

Examining the Role of Perceived Risk and Attitudinal Responses in Shaping Online Purchase Intentions: Evidence from Semi-Urban Consumers

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Abstract

The rapid expansion of online retailing has extended digital commerce beyond urban centers, making semi-urban markets increasingly important for e-commerce growth. However, online shopping adoption in these regions remains influenced by heightened perceptions of risk and uncertainty. This study examines the role of perceived risk in shaping online purchase intention through cognitive and affective attitudinal responses among semi-urban consumers. Perceived risk is conceptualized as a second-order construct comprising product risk, financial risk, convenience risk, and non-delivery risk. Data were collected from 1,231 semi-urban consumers with prior online shopping experience and analyzed using Structural Equation Modeling. The results reveal that perceived risk has a significant negative influence on both cognitive and affective attitudes toward online shopping. Further, cognitive and affective attitudes significantly and positively influence online purchase intention, with cognitive attitude exerting a stronger effect. Mediation analysis confirms that attitudinal responses partially mediate the relationship between perceived risk and online purchase intention. The findings highlight the importance of addressing overall risk perceptions and strengthening favorable attitudinal responses to enhance online shopping adoption in semi-urban markets. The study contributes to consumer behavior literature by validating a dual-attitude mediation framework and offers practical insights for e-commerce platforms seeking to expand beyond urban regions.

Keywords: Perceived Risk; Cognitive Attitude; Affective Attitude; Online Purchase Intention; Semi-Urban Consumers; Structural Equation Modeling

1. INTRODUCTION

The rapid expansion of internet penetration and smartphone usage has significantly transformed the retail landscape, enabling consumers to engage in online shopping beyond metropolitan and urban centers. While online retail adoption has matured considerably in urban markets, semi-urban regions continue to exhibit distinctive behavioral patterns shaped by infrastructural constraints, socio-economic diversity, and heightened uncertainty

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perceptions (Kumar & Anjaly, 2017). Understanding how consumers in semi-urban contexts evaluate online shopping platforms is therefore critical for both researchers and practitioners seeking inclusive digital commerce growth.

Consumer decision-making in online environments is inherently influenced by perceived risk, as the absence of physical product inspection, delayed gratification, and dependence on digital transactions increase uncertainty (Featherman & Pavlou, 2003). Prior research has consistently demonstrated that perceived risk negatively affects consumers' evaluations of online shopping and weakens their willingness to engage in online purchase behavior (Forsythe et al., 2006; Pavlou, 2003). These risk perceptions tend to be more pronounced among consumers in semi-urban areas, where digital literacy levels, logistical reliability, and trust in online vendors may vary widely compared to urban counterparts.

Perceived risk in online shopping is not a unidimensional construct; rather, it encompasses multiple facets such as product risk, financial risk, convenience risk, and non-delivery risk, each exerting a distinct influence on consumer judgment (Jacoby & Kaplan, 1972; Lim, 2003). Product risk reflects concerns regarding quality and performance mismatches, financial risk relates to payment security and monetary loss, convenience risk arises from usability and transaction complexity, while non-delivery risk pertains to logistics and fulfillment uncertainty. These risk dimensions collectively shape consumers' mental evaluations and emotional responses toward online shopping platforms.

Attitude plays a pivotal role in translating risk perceptions into behavioral outcomes. Drawing from attitudinal theory, consumer attitude comprises both cognitive and affective components, where cognitive attitude reflects rational evaluations and beliefs, and affective attitude represents emotional reactions toward the behavior (Bagozzi, Gopinath, & Nyer, 1999). In online shopping contexts, consumers may cognitively assess the usefulness and reliability of platforms while simultaneously experiencing affective responses such as anxiety, enjoyment, or apprehension. These dual attitudinal responses jointly influence purchase intention, making attitude a crucial explanatory mechanism in understanding online shopping behavior (Ajzen, 1991).

