

Gender and Investment Risk Appetite: A Behavioural Finance Perspective

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ABSTRACT

Economic, psychological and demographic factors influence the investment decision-making process, and one such demographic factor is gender. This study discusses the correlation between the attitudes of gender and the self-reported investment risk appetite, and takes into account the relationship between the importance of investment risk knowledge and this correlation. The family, friends and professional contacts were sampled using convenience sampling method, and the primary data were gathered by structured questionnaire by visiting the Delhi NCR area. A total of 74 respondents took part, 45 females (60.8%) and 29 males (39.2%) aged between 21 years and over 60 years. The differences in risk appetite and the level of confidence in the knowledge of investment risks by gender were addressed using statistical tests including Mann-Whitney U test, chi-square test of independence and Spearman's rank-order correlation. Male respondents reported a significantly higher risk appetite ($M = 3.21$) than female respondents ($M = 2.53$; Mann-Whitney $U = 911.00$, $z = 2.86$, $p = .002$), and gender was significantly associated with risk-appetite category, $\chi^2(4, N = 74) = 10.46$, $p = .033$, Cramér's $V = .38$. These findings reflect the association within this sample that occurred when these factors were not independently controlled, and the sample was a non-random convenience sample in the 41-60 age range and from a single metropolitan region, and therefore they do not necessarily mean that there is a causal or generalisable effect of age on financial literacy on investment behaviour. The outcome, however, suggests that gender-inclusive financial education and counseling approaches that take into account gender differences in confidence and risk appetite are beneficial.

Keywords: Gender, Investment Decision-Making, Risk Appetite, Behavioural Finance, Psychological Factors, Investor Behaviour, Financial Decision-Making

1. INTRODUCTION

Real world financial behaviour has an impact on investment decision making, and shows the influence of psychological, social and demographic factors. The list of factors has led over time to the development of behavioural finance (Thaler & Sunstein, 2008; Shefrin, 2002). The field of behavioural finance combines psychology and economic theory.

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Gender has been a demographic factor that is known to have an influence on investment behaviour (Barber & Odean, 2001), and has been a subject of significant academic and practical interest. There are several investment arenas that show distinct investment habits between the genders, including risk tolerance. These differences are related to psychological factors including perception of risk, confidence, loss aversion and attitudes towards uncertainty (Byrnes, Miller & Schafer, 1999). Psychological research suggests that individuals interpret financial risk subjectively, and these interpretations are shaped by cognitive biases, and experiences, which may vary across genders. Bajtelsmit and Bernasek (1996) examined the existing literature on differences in investment decisions due to gender and found that women consistently invest more conservatively than men across pension and household financial decisions which attributes this pattern to a combination of income disparity, socialisation, and differing amounts of risk aversion rather than differences in financial capability.

Investment decision-making is largely affected by risk appetite, it directly influences the types of assets chosen by investors and the strategies adopted by them. Preferences are explained by behavioural finance through psychological constructs such as prospect theory by Kahneman & Tversky (1979) which highlights how people weigh potential losses and potential gains differently. These kinds of behavioural tendencies can appear differently across genders which can give rise to observable differences in investment decisions. Van Rooij, Lusardi and Alessie (2011) found a direct and significant positive relationship between financial literacy and participation in the stock market where people with lower levels of financial literacy were considerably less likely to make investments in stocks which is a finding that is particularly relevant to understanding gender-based differences in investment behaviour.

Understanding the link between gender and investment is becoming more important as more individuals are engaging with financial markets and there is a greater emphasis on financial inclusion (World Bank, 2021). Gender-based insights may help improve financial advisory services, and can support more personalised approaches to financial planning (Lusardi & Mitchell, 2014). Fonseca, Mullen, Zamarro and Zissimopoulos (2012) used large-scale household survey data and found that the gap in financial literacy between genders is not primarily caused by discrepancies in demographic characteristics between men and women but instead by deeper structural and social factors such as education, income, and even marital history which suggests that the core of gendered financial behaviour lies in systemic inequalities and not in individual capability.

