

Examining The Dynamics of Personality Traits And Religiosity in Shaping Investment Biases: A Gendered Perspective

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Abstract: Investment choice is frequently disguised by psychological bias, and investors are frequently led off track from rational decision-making. This research examines the impact of religiosity and the Big Five personality traits on two primary investment biases, loss aversion and mental accounting, moderated by gender. With a sample size of 321 individual investors in Goa, India, Structural Equation Modeling (SEM) identifies that Agreeableness, Conscientiousness, Extraversion, and Neuroticism all increase both biases significantly, while Openness to Experience influences mental accounting only. Religiosity also increases both biases. Notably, gender moderates these relationships, particularly the effects of Neuroticism and Religiosity on both biases. Additionally, gender influences the relationship between Agreeableness and mental accounting, as well as the associations of Conscientiousness, Extraversion, and Openness with loss aversion. These results emphasize the essential role of gender in determining how personality and religiosity lead to financial biases, highlighting the necessity for gender-inclusive financial education and advisory approaches. By incorporating psychological and cultural aspects into investment behaviour research, this research provides useful contributions for financial planners, policymakers, and retail investors seeking more tailored and efficient decision-making models.

Keywords: Religiosity, Personality traits, Investment biases, Gender, Mental accounting, Loss aversion.

INTRODUCTION

Investment decisions are rarely as rational as traditional finance theories assume. Psychological traits, socio-cultural influences, and inherent biases subtly shape how individuals perceive risk and opportunity, often leading to suboptimal choices. While behavioural finance has extensively documented biases like overconfidence, framing effects, and anchoring, research has essentially treated these biases in isolation. How personality traits and religiosity interact with these biases remains underexplored, as they shape real-world financial behaviour.

Personality plays a fundamental role in financial decision-making. These traits affect risk preferences, decision-making styles, and susceptibility to biases. Similarly, religiosity a deeply ingrained aspect of an individual's identity affects financial choices by shaping ethical considerations, risk preferences, and long-term financial planning. Nevertheless, little is understood about how personality and religiosity jointly influence behavioural biases in investment contexts.

Gender is an essential but frequently disregarded component of behavioural finance, significantly complicating matters. Based on studies, men and women perceive financial risks differently, but how much gender influences the relationship among personality, religiosity, and investment biases remains unexamined. Understanding this dynamic is crucial, as gender-based differences in risk perception and decision-making have wide-ranging effects on investment strategists, legislators, and financial counsellors.

This research closes these gaps by looking at the personality attributes or religiosity that shape behavioural biases, with gender as a regulating element. This study uses SEM and a dataset of 321 individual investors to provide fresh perspectives on how demographic, psychological, and cultural dimensions interact to influence investment behaviour. By integrating these factors, the study extends existing behavioural finance research, offering actionable insights for investors, financial advisors, and policymakers to optimise decision-making processes and mitigate biases.

OBJECTIVES

- To assess the impact of personality traits on mental accounting and loss aversion biases in investment decision-making.
- To examine the influence of religiosity on mental accounting and loss aversion biases among individual investors.

- To examine how gender moderates the relationships between personality traits, mental accounting, and loss aversion biases.
- To explore the moderating effect of gender on the relationship between religiosity and cognitive biases such as mental accounting and loss aversion.

REVIEW OF LITERATURE

Understanding the psychological and cultural forces that shape investment choices are essential for addressing behavioural biases that can disrupt rational choices. Two biases that remain especially relevant, because they significantly influence everyday financial behaviour and remain understudied in emerging markets, are the way people mentally classify their money and the instinctive fear of losses.

As conceptualised by Thaler (1999), mental accounting describes the cognitive separation investors make when categorising money into different mental “accounts,” which can distort their spending and investment choices. Several studies have looked at how personality traits affect these biases, but the actual data is still conflicting, particularly regarding emerging markets. For example, Muehlbacher and Kirchler (2019) demonstrate that unique personality characteristics significantly impact the inclination to use mental accounting, with impulsivity weakening and conscientiousness supporting organized financial decision-making.

