

An Empirical Study on the Influence of Behavioral Biases on Investment Decisions in Delhi NCR

– Ashima Saxena*

Assistant Professor-Senior scale, The Northcap University

 ashimasaxena@ncuindia.edu  <https://orcid.org/0000-0002-7289-1848>

– Preeti Chawla

Associate Professor, The Northcap University

 preetichawla@ncuindia.edu  <https://orcid.org/0000-0002-8224-5444>



ARTICLE HISTORY

Paper Nomenclature: Empirical Research Paper (ERP)

Paper Code: GJEISV14I3JS2022ERP1

Submission at Portal (www.gjeis.com): 20-Jul-2022

Manuscript Acknowledged: 23-Jul-2022

Originality Check: 29-Jul-2022

Originality Test (Plag) Ratio (Ouriginal): 10%

Author Revert with Rectified Copy: 12-Aug-2022

Peer Reviewers Comment (Open): 22-Aug-2022

Single Blind Reviewers Explanation: 30-Aug-2022

Double Blind Reviewers Interpretation: 02-Sep-2022

Triple Blind Reviewers Annotations: 09-Sep-2022

Author Update (w.r.t. correction, suggestion & observation): 15-Sep-2022

Camera-Ready-Copy: 23-Sep-2022

Editorial Board Excerpt & Citation: 26-Sep-2022

Published Online First: 30-Sep-2022

ABSTRACT

Purpose: The finance industry was hesitant to accept the psychologist's point of view, which championed the notion of behavioral finance. "Daniel Kahneman and Amos Tversky" considered behavioral finance. According to traditional financial theory, fund managers do not always make sensible financial judgments. Behavioral elements such as greed and fear have an impact on investing. These psychological elements must be considered as risk considerations while making financial decisions. Overconfidence bias, herding bias, representativeness bias, anchoring bias, and other behavioral stereotypes have been sought to explain using psychological finance. The purpose of this study is to understand the frequency analysis for behavioral variables.

Design/Methodology/Approach: The questionnaire was developed using a survey of the literature. The accuracy and quality of the questionnaire were evaluated using pilot test behavioral and Cronbach's Alpha. After sifting the replies, the survey was emailed to 500 people, and the data was analyzed using statistical methods.

Findings: The goal of the study is to investigate the relationship between demographic characteristics and financial behaviour biases, as well as the relationship between financial behaviour biases and investment decisions. The findings revealed a substantial relationship between the demographic variable and differences in investment behaviour.

Originality/Value: This paper will benefit all investors to understand the biases that they unknowingly face while taking or making any financial investment decisions.

Paper Type: Empirical Research Paper

KEYWORDS: Investment Decision | Behavioral Biases | Gender | Investor | Rationality

*Corresponding Author (Ashima Et. Al)

- Present Volume & Issue (Cycle): Volume 14 | Issue-3 | Jul-Sep 2022
- International Standard Serial Number:
Online ISSN: 0975-1432 | Print ISSN: 0975-153X
- DOI (Crossref, USA) <https://doi.org/10.18311/gjeis/2022>
- Bibliographic database: OCLC Number (WorldCat): 988732114
- Impact Factor: 3.57 (2019-2020) & 1.0 (2020-2021) [CiteFactor]
- Editor-in-Chief: Dr. Subodh Kesharwani
- Frequency: Quarterly

- Published Since: 2009
- Research database: EBSCO <https://www.ebsco.com>
- Review Pedagogy: Single Blind Review/ Double Blind Review/ Triple Blind Review/ Open Review
- Copyright: ©2022 GJEIS and it's heirs
- Publishers: Scholastic Seed Inc. and KARAM Society
- Place: New Delhi, India.
- Repository (figshare): 704442/13

GJEIS is an Open access journal which access article under the Creative Commons. This CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0>) promotes access and re-use of scientific and scholarly research and publishing.



Introduction

According to traditional investing theories, investors want to maximise profits. Numerous studies have found that investors are not always sensible. When humans are faced with ambiguity concerning financial decisions, they get bewildered. People’s logics and reasons are frequently absent as a result of inconsistency in market activities. Behavioral finance is concerned with the causes and remedies to people’s irrational thinking and markets’ shifting modes of operation. According to established research, most investors make judgments based on emotion rather than rationality; many of them purchase high speculations and sell little in a panic.

