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Behavioral Biases and Life Insurance Purchase Decisions in Nepal: A Moderated Mediation Approach

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Abstract

Purpose: The study examines the influence of behavioral biases on life insurance purchase decisions in Nepal using an integrated moderated mediation model examining the mediating role of risk perception and the moderating role of institutional trust.

Design/methodology/approach: This study employs a quantitative design, using a cross-sectional survey to collect data from 404 economically active individuals in Nepal through a stratified and convenience sampling approach. Structural equation modeling (SEM) was used to test measurement and structural models, and the proposed moderated mediation relationships.

Findings: The results reveal that behavioral biases significantly influence life insurance purchase decisions both directly and indirectly through risk perception. Risk perception partially mediates the relationship between behavioral biases and purchase decisions, with a positive moderated effect of institutional trust.

Conclusion: Behavioral biases have a meaningful effect in shaping financial protection decisions, shaping a subjective sense of vulnerability; however, their decision to purchase life insurance depends heavily on their confidence in insurers and the regulatory environment.

Practical Implications: The findings suggest that insurers and policymakers should adopt behaviorally informed strategies to enhance insurance penetration. Efforts to improve public risk awareness and strengthen institutional trust through transparent claim processes and consumer protection can significantly improve life insurance adoption in emerging markets.

Originality/value: The study offers an integrated moderated mediation model to examine how behavioral biases influence insurance policy purchase decisions. This study contributes to the behavioral insurance literature by integrating behavioral biases, risk perception, and institutional trust within a moderated mediation framework.

JEL Classification: D91, G22, G41, G52

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Introduction

Life insurance plays a crucial role in mitigating the financial impact of unexpected events, such as health emergencies, accidents, or natural disasters (Frankovic & Kuhn, 2023). Despite its importance, insurance penetration of life and non-life insurance in Nepal remains low (roughly 3.72%, Nepal Insurance Board, 2026), particularly among rural households and low-to middle-income populations (about 50% of the population; Giesbert et al., 2011; Nepal Insurance Board, 2026; Outreville, 2014). National policies (Gautam, 2024), institutional roles, and individual interests and motives play a vital role in improving the poor adoption of insurance policies; however, behavioral biases deviate from rational decision-making. In this regard, traditional economic theorists suggest that people purchase insurance policies only when their expected utility improves, while behavioral researchers highlight that psychological biases and cognitive heuristics significantly shape financial decisions, including insurance purchase (Browne & Hoyt, 2000; Kahneman & Tversky, 1979).

Behavioral biases (e.g., loss aversion, mental accounting, anchoring, herding, and availability heuristics) may influence individuals to underweight potential future risks or overweight the immediate cost of premiums, thereby reducing the likelihood of insurance uptake (Abdellaoui et al., 2007; Imaddudin et al., 2024). At the same time, individuals' perceived risk and trust in financial institutions may mediate or moderate these effects. Understanding these dynamics is particularly relevant in Nepal, where financial literacy varies vastly, and insurance products are most similar. Empirical evidence, though very few, suggests mixed influence; some studies (Gurung et al., 2025; Kandel et al., 2024) show that behavioral biases and psychological centrality influence investment decisions among Nepalese investors, while others (Gurung et al., 2025) report that financial decisions do not rely fully on behavioral biases but may be influenced by context, such as persuasive communication, agent influence, service quality, corporate image (Adhikari & Khadka, 2025; Biswakarma et al., 2025); however, very low insurance coverage demands more rigorous studies to confine the impact of core behavioral biases in life insurance purchase intention in Nepalese context. Likewise, most studies in the Nepalese context are limited to direct-effect models, whereas behavioral decision-making is inherently complex and often operates through indirect psychological mechanisms.

This study develops an integrated behavioral framework linking cognitive biases, cognition, and life insurance purchase intentions. It adopts a moderated mediation approach to capture the indirect effects of behavioral biases on insurance decisions through cognitive processes, while accounting for the contingent role of institutional trust. By extending contemporary behavioral models, the study provides a conditional explanation of insurance purchase behavior that moves beyond traditional rational choice assumptions.