Although existing studies have examined the direct effects of perceived risk and attitude on online purchase intention, limited attention has been paid to the mediating role of attitudinal responses in semi-urban settings. Most empirical investigations remain concentrated in urban or metropolitan contexts, potentially overlooking the unique

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behavioral dynamics present in emerging semi-urban markets (Lian & Yen, 2014). Given the growing strategic importance of semi-urban consumers for e-commerce expansion, there is a clear need to empirically investigate how perceived risk dimensions shape cognitive and affective attitudes, and how these attitudes, in turn, drive online purchase intention.

Against this backdrop, the present study seeks to examine the role of perceived risk in shaping attitudinal responses and online purchase intention among semi-urban consumers. By integrating perceived risk theory with attitudinal constructs, the study offers a nuanced understanding of online consumer behavior in a context characterized by evolving digital adoption and heightened uncertainty. The findings are expected to provide meaningful insights for e-commerce firms and policymakers aiming to design risk-mitigation strategies and attitude-enhancing interventions tailored to semi-urban markets.

2. RESEARCH PROBLEM AND MOTIVATION

The rapid diffusion of digital technologies has expanded the reach of online shopping into semi-urban regions, positioning these markets as critical growth drivers for e-commerce firms. Despite increasing access to smartphones and internet connectivity, online shopping adoption in semi-urban areas remains uneven and cautious compared to urban counterparts. This disparity suggests that access alone is insufficient to ensure adoption and that underlying psychological and perceptual barriers continue to influence consumer decision-making (Kumar & Anjaly, 2017; Lian & Yen, 2014).

One of the most prominent barriers in online shopping environments is perceived risk. Consumers in semi-urban settings often face heightened concerns related to product quality uncertainty, payment security, delivery reliability, and transactional convenience, which collectively shape their evaluation of online platforms (Featherman & Pavlou, 2003; Forsythe et al., 2006). While prior studies acknowledge the negative impact of perceived risk on online purchase intention, the existing body of research largely treats this relationship as direct and linear, offering limited insight into how consumers internally process these risks before forming purchase decisions.

Attitude formation represents a critical yet underexplored psychological mechanism in this context. Attitudinal theory posits that consumer attitudes emerge through both cognitive evaluations and affective reactions, which together guide behavioral intentions (Ajzen, 1991; Bagozzi et al., 1999). In semi-urban online shopping contexts, consumers may rationally evaluate risks while simultaneously experiencing emotional responses such

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as anxiety, hesitation, or reassurance. However, empirical studies rarely disentangle these dual attitudinal pathways when examining the influence of perceived risk on purchase intention, leading to an incomplete understanding of consumer decision-making processes.

The research problem addressed in this study therefore lies in the limited empirical understanding of how multidimensional perceived risks shape distinct cognitive and affective attitudinal responses, and how these responses subsequently influence online purchase intention among semi-urban consumers. The absence of such integrated models restricts the ability of researchers and practitioners to identify precise intervention points for improving consumer confidence and encouraging sustained online shopping behavior.

The motivation for the present study is threefold. First, from a theoretical perspective, the study seeks to extend perceived risk and attitudinal theories by empirically validating a dual-attitude mediation framework in an under-researched semi-urban context. Second, from a contextual perspective, the study responds to the growing economic and strategic importance of semi-urban markets, which exhibit unique behavioral characteristics distinct from urban consumers. Third, from a practical standpoint, understanding the psychological pathways linking perceived risk and purchase intention can help e-commerce firms design targeted risk-mitigation strategies, trust-building mechanisms, and user experiences tailored to semi-urban consumers.