Investor rationality has grown suspect since mainstream financial theories have failed to explain stock market

irregularities adequately. This concept of the rationality principle in traditional finance has been attacked by the people from its inception, as has the question of whether human desires are reasonable or not. Humans, as we know, are social beings with particular values who make decisions based on their feelings and behavior.

Behavioural finance is a discipline of finance that investigates the behavior financial market agents and the effect of psychological variables on decisions made while buying or selling the market, which influences pricing. Science’s purpose is to explain why it’s plausible to conclude that markets are inefficient. Behavioural finance is a relatively recent finance paradigm that tries to combine basic finance theories by including Behavioural components in decision-making.

Review of Literature

Table 1: ROL on Behavioral Biases on Investment Decisions.

Behavioral Biases	Author Name (Year)	Objective Of The Study	Finding Of the Study
Overconfidence Bias & Herding Bias	Huei-Wen Lin,(2011)	To Study The Three Behavioral Biases I.E. Deposition Effect, Overconfidence And Herding On The Basis Of Demographic Variables In Taiwan	There Is A Difference In Biases On The Basis Of Genders. Male And Female Have Different Psychological Behavior While Investing In The Stock Market And They Differ In Deposition Effect, Overconfidence And Herding.
Herding Bias	Imed Medhioub, Mustapha Chaffai, (2018)	To Study The Herding Behavior Of Investors In GCC (Gulf Cooperation Council) Islamic Stock Markets.	The Data From January 2006 To February 2016 Was Analyzed For Five Different Gulf Countries. The Countries That Were Taken Into Consideration For This Research Work Were Bahrain, Kuwait, Qatar, Saudi Arabia And UAE. Findings Of The Research Show That There Is Herd Behavior Seen In Saudi Arabia And Qatar.
Representativeness Bias & Availability Bias	Muhammad Haroon Rasheed, Amir Rafique, Tayyaba Zahid, Muhammad Waqar Akhtar, (2018)	To Study The Impact Of “Representativeness Bias” And “Availability Bias” On Financial Decision Making In Pakistan	Research Work Was Based On Primary Data That Was Collected With The Help Of A Questionnaire. 227 Investors From Islamabad, Lahore And Sargodha In Pakistan Filled The Questionnaire. After Analyzing The Data, The Findings Of The Research Show That “Representativeness Bias” And “Availability Bias” Affect The Investor’s Behavior While He Is Investing In The Stock Market.
Behavioral Factors & Demographic Factors	Noura Metawa, M. Kabir Hassan, Saad Metawa, M. Faisal Safa, (2018)	To Study The Relationship Between Behavioral Factors Such As “Investor Sentiments”, “Overconfidence”, And “Herd Behavior”, “Over Reaction And Under Reaction” And Investment Decisions And Also Between Demographic Factors And Investment Decisions.	Survey Was Conducted In Egyptian Stock Market, With The Help Of A Questionnaire Which Was Filled By 384 Investors. Data, So Collected, Was Analyzed With The Help Of Multiple Regression Method. It Was Found Out That Behavioral Factors Such An “Investor Sentiment”, “Over Confidence”, And “Overreaction” And “Under Reaction” Affects The Investment Decision. Also Age, Gender And Level Of Education Have Direct Effect On Investment Decisions.



Research Objective

- To draw the demographic profile of investors and identify the financial behavioral bias factors which have a correlation with investment decisions.
- Understanding the frequency analysis for behavioral variables.
- To identify the financial behavioral bias factors affecting investment decisions.

Hypothesis: Behavioral biases will have a significant relationship with the financial behaviour of the investors

Data Analysis

In Delhi-NCR, empirical data was obtained from investors using both offline and online surveys. Respondents from the Delhi-NCR region completed 507 surveys. However, after filtering the answer, 478 records remained. At the time of data processing, 373 records were considered for further investigation.

A substantial Cronbach's Alpha of 0.838 (minimum of 0.6 is regarded significant), as shown in table 3.2, validates the reliability and validity of the questionnaire prior to data collection. Cronbach's alpha is used to determine if the questionnaire is capable of examining the various behavioural biases in a meaningful way. The content validity was also evaluated after the dependability. The content validity has been verified by professionals and academics in the subject. As a result, after checking for reliability and validity, the questionnaire was determined to be appropriate for the study.