This study makes several important contributions to the understanding of life insurance purchase decisions, particularly within the context of developing economies such as Nepal. First, it extends the existing literature by integrating behavioral finance perspectives into the analysis of insurance purchase decisions, an area that has traditionally been examined through rational economic frameworks. By focusing on behavioral biases such as heuristics, emotional influences, and cognitive limitations, the study provides a more realistic and crucial explanation of how individuals make life insurance decisions.

Literature Review

To gain a deeper understanding of the mechanisms and boundary conditions influencing insurance purchase behavior, this study proposed conditional relationships (a moderated mediation model with conditional process analysis as outlined by Hayes, 2018) among behavioral biases, risk perception, institutional trust, and life insurance purchase decisions. Therefore, beyond the traditional expected utility theory (rational insurance demand), this study used the quantitative theory-testing approach, as behavioral scientists argue that individuals display bounded rationality and rely on heuristics when evaluating uncertain outcomes (Simon, 1955; Tversky & Kahneman, 1974).

The study developed an integrated theoretical model comprising three theories: behavioral finance theory, risk perception theory, and trust in institutional theory. Behavioral finance theory, responding to the limitations of traditional rational-choice models, demonstrates that individuals evaluate outcomes relative to a reference point and exhibit loss aversion. This theory assumes that people experience more pain in loss than pleasure in equivalent gains (loss aversion). People make decisions around protection against future losses, which is relevant to life insurance decisions. Behavioral finance theory identifies four cognitive biases that influence financial behavior: overconfidence bias (tendency of underestimating personal risk exposure; Barber & Odean, 2001), loss aversion (willingness to purchase insurance; Kahneman & Tversky, 1979), anchoring bias (relying excessively on initial premium or benefit information, i.e., reference dependence; Tversky & Kahneman, 1974), and herding behavior (following peers' insurance choices or aligning to mass decision; Banerjee, 1992).Empirical evidence suggests that these biases systematically distort investment decision-making in both investment and insurance contexts (Browne & Hoyt, 2000; Kunreuther et al., 2013); however, the behavioral insurance literature in developing economies remains relatively underdeveloped.

Risk perception theory posits that people often make investment decisions based on their subjective risk assessments rather than on objective probabilities (Slovic, 1987), which may differ person to person and be contingent on cognitive, emotional, and personal experience (Slovic, 2000). Life insurance purchase decisions are inherently a risk-management approach in a developing economy, where there are no or limited insurance products for long-term investment. Risk perception, i.e., an individual interprets and weighs potential risks, leads to behavioral biases; for instance, overconfidence tends to reduce perceived need for insurance, whereas intense loss aversion motivates purchasing insurance policies to protect against perceived financial shocks. Higher perceived risk increases insurance demand (Browne & Hoyt, 2000).

Trust in institutional theory highlights behavioral inclination based on trust towards the institution. Higher trust refers to individuals' confidence in the reliability, integrity, and competence of the intended insurance company and regulator. Trust becomes a critical determinant of insurance product adoption in the markets characterized by information asymmetry. When institutional trust is low, consumers hesitate to purchase policies even if they perceive high risk (Guiso et al., 2008), while high trust reduces perceived uncertainty and increases willingness to commit to insurance products. In the Nepalese context, life insurance contracts are long-term and intangible, making them particularly sensitive to trust considerations. Trust in institutions is expected to fuel insurance policies, especially in emerging markets like Nepal, where financial literacy and confidence in regulation vary widely.

Based on the arguments developed earlier, this study proposes an integrated framework to examine the conditional process model of life insurance purchase decision by integrating behavioral finance, risk perception theory, and institutional trust theory. Behavioral biases shape individuals' subjective assessment of financial risk; risk perception motivates protective action through life insurance; and trust in institutions determines whether perceived risk is converted into actual buying behavior. This integrated framework (see Figure 1) responds to calls for multi-theoretical and mechanism-based explanations in insurance research.