Loss aversion is closely connected with mental accounting, a fundamental concept in prospect theory (Kahneman & Tversky, 1979), which describes the tendency for losses to weigh more heavily on investors than gains. This bias often leads to risk-averse or irrational investment decisions. Kumar and Dudani (2023) highlight how personality traits modulate loss aversion, with extraversion increasing loss sensitivity while openness appears to mitigate it. However, the interaction of loss aversion with cultural and religious factors remains insufficiently addressed. Saputra et al. (2020) contribute to this discourse by demonstrating how religiosity shapes risk perception, leading religious investors to exhibit heightened loss aversion due to moral and ethical considerations surrounding financial risks.

Personality traits are essential to shaping investment behaviour. Baker et al. (2021) argue that extraversion, openness, conscientiousness, and neuroticism significantly influence investors' susceptibility to cognitive biases. However, empirical research focusing on how these traits affect mental accounting and loss aversion in emerging economies, particularly India, remains sparse. This is a notable gap considering the distinct cultural and socio-economic factors that shape investor behaviour in such contexts. Baker et al. (2024) state that research on personality traits and investment biases in the Indian setting is limited. Addressing this gap is essential to develop a nuanced understanding of investor behaviour and effectively tailor financial advice and interventions in emerging markets like India.

Religiosity, as a cultural and psychological construct, exerts a profound influence on financial decision-making. Noussair et al. (2013) find that religious beliefs often encourage conservative investment behaviours and risk aversion. The literature, however, offers differing opinions regarding the degree to which personality traits' influence on financial biases is mitigated by religiosity. Religion strongly

moderates the association between psychological characteristics and investment behaviour, according to Waseem-Ul-Hameed et al. (2018), while Khuram Shahzad et al. (2014) argue that its effect is minimal. These contradictory results emphasize the necessity of more context-specific investigations, especially in culturally diverse settings like India, where religiosity is deeply embedded in daily life and may uniquely shape biases such as mental accounting and loss aversion.

Gender differences in financial decision-making and bias expression have been noted in prior research. Meier-Pesti and Penz (2008) suggest that risk tolerance is driven more by culturally defined masculine traits than by biological sex itself. Yet particularly in emerging-market settings, the moderating influence of gender on the interaction of personality, religiosity, and biases like loss aversion and mental accounting is still little understood. Designing specialized financial advice and policy actions requires an understanding of these processes.

There are still a lot of unanswered questions about the combined impacts of gender personality, and religion on loss aversion and mental accounting biases. While personality and demographics have been studied, religiosity's role, especially in mental accounting, is underexplored (Badola et al., 2024). The combined effects on loss aversion also lack research, limiting insight into investor behaviour. Personality's impact on these biases, particularly in India, is insufficiently examined (Baker et al., 2024), and links between personality and mental accounting need more evidence (Muehlbacher & Kirchler, 2019). Religiosity affects socially responsible investing and may moderate psychological factors, but findings are mixed. Lastly, the gender's moderating role on these biases remains unclear in culturally diverse contexts like India. This study probes how personality, religiosity, and gender jointly shape mental accounting and loss aversion in an emerging-market setting, offering evidence that can inform culturally attuned financial guidance.

METHODOLOGY

RESEARCH DESIGN

In this research employs a quantitative, cross-sectional survey design suitable for simultaneously testing multiple structural relationships through a single data collection wave. The target population includes individual equity market investors aged 18 years and above.

Data Collection

Primary data is collected offline and online. Methods of convenience and snowball sampling were used to reach a broad and diverse sample of investors.

Sample Size

Following Hair et al. (2019), at least 205 respondents were needed, after it was determined since the smallest quantity of samples was five times the number of questionnaire items (41). To ensure robust analysis, the final sample consisted of 321 individual investors.