Table 1: Cronbach's Alpha Result

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.818	0.838	39

(Source: Data collected from field study)

Table 2 shows the demographic details of the respondents in the current study.

Demographic Variables	Options	Frequency	%
Gender	Male	243	65.10%
	Female	130	34.90%
Age	18 to 25 years	70	18.80%
	26 to 35 Years	135	36.20%
	36 to 60 Years	119	31.90%
	> 60 Years	49	13.10%
Qualification	Higher senior school	42	11.30%
	Graduation	59	15.80%
	Post-Graduation	87	23.30%
	Professional Qualification	185	49.60%
Occupation	Professional	86	23.10%
	Self-employed	104	27.90%
	Salaried	132	35.40%
	Retired	51	13.70%
Marital Status	Married	265	71.00%
	Unmarried	108	29.00%
Income	Up to 5 lacs	45	12.10%
	5-10 lacs	212	56.80%
	Above 10 lacs	116	31.10%

(Source: Data collected from field study)

Frequency Analysis for Behavioural Variable

Overconfidence bias

“Overconfidence,” one of the behavioural factors, refers to having a high opinion of one’s own talents and degree of knowledge. A great deal of study has been conducted on how overconfidence impacts human emotions. Overconfidence has a part in financial decisions, and this is not an exception.

On a 5-point Likert scale, there are nine statements that exemplify the overconfidence bias. According to the first assertion, 25% of respondents believe they have a thorough understanding of the Indian stock market. In response to the second item, 30% of respondents agreed that they are

confident in their ability to choose better stocks than others. 28% of respondents are unsure whether they are risk takers. According to the fourth assertion, 41% of the participants believe they have the ability to recognise the probable winner in the market.

27% of respondents strongly believe that the stock market is the best type of investment for them. According to the sixth assertion, 36% of respondents feel optimistic about their future performance. Approximately 32% of respondents are ambivalent about depending on their own intuitions for stock performance in the future. 45% of respondents believe they will make enough money from the stock market. The eighth statement demonstrates that 34% of poll participants are firmly convinced that whichever equities they choose would always outperform others.

Table 3: Frequency analysis of “Overconfidence Bias” behavioral variable of respondents

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have sufficient knowledge of Indian stock market.	11 (2.95%)	34 (9.12%)	85 (22.79%)	151 (40.48%)	92 (24.66%)
I am confident of my ability to pick better stocks than others.	13 (3.49%)	34 (9.12%)	103 (27.61%)	114 (30.56%)	109 (29.22%)
Once I make a decision, I don’t look back. (risk taker)	6 (1.61%)	24 (6.43%)	105 (28.15%)	126 (33.78%)	112 (30.03%)
I am very much confident about my ability to identify potential winners in the capital market.	9 (2.41%)	32 (8.58%)	87 (23.32%)	153 (41.02%)	92 (24.66%)
I am confident that stock market is the right kind of investment and will be successful in my trading.	6 (1.61%)	21 (5.63%)	81 (21.72%)	164 (43.97%)	101 (27.08%)
At times, I am confident about my future performance of stock.	6 (1.61%)	23 (6.17%)	100 (26.81%)	134 (35.92%)	110 (29.49%)
I rely on my “own intuition” regarding future performance and take investment decisions.	11 (2.95%)	49 (13.14%)	122 (32.71%)	117 (31.37%)	74 (19.84%)
I am confident that I can always make enough profit from the capital market.	9 (2.41%)	34 (9.12%)	86 (23.06%)	168 (45.04%)	76 (20.38%)
I am confident of my skills that whatever stocks I pick, it will have a better return as compared to others.	9 (2.41%)	36 (9.65%)	108 (28.95%)	92 (24.66%)	128 (34.32%)

(Source: Data collected from field study)



Representativeness bias

People have a tendency to take mental shortcuts to get to the results while making any decision. These mental shortcuts are based on what has happened in one's life in the past. The respondents were posed three questions based on the representativeness bias. According to the first statement,

47% of respondents disagree that their investing decisions are based on prior experiences. According to the second statement, 46% of respondents disagree that if their prior trading results improve, they would increase their trading activity. The last statement shows that 48% of respondents disagree that they rely on their prior market expertise to make judgments.