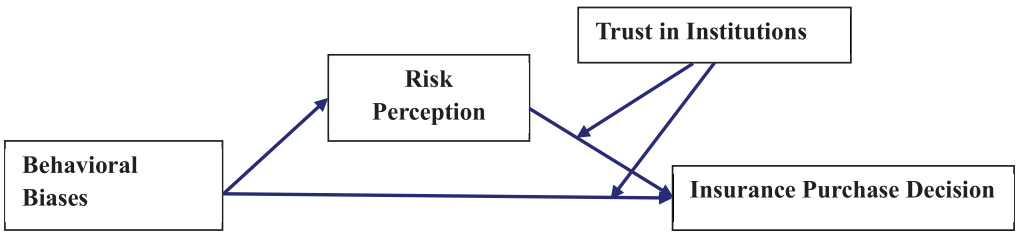


Figure 1: Integrated Research Framework

Behavioral Biases and Insurance Purchase Decisions

Investors frequently exhibit overconfidence, anchoring, and herding tendencies (Baker & Nofsinger, 2010; Barber & Odean, 2001), which significantly influence insurance policy purchasing decisions. Evidence from South Asian contexts similarly indicates that financial decisions deviate from rational expectations due to psychological factors (Browne & Hoyt, 2000). Individuals frequently deviate from expected utility predictions when making insurance choices (Jain et al., 2023), indicating that heuristics such as loss aversion, probability misperception, and framing effect systematically shape insurance uptake in both developed and emerging markets. It is evident that behavioral anomalies, including reference dependence and framing, affect insurance choices even among financially sophisticated consumers, which suggests that behavioral distortions are pervasive across economic contexts (Richter et al., 2019).

Empirical findings from the advanced economies are also similar; they consistently document strong behavioral influences on insurance decisions. Kunreuther et al. (2013) reported that low-probability causes are underinsured against high-impact risks due to myopia, optimism bias, and misperception of probabilities. Consumers who display economically suboptimal insurance purchase decisions, characterized by significant risk misperception and preference inconsistencies (Sydnor, 2010), highlight the role of loss aversion and probability weighting. Consumers are more likely to buy insurance when risks are presented vividly or emotionally, confirming the role of cognitive biases (Jaspersen, 2016). Such studies are evident to justify that behavioral biases persist despite high financial literacy, framing and probability perception strongly affect demand, and trust and institutional quality moderate insurance uptake.

Information asymmetry, lower financial literacy, and reliance on informal advice networks are common in developing economies (Asongu et al., 2016), causing stronger behavioral effects. Shunmugasundaram and Sinha (2022) revealed that overconfidence, herding, and anchoring significantly influence life insurance investment behavior among Indian consumers. Likely, Engti and Bhowal (2025) reported that loss aversion positively affects life insurance purchase intention, as consumers view insurance primarily as protection against financial loss. However, they also observed that excessive loss aversion may lead to a preference for guaranteed-return policies over pure protection plans (Afik et al., 2023; Luca et al., 2023). Similarly, evidence confirms that less financially literate consumers rely more heavily on heuristics and agent recommendations (Bapat, 2017). These findings collectively suggest that behavioral biases are powerful determinants of insurance demand in emerging economies.

Prior insurance studies, particularly in developing economies, have identified demographic factors, income, financial literacy (Alli & Ganiyu, 2025; Weedige et al., 2019), agent influence (Masud et al., 2021), and perceived value as key predictors of life insurance demand (Browne & Hoyt, 2000; Outreville, 2014). Research in Nepal similarly emphasizes service quality, corporate image, and social influence; however, it largely overlooks deep cognitive biases and tends to rely on direct-effect models. Consequently, the psychological processes underlying life insurance purchase decisions remain insufficiently explained; consequently, the study emphasizes the indirect-effect model. This study incorporates overconfidence, loss aversion, availability bias, and herding behavior as the variables of behavioral biases. Based on the evidence, the following hypotheses have been developed:

H1: Behavioral biases have a significant influence on life insurance policy purchase decisions.

H1a: Overconfidence has a significant influence on life insurance policy purchase decisions.

H1b: Loss aversion has a significant influence on life insurance policy purchase decisions.

H1c: Availability bias has a significant influence on life insurance policy purchase decisions.

H1d: Herding behavior has a significant influence on life insurance policy purchase decisions.

Risk Perception as the Mediator

Empirical evidence consistently demonstrates that perceived risk positively influences insurance purchase decisions (Joshi et al., 2024; Kunreuther et al., 2013). Individuals who perceive greater exposure to mortality or financial shocks show stronger intention to purchase life insurance (Alli & Ganiyu, 2025). Behavioral theory suggests that biases primarily operate by distorting risk judgments, indicating an important but underexplored indirect mechanism to determine the insurance policy purchase decision. In addition, behavioral biases are expected to shape insurance decisions primarily through their influence on how individuals perceive and interpret financial risk (Tanjung & Cahyanti, 2025). This study positions risk perception as a mediating variable linking behavioral biases to insurance decisions. Based on the evidence, the following hypotheses have been developed:

H2: Risk perception has a significant mediating influence on behavioral biases and life insurance purchase decisions.