Existing research on investment decision-making has increasingly recognised the role of psychological and demographic factors with particular interest in gender and its effect on shaping financial behaviour. However, behavioural finance literature challenges and opposes the classical assumption of rational, homogeneous investors by showcasing systematic differences in terms of confidence and risk perception, along with decision-making processes across individuals (Barber & Odean, 2001; Croson & Gneezy, 2009).

Kunnanatt and Emiline (2012) explored investment strategies and gender among rural and suburban Indian investors. The study used structured questionnaires and qualitative interviews, by doing so it

examined differences in investment orientation, risk attitudes, and financial goals between female and male investors. This study's findings suggested no significant gender-based differences in overall investment strategy orientation in non-urban Indian investors. However, the authors of this study attributed this result partly to financial knowledge being limited among the respondents, they argued that insufficient awareness about investments may have suppressed the observable behavioural differences. Furthermore, this study emphasised the importance of investment education and suggested that moderate levels of risk-taking behaviour among new investors could potentially contribute to financial stability in developing economies.

However, Kamalkannan (2021) focused her study on women investors in Chennai. The study investigated the effect of age and marital status on investments. Results indicated that generally unmarried and younger women were less averse to risk while married older women were more risk averse (Croson & Gneezy, 2009); however, as a whole, younger women showed greater risk taking tendencies and older, married women showed more risk aversion. The results from this study bring the psychological aspect of life stages and responsibilities into focus in regards to investment behavior.

Gaur et al. (2011) did research on differences in investment decision making due to gender in India by conducting chi-square analysis. The results showed that there exists significant differences in terms of investment awareness, confidence, preferred investment avenues, and decision-making horizons between males and females. Male investors showcased higher confidence along with greater awareness, while female investors were more likely to be cautious and ultimately less satisfied with their investment decisions. A major theme of the study was psychological explanations for the difference, with female investors being risk averse and anxious, and male investors being over-confident and more risk tolerant (Barber & Odean, 2001). The authors' overall position was very positive on the behavioural finance framework, and stated that there is a strong contribution from psychology to the gender-based investment differences.

Patil and Bagodi (2021) also studied the factors that affect investment decisions in the Indian stock market from a behavioural angle, which further confirms the behavioural perspective. However, this study did not only include gender, but also confirmed the part that psychological factors and behavioural factors play – risk perception, information processing and reliance on heuristics – in investment decision-making (Tversky & Kahneman, 1974). The results indicated that investors' process of decision-making is driven by both economic factors and psychological factors, thus offering investors a more comprehensive psychological background for the analysis of gender differences.

In general, the current studies reveal conflicting results regarding gender differences in investment decision making. Some studies demonstrate that there are very few differences under limited financial awareness, others offer solid evidence of gender differences that are rooted in psychological variables like self-confidence, tolerance for risk and uncertainty perception. The discrepancies emphasize the need for more scenario-specific studies, taking into account demographic and behavioural finance factors, as well as the psychological dimension.

The objectives of this study were:

- To investigate the relationship between gender and investment decisions.
- To investigate whether there is a significant difference in investment risk appetite between females and males.
- To be able to explain how various psychological factors (such as perception of risk and risk tolerance) affect investment behaviour.
- To add empirical evidence of gender differences in the investment decision making in an urban India context to the body of behavioural finance literature.

Based on the objectives, the following hypotheses were formulated:

Null hypothesis (H_0): There is no significant association between gender and investment risk appetite.

Alternative hypothesis (H_1): There is a significant association between gender and investment risk appetite.

2. RESEARCH METHODOLOGY

This study is quantitative research conducted to examine the relationship between Gender and Investment decision making. Primary data has been collected by using a structured questionnaire administered to the respondents of Delhi NCR region. The survey was open to all age groups to gain a variety of investment behaviors and risk preferences. Throughout this paper, “gender” refers to the self-reported male/female category collected via the questionnaire, consistent with the two-category demographic option offered in the survey instrument; the study does not distinguish gender identity from biological sex.