Measures

There were five separate sections on the survey instrument. Age, sex, income, degree of education, and occupation, and trading experience were among the demographic information gathered during the initial stage. The Big Five as a model is employed in the second section to assess personality traits, following the framework outlined

by Mayfield et al., (2008). The third section examined religiosity, incorporating elements from scales developed by Koenig & Büssing, (2010) and Abdel – Khalek (2017). The fourth and fifth sections explored biases related to mental accounting and loss aversion, utilising measures from Muehlbacher & Kirchler, (2019) and Li et al., (2021), respectively. The seven-point Likert scale was utilized to capture participant responses., where ‘1’ signified strong disagreement, going up to 7, which signified strong agreement, to assess their level of agreement.

Data Analysis

Smart PLS 4.0 has used to perform PLS-SEM since of its capacity to manage complex models and moderation effects, particularly when dealing with non-normal data. The measurement model's validity & reliability have been assessed, however its structural model tested the associations which were hypothesized via bootstrapping. Gender's moderating influence was examined using Multi-Group Analysis (MGA).

Ethical Considerations

The university's ethics committee granted ethical clearance prior to data collection. The participants gave their consent, and confidentiality was assured throughout the research.

Hypothesis developed

H1: Neuroticism has a significant impact on mental accounting bias

H2: Neuroticism has a significant impact on loss aversion bias.

H3: Extraversion trait has a significant impact on mental accounting bias.

H4: Extraversion trait has a significant impact on loss aversion bias.

H5: Openness to experience trait has a significant impact on mental accounting bias.

H6: Openness to experience trait has a significant impact on loss aversion bias.

H7: Agreeableness trait has a significant impact on mental accounting bias.

H8: Agreeableness trait has a significant impact on Loss aversion bias.

H9: Conscientiousness trait has a significant impact on Mental accounting bias.

H10: Conscientiousness trait has a significant impact on Loss aversion bias

H11: Religiosity has a significant impact on Mental accounting bias.

H12: Religiosity has a significant impact on Loss aversion bias.

H 13: Gender moderates the relationship between openness and loss aversion bias.

H14: Gender moderates the relationship between conscientiousness and mental accounting bias.

H15: Gender moderates the relationship between conscientiousness and loss aversion bias.

H16: Gender moderates the relationship between extraversion and mental accounting bias.

H17: Gender moderates the relationship between extraversion and loss aversion bias.

H18: Gender moderates the relationship between agreeableness and mental accounting bias.

H 19: Gender moderates the relationship between agreeableness and loss aversion bias.

H 20: Gender moderates the relationship between neuroticism and mental accounting bias.

H 21: Gender moderates the relationship between neuroticism and loss aversion bias.

H 22: Gender moderates the relationship between religiosity and mental accounting bias.

RESULTS

Analysis of Research Model

The study employed PLS-SEM via Smart PLS 4.0. The analysis began with evaluating its measurement model for reliability and validity, then testing its structural model using 10,000 subsamples for bootstrapping (Hair et al., 2016). MGA contrasted male (n = 164) and female (n=157) participants, since PLSMGA accommodates uneven group sizes (Reinartz et al., 2009).

