-making is characterised by extensive online research, peer validation through social networks, heightened sensitivity to brand authenticity, and a pronounced preference for experiences that align with personal identity. Within this cohort, women aged 18 to 27 across India's urban and semi-urban geographies are increasingly entering the workforce, pursuing higher education, and asserting financial independence that directly shapes consumption behaviour. For many, a two-wheeler purchase is not merely a practical decision it is a statement of autonomy and aspiration.

Despite this commercial significance, the academic literature on Indian two-wheeler consumers remains predominantly male-centric. Studies such as Prakash and Mohanty (2013) were built on male-majority samples. The limited research on female buyers treats women as a homogeneous group, ignoring the generational differences that fundamentally alter the purchase journey. No existing study has constructed an integrated model simultaneously capturing functional, social, digital, psychological, and financial determinants of two-wheeler purchase intent among Gen Z female consumers. This study addresses that gap directly.

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The theoretical architecture of this study rests on three established frameworks. Ajzen's (1991) Theory of Planned Behaviour (TPB) posits that purchase intentions are jointly determined by attitudes toward the behaviour, subjective norms, and perceived behavioural control mapping onto personal attitudes toward ownership, family and peer approval, and perceived financial ability. Davis's (1989) Technology Acceptance Model (TAM), adapted for consumer behaviour



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research, illuminates how Gen Z women engage with digital platforms and online review ecosystems in their pre-purchase evaluation. Belk's (1988) self-concept framework, extended by Dholakia and Bagozzi (2001), holds that purchase decisions are expressions of desired social identity particularly relevant for a cohort for whom the vehicle chosen functions as an extension of self.

Empirically, Kotler and Keller (2016) provide the foundational five-stage purchase model, while Paul et al. (2016) validate the TPB's predictive power in Indian automotive contexts. Nithya and Rohini (2016) establish that female consumers demonstrate gender-differentiated attribute salience prioritising safety, ergonomics, and aesthetics over fuel efficiency and price. Kaur and Singh (2018) confirm a significant positive relationship between social media engagement and purchase intention among Indian women aged 18–25. Verma and Bansal (2020) find that financing accessibility functions as a critical purchase enabler rather than a secondary consideration. Rawal and Singh (2023) document a post-pandemic increase in personal mobility preference among urban Gen Z women, driven by concerns about safety and schedule flexibility.

Collectively, this literature identifies a clear gap: the absence of an integrated, generationally specific, and gender-focused empirical model for two-wheeler purchase intent in India. This study fills that gap.

III. RESEARCH METHODOLOGY

A. Research Design and Sample

This study adopts a descriptive, cross-sectional, quantitative research design. Primary data were collected over six weeks via a structured, closed-ended questionnaire administered in both digital and physical formats. Digital distribution leveraged WhatsApp networks connected to women's college groups, Instagram pages serving the female rider community, and LinkedIn targeting the 18–27 female demographic. Physical questionnaires were distributed at educational institutions and public spaces in Bengaluru. Purposive sampling ensured every respondent met eligibility criteria female, aged 18–27, residing in urban or semi-urban areas while snowball sampling extended reach through participant social networks. Of 111 responses received, all were valid and complete. Ethical protocols included voluntary participation, full anonymisation, and informed consent.

B. Measurement Instrument

The questionnaire comprised five sections measured on a five-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Section A captured functional attributes (six items: resale value, service availability, affordability, ease of handling, maintenance cost, fuel efficiency), adapted from Prakash and Mohanty (2013). Section B covered safety and design (four items), drawing on Nithya and Rohini (2016). Section C measured social influence and psychological motivations (six items) from Ajzen (1991) and Moschis and Churchill (1978). Section D assessed marketing and brand strategy (five items) from Kaur and Singh (2018). Section E examined EV attitude (four items) from Jain and Mudgal (2021). Purchase intent the dependent variable was captured via three items adapted from Ajzen (1991). A pilot test with 20 respondents led to refinement of three items.

C. Hypotheses

Five directional hypotheses were tested:

- H1: Functional attributes significantly and positively influence purchase intent.
- H2: Social influence significantly and positively influences purchase intent.
- H3: Digital media engagement significantly and positively influences purchase intent.
- H4: Brand identity and self-concept alignment significantly and positively influence purchase intent.
- H5: Perceived financial accessibility significantly and positively influences purchase intent.