2.1 Participant and sampling

There were a total of 74 respondents that took part in this study, comprising 45 females (60.8%) and 29 males (39.2%). The participants were from Delhi NCR region covering a wide age group of 21 years and above. Convenience sampling was the main sampling technique and the respondents were recruited through both personal and professional contacts. This method enabled easy data collection, but might not be representative of the entire Indian community.

2.2 Method

A structured questionnaire on Google Forms to collect the data. This questionnaire aimed at collecting data on respondents’ demographic features, preferred investment avenues, risk appetite, as well as confidence in knowledge about investment risks. Likert-scales and close-ended questions were used to make sure that responses were uniform and that quantitative analysis also could be completed. A structured format also reduced the potential for ambiguity in responses, and facilitated systematic comparison between responses from the gender groups.

2.2.1 Measurement of risk appetite

The risk appetite was measured by a single question: How would you rate your overall risk appetite for investments? with five levels of responses ordered from ‘very low (prefer only guaranteed returns)’ to ‘very high (open to speculative investments)’. For the Mann-Whitney U test and the Spearman correlation, responses were coded from 1 (very low) to 5 (very high). The same five categories were used directly as the columns of the contingency table for the chi-square test of independence (Section 3.4). It was thus not a multi-item scale, but rather a single item ordinal measure and so there is no internal consistency statistic (such as Cronbach's alpha).

2.2.2 Measurement of confidence in investment-risk knowledge

The level of confidence in investment-risk knowledge was assessed by a single item: ‘How confident are you about your knowledge of investment risks?’, with four ordered response options: ‘not confident at all’, ‘slightly confident’, ‘moderately confident’, and ‘very confident’. These were coded from 1 to 4 for the Mann-Whitney U test and the Spearman correlation. The Spearman correlation reported in Section 3.5 for investment horizon (short, medium, long) was coded as 1, 2 and 3, respectively. The preferred investment avenue (PIA) is an unordered categorical variable that was not used for binary or ordinal analysis or correlational analysis.

2.3 Data Analysis

The data that was collected was analysed by various statistical methods. The demographic and investment profile of the respondents was summarised using descriptive statistics. The data were ordinal and therefore, a Mann-Whitney U test was carried out to see if there were any differences between females and males in terms of their risk appetite and investment-risk knowledge. A chi-square test of independence was also conducted to investigate the link between gender and investment risk appetite. Additionally, Spearman's rank-order correlation analysis was additionally carried out to examine the relationships among gender, risk appetite, and confidence in investment-risk knowledge.

The reported Mann-Whitney U tests, all in Section 3, are two-tailed (asymptotic/normal-approximation) significance tests, and the reported Spearman correlations are also two-tailed. Spearman correlations and the effect-direction of Mann-Whitney tests were coded 0 = female, 1 = male, with positive correlations representing a positive association with being male. In the case of the Chi-square test of independence, the assumption regarding the cell counts of the contingency table was tested: two of the 10 cells in the contingency table 2×5 were below 5 (0.61 for female and 0.39 for male, both in the ‘very high’ category for risk-appetite, with only one respondent in the entire sample ticked in this risk-appetite category). This is a well-known problem with this category and will be discussed in more detail in Section 4.2.

2.4 Ethical Guidelines

All respondents were told about the objective of the study and gave their consent. Respondents were assured that their responses would remain anonymous and that the data would only be used for academic purposes and would be destroyed after the study was published. No personally identifiable information was collected and respondents had the right to withdraw at any point without consequence.

3. RESULTS

3.1. Descriptive Statistics

A total of 74 respondents participated in the study, including 45 females (60.8%) and 29 males (39.2%). Majority of the participants were in the 51-60 years age group (41.9%), followed by the 41-50 years age group (32.4%). Mutual funds were found to be the most preferred investment avenue as it was selected by 50.0% of participants, followed by stocks/equities (14.9%), bank fixed deposits/recurring deposits (12.2%), gold/precious metals (9.5%), and real estate (8.1%).