Table 4: Frequency analysis of “Representativeness Bias” behavioral variable of respondents

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My investment decisions are based on past experience (success or failure).	46 (12.33%)	178 (47.72%)	81 (21.72%)	62 (16.62%)	6 (1.61%)
I would increase my trading activity if the past trading volume of stock market was higher than usual.	81 (21.72%)	173 (46.38%)	63 (16.89%)	53 (14.21%)	3 (0.80%)
I rely on my previous experiences in the market for my next investment.	90 (24.13%)	182 (48.79%)	51 (13.67%)	45 (12.06%)	5 (1.34%)

(Source: Data collected from field study)

Availability bias

Another sort of shortcut is availability, in which individuals frequently base their judgments on information that is easily accessible. The first statement shows that 43% of respondents agree that while making decisions, they frequently seek information from television or magazines. 45% of respondents say that they rely on a company's

prior financial statistics when making investment decisions. According to the third statement, 28% of respondents are neutral in the sense that they speak with their friends and relatives before investing in the portfolio market. The fourth statement shows that 60% of respondents agree that they never make financial decisions without talking with their investment advisor.

Table 5: Frequency analysis of “Availability Bias” behavioral variable of respondents

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
While taking any investment decisions, I often use information gained from TV, news or magazines.	6 (1.61%)	50 (13.40%)	114 (30.56%)	163 (43.70%)	40 (10.72%)
At the time of making investment decisions, I mostly rely on company historical financial data.	5 (1.34%)	51 (13.67%)	108 (28.95%)	168 (45.04%)	41 (10.99%)
I consult my friends and family before investing in portfolio market.	8 (2.14%)	37 (9.92%)	107 (28.69%)	180 (48.26%)	41 (10.99%)
I never make any investment decisions without consulting my investment advisor	5 (1.34%)	28 (7.51%)	71 (19.03%)	226 (60.59%)	43 (11.53%)

(Source: Data collected from field study)

Herding bias

Herding, as the name implies, is used to imitate a throng. The metaphor of herding sheep has been applied to finance, which involves following the mob without thinking for yourself. The herding bias was represented by four statements. In the first statement, 41% of respondents disagree that they readily oppose changes in other shareholder choices

and begin tracking stock market reaction. According to the second statement, 44% of respondents believe that they are enticed when they notice a profitable opportunity. According to the third statement, 24% of respondents are ambivalent about following their colleagues' investing advice. According to the last statement, 25% of respondents believe that other individuals have influence on their financial decisions.

Table 6: Frequency analysis of “Herding Bias” behavioral variable of respondents

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I usually react quickly to the changes of other investors' decisions and follow their reactions to the stock market.	33 (8.85%)	154 (41.29%)	92 (24.66%)	86 (23.06%)	8 (2.14%)
I easily get tempted to buy stocks, when I see a lucrative investment opportunity.	13 (3.49%)	83 (22.25%)	93 (24.93%)	166 (44.50%)	18 (4.83%)
I follow my colleague's advice for buying stocks.	48 (12.87%)	161 (43.16%)	91 (24.40%)	61 (16.35%)	12 (3.22%)
Other investors' decisions of choosing stock types have impact on my investment decisions	36 (9.65%)	160 (42.90%)	71 (19.03%)	94 (25.20%)	12 (3.22%)

(Source: Data collected from field study)

Gambler Fallacy

The Gambler fallacy is the most widespread and essential sort of prejudice, in which individuals believe that if something happened more frequently in the past, it would happen less frequently in the future. The respondents were instructed to make seven assertions that represented the Gambler fallacy. According to the first statement, around 59% of individuals think that if a coin is tossed five times and the first four times come out heads, the fifth time is more likely to be tails than heads. According to the second statement, 64% of individuals believe that if a slot machine has gone without paying a lot

of money, it will have more opportunities to pay more money in the near future. With this rationale, 20% of those polled are positive since the possibilities of losing are larger if there is a long string of wins on the slot machine. 59% of those polled believe that a long string of losses on the slot machine increases the odds of winning. In the fifth argument, it was discovered that 60% of those polled strongly believe that one should avoid playing on this slot machine that appears to have paid out cash. 55% of people polled feel that if others succeed in the gambling game, their turn will come as well. The last statement is neutral with 23% of respondents.