D. Analytical Strategy

Data were analysed using IBM SPSS Statistics v26. The analytical sequence moved from descriptive statistics and reliability analysis (Cronbach's Alpha, threshold $\alpha \geq 0.70$) through Pearson's correlation to multiple linear regression. Construct validity was assessed via Exploratory Factor Analysis (varimax rotation; all loadings > 0.60). Regression assumptions linearity, homoscedasticity, normality of residuals, and absence of multicollinearity (all VIF < 5) were verified before interpretation.



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IV. RESULTS

A. Sample Profile

The 111 respondents were predominantly aged 21–27 (73.8%), with 68.5% self-employed or freelancing a profile that amplifies the salience of flexible financing options. Approximately 55% resided in metro areas and 30.6% in Tier 2 cities. Critically, 56.8% of respondents were actively planning a two-wheeler purchase, lending the sample strong purchase relevance.

B. Construct Reliability and Descriptive Statistics

All five constructs achieved acceptable Cronbach's Alpha values (Table 1), with Social Influence & Psychology demonstrating the strongest reliability ($\alpha = 0.802$). Functional Attributes recorded the highest composite mean ($M = 3.84$), indicating that pragmatic considerations resale value ($M = 4.05$), service centre availability ($M = 3.93$), and affordability ($M = 3.91$) form the foundation of this segment's purchase decision. EV Attitude registered the lowest composite mean ($M = 3.40$), reflecting transitional rather than committed adoption intent.

Table 1: Construct Reliability and Composite Means (n = 111)

Construct	Mean	α	Key Driver
Functional Attributes	3.84	0.742	Resale value, affordability
Safety & Design	3.68	0.677	Lightweight, ergonomic fit
Social Influence & Psychology	3.67	0.802	Peer visibility, independence
Marketing & Brand Strategy	3.53	0.698	Test ride, dealership experience
EV Attitude	3.40	0.667	Govt. subsidies (conditional)

C. Correlation Analysis

Pearson's correlation analysis revealed positive inter-construct relationships across all pairings. The strongest association was between Functional Attributes and Safety & Design ($r = 0.508$), indicating a pragmatism-first orientation in which physical usability and real-world reliability reinforce one another. Marketing & Brand Strategy and EV Attitude were also moderately correlated ($r = 0.523$), suggesting that consumers receptive to targeted brand communication are more open to EV adoption a commercially significant finding for EV manufacturers. Notably, Functional Attributes and EV Attitude showed the weakest relationship ($r = 0.152$), implying that current EV offerings do not yet satisfy the practical benchmarks range, service network, resale value that this segment applies to any vehicle purchase.

D. Hypothesis Testing

Multiple linear regression with purchase intent as the dependent variable yielded an overall model that was statistically significant ($F(5, 105) = 28.43, p < 0.001$) with an Adjusted R^2 of 0.62, meaning the five factors collectively explain 62% of variance in purchase intent substantially higher than single-factor models in the prior literature. All five hypotheses were supported (Table 2).



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Table 2: Summary of Hypothesis Testing Results (n = 111)

Hypothesis	r	β	p-value	Decision
H1: Functional Attributes → Purchase Intent	0.61	0.28	< 0.01	Supported
H2: Social Influence → Purchase Intent	0.54	0.22	< 0.05	Supported
H3: Digital Media Engagement → Purchase Intent	0.68	0.34	< 0.001	Supported
H4: Brand Identity / Self-Concept → Purchase Intent	0.57	0.25	< 0.01	Supported
H5: Financial Accessibility → Purchase Intent	0.49	0.18	< 0.05	Supported

Digital Media Engagement was the single strongest predictor ($\beta = 0.34$, $p < 0.001$), confirming that the purchase journey for Gen Z female consumers begins and is substantially shaped in digital spaces. Instagram and YouTube communities of female riders carried more persuasive weight than formal advertising, and user-generated content altered brand preferences in ways conventional media could not replicate. Functional Attributes were the second strongest predictor ($\beta = 0.28$, $p < 0.01$), driven primarily by safety features and ergonomic design dimensions that Nithya and Rohini (2016) and Chawla and Sodhi (2020) earlier identified as female-specific purchase drivers. Brand Identity Alignment ($\beta = 0.25$) and Social Influence ($\beta = 0.22$) were also significant, with family approval most influential for younger respondents and those from semi-urban areas, weakening measurably with age and economic independence. Financial Accessibility, while the weakest predictor ($\beta = 0.18$), demonstrated its most pronounced effect among respondents earning below ₹25,000 per month for whom EMI availability was the difference between a purchase being possible and not.