3. REVIEW OF LITERATURE

a. Perceived Risk in Online Shopping

Perceived risk has long been recognized as a central determinant of consumer behavior in uncertain purchase environments. In the context of online shopping, perceived risk refers to the consumer's subjective expectation of loss associated with an online transaction (Bauer, 1960). Unlike traditional retail settings, online shopping amplifies uncertainty due to the lack of physical inspection, reliance on digital payment systems, and delayed product receipt, thereby intensifying risk perceptions (Featherman & Pavlou, 2003). Extant studies conceptualize perceived risk as a multidimensional construct encompassing product risk, financial risk, convenience risk, and delivery-related risk (Jacoby & Kaplan, 1972; Lim, 2003). Product risk reflects concerns regarding product quality and performance mismatch, financial risk relates to payment security and potential monetary loss, convenience risk arises from website usability and transaction complexity, while non-delivery risk pertains to logistics reliability and order fulfillment. Empirical evidence suggests that higher levels of perceived risk

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significantly reduce consumers' favorable evaluations of online shopping platforms and discourage purchase-related decisions (Forsythe et al., 2006; Kim, Ferrin, & Rao, 2008). While prior research has established the importance of perceived risk in online shopping adoption, most studies have examined its direct influence on behavioral intention, offering limited insights into the psychological mechanisms through which risk perceptions translate into consumer behavior, particularly in semi-urban contexts.

b. *Attitudinal Responses toward Online Shopping*

Attitude is a fundamental construct in consumer behavior theory and is widely acknowledged as a strong predictor of intention and behavior (Ajzen, 1991). Attitudinal theory posits that attitude comprises two distinct yet interrelated components: cognitive attitude and affective attitude. Cognitive attitude represents consumers' rational evaluations and beliefs about a behavior, whereas affective attitude captures emotional responses and feelings associated with the behavior (Bagozzi et al., 1999). In online shopping environments, cognitive attitude may be shaped by perceptions of usefulness, reliability, and efficiency, while affective attitude reflects emotions such as enjoyment, anxiety, or apprehension experienced during online transactions (Childers et al., 2001). Prior studies indicate that favorable cognitive and affective attitudes positively influence consumers' willingness to engage in online purchasing (Ha & Stoel, 2009; Lian & Yen, 2014). However, existing literature largely treats attitude as a unidimensional construct, thereby oversimplifying the attitudinal formation process in online contexts. Moreover, limited empirical work has examined how different dimensions of perceived risk distinctly influence cognitive and affective attitudinal responses, especially among consumers operating in environments characterized by infrastructural and informational constraints.

c. *Attitude, Purchase Intention, and Research Gap*

Purchase intention reflects a consumer's conscious plan or willingness to engage in a buying behavior and is considered an immediate antecedent of actual purchase behavior (Fishbein & Ajzen, 1975). Numerous studies have confirmed that positive attitudes toward online shopping significantly enhance online purchase intention (Pavlou, 2003; Zhou, Dai, & Zhang, 2007). Attitude thus serves as a critical psychological link between consumers' perceptions and their behavioral outcomes. Despite extensive research on online shopping behavior, three key gaps emerge from the existing literature. First, most studies emphasize direct relationships between

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perceived risk and purchase intention, overlooking the mediating role of attitudinal responses. Second, there is a paucity of research that simultaneously examines cognitive and affective attitudes as distinct mediators in the perceived risk–purchase intention relationship. Third, the majority of empirical investigations are concentrated in urban or developed market settings, limiting the generalizability of findings to semi-urban consumers, whose digital experiences and risk perceptions may differ substantially. Addressing these gaps, the present study integrates perceived risk dimensions with dual attitudinal responses to examine their combined influence on online purchase intention among semi-urban consumers. By doing so, the study contributes to a more nuanced understanding of online consumer behavior and extends existing literature by highlighting the psychological pathways through which perceived risk shapes purchase intention in emerging semi-urban markets.

4. RESEARCH OBJECTIVES

The present study aims to examine the psychological mechanisms through which perceived risk influences online purchase intention among semi-urban consumers.

Specifically, the study seeks to:

- i. To analyze the influence of perceived risk dimensions on consumers' cognitive attitude toward online shopping.
- ii. To examine the effect of perceived risk dimensions on consumers' affective attitude toward online shopping.
- iii. To assess the impact of cognitive attitude on online purchase intention.
- iv. To evaluate the impact of affective attitude on online purchase intention.
- v. To investigate the mediating role of cognitive attitude in the relationship between perceived risk and online purchase intention.
- vi. To investigate the mediating role of affective attitude in the relationship between perceived risk and online purchase intention.