Half of the participants (50.0%) preferred medium-term investments (3-7 years), while 40.5% preferred long-term investments (more than 7 years). Additionally, the majority (55.4%) reported a moderate risk tolerance, while 27.0% reported low or very low risk appetite and 17.6% reported high or very high risk appetite. 50.0% of respondents reported being moderately confident in their investment-risk knowledge and 21.6% indicated that they were very confident.

Table 1: Descriptive Profile of Respondents (N = 74)

Variable	Category	n	%
Gender	Female	45	60.8
	Male	29	39.2
Age Group	21–30 years	2	2.7
	31–40 years	5	6.8
	41–50 years	24	32.4
	51–60 years	31	41.9
	Above 60 years	12	16.2
Preferred Investment Avenue	Mutual Funds	37	50.0
	Stocks/Equities	11	14.9
	Bank FDs/RDs	9	12.2
	Gold/Precious Metals	7	9.5
	Real Estate	6	8.1
Investment Horizon	Short-term	7	9.5
	Medium-term	37	50.0

	Long-term	30	40.5
Risk Appetite	Low/Very Low	20	27.0
	Moderate	41	55.4
	High/Very High	13	17.6

3.2. Gender Differences in Investment Risk Appetite

Figure 1: Gender Differences in Risk Appetite (Male $M = 3.21$; Female $M = 2.53$, on a 1–5 scale)

To examine whether gender influences investment risk-taking behaviour, a Mann-Whitney U test was conducted. Male respondents reported significantly higher levels of risk appetite ($M=3.21$) than the female participants ($M=2.53$). This difference in mean levels of risk appetite was statistically significant: $U=911.00$, $z=2.86$, $p=0.002$, $r=0.33$, indicating a moderate effect size.

Table 2: Results of the Mann–Whitney U Test Comparing Risk Appetite Between Male and Female Respondents

Test Statistic	Value
Mann–Whitney U	911.00
z	2.86
p	.002
Effect Size (r)	.33

3.3. Gender Differences in Confidence in Investment-Risk Knowledge

Figure 2: Gender Differences in Confidence in Investment-Risk Knowledge (Male $M = 3.10$; Female $M = 2.71$, on a 1–4 scale)

A Mann–Whitney U test was also performed to investigate gender differences in confidence regarding investment-risk knowledge. Male respondents reported significantly higher confidence levels ($M = 3.10$) than female respondents ($M = 2.71$). The difference was statistically significant, $U = 820.50$, $z = 1.86$, $p = .045$, $r = .22$, indicating a small-to-moderate effect size.

Table 3: Results of the Mann–Whitney U Test Comparing Confidence in Investment-Risk Knowledge Between Male and Female Respondents

Test Statistic	Value
Mann–Whitney U	820.50
z	1.86
p	.045

Effect Size (r)	.22
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3.4. Association Between Gender and Investment Risk Appetite

A chi-square test of independence was performed to determine whether gender was related to investment risk appetite. The results revealed that there was a statistically significant association between gender and risk appetite, $\chi^2(4, N = 74) = 10.46$, $p = .033$, Cramér's $V = .38$. The effect size suggests a moderate relationship between the variables.

The findings revealed that male respondents were inclined to report that they have risk tolerance of very high and high while female respondents were more likely to report that they had low or moderate risk tolerance. The results are consistent with the hypothesis that gender is associated with investment risk preferences in this sample.

Table 4: Association Between Gender and Risk Appetite

Variable	χ^2	df	p	Cramér's V
Gender $\times$ Risk Appetite	10.46	4	.033	.38

3.5. Correlation Analysis

Spearman's rank-order correlation analysis was employed to explore the links between gender, risk appetite and confidence in knowledge of investment risk. Gender was coded 0 = female, 1 = male, so a positive correlation indicates a positive association with being male (see Section 2.3).

The finding revealed that there was a positive significant correlation between gender and risk appetite ($r_s = .37$) with p value = .001, meaning that male respondents were more willing to take investment risk than female respondents in this sample. Male respondents also tended to be more confident in their understanding of investments and investment risk, $r_s = .24$, $p = .043$, positively associated with gender.

