Role of Investor Cognition and Psychology in Mitigating Loss Aversion Bias occurred in Stock Trading

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Abstract

According to behavioral finance literature, cognitive biases frequently lead investors away from rational decision-making. Loss aversion, one such bias, has become particularly salient among retail investors on the Colombo Stock Exchange following the recent economic crisis. Although prior studies document its presence and adverse effects on investment performance, empirical evidence on mitigating loss aversion is limited. This study therefore examines cognitive and psychological factors that reduce loss aversion among individual investors. Data was collected via a self-administered questionnaire from 261 active individual investors and analyzed using partial least squares structural equation modelling. Contrary to the common expectation that financial literacy and investment experience mitigate loss aversion, the results indicate no such effect. By contrast, risk perception and self-efficacy are associated with lower loss aversion, and these relationships vary by gender. Further, the mitigating effect of risk perception differs between Gen Z and non-Gen Z investors. The findings suggest that as investors perceive greater risk, they become less loss averse, and that greater confidence in one's abilities reduces sensitivity to losses. Accordingly, investor education interventions should emphasize psychological drivers particularly self-efficacy and risk perception rather than relying solely on financial literacy, and interventions should be tailored to gender and generational characteristics. This study contributes to the behavioral finance literature on loss aversion and offers practical insights for policymakers, investment advisers, and financial educators seeking to improve investor decision making.

Keywords: Behavioral biases, debiasing, Gen Z investors, loss aversion, risk perception, self-efficacy

Introduction

In the contemporary financial landscape, behavioral finance has emerged as a vital discipline that integrates economics and psychology to better understand how individuals actually make investment decisions. Behavioural finance recognizes that investor behavior is often dominated by emotions and that people have certain biases which influence their reasoning, even if it is beyond the scope of classical finance (Bagchi, Prasad & Shrivastava, 2025; Thaler, 2015). The study of Kahneman and Tversky (1979) when they presented Prospect Theory and thus changed the whole way of economists' perception of risk and uncertainty

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was a very significant point in this area. One of the concepts contained in this theory is loss aversion that is a notion which accounts for the individual's preference to reject losses instead of getting the same amount of gains. Losses, therefore, are "experienced" more than gains of the same amount (Kahneman & Tversky, 1979; Barberis, 2013).

In spite of a large volume of research over several decades, loss aversion is still a major factor that adversely affects investment decision-making. Literature shows that loss aversion is the main reason for behaviors of investors which are not optimal to the point that they sell winning stocks too soon, hold losing stocks for too long without cutting and delay their reaction to rebound opportunities. These behaviors are intensified during times of high volatility and market crises (Katenova et al., 2025). In fact, it has been argued that previous works have mainly focused on the causes and the signs of loss aversion, and only a handful of them have touched upon ways to weaken its impact, as indicated by Jugnandan & Willows (2023). Thus, the present research aims at uncovering the mechanisms which would be instrumental in decreasing loss aversion bias among individual investors.

The findings of the study provide the following key implications. Supporting the Prospect Theory in an emerging market context, the findings imply significance of investors' psychology, notably risk perception and self-efficacy, in shaping their decision-making. Thus, financial literacy cognition alone cannot mitigate their loss aversion bias. On this ground, the findings serve the policymakers, financial educators and investment advisors to come up with targeted intervention programs to elevate behavioral awareness, emotional intelligence and financial confidence. These programs can lead to the propagation of rational, stable, and well-informed investment practices.

The rest of the article is organized in the similar manner. Section 2 delves into the literature review by expounding the theoretical constructs and main research idea of loss aversion and the factors that reduce it. Section 3 outlines the methodology, including research design, data collection, and analytical techniques. Section 4 details the data analysis and results, while Section 5 concludes with the findings and implications.