Institutional Trust as Moderator

Research across emerging markets shows that trust in insurers and regulatory systems significantly affects insurance participation (Guiso et al., 2008; Tanjung & Cahyanti, 2025). Low-trust environments often experience persistent underinsurance despite awareness of risk (Alli & Ganiyu, 2025; Singh & Shah, 2024). In Nepal, existing studies typically treat trust as a direct predictor rather than examining its conditional role. Institutional trust is expected to condition the relationship between behavioral biases, risk perception, and insurance purchase decisions by shaping how individuals interpret and act upon perceived risk (Alli & Ganiyu, 2025). Specifically, higher levels of trust reduce perceived uncertainty and enhance confidence in insurers and regulatory systems, thereby strengthening the likelihood that perceived risk translates into actual insurance uptake. Thus, this study integrates trust as a moderator in the integrated model.

Based on the evidence, the following hypotheses have been developed:

H3: Trust in institutions has a significant moderating role in the model predicting the mediated effect of risk perception on the relationship between behavioral biases and life insurance purchase decisions.

Research Methods

Research Design and Procedures

This study adopted an explanatory research design to examine the influence of behavioral biases on life insurance purchase decisions through the mediating role of risk perception and the moderating effect of institutional trust. This study developed an integrated research framework with theoretically grounded latent constructs. Cross-sectional surveys are widely used in behavioral finance and insurance-related research (Hair et al., 2022).

Grounded in a positivist research paradigm, this study followed a deductive approach, assuming that behavioral tendencies and purchase decisions can be objectively measured and statistically analyzed. Hypotheses were developed from behavioral finance and insurance decision theories and empirically tested using an SEM.

All economically active people (who can purchase an insurance policy if they wish), either existing life insurance policyholders or potential buyers capable of making financial decisions in Nepal, were included in the study population. This study used a multi-stage sampling approach: first, major urban and semi-urban areas in the Kathmandu Valley were selected; then, respondents were approached through convenience and stratified sampling of respondents from the selected locations. 404 complete responses were included in the survey; however, 560 potential respondents were approached. The sample size is adequate as per the SEM guidelines; a minimum of 10 observations per indicator is recommended (Hair et al., 2022).

Primary data were collected using a structured self-administered questionnaire with high ethical safeguards, including informed consent, voluntary participation, and assuring anonymity and confidentiality for academic use of data only.

Items measuring all constructs were adapted from well-established prior studies and contextualized to the Nepalese insurance market. Four-point Likert scales (1-strongly disagree, 2-disagree, 3-agree, 4- strongly agree) with five items for each construct were used to reduce central tendency bias. Some representative measurement statements included: "I am confident in my ability to make correct financial decisions" (Nguyen et al., 2019), "I prefer avoiding financial losses rather than achieving gains" (Hersh Shefrin, 2007), "I consider insurance more seriously when I hear about accidents or deaths" (Nguyen et al., 2019), "I am influenced by the insurance decisions of people around me" (Bikhchandani & Sharma, 2001), "I believe my family faces significant financial risk without life insurance" (Outreville, 2014), "I trust life insurance companies in Nepal" (Ennew & Sekhon, 2007), and "I intend to purchase life insurance (or an additional policy) soon" (Outreville, 2014).

The primary data collected using the survey were analyzed using Covariance-based SEM (CB-SEM) to simultaneously examine the measurement properties of the constructs, assess the second-order construct of Behavioral Biases and its underlying first-order dimensions, and test the hypothesized research framework. CB-SEM is appropriate for models involving multiple latent variables, higher-order constructs, mediation, and moderation effects (Kline, 2016; Hair et al., 2022). Before the final analysis, missing value analysis and treatment, assessment of normality (skewness and kurtosis), multicollinearity diagnostics, and descriptive statistics of respondents were assessed.