Table 1: Item Measurement and Outer Loadings

Construct	Items	Details	Outer Loading
Agreeableness(A)	A1	I often have arguments with my family and co-workers	0.0802
	A2	Some people think I'm selfish and egotistical	0.887
	A3	Some People think I'm cold and calculating	0.794
	A4	I generally try to be thoughtful and considerate	0.789
Conscientiousness	C1	Keep my belongings neat and clean	0.715
		I'm Pretty good about pacing myself so as to get Things done on time	0.745
	C3	I waste a lot of time before settling down to work	0.779
Extraversion(E)	C4	I never seem to be able to get organized	0.713
	E1	I often feel as if I'm bursting with energy	0.740
	E2	I am a cheerful high-spirited person	0.807
	E3	I am a very active person	0.858
Neuroticism	N2	When I'm under a great deal of stress, something I feel like I'm going to pieces	0.812
	N3	I often feel tense and jittery	0.828
	N4	Sometimes I feel completely worthless.	0.862
	N5	Too often when things go wrong, I get discouraged and feel like giving up	0.838
Openness(O)	O1	I am intrigued by the patterns I find in art and nature	0.796
	O2	I often try new and foreign foods	0.761
	O3	I have a lot of intellectual curiosity	0.723
	O4	I often enjoy playing with theories or abstract ideas	0.827
Religiosity (Rel.)	Rel.1	I attend a place of worship	0.778
	Rel.2	I spend time in private religious activities	0.826
	Rel.3	My faith is an integral part of my personality	0.802
	Rel.4	My religious beliefs are the basis for my actions my religious to life	0.766
Loss Aversion (LA)	Rel.5	My faith affects many of my decisions	0.847
	LA1	The pain of losing money matters more than the pleasure of gaining the same amount of money	0.773
	LA2	I feel nervous while making a decision that may lead to loss	0.803
	LA3	The pain of losing something matters much more to me than the pleasure of getting it.	0.785
Mental Accounting (MA)	LA4	Avoiding failure is less important to me than seeking success	0.799
	MA1	A potential failure scares me more than a potential success encourage me	0.841
	MA2	The suffering that come with losses can be fully off's be the pleasure that comes from gains	0.819
	MA3	It is important to me to keep track of my financial activity precisely	0.775
	MA4	I keep a record of my earnings and expenses	0.869
	MA5	I could at least say roughly how much I have spent generally, I am someone others would describe as well org raised	0.773

Note: Items N1, LA5, and MA4 were removed as their outer loadings were below the recommended threshold of 0.708 (Hair et al., 2016).

Measurement Model Assessment

Verification of convergent validity are performed by CR values spanning 0.827 - 0.916 (>0.70), AVE scores > 0.50, and outer loadings among 0.713 - 0.900 (>0.708) (Table 1). The method of discriminant validity formed by the Fornell–Larcker criterion (Table 2), and HTMT values ranged from 0.111 to 0.574 (Table 3), all below the 0.85 threshold (Hair et al., 2016).

Table 2: Construct Intercorrelations for Discriminant Validity

	Composite Reliability	Average Variance extracted (AVE)	A	C	E	N	O	LA	MA
Agreeableness(A)	0.89	0.671	0.819						
Conscientiousness	0.827	0.545	0.331	0.738					
Extraversion(E)	0.845	0.645	0.217	0.421	0.803				
Neuroticism	0.902	0.698	0.143	0.172	0.261	0.835			
Openness(O)	0.859	0.605	0.238	0.302	0.333	0.148	0.778		
Loss Aversion (LA)	0.916	0.646	0.374	0.349	0.324	0.255	0.273	0.804	
Mental Accounting (MA)	0.899	0.691	0.31	0.401	0.425	0.341	0.43	0.097	0.831
Religiosity (Rel.)	0.901	0.647	0.256	0.284	0.294	0.268	0.171	0.317	0.346

Notes: Correlations are positioned in the bottom matrix section.

The shared Diagonal entries in bold show its square root of AVE, with latent construct variances presented on upper portion of the matrix.

Table 3: HTMT Ratio for Discriminant Validity

	A	C	E	N	O	LA	MA	Rel.
Agreeableness(A)								
Conscientiousness	0.419							
Extraversion(E)	0.273	0.574						
Neuroticism	0.167	0.215	0.331					
Openness(O)	0.282	0.398	0.436	0.178				
Loss Aversion (LA)	0.431	0.432	0.402	0.291	0.324			
Mental Accounting (MA)	0.366	0.509	0.532	0.397	0.526	0.111		
Religiosity (Rel.)	0.3	0.359	0.373	0.311	0.21	0.36	0.4	

Measurement Invariance of Composites (MICOM)

To test gender as a moderator, the MICOM procedure was applied to ensure each group's constructs were measured equally. (Henseler et al., 2016)