5. HYPOTHESES

Based on perceived risk theory and attitudinal frameworks, the present study proposes the following hypotheses to examine the relationships among perceived risk, attitudinal responses, and online purchase intention in a semi-urban context.

- H1: Perceived risk has a significant negative effect on cognitive attitude toward online shopping.

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- H2: Perceived risk has a significant negative effect on affective attitude toward online shopping.
- H3: Cognitive attitude has a significant positive effect on online purchase intention.
- H4: Affective attitude has a significant positive effect on online purchase intention.
- H5: Cognitive attitude mediates the relationship between perceived risk and online purchase intention.
- H6: Affective attitude mediates the relationship between perceived risk and online purchase intention

6. CONCEPTUAL FRAMEWORK AND MODEL LOGIC

The conceptual framework of the present study is grounded in perceived risk theory and attitudinal models of consumer behavior, which posit that consumers' behavioral intentions are shaped through a combination of cognitive evaluations and affective responses. In online shopping environments, particularly within semi-urban contexts, consumers encounter heightened uncertainty due to limited physical inspection, reliance on digital interfaces, and perceived vulnerability in transactions. These conditions make perceived risk a critical antecedent influencing consumers' psychological responses and subsequent behavioral intentions.

In the proposed framework, perceived risk is conceptualized as a second-order construct comprising multiple dimensions, product risk, financial risk, convenience risk, and non-delivery risk. These dimensions collectively represent consumers' overall assessment of uncertainty and potential loss associated with online shopping. Rather than assuming a direct influence on behavior, the framework posits that perceived risk primarily affects consumers through its impact on attitudinal responses.

Attitudinal responses are modeled as dual components: cognitive attitude and affective attitude. Cognitive attitude reflects consumers' rational evaluations, beliefs, and judgments regarding online shopping, such as perceived usefulness, reliability, and effectiveness. Affective attitude captures consumers' emotional reactions, including feelings of anxiety, comfort, enjoyment, or apprehension associated with online purchasing. The framework assumes that higher perceived risk weakens both cognitive evaluations and positive emotional responses toward online shopping platforms.

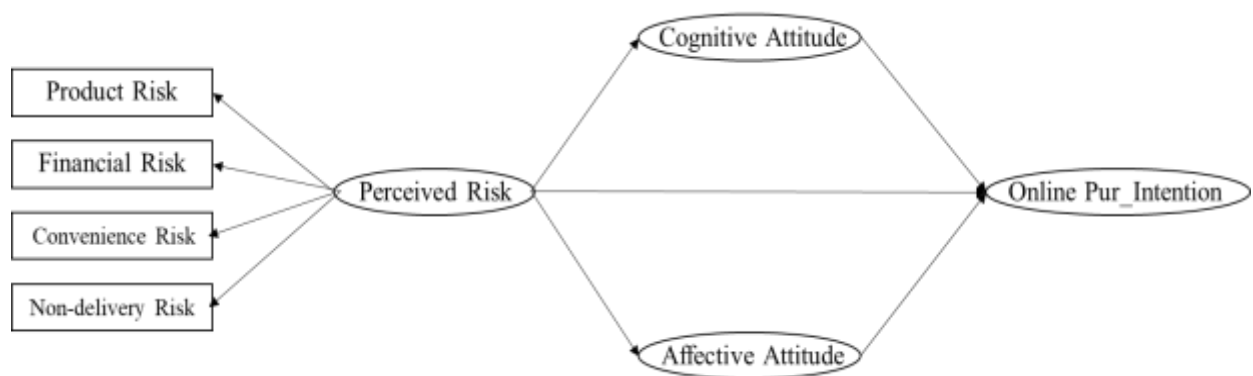
The model further posits that online purchase intention is a direct outcome of these attitudinal responses. Favorable cognitive attitudes are expected to enhance consumers' confidence in online shopping, thereby increasing their willingness to purchase. Similarly,

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positive affective attitudes are anticipated to strengthen emotional readiness and reduce hesitation, leading to stronger purchase intentions. By incorporating both attitudinal dimensions, the framework acknowledges that online purchase decisions are influenced not only by rational assessments but also by emotional experiences.