Literature Review

Loss aversion as a behavioral finance refers to the situation when a person's mental pain caused by losing money is more than double the feeling of pleasure caused by equal gain which is central to Prospect Theory. This theory explains why investors hold poorly performing stocks for too long. Referring to literature, Gachter et al. (2021) mention that a loss is valued roughly twice as heavily as a gain and this is the reason investors may become irrational in their decision-making, thus, either taking too high risks or behaving in a too cautious manner in the face of losses. However, these tendencies are influenced by Investment Experience, Financial Literacy, Self-Efficacy and Risk Perception. Emotional decision-making of that kind makes a situation where investors keep on buying a stock that is performing badly in their portfolio or simply not entering a likely profitable market (Mallik et al., 2017). Such a pattern of behavior was very noticeable in Sri Lanka during the 2022

economic crisis, particularly in the CSE where the atmosphere of fear and uncertainty was followed by the selling of stocks in panic and herd behavior (Kalainathan, 2022). According to Buddhika and Ediriwickrama (2022) findings, a majority of investors chose to follow the news rather than doing their own research which caused the safety of the market to be shaken further. These findings demonstrate that investors' decisions are emotional and psychological in nature. As a result, the knowledge of loss aversion, as well as ways of reducing it are utmost significant for more rational investment behavior.

Investment Experience and Loss Aversion

It is a commonly held belief that investment experience facilitates in better understanding investment situation and evaluating it more rationally to make better decisions. Hani et al. (2020) show that experience in investment together with financial education makes the individuals more logical in their decision making. However, it is important to note that previous empirical studies has challenged this general expectation of investment experience. Malmendier et al. (2019) argued that although experience may lead to better decision making, it can also increase one's cognitive biases. For instance, recency bias is a cognitive bias that refers to the excessive influence of recent events on decisions. According to the study by Arun et al. (2018), there is no clear indication that experience can lead to a reduction in loss aversion among Indian investors. They suggest that risk perception or demographics may have a stronger influence than experience. Some researchers such as Cheng and He (2017) and Wang et al. (2020) argue that experience-based learning enables investors to change their behavior and become less sensitive to short-term losses. Thus, it is hypothesized that investment experience can be a way to reduce in loss aversion bias among investors, as given by the hypothesis H1.

H1: Higher the investment experience, lower the loss aversion in individual investors in stock trading.

Financial Literacy and Loss Aversion

Financial literacy refers to the understanding and application of financial information, which is one of the most important aspects of investment behavior. Remund (2010) refers it as the ability to handle one's money in a confident manner and to be able to make informed choices even when the markets are unstable. Tyas and Fathmaningrum (2024) reported that financial literacy and loss aversion were two of the most significant factors that affected the quality of investment decisions. Those investors who are more literate tend to look at the short-term losses as something temporary rather than a permanent failure. Ye (2021) and Peng (2025) have found that investors with knowledge are less influenced by their emotions and they spread their investments and stick to their financial goals. Thus, consistent with the literature, it is expected that financial literacy is a powerful tool in the fight against loss aversion bias, as indicted by the hypothesis H2.

H2: A higher level of financial literacy of individual investors lowers their loss aversion bias in stock trading.

Self-efficacy and Loss Aversion

Bandura (1986) was the first to come up with the concept of self-efficacy, which is basically the belief people have in their own ability to do tasks and achieve goals. In the area of finance, financial self-efficacy (FSE) is a measure of how much a person is able to handle money, investing, and sudden challenges in life with confidence (Farrell, Fry, & Risse, 2016). Having high self-efficacy is a great way for individuals to bounce back from situations where they have failed, go for the kind of risk where the outcome has been weighed instead of a risk that frightens them, and fear of loss does not paralyze them (Molins et al., 2021; Ye, 2021; Peng, 2025). The study of Mohyuddin and Lonnum (2023) shows that improving FSE helps in the reduction of myopic loss aversion. Montford and Goldsmith (2016) also find that managing FSE almost eliminates gender differences in investing behavior. In the same way, Ali, Malik and Anjum (2023) considered FSE as the main factor that explains the connection between risk aversion and making better financial decisions. Consistent with these findings, it is hypothesized that raising one's financial self-efficacy is a way of decreasing one's loss aversion, as given by the hypothesis H3.

H3: A higher level of self-efficacy of individual investors lowers their loss aversion bias in stock trading.