Table 4: MICOM Analysis Results for Gender

	Constructs	Original Correlation	Correlation Permutation mean	5.00%	Permutation P-value
Step 2: Compositional Invariance	A	0.999	0.998	0.994	0.715
	C	0.993	0.994	0.985	0.288
	E	0.999	0.998	0.993	0.729
	N	0.996	0.998	0.994	0.159
	O	0.999	0.997	0.992	0.754
	LA	0.999	0.998	0.995	0.718
	MA	0.999	0.999	0.997	0.653
	Rel.	0.999	0.997	0.992	0.888
	Constructs	Original Correlation	Correlation Permutation mean	5.00%	Permutation P-value
Step 3a: Mean Invariance	A	0.076	-0.002	-0.221	0.221
	C	0.027	0	-0.221	0.217
	E	0.043	0.001	-0.22	0.215
	N	-0.99	-0.001	-0.221	0.219
	O	0.07	0	-0.219	0.219
	LA	0.069	-0.001	-0.221	0.219
	MA	-0.073	0	-0.222	0.221
	Rel.	-0.117	-0.001	-0.225	0.221
	Constructs	Original Correlation	Correlation Permutation mean	5.00%	Permutation P-value
Step 3b: Variance Invariance	A	0.042	0.001	-0.318	0.332
	C	0.058	0	-0.296	0.296
	E	0.088	-0.002	-0.353	0.348
	N	0.066	0.001	-0.302	0.296
	O	0.044	0.001	-0.299	0.303
	LA	-0.066	0.001	-0.274	0.275
	MA	-0.129	0.001	-0.399	0.401
	Rel.	0.093	0.003	-0.309	0.312

MICOM (Table 4), confirmed measurement invariance through three steps: (1) Configural invariance, established by using identical measurement models, algorithm settings, and data preprocessing for both male and female groups; (2) Compositional invariance, confirmed as original correlations (0.993–0.999) exceeded the 5% quantile values with non-significant p-values ($p > 0.05$); and (3) Equality of composite means and variances, validated as all original differences fell in the 2.5%–97.5% quantile interval with p-values > 0.05 . These results confirmed measurement invariance across gender groups.

Multi-Group Analysis (MGA)

MGA revealed gender-based differences for the paths $A \rightarrow MA$, $C \rightarrow LA$, $E \rightarrow LA$, $N \rightarrow LA$, $N \rightarrow MA$, $O \rightarrow LA$, $Rel. \rightarrow LA$, and $Rel. \rightarrow MA$, confirming moderation by gender. There were no notable variations discovered for $A \rightarrow LA$, $C \rightarrow MA$, $E \rightarrow MA$, and $O \rightarrow MA$. Neuroticism and Religiosity showed full non-invariance, indicating their varying influence by gender. (Table 5)

Table 5: Multi-Group Analysis (MGA) of Gender Differences

	Path	p-value (female)	Path coefficient (Male)	p-value (Male)	Invariant
A->LA	0.223	0.009	0.228	0.002	Yes
A->MA	0.072	0.288	0.143	0.026	No
C->LA	0.124	0.170	0.187	0.009	No
C->MA	0.149	0.036	0.141	0.030	Yes
E->LA	0.209	0.005	0.012	0.874	No
E->MA	0.182	0.017	0.171	0.027	Yes
N->LA	0.008	0.907	0.261	0.000	No
N->MA	0.237	0.000	0.105	0.148	No
O->LA	0.073	0.363	0.139	0.034	No
O->MA	0.304	0.000	0.204	0.000	Yes
Rel->LA	0.165	0.024	0.085	0.248	No
Rel->MA	0.062	0.384	0.21	0.001	No

Structural Model Evaluation

Model assessment (Hair et al., 2016) used R^2 , β , t-values, Q^2 , f^2 , and VIF. R^2 was 0.271 (Loss Aversion) and 0.382 (Mental Accounting), exceeding the 0.26 threshold, indicating that the model can reasonably forecast the endogenous variables. Q^2 values, 0.240 for Loss Aversion and 0.354 for Mental Accounting, confirmed predictive relevance (Table 6). VIF values (Table 7) < 3.3 indicated no multicollinearity.