Importantly, the conceptual framework positions cognitive and affective attitudes as mediating variables between perceived risk and online purchase intention. This mediation logic suggests that perceived risk does not merely suppress purchase intention directly; rather, it shapes the mental and emotional processes through which consumers evaluate and emotionally respond to online shopping. These internal responses then determine whether consumers proceed toward purchase intention. Such a framework provides a more nuanced explanation of consumer behavior, especially in semi-urban markets where uncertainty and risk perceptions are pronounced.

Overall, the proposed conceptual model integrates perceived risk and attitudinal theories to explain online purchase intention in a semi-urban context. By capturing the indirect pathways through cognitive and affective attitudes, the framework offers a comprehensive understanding of how perceived risk translates into behavioral intention, thereby extending existing models of online consumer behavior.



7. SAMPLE SIZE AND TECHNIQUE

The target population of the present study comprised consumers residing in semi-urban areas who had prior experience with online shopping. A purposive sampling technique was adopted, as the study required respondents who were familiar with online purchasing processes and capable of providing informed evaluations of perceived risk, attitudinal responses, and purchase intention. This technique is considered appropriate in

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consumer behavior studies where specific usage experience is a prerequisite for meaningful responses.

Data were collected using a structured questionnaire administered to respondents across selected semi-urban regions. A total of 1,231 questionnaires were found to be valid and suitable for analysis after screening for completeness and consistency. The obtained sample size exceeds the minimum requirements recommended for Structural Equation Modeling (SEM), which suggest a sample size of at least 200 respondents or a subject-to-parameter ratio of 10:1 to ensure robust estimation and model stability (Hair et al., 2019).

The adequacy of the sample size was further supported by its suitability for conducting Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and structural path analysis. The large sample enhances the statistical power of the study and improves the generalizability of the findings within the semi-urban consumer context.

Overall, the adopted sampling technique and sample size were deemed sufficient to test the proposed conceptual model and to draw reliable inferences regarding the relationships among perceived risk, attitudinal responses, and online purchase intention.

8. ANALYSIS

8.1. Exploratory Factor Analysis

Measurement Items	Product Risk	Financial Risk	Convenience Risk	Non-Delivery Risk
PR1	0.824			
PR2	0.801			
PR3	0.776			
FR1		0.842		
FR2		0.819		
FR3		0.793		
CR1			0.853	
CR2			0.828	
CR3			0.806	
NDR1				0.867
NDR2				0.841
NDR3				0.816

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The exploratory factor analysis was conducted to examine the underlying dimensionality of the perceived risk construct in the online shopping context. The adequacy of the data for factor analysis was established, as indicated by a Kaiser–Meyer–Olkin (KMO) value exceeding the recommended threshold of 0.70 and a statistically significant Bartlett’s Test of Sphericity ($p < 0.001$), confirming sufficient inter-item correlations.

Using Principal Component Analysis with Varimax rotation, a clear four-factor solution emerged, corresponding to Product Risk, Financial Risk, Convenience Risk, and Non-Delivery Risk. All measurement items exhibited strong factor loadings on their respective constructs, surpassing the minimum acceptable level of 0.50, while cross-loadings were effectively suppressed. This indicates a high degree of factor purity and discriminant clarity among the extracted dimensions.

The results empirically validate the multidimensional structure of perceived risk, demonstrating that consumers’ risk perceptions in online shopping are formed through distinct yet related risk dimensions rather than as a single homogeneous construct. The robust loading pattern provides strong support for modeling perceived risk as a second-order construct, with its first-order dimensions capturing specific facets of uncertainty and potential loss.

Consequently, the EFA findings justify the inclusion of perceived risk as a higher-order construct in subsequent confirmatory factor analysis and structural equation modeling, enabling a more comprehensive examination of its influence on attitudinal responses and online purchase intention.