Risk Perception and Loss Aversion

Risk perception (RP) is essentially how people understand and evaluate the financial consequences of a situation. Overly cautious individuals who exaggerate the risk may not invest at all, while the ones who realistically figure out the risks would be able to make more balanced decisions (Clay et al., 2017; Kim et al., 2023; Ye, 2021). According to Shafqat and Malik (2021), risk-taking investors were more engaged in trading activities and usually made more profits, however, at the same time, due to loss aversion and regret, they limited their trading frequency. In addition, the studies of Shah et al. (2018), Quddoos et al. (2020) and Akhtar & Das (2020) have explored risk perception as a moderating variable, but only a few have confirmed a direct two-way relationship with loss aversion. Accordingly, the following hypothesis is established.

H4: A higher level of risk perception of individual investors lowers their loss aversion bias in stock trading.

Demographic Moderators: Age, Gender, and Generation Z

Different demographic and generational factors also influence the investors' behavioral biases which they recognize and manage in different manners. For example, the age affects the degree of aversion to loss and the efficiency of its reduction. Walasek et al. (2024) discovered that elderly people are, on average, more averse to loss but at the same time, they are able to make more stable decisions. Johnson, Gächter, and Herrmann (2006) have different views that loss aversion depends on age and experience and does not change. Arora

and Kumari (2015) found that the middle-aged investors express more regret and have stronger loss aversion compared to the youth.

H5: Age moderates the impact of mitigators (investment experience, financial literacy, financial self-efficacy, risk perception) on loss aversion bias among individual investors in stock trading.

Gender has also been associated with differences in risk-taking. The studies by Dolder and Vandenbroucke (2020) and Dohmen et al. (2011, 2023) have shown that women are generally more cautious and more sensitive to losses than men, however, education can reduce this difference. Arora and Kumari (2015) emphasized that the main causes of gender-related differences in risk-taking behavior are the psychological factors regret and loss aversion. Thus, this study hypothesizes that gender has a moderating role in mitigating loss aversion bias, as given by the hypothesis H6.

H6: Gender moderates the impact of mitigators (investment experience, financial literacy, financial self-efficacy, risk perception) on loss aversion bias among individual investors in stock trading.

Gen Z, is made up of people born between 1997 and 2012, and it exhibits an entirely different set of patterns. Since they were born and brought up in the digital era, their investing habits have been shaped by the use of technology, social media, and gamification. Hwang (2024) discovered that Gen Z investors prioritize authenticity and personalization over other conventional factors such as trust and long-term returns. Ardini and Achyani (2023) pointed out that overconfidence is the main factor that strongly influences the decisions of Gen Z, while Rahmawati (2023) indicated that the Fear of Missing Out carries the effect of loss aversion on their trading activities to a higher level. All these findings have led to the conclusion that Gen Z investors are under the influence of a continuous tug-of-war between challenging the risk side of their nature and feeling terrified to lose. Thus, this study hypothesizes that Gen Z has a moderating role in mitigating loss aversion bias, as given by the hypothesis H7.

H7: Gen Z moderates the impact of mitigators (investment experience, financial literacy, financial self-efficacy, risk perception) on loss aversion bias among individual investors in stock trading.

Research Methodology

Conceptual Framework

Ye (2021), which investigated the impact of investment experience, financial literacy, self-efficacy, and risk perception in reducing the negative effects of loss aversion on individual stock trading investment decisions, served as the primary source of the conceptual foundation for this study. Loss aversion (LA) is the dependent variable in this study, whereas investment experience (IE), financial literacy (FL), self-efficacy (SE), and risk perception (RP) are the

independent factors while age, gender and Gen-z are moderating variables. Past studies show a limited investigations relating to combined effect of demographic factors and investment behavior (Tyas & Fathmaningrum, 2024; Perera & Silva, 2022). Based on that the Figure one, conceptual model was created with the aim of testing H1 to H7.