Table 7: Frequency analysis of “Gambler Fallacy” behavioral variable of respondents

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
If I toss a coin five times and the first four tosses come up heads, I think that the fifth toss will be more likely to be tails than heads.	2 (0.54%)	20 (5.36%)	85 (22.79%)	222 (59.52%)	44 (11.80%)
The longer a slot machine has gone without paying out a large sum of money, the more likely are the chances that that it will pay out in the very near future.	1 (0.27%)	13 (3.49%)	66 (17.69%)	239 (64.08%)	54 (14.48%)
After a long string of wins on a slot machine, the chances of losing become greater.	1 (0.27%)	13 (3.49%)	77 (20.64%)	220 (58.98%)	62 (16.62%)
After a long string of losses on a slot machine, the chances of winning become greater.	2 (0.54%)	20 (5.36%)	86 (23.06%)	222 (59.52%)	43 (11.53%)
It is good idea to purposely avoid playing on slot machine that has recently paid out of money.	1 (0.27%)	17 (4.56%)	90 (24.13%)	227 (60.86%)	38 (10.19%)
If others are winning in a gambling game, I feel that my turn is coming too.	1 (0.27%)	22 (5.90%)	64 (17.16%)	206 (55.23%)	80 (21.45%)
Sometimes, it is a good idea to keep gambling if you get a strong feeling that you are about to win.	1 (0.27%)	13 (3.49%)	89 (23.86%)	216 (57.91%)	54 (14.48%)

(Source: Data collected from field study)



Regret Aversion

Fear of regret is a powerful motivator that prevents people from making decisions. Individuals with regret aversion are unwilling to accept defeat. About 52% of those polled disagree with the first assertion. 60% of respondents do not believe that they are severely dissatisfied if they lose money while their friends prosper. 54% of respondents disagree that when things go wrong in investment, it takes some time to recover.

Loss Aversion

According to the idea of loss aversion, the investor is so terrified of facing losses that they choose to prevent losses above gaining gains. The responders were instructed to make six statements. In the first statement, 25% of respondents agree that as they get older, investors favour low-risk investments. The second statement shows that 30% of respondents agree that they become more risk seeking after a past gain, while the third statement shows that around 27% of respondents

Table 8: Frequency analysis of “Regret Aversion” behavioral variable of respondents

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My disappointment after losing money on an investment diminishes a little if others have also experienced the same loss.	53 (14.21%)	197 (52.82%)	61 (16.35%)	54 (14.48%)	8 (2.14%)
I feel extremely disappointed if I take a contrarian position (opposite to the general trend) and lose while my friends make profits by following the crowd.	52 (13.94%)	225 (60.32%)	60 (16.09%)	34 (9.12%)	2 (0.54%)
When things go wrong at investment it takes me a while to get over it.	61 (16.35%)	202 (54.16%)	60 (16.09%)	47 (12.60%)	3 (0.80%)

(Source: Data collected from field study)

Anchoring

According to the first statement, nearly 62% of respondents believe that they make decisions solely on a single piece of information. 62% of respondents think that when they find a profitable opportunity, they are readily swayed to acquire such stocks. 60% of respondents think that as the market rises, investors become more pessimistic, while 62% say that when the market falls, investors get more hopeful.

are indifferent when asked whether they are more sensitive to risk following a previous investment loss. 34% of respondents believe that they avoid selling shares that have declined in value and, on the other hand, prefer to swap shares that have increased in price. According to the fifth statement, 35% of respondents are more upset when “they retain the losing stocks too long” than when “they sell the winning stocks too soon.” According to the previous statement, 52% of respondents promptly sell equities when their prices begin to fall.

Table 9: Frequency analysis of “Anchoring” behavioral variable of respondents

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I usually take decision based on single piece of information.	0	15 (4.02%)	42 (11.26%)	231 (61.93%)	85 (22.79%)
Whenever, I see profitable investment opportunity, I easily get carried away to buy those stocks.	1 (0.27%)	11 (2.95%)	52 (13.94%)	234 (62.73%)	75 (20.11%)
Investors tend to become more pessimistic when the market rises	1 (0.27%)	9 (2.41%)	59 (15.82%)	224 (60.05%)	80 (21.45%)
Investors tend to become more optimistic when the market falls	1 (0.27%)	8 (2.14%)	58 (15.55%)	233 (62.47%)	73 (19.57%)

(Source: Data collected from field study)

Table 10: Frequency analysis of “Loss Aversion” behavioral variable of respondents