Table-6 Result of R2 and Q2 values

Endogenous latent variable	R2	Q2	Interpretation
Mental Accounting Bias (MA)	0.382	0.354	Substantial
Loss Aversion Bias (LA)	0.271	0.240	Substantial

Key findings (Table 7):

- **Agreeableness** positively influenced Loss Aversion ($\beta = 0.229$, $f^2 = 0.06$) and Mental Accounting ($\beta = 0.103$, $f^2 = 0.015$) – H1, H2 supported.
- **Conscientiousness** impacted Loss Aversion ($\beta = 0.137$, $f^2 = 0.019$) and Mental Accounting ($\beta = 0.150$, $f^2 = 0.027$) – H3, H4 supported.
- **Extraversion** influenced Loss Aversion ($\beta = 0.113$, $f^2 = 0.013$) and Mental Accounting ($\beta = 0.167$, $f^2 = 0.033$) – H5, H6 were supported.
- **Neuroticism** influenced Loss Aversion ($\beta = 0.117$, $f^2 = 0.017$) and Mental Accounting ($\beta = 0.182$, $f^2 = 0.048$) – H7, H8 supported.

- **Openness** to Experience impacted Mental Accounting ($\beta = 0.254$, $f^2 = 0.088$) – H10 supported, but not Loss Aversion ($\beta = 0.099$, $p = 0.053$) – H9 not supported.
- **Religiosity** positively affected both Loss Aversion ($\beta = 0.138$, $f^2 = 0.021$) and Mental Accounting ($\beta = 0.136$, $f^2 = 0.025$) – H11, H12 supported.

Overall, the model showed a high capacity for prediction and emphasized the unique ways that personality and religion influence investment bias..

Table 7: Evaluation of Hypotheses and Effect Size

	Path	Beta	Standard deviation	t-value	P value	Supported	F2	Interpretation	Inner VIF
H1	A->LA	0.229	0.056	4.085	0	Yes	0.06	small	1.186
H2	A->MA	0.103	0.046	2.242	0.025	Yes	0.015		1.186
H3	C->LA	0.137	0.055	2.485	0.013	Yes	0.019		1.364
H4	C->MA	0.15	0.045	3.313	0.001	Yes	0.027	Small	1.364
H5	E->LA	0.113	0.052	2.166	0.03	Yes	0.013		1.368
H6	E->MA	0.167	0.052	3.197	0.001	Yes	0.033	Small	1.368
H7	N->LA	0.117	0.048	2.456	0.014	Yes	0.017		1.127
H8	N->MA	0.182	0.047	3.866	0.0	Yes	0.048	Small	1.127
H9	O->LA	0.099	0.051	1.939	0.053	No	0.011		1.191
H10	O->MA	0.254	0.039	6.538	0.0	Yes	0.088	Small	1.191
H11	Rel->LA	0.138	0.052	2.655	0.008	Yes	0.021	Small	1.209
H12	Rel->MA	0.136	0.048	2.818	0.005	Yes	0.025	Small	1.209

Note: Beta is the path coefficient; f^2 represents the effect size. Path coefficients are significant if $t > 1.645$ and $p < 0.05$ (one-tailed).

**** P<0.05. *** P<0.01**

DISCUSSION

Investor behaviour is often shaped less by logic and more by psychological traits and belief systems. This study contributes to behavioural finance by revealing how personality traits and religiosity drive key biases, loss aversion, & mental accounting, and how gender differences exist in these connections. The findings emphasize the necessity of considering both psychological and cultural magnitudes when analysing investment decisions.

Extraversion was substantially linked to both loss aversion and mental accounting, consistent with Kumar & Dudani (2023) and Baker et al. (2021). Extraverts' action-oriented and socially driven behaviour may heighten emotional responses to financial losses and reinforce cognitive compartmentalisation of investments. Gender moderated the link between extraversion and loss aversion, with the effect significant among females, possibly due to higher risk sensitivity. At the same time, its influence on mental accounting remained consistent across genders.