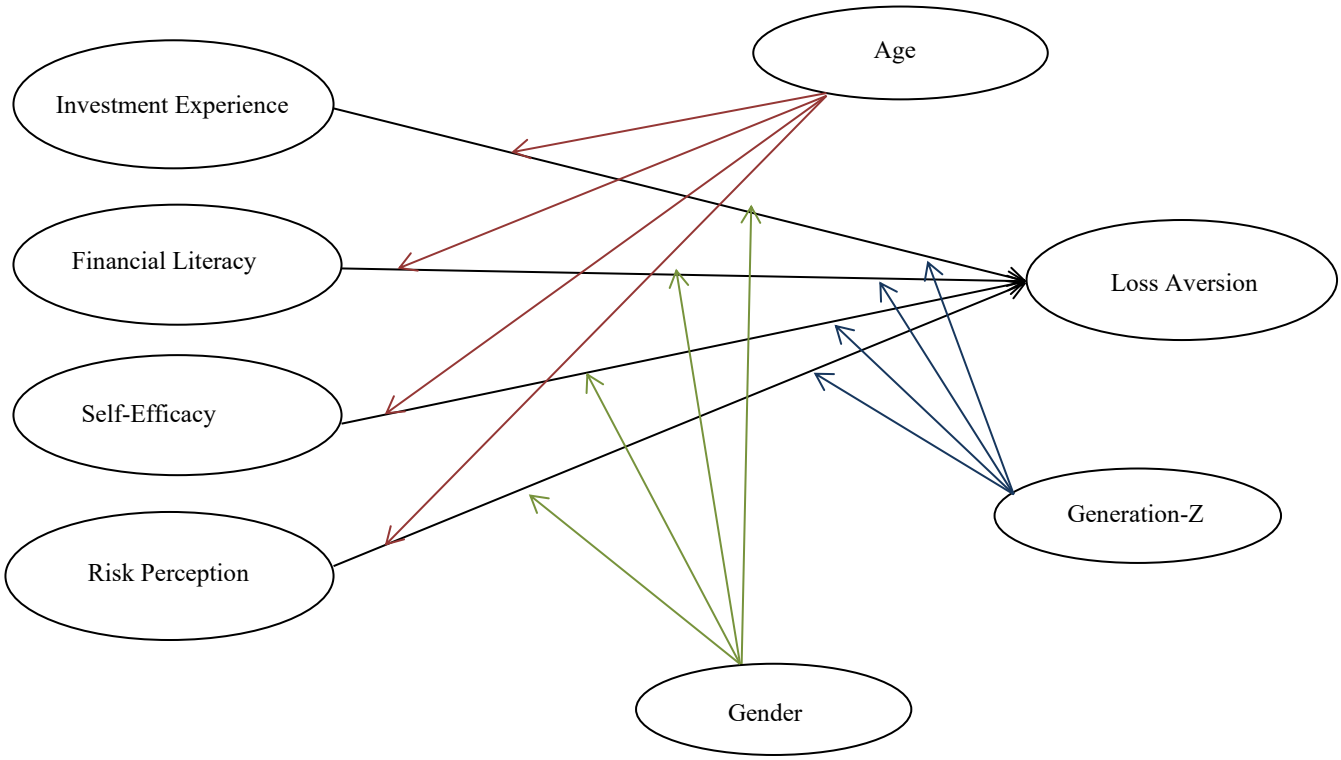

Figure 1: Conceptual Framework

Data Collection

Individual investors who registered at Colombo Stock Exchange (CSE) and holds Central Depository (CD) accounts at least six months were chosen as the unit of analysis for this study. The main reason for this is this group was highly threatened from the recent economic crisis which they directly affected from Loss Aversion on investing decisions. 250 clean data was collected which were ready for the analysis. Web-based structured questionnaire was developed for the purpose of collecting data. As a result of several discussions with individual investor advisors from several broker firms, the questioner was distributed using online investor platforms which open ups wide pool of active investors. To guarantee the consistency and dependability of data collection, the survey included five-point Likert scale items that were modified from earlier validated studies. The period of data gathering was August through October. Additionally, a number of CSE regional branches were visited in order to talk with broker firms about the study. The distribution of the questionnaire to their clients was also endorsed by investment advisors. Eight preliminary questions were added in the questionnaire in order to evaluate investment profiles, gather demographic information, and confirm the legitimacy of investors.