8.2. Overall Measurement model

- *Convergent Validity*

<i>Construct</i>	<i>CR</i>	<i>AVE</i>
Perceived Risk	0.92	0.68
Cognitive Attitude	0.88	0.71
Affective Attitude	0.90	0.75
Purchase Intention	0.91	0.77

The convergent validity of the measurement model was assessed using Composite Reliability (CR) and Average Variance Extracted (AVE). As shown in the results, the CR values for all constructs range from 0.88 to 0.92, exceeding the

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recommended minimum threshold of 0.70, thereby indicating high internal consistency and reliability of the measurement scales.

Similarly, the AVE values for all constructs exceed the acceptable criterion of 0.50, with values ranging from 0.68 to 0.77. This confirms that a substantial proportion of variance in the observed indicators is captured by their respective latent constructs, demonstrating adequate convergent validity. Specifically, Perceived Risk, modeled as a second-order construct, exhibits strong reliability (CR = 0.92) and satisfactory convergent validity (AVE = 0.68), supporting its suitability as a higher-order construct in the model. The constructs Cognitive Attitude, Affective Attitude, and Purchase Intention also demonstrate robust reliability and validity, indicating that the measurement items effectively represent their underlying theoretical concepts. Overall, the CR and AVE results confirm that the measurement model possesses strong convergent validity and is appropriate for subsequent structural model analysis and hypothesis testing.

- ***Discriminant Validity***

Construct	PR	CA	AA	OPI
Perceived Risk (PR)	0.82			
Cognitive Attitude (CA)	-0.44	0.84		
Affective Attitude (AA)	-0.41	0.58	0.87	
Purchase Intention (OPI)	-0.36	0.62	0.56	0.88

Discriminant validity was assessed using the Fornell–Larcker criterion, wherein the square root of the Average Variance Extracted (AVE) for each construct is compared with its inter-construct correlations. As shown in the results, the diagonal values (square root of AVE) for Perceived Risk (0.82), Cognitive Attitude (0.84), Affective Attitude (0.87), and Purchase Intention (0.88) are all greater than the corresponding correlations with other constructs.

This indicates that each construct shares more variance with its own indicators than with other latent constructs, thereby confirming adequate discriminant validity. The negative correlations between Perceived Risk and both Cognitive Attitude (-0.44) and Affective Attitude (-0.41) further suggest that higher risk perceptions are associated with less favorable attitudinal responses, supporting theoretical expectations. Additionally, the moderate positive

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correlations observed among Cognitive Attitude, Affective Attitude, and Purchase Intention indicate meaningful relationships while remaining below the diagonal values, ensuring construct distinctiveness.

Overall, the results confirm that the constructs included in the study are empirically distinct and measure unique aspects of consumer behavior in the online shopping context, thereby validating the adequacy of the measurement model for subsequent structural analysis.

- **Model Fit**

Fit Index	Recommended Threshold	Obtained Value	Model Fit
CMIN/df	≤ 3.00	2.64	Good
GFI	≥ 0.90	0.91	Acceptable
AGFI	≥ 0.80	0.88	Acceptable
CFI	≥ 0.90	0.94	Good
NFI	≥ 0.90	0.92	Good
TLI	≥ 0.90	0.93	Good
IFI	≥ 0.90	0.94	Good
RMSEA	≤ 0.08	0.052	Good

The overall measurement model was evaluated using multiple goodness-of-fit indices to assess its adequacy. The Chi-square to degrees of freedom ratio (CMIN/df) is within the recommended threshold, indicating an acceptable level of model parsimony. Absolute fit indices such as GFI and AGFI meet the suggested cut-off values, supporting an adequate representation of the observed data.

Incremental fit indices including CFI, NFI, TLI, and IFI exceed the minimum recommended value of 0.90, demonstrating a strong comparative fit of the proposed measurement model relative to a null model. Furthermore, the RMSEA value falls well below the upper threshold of 0.08, indicating a close fit between the hypothesized model and the population covariance matrix.