Openness to experience positively influenced mental accounting but had a marginally non-significant effect on loss aversion, contrasting with Kumar et al. (2023), who found a negative association. The positive association with mental accounting aligns with Baker et al. (2021), reflecting a broader and more flexible decision-making style. Gender moderated the openness–loss aversion link, which was significant among males, suggesting open-minded men might interact more thoroughly with financial information, increasing sensitivity to losses. No moderating effect was found on mental accounting.

Conscientiousness positively affected both biases, supporting the view that disciplined and methodical investors are more prone to structure finances rigidly and avoid losses. Gender moderated its influence on loss aversion, significant among males, indicating conscientious men may perceive financial caution as a virtue. Its effect on mental accounting remained unaffected by gender.

Additionally, agreeableness correlated favourably with both biases, differing from some earlier findings (Kumar et al., 2023; Baker et al., 2021). Agreeable individuals' tendency to avoid conflict and prioritise harmony may lead to emotionally driven and compartmentalised financial choices. Gender moderated the agreeableness–mental accounting link, significant only among males, indicating a structured financial approach influenced by interpersonal sensitivity.

Neuroticism significantly influenced both biases, diverging from previous studies. Emotional instability may prompt overreactions to perceived losses and reliance on mental accounting as a coping mechanism. Gender effects were distinct: neuroticism influenced loss aversion among males and mental accounting among females, reflecting gender-specific emotional responses to financial uncertainty.

Religiosity emerged as a significant antecedent of both biases. Those with fervent religious convictions could be more conservative in financial decision-making, guided by ethical and moral norms. This supports Saputra et al. (2020) and highlights religiosity's relevance in behavioural finance. Gender further moderated these effects: religiosity heightened loss aversion among females and influenced mental accounting among males, possibly due to differing value systems and financial roles across genders.

Overall, the findings illustrate that behavioural biases in investment choices are psychologically, socially, and culturally grounded. The intersection of personality, religiosity, and gender presents a multifaceted picture of investor behaviour, especially in culturally diverse markets like India.

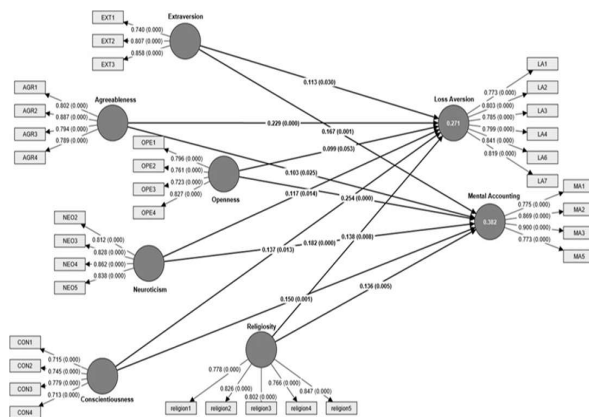


Figure 1. Research Framework and Summary of Results: A path coefficient is deemed significant if the t-value is more than 1.645, with $p < 0.05$ in a one-tailed test. * $p < 0.05$; ** $p < 0.01$.

CONCLUSION

This study underscores the intricate relationship between gender, religion, and personality attributes in shaping behavioural biases—specifically mental accounting and loss aversion—among investors. By highlighting how individual differences contribute to irrational financial behaviour, the findings offer valuable insights for developing more tailored investor education and advisory strategies. Acknowledging these psychological and cultural influences is essential to promoting rational investment practices as financial decision-making becomes increasingly nuanced.

Expanding this inquiry across diverse cultural and

and economic contexts can enrich our understanding of bias formation. Longitudinal studies may reveal how these biases shift with financial literacy, experience, and evolving market conditions. Additionally, the growing influence of fintech and AI-driven platforms presents a promising avenue to explore interventions that mitigate bias and support informed decision-making. Continued research can enhance behavioral finance's practical relevance and contribute to more effective, inclusive financial systems.