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Investors tend to prefer low risk investments as they grow older.	3 (0.80%)	122 (32.71%)	109 (29.22%)	92 (24.66%)	47 (12.60%)
After a prior gain, I am more risk seeker than usual	2 (0.54%)	124 (33.24%)	109 (29.22%)	110 (29.49%)	28 (7.51%)
After a prior loss, I am more risk adverse.	7 (1.88%)	128 (34.32%)	101 (27.08%)	93 (24.93%)	44 (11.80%)
I avoid selling shares that have decreased in value and readily sell shares that have increased in value.	3 (0.80%)	83 (22.25%)	128 (34.32%)	127 (34.05%)	32 (8.58%)
I feel more sorrow about holding losing stocks too long than about selling winning stocks too soon.	2 (0.54%)	21 (5.63%)	117 (31.37%)	133 (35.66%)	100 (26.81%)
I quickly dispose of the stocks whose price starts decreasing.	10 (2.68%)	26 (6.97%)	99 (26.54%)	191 (51.21%)	47 (12.60%)

(Source: Data collected from field study)

Factor Analysis

Factor analysis is “the process of shrinking the large data into smaller data set which is more convenient and handy”. (Child). EFA and CFA are the two primary factor analysis methods. CFA attempts to verify hypotheses and utilizes path diagrams to portray variables and factors, while EFA attempts to detect complicated trends by exploring the data set and testing predictions.

“KMO test” indicates the proportion of variance in the variable. It ensures whether the statistics is or is not ideal for factor evaluation. Any value which is greater than 0.5 is accepted as per KMO test.

Data of table 4.19 show that the KMO value is 0.813, which is acceptable. Hence, this data is suitable for factor analysis.

Table 11: KMO and Bartlett’s Test

KMO and Bartlett’s Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.813	
Bartlett’s Test of Sphericity	Approx. Chi-Square	10272.5
	Df	780
	Sig.	0

(Source: Data collected from field study)

“Bartlett’s Test of Sphericity” depicts the “content validity and suitability of the responses.” The recommended level of Bartlett’s Test of Sphericity is less than 0.05.

Table 12: Exploratory Factor Analysis

Factor	Statement	Factor Loading	Variance %	Cronbach Alpha
Overconfidence	Statement 1	0.709	11.774	0.874
	Statement 2	0.758		
	Statement 3	0.717		
	Statement 4	0.635		
	Statement 5	0.713		
	Statement 6	0.716		
	Statement 7	0.65		
	Statement 8	0.745		
	Statement 9	0.715		
Representativeness	Statement 10	0.827	4.137	0.867
	Statement 11	0.936		
	Statement 12	0.9		



Factor	Statement	Factor Loading	Variance %	Cronbach Alpha
Availability	Statement 13	0.817	6.743	0.91
	Statement 14	0.923		
	Statement 15	0.876		
	Statement 16	0.902		
Herding	Statement 17	0.823	5.317	0.831
	Statement 18	0.813		
	Statement 19	0.803		
	Statement 20	0.804		
Gambler Fallacy	Statement 21	0.707	20.009	0.903
	Statement 22	0.912		
	Statement 23	0.89		
	Statement 24	0.806		
	Statement 25	0.775		
	Statement 26	0.532		
	Statement 27	0.729		
Regret Aversion	Statement 28	0.9	5.211	0.902
	Statement 29	0.922		
	Statement 30	0.911		
Anchoring	Statement 31	0.825	6.109	0.935
	Statement 32	0.833		
	Statement 33	0.894		
	Statement 34	0.88		
Loss Aversion	Statement 35	0.841	8.672	0.869
	Statement 36	0.877		
	Statement 37	0.864		
	Statement 38	0.763		
	Statement 39	0.625		
	Statement 40	0.681		

(Source: Data collected from field study)

Table 12 depict the exploratory factor analysis, it is observed that approximately 11.77% of the total variance is for overconfidence bias. For the Representativeness bias, the total percentage of variance came out to be 4.13%, and for availability bias, it is 6.74% of the total variance. It has further been observed that Gambler fallacy has the maximum percentage of total variance which came out to be 20.00%. Similarly for other bias, the total percentage of variance has been given in the above table. The cumulative percentage of variance is 67.973%. Cronbach Alpha has been calculated for each of the biases separately, and it was further observed that in all the 8 biases, Cronbach Alpha came out to be above 0.7, which is acceptable in all the cases.