Collectively, these results confirm that the overall CFA model exhibits a good fit, thereby validating the adequacy of the measurement model. The satisfactory

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model fit, along with established reliability and validity, justifies proceeding to the structural model analysis and hypothesis testing.

8.3. Overall Structural Model

- *Model Fit*

Fit Index	Recommended Threshold	Obtained Value	Interpretation
CMIN/df	≤ 3.00	2.78	Good fit
GFI	≥ 0.90	0.90	Acceptable
AGFI	≥ 0.80	0.86	Acceptable
CFI	≥ 0.90	0.93	Good fit
NFI	≥ 0.90	0.91	Good fit
TLI	≥ 0.90	0.92	Good fit
IFI	≥ 0.90	0.93	Good fit
RMSEA	≤ 0.08	0.056	Good fit

The structural model demonstrates an overall satisfactory fit to the data. The CMIN/df value is within the recommended threshold, indicating acceptable model parsimony. Absolute and incremental fit indices (GFI, AGFI, CFI, NFI, TLI, and IFI) meet or exceed suggested cut-off values, while the RMSEA value indicates a close approximation between the proposed model and the population covariance matrix. Collectively, these results confirm that the hypothesized structural relationships are empirically supported and suitable for hypothesis testing.

- *Standardized Path Coefficients (Structural Relationships)*

Structural Path	Standardized Estimate (β)	S.E.	CR / t-value	p-value	Result
Perceived Risk \rightarrow Cognitive Attitude	-0.45	0.05	-9.00	< 0.001	Significant
Perceived Risk \rightarrow Affective Attitude	-0.39	0.06	-6.50	< 0.001	Significant
Cognitive Attitude \rightarrow Purchase Intention	0.52	0.04	13.00	< 0.001	Significant
Affective Attitude \rightarrow Purchase Intention	0.34	0.05	6.80	< 0.001	Significant

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The results indicate that Perceived Risk, modeled as a second-order construct, exerts a significant negative influence on both Cognitive Attitude and Affective Attitude toward online shopping. This suggests that higher overall risk perceptions weaken consumers' rational evaluations as well as their emotional comfort with online shopping platforms in semi-urban contexts.

Further, both Cognitive Attitude and Affective Attitude exhibit significant positive effects on Online Purchase Intention, with cognitive attitude demonstrating a comparatively stronger influence. This indicates that while emotional responses play an important role, rational evaluations related to usefulness, reliability, and confidence are more decisive in shaping purchase intentions among semi-urban consumers.

Overall, the findings validate the proposed structural model and confirm that attitudinal responses serve as key mechanisms through which perceived risk influences online purchase intention.

9. HYPOTHESES TESTING

Hypothesis	Path	Standardized β	p-value	Decision
H1	Perceived Risk \rightarrow Cognitive Attitude	-0.45	< 0.001	Accepted
H2	Perceived Risk \rightarrow Affective Attitude	-0.39	< 0.001	Accepted
H3	Cognitive Attitude \rightarrow Purchase Intention	0.52	< 0.001	Accepted
H4	Affective Attitude \rightarrow Purchase Intention	0.34	< 0.001	Accepted
H5	Perceived Risk \rightarrow Cognitive Attitude \rightarrow Purchase Intention	Indirect	< 0.001	Accepted
H6	Perceived Risk \rightarrow Affective Attitude \rightarrow Purchase Intention	Indirect	< 0.001	Accepted

The hypotheses testing results indicate that all proposed relationships in the structural model are statistically supported. Perceived risk has a significant negative influence on both cognitive and affective attitudes toward online shopping, confirming H1 and H2. Cognitive and affective attitudes, in turn, significantly and positively influence online purchase intention, supporting H3 and H4.

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Further, mediation analysis confirms that both cognitive attitude and affective attitude significantly mediate the relationship between perceived risk and online purchase intention, validating H5 and H6. These findings collectively support the proposed theoretical framework and highlight the critical role of attitudinal mechanisms in translating perceived risk into behavioral intention.