Table 5: Spearman Correlation Matrix

Variable	1	2	3
1. Gender	—		
2. Risk Appetite	.370**	—	
3. Confidence in Investment-Risk Knowledge	.236*	.542***	—

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. Gender coded 0 = female, 1 = male.

There was a significant positive correlation ($r_s = .54$, $p < .001$) between risk appetite and confidence in knowledge of investment-risk. The result indicates that those who have more confidence in their

investment related risk knowledge have more tolerance of financial risk. There was no significant association between gender and investment horizon preference, $r_s = -.03$, $p = .812$.

3.6. Summary of Bivariate Associations with Risk Appetite

The correlational results of the previous analyses are summarised here to provide an overview of which variables were strongly associated with risk appetite in this sample, but are not presented as a predictive or causal model. The results indicate that gender and confidence in knowledge of investment risk are each associated with investment risk appetite in this sample.

When compared to other variables tested, confidence in investment-risk knowledge showed the strongest bivariate association with the respondents' level of risk tolerance ($r_s = .54$, $p < .001$) of all the variables examined. Gender also showed a significant association with risk appetite ($r_s = .37$, $p = .001$), with male respondents reporting greater willingness to take risks in investing than the female respondents.

Additionally, the correlation coefficient between gender and confidence was positive ($r_s = .24$, $p = .043$), indicating that there may be some gender differences in self-perceived investment knowledge that co-occur with differences in investment risk-taking behaviour in this sample. The results are broadly consistent with the theory of behavioural finance, which suggests that psychological aspects of confidence and risk perception play a role in financial decision making alongside economic factors.

Table 6: Key Correlates of Investment Risk Appetite

Variable	Relationship with Risk Appetite	Spearman's r_s	p
Confidence in Investment-Risk Knowledge	Positive	.542	< .001
Gender	Positive	.370	.001
Investment Horizon	Not Significant	-.028	.812

The results are consistent with the hypothesis that gender is associated with behavioural aspects of decision-making in this sample. The risk appetite of male investors was found to be significantly higher than that of female investors, and there was more confidence reported in their investment-risk knowledge than the female investors. A significant gender difference was also found in regard to investment risk appetite, where gender remains a significant correlate of risk-taking behaviour in this sample.

Additionally, correlation analysis showed that confidence in investment-risk knowledge was significantly related to risk appetite, and was the variable most strongly correlated with risk appetite among those examined. On the other hand, there was no significant difference between the sexes in terms of investment horizon.

In general, the results are in line with the theoretical aspect of behavioral finance indicating that psychological aspects of investing (confidence and risk appetite) are more likely to be related to

gender than the type of investment product. The results show that there is co-occurrence of some behavioural aspects with the investment decisions found here, which could be useful with respect to the gender gap in finance.

4. DISCUSSION

4.1 Interpretation of Results and Comparison with Existing Literature

The results of this study showcased a statistically significant relationship between gender and risk appetite, $\chi^2(4, N = 74) = 10.46$, $p = .033$, with a Cramér's V of .38 (consistent with Table 4), which indicates a moderate relationship between these two variables. Since the p -value falls below the 5% significance level, the null hypothesis was rejected which confirms that the responses across categories of risk appetite differs meaningfully between the two genders in this sample. It is important to note that this is a statistical correlation of reported gender and risk appetite in this convenience sample and that other demographic and financial factors (such as age, income, education, and financial literacy) were not statistically controlled or held constant (see Section 4.2). These findings are therefore consistent with a wide range of well-established literature in behavioural finance that documents systemic differences in gender with regards to investment behaviour and risk preferences. These findings are similar to some of the earliest empirical work done in this field, Jianakoplos and Bernasek (1998) used household-level data and found that single women invest a smaller proportion of their wealth in risky assets compared to single men and that this gap remains even when wealth increases which provides foundational evidence that gender-based differences in financial risk-taking are economically meaningful.