Result and Analysis

Demographic Profile of Respondents

The respondents included a diverse group: males (59.41%) in comparison to females (40.59%); age below 30 years (47.03%), 30 - 45 years (37.13%), 45 years and above (15.84%).

Descriptive Analysis of the Status of Constructs

Conceptually, this study incorporates overconfidence, loss aversion, availability bias, and herding behavior as variables of behavioral biases, risk perception as a mediating variable, trust in the institution as a moderating variable, and the life insurance policy purchase decision as the dependent variable. Primarily, descriptive statistics were used to assess respondents' understanding of hypothesized constructs (see Table 1).

Table 1: Mean Satisfaction and Standard Deviation on the Dimensions

Variables	Mean	S. D
Overconfidence (OC)	2.99	.81
Loss aversion (LA)	3.15	.87
Availability bias (AB)	2.96	.71
Herding behavior (HB)	3.19	.78
Behavioral biases (Higher Order) (BB)	3.07	.79
Risk perception (RP)	3.21	.75
Institutional trust (IT)	2.85	.94
Life insurance purchase decision (PD)	3.12	.69

All constructs were measured using a four-point Likert scale. The mean values indicate a moderate to high level of agreement across constructs, with risk perception recording the highest mean (M = 3.21, SD = .75), followed by herding behavior (M = 3.19, SD = .78). Institutional trust shows the lowest mean (M = 2.85,

SD = .94), with the highest variability among respondents, indicating relatively dispersed perceptions of trust compared to other constructs.

Model Fit Assessment

The goodness of fit allows for the further examination of the proposed framework, as there is evidence of a good fit of the model with p-value <.05, Chi-square/df = 1.756, RMSEA < .05, GFI (.915), AGFI (.885), SRMR (.052), NFI (.910), TLI (.943), and CFI (.951). Hence, all the criteria of model fit have been satisfied.

Table 2 : Model Fit Analysis

Factors	Estimated Model
p-value	.000
Chi-Square/df	1.756
RMSEA	.042
GFI	.915
AGFI	.885
SRMR	.052
NFI	.910
TLI	.943
CFI	.951

Assessment of the Measurement Model

Table 3 provided evidence of good internal consistency (α > .70) for the model's constructs. Further, the composite reliability above .80 confirms reliability. The average variance extracted (AVE) values exceeding .50 support convergent validity.

Table 3: Assessment of the Measurement Model

Construct	Alpha	CR	AVE	OC	LA	AB	HB	RP	IT	PD
Overconfidence (OC)	.878	.849	.661	1						
Loss aversion (LA)	.865	.856	.676	.45**	1					
Availability bias (AB)	.771	.815	.598	.43**	.44**	1				
Herding behavior (HB)	.862	.853	.631	.53**	.53**	.57**	1			
Risk perception (RP)	.812	.782	.593	.55**	.56**	.53**	.51**	1		
Institutional trust (IT)	.747	.715	.563	.47**	.49**	.43**	.50**	.67**	1	
Life insurance purchase decision (PD)	.842	.818	.631	.42**	.44**	.36**	.44**	.65**	.58**	1

Discriminant validity (see Table 3) was assessed using the multitrait–multimethod (MTMT) correlation matrix of composite variables. The inter-construct correlations below .80 provided adequate discriminant validity of measures. The positive, significant inter-construct correlations of moderate magnitude provided evidence of theoretical alignment without evidence of multicollinearity. Furthermore, the reliability and validity of the measurement model enabled hypothesis testing.

Table 4: Second-order Construct Assessment

Higher-Order Construct	Dimension	Loading	*t-value*	*p-value*	CR	AVE
Behavioral biases	Overconfidence (OC)	.79	14.62	<.001		
	Loss aversion (LA)	.81	15.03	<.001		
	Availability bias (AB)	.76	13.88	<.001		
	Herding behavior (HB)	.84	16.21	<.001		
Behavioral biases					.90	.69

The second-order measurement model (see Table 4) indicates that four dimensions well represent the behavioral biases. All higher-order loadings exceed the recommended threshold of .70 and are statistically significant ($p < .001$). The composite reliability (CR = .90) and average variance extracted (AVE = .69) further confirm the reliability and convergent validity of the higher-order construct.