Table 1 shows the demographic analysis of survey respondents. Relating to moderating variables, majority of participants were from age group 20-35 which confirms the study's

relevance for Gen-z category which reflects the younger investors. This was further elaborated that highest portion of 60.4% shows the respondents are included in Gen-z category. Relating to gender, even highest number of respondent are males, females also shows a notable portion from the sample. Portion of income levels are dynamic from one range to another showing various economic backgrounds. Investment experience represents highest percentage of investors from 5-10 years of experience while lowest from over 10 years, providing a proper balance of seasoned and novice investors. The behavior of seeking professional advisors of investors before making decisions is well shown from the percentages of information sources/platform used. As conclusion this demographic distribution well represent Sri Lankan investor base enabling robust analysis of loss aversion across dynamic demographic and experiential groups.

Table 1: Profile of Survey Respondents.

Item	Factor	No. of Respondents	Percentage
Gender	Male	145	58%
	Female	105	42%
Age	Under 20	6	2%
	20-35	145	58%
	35-55	64	26%
	Over 55	35	14%
Gen-z	Gen-z Population	151	60.4%
	Non Gen-z Population	99	39.6%
Education Level	G.C.E. A/L or above	30	12%
	Undergraduate student	54	22%
	Bachelor's Degree Holder	92	37%
	Postgraduate (Masters/PhD)	49	20%
	Professional Qualifications	25	10%
Monthly Income Level	Below RS. 100,000	69	28%
	RS. 100,000 – 300,000	77	31%
	RS. 300,000 – 500,000	56	22%
	Above RS. 500,000	48	19%
Trading Experience	Less than 2 years	66	26%
	2-5 years	60	24%
	5-10 years	88	35%
	Over 10 years	36	14%
Platforms use before make investment decisions	A Stockbroker/ Financial Advisor	141	56%
	By Discussion with Other Investors	35	14%
	Personal Research/Own Experience	47	19%
	By Following Investor Blocks/ Social Media Trends	27	11%

Questionnaire Design

The study comprised a total of seventeen question items. Measures pertaining to the dependent and independent variables were evaluated after the demographic section. While financial literacy (FL) was assessed using its three main sub dimensions-financial knowledge, financial awareness, and financial attitude-investment experience (IE) was assessed using measures of openness to experience. Two aspects of self-efficacy (SE) were investigated: financial self-efficacy and general self-efficacy. Perceptions and knowledge about financial risk were used to measure risk perception (RP). These divides decreased the possibility of overlap or misunderstanding across constructs and enabled more accurate testing of each independent variable. Respondents were made fully aware that their replies would remain anonymous and that there was no right or wrong answer. Prior to the main survey, the questionnaire was pre-tested with a sample of thirty individual investors to guarantee the instrument's quality and dependability. Under the academic exporter guidance and some pilot tests, the professionality and suitability of the survey was confirmed.

Five-point Likert scale items were used for the questionnaire ranging from Strongly agree-5 to disagree-1 which ensures the agreement f the respondents for each questioner items. Financial literacy was tested using Financial Knowledge, financial attitudes and financial awareness. Using OECD/INFE surveys (2020–2023), financial knowledge was tested, aiming interest rates, inflation an diversification etc. Financial Attitudes was tested saving and planning decisions and awareness regarding financial products and regulations. Openness to experience is a highly suitable mechanism to check the investment experience levels. Mayfield (2008) suggested this personality scale and into this study to ensure the measurement of investment experience. Self-Efficacy was tested using both general and financial self-efficacy and the questions were adopted from Khara's (2021). Tavare et al. (2021) study found better ways to test risk perception using perception and attitudes towards financial risk ensuring the suitability of using question items from this article to this loss aversion study. Some questions were further adjusted to meet the studies expectations without harming the core idea of each items.

Data Analyses Methods

Total of collected responses were cleaned by removing inconsistent entries and missing values and accurate responses of 250 was used for the analysis. Demographic variables such as including age, gender and education levels were summarized in frequencies and percentages style. Descriptive analysis for each variable including independent, dependent and moderating variables were analyzed using mainly the Standard Deviation and Mean Values.