Conclusion

Many research papers have attacked the notion of conventional finance since it assumes that investors in the stock market frequently exhibit rational conduct, implying that whatever information they obtain is utilised to the best possible use and the market is always efficient. However, a new idea of behavioural finance emerged, which supplemented classic finance theory. Investors, according to the notion of behavioural finance, do not make rational decisions and are irrational. Emotions drive human conduct. According to behavioural finance, investment decisions are frequently influenced by emotion and specific biases. The goal is to investigate the relationship between demographic characteristics and financial behaviour biases, as well as

the relationship between financial behaviour biases and investment decisions. The findings revealed a substantial relationship between the demographic variable and differences in investment behaviour.

References:

- Belsky, G., & Gilovich, T. (2010). Why smart people make big money mistakes and how to correct them: Lessons from the life-changing science of behavioral economics. Simon and Schuster.
- Chaffai, M., & Medhioub, I. (2018). Herding behavior in Islamic GCC stock market: a daily analysis. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(2), 182-193.
- Lin, H. W. (2012). How herding bias could be derived from individual investor types and risk tolerance?. *International Journal of Economics and Management Engineering*, 6(6), 1395-1400.
- Lin, H. W. (2011). Elucidating the influence of demographics and psychological traits on investment biases. *International Journal of Economics and Management Engineering*, 5(5), 424-429.
- Metawa, N., Hassan, M. K., Metawa, S., & Safa, M. F. (2018). Impact of behavioral factors on investors' financial decisions: case of the Egyptian stock market. *International Journal of Islamic and Middle Eastern Finance and Management*.
- Pompian, M. M. (2011). Behavioural finance and wealth management: how to build investment strategies that account for investor biases (Vol. 667). John Wiley & Sons.
- Pompian, M. M., & Longo, J. M. (2005). Incorporating Behavioural finance into Your Practice. *Journal of Financial Planning*, 18(3).
- Rasheed, M. H., Rafique, A., Zahid, T., & Akhtar, M. W. (2018). Factors influencing investor's decision making in Pakistan: Moderating the role of locus of control. *Review of Behavioral Finance*.
- Ricciardi, V., & Simon, H. K. (2001). Behavioural finance: A new perspective for investors and financial professionals. Retrieved from.
- Waweru, N. M., Mwangi, G. G., & Parkinson, J. M. (2014). Behavioural factors influencing investment decisions in the Kenyan property market. *Afro-Asian Journal of Finance and Accounting*, 4(1), 26-49.

GJEIS Prevent Plagiarism in Publication

The Editorial Board had used the Ouriginal – a Swedish anti-plagiarism software tool which is a fully-automatic machine learning text-recognition system made for detecting, preventing and handling plagiarism and trusted by thousands of institutions across worldwide. Ouriginal by Turnitin is an award-winning software that helps detect and prevent plagiarism regardless of language. Combining text-matching with writing-style analysis to promote academic integrity and prevent plagiarism, Ouriginal is simple, reliable and easy to use. Ouriginal was acquired by Turnitin in 2021. As part of a larger global organization GJEIS and Turnitin better equipped to anticipate the foster an environment of academic integrity for educators and students around the globe. Ouriginal is GDPR compliant with privacy by design and an uptime of 99.9% and have trust to be the partner in academic integrity (<https://www.ouriginal.com/>) tool to check the originality and further affixed the similarity index which is {10%} in this case (See below Annexure-I). Thus, the reviewers and editors are of view to find it suitable to publish in this Volume-14, Issue-3, Jul-Sep 2022.

Annexure 14.11

Submission Date	Submission Id	Word Count	Character Count
29-Jul-2022	D154859471 (Ouriginal)	4284	27384

Analyzed Document	Submitter email	Submitted by	Similarity
1.1 ERP1_Ashima_GJEIS Jul to Sep 2022.docx (D154859471)	ashimasaxena@ncuindia.edu	Ashima Saxena	10%