REFERENCES

1. Abdel - Khalek, A. M. (2017). The Construction and Validation of the Arabic Scale of Intrinsic Religiosity (ASIR). *Psychology and Behavioral Science International Journal*, 4(4). <https://doi.org/10.19080/pbsij.2017.04.555644>
2. Badola, S., Sahu, A. K., & Adlakha, A. (2024). A systematic review on behavioral biases affecting individual investment decisions. *Qualitative Research in Financial Markets* (Vol. 16, Issue 3, pp. 448–476). Emerald Publishing. <https://doi.org/10.1108/QRFM-05-2022-0095>
3. Baker, H. K., Kathpal, S., & Akhtar, A. (2024). The Big 5 personality traits and investment biases: the role of financial literacy. *Review of Behavioral Finance*. <https://doi.org/10.1108/RBF-07-2023-0169>
4. Baker, H. K., Kumar, S., & Goyal, N. (2021). Personality traits and investor sentiment. *Review of Behavioral Finance*, 13(4), 354–369. <https://doi.org/10.1108/RBF-08-2017-0077>
5. Hair, J. F., Black W.C, Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* . (8th ed.). Cengage Learning.
6. Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. . Sage Publications.
7. Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405–431. <https://doi.org/10.1108/IMR-09-2014-0304>
8. Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. . . *Econometrica*, 47(2), 363–391
9. Khuram Shahzad, S., Muhammad Awan, H., & Saqib Qureshi, A. (2014). Influence of religion and culture on investment behaviour of Muslim investors in Pakistan. *Int. J. Social Entrepreneurship and Innovation* (Vol. 3, Issue 2).
10. Koenig, H. G., & Büssing, A. (2010). The Duke University Religion Index (DUREL): A five-item measure for use in epidemiological studies. *Religions* (Vol. 1, Issue 1, pp. 78–85). <https://doi.org/10.3390/rel1010078>
11. Kumar, V., & Dudani, R. (2023). The big five personality traits and psychological biases: an exploratory study. *Current Psychology*, 42, 6587–6597. <https://doi.org/10.1007/s12144-021-01999-8>/Published
12. Li, Jin & Chai, Linlin & Nordstrom, Onnolee & Tangpong, Chanchai & Hung, Kuo-Ting. (2021). Development of a Loss Aversion Scale. *Journal of Managerial Issues*. XXXIII. 69-89.
13. Mayfield, C., Perdue, G. and Wooten, K. (2008) *Investment Management and Personality Type*. *Financial Services Review*, 17, 219-236.
14. Meier-Pesti, K., & Penz, E. (2008). Sex or gender? Expanding the sex-based view by introducing masculinity and femininity as predictors of financial risk taking. *Journal of Economic Psychology*, 29(2), 180–196. <https://doi.org/10.1016/j.joep.2007.05.002>
15. Muehlbacher, S., & Kirchler, E. (2019). Individual Differences in Mental Accounting. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02866>
16. Noussair, C. N., Trautmann, S. T., van de Kuilen, G., & Vellekoop, N. (2013). Risk aversion and religion. *Journal of Risk and Uncertainty*, 47(2), 165–183. <https://doi.org/10.1007/s11166-013-9174-8>
17. Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. . *International Journal of Research in Marketing*, 26(4), 332–344.
18. Saputra, S. E., Natassia, R., & Utami, Y. (2020). The Effect of Religiosity Moderation with Loss Aversion on the Investment Decision of Personal Investors Kind of Stock Security in Padang City. *Andalas Management Review*, 4(1), 40–55.
19. Thaler, R. H. (1999). Mental Accounting Matters. In *Journal of Behavioral Decision Making J. Behav. Dec. Making* (Vol. 12, Issue 3).
20. Waseem -Ul-Hameed, Saeed Ahmad Sabir, Shazma Razzaq, & Dr. Asad Afzaal Humayon. (2018). The influence of behavioural biases on investment decision making: a moderating role of religiosity among Pakistani investors. *International Journal of Management Research and Emerging Sciences*, 8, 69–77. <https://doi.org/10.1186/s40497-018-0112>