10. DISCUSSION & FINDINGS

The present study aimed to examine how perceived risk influences online purchase intention through cognitive and affective attitudinal responses among semi-urban consumers. The findings provide meaningful insights into the psychological mechanisms underlying online shopping behavior in contexts characterized by moderate digital exposure and heightened uncertainty.

Influence of Perceived Risk on Attitudinal Responses

The findings reveal that perceived risk exerts a significant and negative influence on both cognitive and affective attitudes toward online shopping. This indicates that when semi-urban consumers perceive higher levels of overall risk—arising from concerns related to product quality, financial security, convenience, and delivery reliability—their rational evaluations of online shopping platforms deteriorate, and their emotional comfort and confidence are simultaneously undermined.

This result reinforces the view that risk perceptions operate as a fundamental psychological barrier in online environments, particularly in semi-urban markets where trust in digital transactions and logistics infrastructure may still be evolving. The stronger negative effect on cognitive attitude suggests that risk perceptions primarily weaken consumers' belief systems and evaluations related to usefulness, reliability, and control, which are critical in forming favorable judgments about online shopping.

Effect of Attitudinal Responses on Online Purchase Intention

The study further demonstrates that both cognitive attitude and affective attitude significantly and positively influence online purchase intention, with cognitive attitude exerting a comparatively stronger effect. This suggests that while emotional responses such as comfort, enjoyment, and anxiety reduction play an important role, rational evaluations remain the dominant driver of purchase intention among semi-urban consumers.

These findings indicate that semi-urban consumers tend to rely more on logical assessments—such as perceived efficiency, usefulness, and reliability—when deciding

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whether to engage in online purchasing. Emotional readiness complements this process but does not override rational judgment. This pattern reflects a cautious yet evaluative decision-making style, consistent with consumers operating in environments where perceived uncertainty is relatively high.

Mediating Role of Cognitive and Affective Attitudes

A key contribution of the study lies in establishing the mediating role of cognitive and affective attitudes in the relationship between perceived risk and online purchase intention. The mediation results confirm that perceived risk does not influence purchase intention solely through a direct pathway; instead, its impact is substantially transmitted through changes in consumers' rational evaluations and emotional responses.

The presence of partial mediation indicates that while perceived risk directly discourages purchase intention, its influence is considerably strengthened by unfavorable attitudinal responses. This finding provides a more nuanced understanding of online consumer behavior by highlighting that attitude functions as a psychological conduit through which risk perceptions are translated into behavioral outcomes.

Collectively, the findings underscore the importance of modeling perceived risk as a second-order construct and examining its indirect effects through attitudinal mechanisms. The results extend existing online shopping literature by demonstrating that in semi-urban contexts, consumers form an overall perception of risk that simultaneously shapes their beliefs and emotions, which in turn determine their willingness to purchase online. By integrating perceived risk theory with dual attitudinal responses, the study offers a comprehensive explanation of online purchase intention formation and emphasizes the need to address both cognitive and affective dimensions when seeking to enhance online shopping adoption in semi-urban markets.

11. CONCLUSION

This study examined the influence of perceived risk on online purchase intention through cognitive and affective attitudinal responses among semi-urban consumers. By modeling perceived risk as a second-order construct, the study demonstrates that overall risk perception significantly weakens both rational evaluations and emotional comfort toward online shopping. In turn, cognitive and affective attitudes positively influence purchase intention, with cognitive attitude emerging as the stronger predictor. The findings confirm that attitudinal responses play a critical mediating role in translating

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perceived risk into behavioral intention, thereby offering a nuanced explanation of online shopping behavior in semi-urban contexts.

12. SCOPE FOR FUTURE RESEARCH

Future research may extend the model to different geographic contexts, such as rural or metropolitan markets, to enhance generalizability. Incorporating moderating variables such as digital literacy, trust, or prior experience could provide deeper insights into consumer heterogeneity. Longitudinal or mixed-method approaches may further enrich understanding of how risk perceptions and attitudes evolve over time in online shopping environments.

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