Innate financial ability is not the cause of the difference in investment behaviour between the genders, but instead it differs because of a combination of various psychological and social-cognitive factors. Research in behavioural finance indicates that on average men display higher levels of overconfidence which can lead to greater risk-taking and more frequent trading - even at the expense of long-term returns sometimes. Barber and Odean (2001), found that men trade 45% more than women and earn annual risk-adjusted net returns that are 1.4% less than those earned by women, which indicated that men are primarily driven by overconfidence. On the other hand, women seem to display stronger risk perception and greater loss aversion which means they are more sensitive to potential losses and thus prefer more stable, diversified investment options. This pattern of behaviour is further validated by Powell and Ansic (1997), whose experimental analysis found that females are seek less risk than males irrespective of task familiarity, framing, or ambiguity, and that while men and women employ different decision strategies in financial environments, these differences do not have a significant impact on actual performance ability. Croson and Gneezy (2009), in their review of gender differences in various economic experiments, identified meaningful differences in risk preference between men and women and concluded that women are consistently more risk averse than men in various scenarios. Moreover, this distinction is strengthened by socialization, as men are encouraged to connect risk with competence, prowess, and success, whereas women are encouraged to be risk averse and to value caution and security more. Olsen and Cox (2001) conducted a study of professional investment managers to identify the reasons for gender-based

differences in risk behaviour when men and women are equally trained and experienced, and were equally exposed to the same information. They concluded that cultural conditioning is likely to be the biggest factor in explaining gender-based differences in how people perceive and respond to investment risk. In addition, self-efficacy is also important, as women might not feel confident in their financial knowledge even though they might have the same financial ability, as a result of not having been reassured by society about their financial knowledge, which could decrease investment participation. Financial self-efficacy, defined as the belief that one has the ability to reach financial objectives, is directly empirically supported in this regard by Montford and Goldsmith (2016) who found that women have less financial self-efficacy than men, which is a significant difference between the two genders and the process of engaging in financial risk taking. Thus, any gender difference in investing choices observed in studies such as this one may reflect differences in confidence, risk assessment and learned behavioral patterns encouraged by society, rather than necessarily differences in intelligence or rationality.

These findings are easily understood by using two key concepts in behavioural finance. The first is prospect theory developed by Kahneman and Tversky (1979) which states that people compare prospects to a reference point and that they are more sensitive to a loss than their counterparts are to a gain of the same magnitude – loss aversion. The findings show that both loss aversion and risk aversion appear to be related to gender in this sample and that women are more sensitive to potential losses than men. This also gives the theory grounds for the observed pattern in the present study which is that the female respondents were more inclined towards investment vehicles that come with less risk. The second is the overconfidence model, which suggests investors who think they know more and make more accurate judgments are more likely to trade often and to be more risk-taking. Social identity, in addition to biological factors, has been shown to contribute to the gender difference in risk tolerance; gender identity cues result in increased overconfidence in males and increased investment size and frequency in males. Hsu et al. (2021) also discovered that the gender gap in their behaviors, as measured by their self-attribution, illusion-of-control, regret aversion, and loss aversion, can be attributed to a different financial knowledge as well, since their results indicate that financial literacy reduces the gap between the two. These frameworks imply that the gender gap observed in this study is not necessarily a random one, and is consistent with known psychological processes affecting the perception and response to financial risk in men and women.

4.2 Limitations

Although this study yielded significant results, there are some limitations that should be noted. The sample was selected in a non-probability manner and was purely based on convenience sampling through the authors' contacts, family and friends, and thus the results may not be generalizable across the entire Indian investor population, as it may have different socio-economic and cultural norms and environmental factors. The sample was also relatively small in terms of age; the 41-60 age group accounted for 74.3% of the sample (32.4% aged 41-50 and 41.9% aged 51-60) indicating that these results would more closely reflect this age group, than the wider investor sample. Since all the data was collected through a self-report structured questionnaire, they may be subject to personal biases such as social desirability bias or inaccuracies while recalling information. Additionally, the sample size was limited so generalising the

results to a wider population may not be possible. The study also failed to measure and statistically control for other demographic and financial characteristics that could vary between the gender groups and independently be related to risk appetite – such as age, education, income, wealth, occupation, marital status, investing experience, and financial literacy – so the reported association between gender and risk appetite should not be interpreted as an independent or causal effect of gender net of these other factors. Additionally, two general categories (male/female) were again used for gender and only one self-report item was used, so the group-level averages reported here should be interpreted as typical characteristics of all women or all men. . Lastly, investment behaviour is dynamic in nature and the cross-sectional design of this study only allows it to capture responses at a single point in time and fails to account for changes in behaviour with respect to time.