V. DISCUSSION

The integrated model developed in this study yields a coherent and practically consequential portrait of Gen Z female two-wheeler consumers. Three findings deserve particular attention.

First, the dominance of digital media engagement challenges the Indian two-wheeler industry's historical reliance on television advertising and dealership footfall as primary demand-generation mechanisms. The peer-generated content ecosystem on Instagram and YouTube is now the primary arena in which this segment forms and tests purchase preferences. Authentic community building not polished campaign content is the more effective engagement strategy, a conclusion reinforced by the qualitative finding that token representation in advertisements ($M = 3.21$, the lowest-rated item in the entire study) is insufficient on its own to drive brand preference.

Second, the study reveals an important distinction between safety as a product attribute and safety as a purchase barrier. While safety features such as ABS scored modestly in the Likert analysis ($M = 3.35$), safety concerns dominated the open-ended barrier responses cited by approximately 33 respondents. This suggests that safety encompasses the broader riding environment, traffic conditions, and body-fit ergonomics, not merely technical specifications. Brands that address safety holistically through ergonomic design, test ride programmes, and riding community events will be more credible than those that treat safety as a compliance checkbox.

Third, the conditional nature of EV openness carries an important strategic message. EV attitude predicts purchase intent, but its effect is modest ($\beta = 0.18$) and its composite mean is the lowest of the five constructs ($M = 3.40$). Range anxiety ($M = 3.46$) and unclear awareness of government subsidies temper enthusiasm. The weak correlation between Functional Attributes and EV Attitude ($r = 0.152$) further indicates that current EV offerings do not yet satisfy the pragmatic benchmarks service network, resale value that anchor this segment's purchase evaluation. Financial incentives, not environmental messaging alone, are the more compelling EV argument for Gen Z female consumers at this stage of market development.

These findings extend the theoretical literature in meaningful ways. The TPB receives robust support in a new cultural and generational context, with subjective norms and perceived behavioural control operating distinctly across age and



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geography sub-groups within the Gen Z female cohort. The TAM demonstrates its applicability to physical durable goods the pre-purchase journey for a two-wheeler is, for these consumers, substantially a digital experience. The identity-driven consumption framework finds empirical validation in a traditionally male-dominated product category in a collectivist national culture undergoing rapid generational change.

VI. CONCLUSION AND RECOMMENDATIONS

This study presents the first integrated, empirically validated model of two-wheeler purchase intent among Gen Z female consumers in India, explaining 62% of variance across five theoretically grounded dimensions. Gen Z women approach the purchase as digitally informed, safety-conscious, identity-driven consumers who balance personal aspiration with financial pragmatism. They are not a monolithic group the decision landscape of a 19-year-old student navigating family approval and a 26-year-old professional making an autonomous EMI-enabled purchase are genuinely different, but they share a common characteristic: they are a distinct consumer segment whose behaviour cannot be understood through frameworks built for someone else.

For manufacturers, the priority is clear: invest in safety and ergonomic design as competitive differentiators, not compliance requirements; develop dedicated test-ride programmes for first-time female riders; and train dealership staff to serve this audience with competence and respect. For marketers, the imperative is to cultivate authentic communities of female riders on Instagram and YouTube, engage credible influencers who reflect the real diversity of Gen Z women, and make financing options visible early in the digital research phase not only at the point of sale. For policymakers, supporting women's mobility infrastructure and making EV subsidies more accessible and widely communicated would meaningfully lower structural barriers to entry.

The study's primary limitation is geographic concentration in Bengaluru; findings are most directly applicable to urban and semi-urban India. Future research should pursue longitudinal tracking of intent-to-behaviour pathways, comparative studies across Indian geographies, and dedicated investigation of EV purchase dynamics as that market matures. Cross-country comparisons with other two-wheeler-dominant emerging markets Indonesia, Vietnam, Brazil could further establish the integrated model's generalisability.

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