Hypothesis Testing

The structural model results (see Table 5) indicate that behavioral biases significantly influence insurance purchase decisions ($\beta = .17$, $p < .015$) and risk perception ($\beta = .56$, $p < .001$). The study also examined risk perception as a significant predictor of life insurance purchase decisions ($\beta = .39$, $p < .001$). The direct effect of behavioral biases on purchase decisions remains significant, indicating partial mediation. The interaction between risk perception and institutional trust is positive and significant ($\beta = .24$, $p < .001$), confirming the moderating role of institutional trust.

Table 5 : Direct Effect, Indirect Effect, and Conditional Indirect Effects

Path	β	SE	*t-value*	*p-value*	Decision
BB->RP	.56	.05	11.2	<.001	Supported
RP->PD	.39	.06	6.5	<.001	Supported
BB->PD	.17	.07	2.43	<.015	Supported
RP x IT -> PD	.24	.05	4.8	<.001	Supported
Indirect Effect (Mediation Test)					
Effect	**β**	**Boot SE**	**LLCI**	**ULCI**	**Result**
BB->RP->PD	.22	.04	.15	.31	significant
Conditional indirect effects at levels of Institutional Trust					
Institutional Trust Level	**Indirect effect**	**Boot SE**	**LLCI**	**ULCI**	
Low (-1 SD)	.14	.03	.08	.21	
Mean	.22	.04	.15	.31	
High (+1 SD)	.31	.05	.22	.42	
Index of Moderated Mediation					
Index		**Boot SE**	**LLCI**	**ULCI**	**Interpretation**
.09		.02	.05	.14	significant

Bootstrapping results further reveal that the conditional indirect effect of behavioral biases on purchase decisions through risk perception increases with higher levels of institutional trust. The index of moderated mediation is significant ($\beta = .09$, 95% CI [.05, .14]**),** supporting the presence of moderated mediation. These results supported the hypotheses formulated in the study.

Discussion

This study examined how an integrated model incorporating behavioral biases, perceived risk, and institutional trust influences life insurance purchase decisions in Nepal. The results of the moderated mediation model, analyzed using SEM, provide robust empirical support for the contribution to the growing behavioral insurance literature.

The results confirm that overconfidence, loss aversion, availability bias, and herding behavior are the components of behavioral biases that significantly influence life insurance purchase decisions. Aligning with behavioral finance theory, results of the study suggest that individuals do not always make fully rational financial decisions (Thaler, 1999; Tversky & Kahneman, 1974). This study supports findings of prior empirical evidence (Nguyen et al., 2019; Weedige et al., 2019) that cognitive shortcuts and emotional reactions shape insurance demand in emerging markets.

Relatively high mean scores for loss aversion and herding behavior suggest that individuals are particularly sensitive to potential financial losses and social influence in Nepal. In the Nepalese context, as the country is undergoing economic transformation, these results indicate that individual financial decisions are strongly shaped by social learning and perceived downside risk, supporting earlier findings from developing economies (Banerjee, 1992; Bikhchandani & Sharma, 2001). The result echoes findings of South Asian studies arguing that people purchase insurance policies because of fear of future uncertainty (Giesbert et al., 2011). Respondents' preference is to avoid financial loss rather than seek a gain, which could be the major motivator in purchasing insurance policies. In addition, respondents rely on the most recalled event to minimize their financial loss before making insurance purchase decisions, recalling availability bias. More importantly, Nepalese respondents are more likely to be positive about purchasing insurance if they receive consistent recommendations from friends and relatives and feel confident when they know that social or professional influencers have purchased the insurance policies, reflecting strong herding behavior.

The key outcome of this study is to confirm the significant mediating effect of risk perception in the relationship between behavioral biases and life insurance purchase decisions (Imaddudin et al., 2024; Outreville, 2014; Weedige et al., 2019). The effect of risk perception and behavioral biases on insurance purchase decisions can be improved by increasing institutional trust, i.e., the moderating effect of institutional trust. These results are consistent with heuristic and risk perception literature emphasizing individuals' perceived vulnerability predicting protective financial behavior (Joshi et al., 2024; Loewenstein et al., 2001; Slovic, 1987). This finding highlights the boundary condition under which behavioral mechanisms translate into actual purchase behavior. Individuals exhibiting stronger loss aversion or availability bias are more likely to overestimate financial risks associated with death or income loss, thereby increasing their propensity to purchase life insurance. In Nepal, subjective risk appraisal appears to play an even more decisive role in insurance adoption.