Furthermore, several directions for future research are recommended. The research should be extended beyond the Delhi NCR region to include other diverse cities and various regions and villages within India to gain a better understanding of gender-based investing behaviour in India. A longitudinal study would also be useful to observe the evolving nature of gender-based differences in risk appetite over time, especially in the context of the increasing trend of retail investors and digital financial services in India. The inclusion of additional demographic factors like income level, level of education and financial literacy would allow researchers to observe how these factors affect investment behaviour independently of gender, which would result in a more complex understanding of investment behaviour. This is corroborated by Dwyer, Gilkeson and List (2002) who showed that gender differences in the riskiness of mutual fund investment choices are greatly reduced when financial knowledge is included as a control for the analysis suggesting that by closing the financial knowledge gap between women and men the gender risk difference may be materially reduced. In the Indian setting, specifically, Adil, Singh and Ansari (2022) in a study of investors from Delhi NCR region found that overconfidence and herding biases were more prevalent among male investors while risk aversion observed more among female investors and financial literacy acted as a dampener of the impact of overconfidence and herding biases, further reinforcing the need for gender-targeted financial education initiatives in urban India.

These findings should also be considered by investment advisors, financial institutions, and policy makers. A gender-sensitive approach to the development of investment products, investment advisory services and targeted financial education programmes needs to be put in place to tackle gaps in investment knowledge and confidence. Regardless, given gender differences observed in this and other studies, insights from behavioural finance should be integrated in investor guidance to aid in recognition and management of psychological biases (e.g., overconfidence, fear of loss) and inclusive financial strategies should be developed to enable more informed participation.

5. CONCLUSION

The present study examined the correlation between gender and investment decision making among the respondents of the Delhi NCR region with specifically gender difference with regard to risk appetite. A structured questionnaire was used along with a range of statistical techniques which resulted in findings

that revealed a statistically significant association between gender and investment risk appetite, leading to the rejection of the null hypothesis. The results of these findings reflect an association found within this convenience sample and should not be interpreted as a causal association as there were no random sampling or statistical controls for other demographic and financial factors (Section 4.2). The findings showed that male participants reported significantly higher levels of risk appetite and greater confidence in their investment-risk knowledge compared to the female respondents. However, no significant gender difference was found in investment horizon preference or choice of investment avenue which indicates that the gender gap observed here was larger when it comes to confidence and risk aversion and not in the structural choices related to investment themselves. These results are broadly consistent with well-established frameworks in behavioural finance, particularly Kahneman and Tversky's (1979) prospect theory and the overconfidence framework discussed by Barber and Odean (2001) and Croson and Gneezy (2009), both of which suggest that gender differences in investment behaviour observed in prior studies are more often attributed to psychological and social-cognitive factors rather than differences in financial intelligence or rationality. Despite the limitations of this study, it offers some preliminary empirical data from an urban Indian setting to the existing body of literature on behavioural finance.

This study has tentative policy and practice implications, to be tested with larger and more representative samples. Financial institutions and investment advisors should acknowledge that there may be gender-based differences in risk perceptions and confidence, and tailor advisory services and investment products to these. The gap in investment participation between men and women can be addressed with targeted financial education programming, especially around increasing women's investment confidence and decreasing their risk aversion. Awareness creation policies and programs should include policy elements that reflect the behavioural findings to ensure that all investors, regardless of gender, have the opportunity to make informed and confident financial decisions. With greater retail investor participation in India, it is not just an academic issue, it's a very important one to understand and address the psychological differences.

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