Following the comprehensive examination of the demographic and descriptive analyses, the measurement for reliability and validity was conducted. Reliability was evaluated based on the Cronbach's Alpha, composite reliability, and Average Variance Extracted (AVE) values, whereas discriminant validity was determined based on the Heterotrait-Monotrait (HTMT) ratio and Fornell-Larcker criterion in SmartPLS. Partial Least Squares Structural Equation

Modeling (PLS-SEM) was employed for testing measurement and structural models, which also included the direct effects of main variables and the moderation by age, gender, and Generation Z. The bootstrapping at a 5% significance level ($p < 0.05$) was used to secured strong, theory-driven results that are in line with behavioral finance principles.

Results and Discussion

Descriptive Analysis of Variables

Table 2 provides a summary of the statistics of the variables for the current study, age, and gender, Generation Z, financial literacy, investment experience, self-efficacy, risk perception, and loss aversion. The measures of central tendency, dispersion, and distribution-such as the means, standard deviations, skewness, and kurtosis-have been used to provide an overview of the investor's responses. Among the independent variables, financial literacy (M = 4.22, SD = 0.77), investment experience (M = 4.10, SD = 0.70), self-efficacy (M = 4.24, SD = 0.90), and risk perception (M = 4.18, SD = 0.72) had the highest mean values on a five-point Likert scale, indicating strong agreement and confidence. These variables showed left-skewed and peaked distributions (skewness: -0.900 to -1.299; kurtosis: 1.690–2.705). By contrast, loss aversion (M = 2.48, SD = 1.19) pointed to lower agreement, positive skewness (0.390), and negative kurtosis (-0.843), thus indicating more diverse responses. The demographic profile revealed that Gen Z investors were mainly younger and male. In general, investors showed reduced loss aversion and higher levels of financial literacy, risk perception, self-efficacy, and investment experience. Skewness and kurtosis values reinforce the study's conceptual framework on the inverse relationship between financial confidence and loss averse behavior by confirming that distributions are suitable for behavioral analysis.

Table 2: Descriptive Statistics.

Variable	Mean	Standard Deviation	Skewness	Kurtosis
Financial Literacy	4.220	0.770	-1.242	2.705
Investment Experience	4.100	0.700	-1.069	2.203
Self-Efficacy	4.240	0.900	-1.299	1.690
Risk Perception	4.180	0.720	-0.900	1.809
Loss Aversion	2.480	1.190	0.390	-0.843
Age	2.510	0.760	0.756	-0.389
Gender	1.420	0.490	0.326	-1.908
Gen-Z	1.390	0.490	0.427	-1.831

Analysis of Reliability and Validity

Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), indicator loadings, Fornell-Larcker criterion, HTMT ratio, the validity and reliability of the measurement model, as shown in Table 3,4 and 5. The Cronbach's Alpha and CR values for each construct were higher than the suggested 0.70 (CR range: 0.838–0.958), indicating great internal consistency. With AVE values primarily above 0.50, particularly for Self-Efficacy

(0.605) and Loss Aversion (0.851), convergent validity was validated. Although they maintained theoretical dependability, Financial Literacy (0.381) and Risk Perception (0.447) displayed somewhat lower AVE. Discriminant validity was verified using the Fornell-Larcker and HTMT criteria, as indicated in Tables 4 and 5. With the exception of a few theoretically acceptable overlaps between Age and Gen Z (HTMT = 0.896) and Financial Literacy and Investment Experience (HTMT = 0.864), the most of the constructs satisfied the necessary thresholds. With dependable, valid, and empirically distinct constructs, the measurement model has high psychometric qualities overall, offering a solid basis for further structural model analysis and hypothesis testing.

Table 3: Assessment of the measurement quality of the model's constructs.

Construct	Cronbach's Alpha	Composite Reliability (rho-a)	AVE
FL	0.846	0.868	0.381
IE	0.762	0.838	0.508
LA	0.942	0.958	0.851
RP	0.835	0.864	0.447
SE	0.913	0.930	0.605

Table 4: Fornell-Larcker criterion analysis for assessing discriminant validity.