Sources included in the report			
SA	Full thesis 29.07.2021.docx Document Full thesis 29.07.2021.docx (D110899494)		2
SA	Doan and Le Thesis -2011.pdf Document Doan and Le Thesis -2011.pdf (D4101977)		2
SA	Thesis 5.9.2021.docx Document Thesis 5.9.2021.docx (D112301015)		1
SA	Commerce & Management Prajakta Mandar Joshi PhD Thesis.pdf Document Commerce & Management Prajakta Mandar Joshi PhD Thesis.pdf (D143700386)		2
SA	DBIM Latest.docx Document DBIM Latest.docx (D123825055)		1
SA	JETIR research paper.pdf Document JETIR research paper.pdf (D69437557)		1
SA	Thesis_5.9.2021[1].docx Document Thesis_5.9.2021[1].docx (D122329905)		2
SA	Leya Paulsy-BEHAVIOURAL INFLUENCES OF CAPITAL MARKET INVESTORS AND INVESTMENT DECISIONS.pdf Document Leya Paulsy-BEHAVIOURAL INFLUENCES OF CAPITAL MARKET INVESTORS AND INVESTMENT DECISIONS.pdf (D142572072)		1
SA	Term paper.pdf Document Term paper.pdf (D147601187)		1



Reviewers Memorandum



Reviewer's Comment 1: Behavioral finance is a relatively recent phenomenon, which has not yet been explored much. It tries to combine basic finance theories by including Behavioural components in decision-making. The study helps investors to understand the biases that they unknowingly face while taking or making any financial investment decisions.

Reviewer's Comment 2: The study is empirical in nature based on the quantitative approach based on the data collected from 373 respondents from the Delhi-NCR region. Reliability and validity of the instrument was ensured before further analysis. An appropriate research methodology is followed to undertake the research.

Reviewer's Comment 3: The paper is quite technical in nature, yet presented very strategically, also the choice of topic is very appropriate. Yet a more strengthened and updated review of the literature could be conducted to further improve the quality of the work done.



Ashima Saxena and Preeti Chawla
 "An Empirical Study on the Influence of Behavioral Biases on Investment Decisions in Delhi NCR"
 Volume-14, Issue-3, Jul-Sep 2022. (www.gjeis.com)

<https://doi.org/10.18311/gjeis/2022>

Volume-14, Issue-3, Jul-Sep 2022

Online ISSN : 0975-1432, Print ISSN : 0975-153X

Frequency : Quarterly, Published Since : 2009

Google Citations: Since 2009

H-Index = 96

i10-Index: 964

Source: <https://scholar.google.co.in/citations?user=S47TtNkAAAAJ&hl=en>



Conflict of Interest: Author of a Paper had no conflict neither financially nor academically.

Editorial Excerpt



The article has 10% of plagiarism which is the accepted percentage as per the norms and standards of the journal for publication. As per the editorial board's observations and blind reviewers' remarks the paper had some minor revisions which were communicated on a timely basis to the authors (Ashima and Preeti), and accordingly, all the corrections had been incorporated as and when directed and required to do so. The comments related to this manuscript are noticeably related to the theme "**Influence of behavioral biases on investment decisions in Delhi NCR**" both subject-wise and research-wise. Behavioural finance is a discipline of finance that investigates the behavior of financial market agents and the effect of psychological variables on decisions made while buying or selling the market, which influences pricing. The findings revealed a substantial relationship between the demographic variable and differences in investment behaviour. Overall, the paper promises to provide a strong base for further studies in the area. After comprehensive reviews and the editorial board's remarks, the manuscript has been categorized and decided to publish under "**Empirical Research Paper**" category.

Acknowledgement



The acknowledgment section is an essential part of all academic research papers. It provides appropriate recognition to all contributors for their hard work and effort taken while writing a paper. The data presented and analyzed in this paper by (Ashima and Preeti) were collected first handily and wherever it has been taken the proper acknowledgment and endorsement depicts. The authors are highly indebted to others who facilitated accomplishing the research. Last but not least endorse all reviewers and editors of GJEIS in publishing in the present issue.

Disclaimer



All views expressed in this paper are my/our own. Some of the content is taken from open-source websites & some are copyright free for the purpose of disseminating knowledge. Those some we/I had mentioned above in the references section and acknowledged/cited as when and where required. The author/s have cited their joint own work mostly, and tables/data from other referenced sources in this particular paper with the narrative & endorsement have been presented within quotes and reference at the bottom of the article accordingly & appropriately. Finally, some of the contents are taken or overlapped from open-source websites for knowledge purpose. Those some of i/we had mentioned above in the references section. On the other hand, opinions expressed in this paper are those of the author and do not reflect the views of the GJEIS. The authors have made every effort to ensure that the information in this paper is correct, any remaining errors and deficiencies are solely their responsibility.