This result is theoretically consistent with trust-based financial behavior models (Ennew & Sekhon, 2007; Guiso et al., 2008), which argue that even risk-aware individuals may refrain from purchasing financial products if they lack confidence in providers. Insurance regulators and insurance companies should be concerned about claim settlement, transparency, and regulatory effectiveness, which often dampen insurance demand. This study supports recent studies from developing economies showing that trust in insurers and regulators significantly strengthens insurance participation (Beck et al., 2012; Richter et al., 2019).

Regarding the conceptualized integrated model, the measurement and structural models demonstrated satisfactory psychometric properties. Reliability and convergent validity indicators exceeded recommended thresholds (Hair et al., 2022), and the model fit indices indicate good model fit according to conventional SEM standards (Hu & Bentler, 1999; Kline, 2016). These results strengthen confidence in the robustness of the proposed framework.

Conclusion and Implications

This study examined how behavioral biases influence life insurance purchase decisions by applying a moderated mediation framework, intervening risk perception as a mediator, and institutional trust as a moderator.

The study concluded that behavioral biases comprising overconfidence, loss aversion, availability bias, and herding behavior significantly affect life insurance purchase decisions. This strengthens the behavioral finance perspective, i.e., individuals often rely on cognitive shortcuts when making insurance purchase decisions to deal with uncertain financial choices. Behavioral biases have a meaningful effect in shaping financial protection decisions in a developing market like Nepal, where financial awareness and insurance literacy are still maturing.

Biases shape the subjective sense of vulnerability, i.e., risk perception, which then motivates insurance purchasing, highlighting the psychological pathway underlying insurance behavior. The study suggests that improving risk understanding could be an effective lever for increasing insurance uptake. The study also investigates that institutional trust strengthens the relationship between risk perception and purchase decision. This study concludes that even when individuals recognize potential risks, their decision to purchase life insurance depends heavily on their confidence in insurers and the regulatory environment.

Theoretically, the study contributes by integrating behavioral biases, risk perception, and institutional trust into a single moderated mediation framework to explain life insurance purchase decisions. This study extends prior research that examined these constructs separately, reveals the underlying psychological process through which behavioral biases influence insurance behavior, and identifies the boundary condition that strengthens this relationship. This study integrates higher-order behavioral bias construct modeling of overconfidence, loss aversion, availability bias, and herding behavior, and advances methodological rigor in behavioral finance, extending its application to life insurance. Furthermore, this study enhances the contextual relevance and external validity of behavioral insurance literature supported by empirical evidence from an emerging market in Nepal.

The study offers actionable insights for regulators, insurers, and policymakers to expand life insurance penetration by increasing institutional trust. The insurers should adopt behaviorally informed communication strategies that address common cognitive biases and shape risk perceptions more effectively, increasing trust and reliability. They should ensure stronger trust-building initiatives, including transparent claim settlement processes, robust consumer protection mechanisms, and visible regulatory oversight. In addition, academic institutions, regulators, and insurers should initiate financial literacy and public awareness programs through academic courses and short-term awareness campaigns to empower people that supports recognize and manage their own decision biases.

Limitations and Future Research

Despite its contributions, this study has a few limitations that can be acknowledged in future studies. A cross-sectional design can limit the ability to draw strong causal inferences among behavioral biases; a longitudinal research design can better capture evolving behavioral biases and strong causal relationships. Similarly, self-reported survey data may be subject to common method bias and social desirability effects, particularly in financial behavior research. Although behavioral biases were modeled as a higher-order construct, future studies can incorporate other relevant psychological factors, such as financial literacy, regret aversion, emotional intelligence, and cultural norms. Future work may also employ mixed-method approaches, combining survey data with behavioral experiments or actual policy data, to reduce common method concerns and deepen insight into real purchasing behavior.

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Conflict of interest

The authors declare that they have no known competing financial, professional, or personal interests that could have influenced the work reported in this manuscript.

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Ethical Statement

Formal ethical approval was not required for this study, as it was based on a perception/behavioural survey and did not involve any clinical intervention, medical procedure, animal subjects, or sensitive personal data. The study was conducted in accordance with established research ethics and academic integrity standards.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Authors' Contribution and ORCID iDs

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