	Age	FL	Gen_Z	Gender	IE	LA	RP	SE	Discriminant Validity Met?
Age	1.000								Yes
FL	0.090	0.617							No
Gen_Z	0.896	0.005	1.000						Yes
Gender	-0.179	-0.306	-0.159	1.000					Yes
IE	-0.003	0.710	-0.056	-0.150	0.713				Yes
LA	-0.133	-0.424	-0.085	0.458	-0.241	0.923			Yes
RP	-0.005	0.733	-0.070	-0.314	0.671	-0.323	0.669		No
SE	-0.045	0.777	-0.119	-0.354	0.671	-0.480	0.726	0.778	Yes

Table 5: HTMT criterion analysis for assessing discriminant validity.

	Age	FL	Gen_Z	Gender	IE	LA	RP	SE
Age								
FL	0.160							
Gen_Z	0.896	0.140						
Gender	0.179	0.322	0.159					
IE	0.195	0.864	0.200	0.164				
LA	0.134	0.387	0.083	0.471	0.280			
RP	0.198	0.841	0.216	0.293	0.824	0.289		
SE	0.063	0.805	0.126	0.369	0.811	0.506	0.794	

Testing of Research Hypotheses

After the validity and reliability of the measurement model were confirmed, the suggested connections between the latent components were investigated by analyzing the structural model. Using bootstrapping in SmartPLS 4, path coefficients (β), t-statistics, p-values, and effect sizes (F^2) were evaluated; the outcomes are shown in Table 6. The model demonstrated moderate explanatory power, accounting for 50.8% of the variation in Loss Aversion (LA, R^2 = 0.508; adjusted R^2 = 0.467). Adequate model fit was validated by the SRMR value of 0.128. Investment experience lowers loss aversion, according to H1. A negative but small effect was seen in the data (β = -0.033, t = 0.131, p = 0.448, F^2 = 0.004), indicating that experience by itself does not lessen loss-averse behavior. This is probably because of ingrained emotional biases. Although H2 predicted that financial literacy would have a negative impact on LA, the effect was positive and negligible (β = 0.240, t = 1.134, p = 0.128, F^2 = 0.008), suggesting that knowledge by itself does not lessen loss aversion in the face of market volatility. Risk perception and LA were significantly inversely correlated in H3 (β = -0.572, t = 2.189, p = 0.014, F^2 = 0.026), indicating that heightened risk awareness encourages logical decision making and uncertainty tolerance. H4 revealed that self-efficacy had the biggest negative influence (β = -0.738, t = 2.899, p = 0.002, F^2 = 0.052), showing that having faith in one's financial skills significantly lowers loss-averse behavior.

Table 6: The model's path coefficients, their significance, and effect sizes estimates

Hypothesis	Path	Path Coefficient	Standard Error	t-value	p value	F^2
H1	IE -> LA	-0.033	0.253	0.131	0.448	0.004
H2	FL -> LA	0.240	0.212	1.134	0.128	0.008
H3	RP -> LA	-0.572	0.261	2.189	0.014	0.026
H4	SE -> LA	-0.738	0.255	2.899	0.002	0.052
H5	Age x FL -> LA	0.305	0.229	1.333	0.091	0.012
	Age x IE -> LA	0.052	0.258	0.200	0.421	0.004
	Age x RP -> LA	-0.380	0.325	1.170	0.121	0.012
	Age x SE -> LA	-0.187	0.324	0.576	0.282	0.007
H6	Gender x FL -> LA	-0.363	0.213	1.702	0.044	0.023
	Gender x IE -> LA	0.365	0.199	1.832	0.033	0.025
	Gender x RP -> LA	0.506	0.212	2.383	0.009	0.036
	Gender x SE -> LA	0.425	0.203	2.090	0.018	0.033
H7	Gen_Z x FL -> LA	-0.690	0.464	1.488	0.068	0.016
	Gen_Z x IE -> LA	-0.115	0.465	0.246	0.403	0.005
	Gen_Z x RP -> LA	1.041	0.592	1.759	0.039	0.025
	Gen_Z x SE -> LA	0.695	0.574	1.212	0.113	0.014

Age did not substantially affect any predictor-LA correlations, according to moderation analyses (F^2 = 0.004–0.012, p > 0.05). But to gender, it had a significant effect on all the

paths (F^2 = 0.023 0.036, $p < 0.05$), which suggests that the behavior of male and female investors differ. Only the Risk Perception–LA relationship showed significant generation Z moderation ($\beta = 1.041$, $t = 1.759$, $p = 0.039$, $F^2 = 0.025$), indicating that younger investors' greater risk appetite influences loss aversion, while other constructs remained unchanged. In summary, the findings emphasize that psychological factors are, by far, the most significant determinants of a loss averse behavior pattern - particularly, self-efficacy and risk perception. Neither investment experience nor financial literacy had a significant effect on the results. The study also found that gender differences do not work age as a moderator, but rather emphasize the need for gender-specific financial education. To reduce loss aversion tendencies, our research points to the importance of behavioral interventions that target emotional regulation, self-confidence, and objective risk evaluation.

Discussion of Key Findings

According to the findings of the research, H1 and H2 were not supported which shows that Financial Literacy or having financial knowledge or mere experience do not have a relationship into mitigating this bias. On the other hand it found that, H3 and H4 was accepted, reflecting that physiological biases including self-efficacy and risk perception can mitigate loss aversion. This was further confirmed individual investor's confidence level highly impacted on loss averse tendencies. This findings are aligns with pas studies. Even Malmendier and Nagel (2011), Remund (2010), and Tyas (2024) argued that financial literacy and experience improve the decision making skills of investors it is not always enough under volatile conditions, especially like Sri Lankan economy which always fluctuate. Literacy can enhance the understanding of financial concepts that makes easier for investors to make their decisions but it is not applicable in fear based situations. Risk Perception and Self efficacy closely linked to mitigate loss aversion as explained, indicating psychological empowerment on better investing decision making. behavior (Bandura, 1994; Farrell, Fry, & Risse, 2016; Montford & Goldsmith, 2016; Arora & Kumari, 2015). The results indicate that the ability to think and control one's emotions plays an important role in reducing the tendency to make irrational decisions.

In moderating relationships, H6, gender shows an ability of moderating effect on mitigators of loss aversion but H5, age variations does not have ability to make this affect. H7, Gen-z moderating variable shows that only the relationship between risk perception and loss aversion can be moderated using gen-z variable indicating that the higher digital exposure and the greater risk tolerance of young investors influence their investment decisions. Men and women differ in the way they use their literacy, confidence, and experience to engage in financial behavior. In summary, the results here support the view that loss aversion is largely due to perceptual and emotional factors rather than to mere market experience or knowledge, thus, it is important to consider cognitive, psychological, and demographic aspects when building models of financial behavior.

Conclusions and Implications

This study provides important contribution for both academia and industry. Contrary to the common expectation that financial literacy and investment experience mitigate loss aversion, it is found that physiological factors including self-efficacy and risk perception have the ability of reducing loss aversion. Thus, supporting the prospect theory, a combination of psychological and demographic factors can open ups ways to mitigate loss aversion. Accordingly, investor education interventions should emphasize psychological drivers particularly self-efficacy and risk perception rather than relying solely on financial literacy, and interventions should be tailored to gender and generational characteristics. This finding is important for policy makers, advisors and financial educators seeking to improve investor decision making.

In moderating affects, similar to past findings, this study found that gender differences are highly impacted on decision making suggesting females are more concern than males. In addition, even age has not any impact, gen-z moderated risk perception relationship. Gen-z category is the mostly impacted population from digital exposure and this shows that combine with risk perception and loss aversion, way of decision making getting differed which is an important finding for industry experts. In summary, this study creates a significant contribution to the prospect theory and build up knowledge on rather than trying to mitigate loss aversion using individual biases, a combination of psychological and demographic factors can open ups ways to mitigate loss aversion.

Limitations and Directions for Future Research

This study has the following limitations. This study uses self-reported data which might not express the real situations of respondents which reduce the quality of findings. Cross sectional designs limit casual interpretations based on attitudes and market conditions. Future researchers can conduct longitudinal studies in this respect. To enhance the understanding of investor psychology relating to reducing loss aversion, new models can be examined including more biases like overconfidence, herding, regret aversion, and emotional stability. Multidimensional moderators can be combined with them. Lastly, experiments can be designed to test the effectiveness of behavioral interventions such as training, decision-support tools, and counseling in reducing loss aversion and helping investors to make more rational, emotionally balanced decisions.

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