Behavioral Factors Influencing Mutual Fund Investment: A Case Study of West Bengal

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Abstract-The primary objective of this research is to examine the influence of psychological factors, including overconfidence bias, conservatism bias, herding behavior, and availability bias, on mutual fund investment decisions in West Bengal, India. The study also aims to determine the physiological factors influencing investors' decision making of mutual fund schemes and to propose a structural model highlighting the interrelationships among factors to facilitate investors' decision-making. The study found that availability bias, conservatism, herding, and overconfidence act as determinants of investment decision regarding mutual fund investment.

Keywords: Behavior finance, mutual fund, structural equation model, West Bengal

1. Introduction

Investment plays a key role in the economic development of individuals and nations. Among the various investment avenues available in financial markets, mutual funds have emerged as a popular, flexible, and professionally managed investment option for both novice and seasoned investors. Mutual funds offer several advantages, including diversification, liquidity, professional management, and affordability. Diversification helps reduce unsystematic risk by investing in a wide range of assets, thereby protecting investors from significant losses due to the poor performance of a single security (Reilly & Brown, 2012). Despite their benefits, mutual funds are not free from risks. Market volatility, fund manager performance, and management fees can affect returns. Hence, investors must assess their risk , investment opportunity , and financial goals before selecting mutual fund schemes. Professional fund managers use their expertise and market research to make informed investment decisions, enhancing potential returns for investors who may lack the time or knowledge to manage their own portfolios (Bodie, Kane, & Marcus, 2014).

The Indian Mutual Fund sector began in 1963 when the government created UTI by an Act of Parliament. The Reserve Bank of India (RBI) was in charge of regulating and managing the industry. In 1978, the RBI and the Industrial Development Bank of India (IDBI) took over the regulatory and administrative administration of UTI. The first scheme UTI started was the Unit Scheme 1964 (US '64). UTI had ₹ 6,700 crores in Assets Under Management (AUM) by the end of 1988. The MF industry has expanded a lot in the past few years. The rise in mutual fund investments is also attributed to increased financial awareness and the digitization of investment platforms, which have simplified the investment process. According to the Association of Mutual Funds in India (AMFI, 2015), the Assets Under Management (AUM) of mutual funds in India has witnessed significant growth over the past decade, indicating rising investor confidence. Furthermore, Systematic Investment Plans (SIPs), which allow periodic investments in mutual funds, have become particularly popular among retail investors due to their disciplined approach and potential to accumulate wealth over the long term.From a behavioral perspective, the decision to invest in mutual funds is influenced by psychological factors such as overconfidence bias, conservatism bias, hearding & availability bias return expectations, financial literacy, and trust in fund management companies (Rajeswari & Moorthy, 2015, Barkar ,2016). Stock market variances and empirical studies by Babajide & Adetiloye (2012) and Bashir et al. (2013) indicate that investors do not consistently exhibit rational behavior as commonly assumed. Behavioral finance, an emerging domain within finance, elucidates these anomalies. Behavioral finance examines the influence of psychological characteristics on the actions of individuals or groups in their roles as investors, analysts, and portfolio managers. It seeks to comprehend the impact of emotions and cognitive biases on the behaviors of individual investors (Kengatharan 2014). It aims to elucidate the reasons and mechanisms by which investors may operate outside the confines of rationality, contrary to expected behavior. The primary objective of this research is to examine the influence of psychological factors. The overconfidence bias, conservatism bias, herding behavior, and availability bias may significantly influence financial decisions.

1. **Identification of the Research Gap (300 words)**

Several research studies have been conducted on psychological factors & investment decisions. There is a lack of research conducted in the specific context of West Bengal that aims to investigate the impact of psychological factors on investment decisions in mutual funds. There has been no study in West Bengal covering the behavior of finance and investment decisions. The study approaches the research gap from four perspectives: overconfidence, conservatism bias, availability bias, and herding behavior. To the researchers' understanding, this study represents the initial empirical investigation that comprehensively presents a theoretical framework pertaining to the psychological factors of investment decisions.

2. **Objectives of the study**
   - Determining the physiological factors influencing investors' decision making of MF schemes
   - To propose a structural model highlighting the interrelationships among factors to facilitate investors' decision-making.
3. **Literature Review**

4.1 Overconfidence Bias

Overconfidence bias refers to an investor's tendency to overestimate their knowledge, predictive skills, or control over outcomes. Various studies affirm the detrimental effect of overconfidence on mutual fund investment behavior.

Barberis and Thaler (2003) laid the foundation, but it was Kumar and Goyal (2015) who empirically examined overconfidence in Indian mutual fund investors. They found that overconfident investors tended to trade excessively, underestimating the risks associated with frequent switching between mutual fund schemes. Similarly, Glaser and Weber (2010) observed that overconfident investors exhibited a higher volume of trades, believing they could consistently beat the market—a belief that ultimately led to suboptimal portfolio performance. Statman, Thorley, and Vorkink (2010) showed that overconfidence could drive momentum trading, especially in mutual funds marketed as high-performing based on past returns. The belief in one's superior ability to pick winning funds often leads investors to ignore diversification and engage in speculative investments. In the Indian context, Jain et al. (2014) conducted a survey and found that male investors and those with a higher education background were more susceptible to overconfidence, believing they could "time" mutual fund purchases more accurately than others. Such behavioral patterns suggest that overconfidence significantly undermines objective risk assessment and long-term returns.

4.2 Conservatism Bias

The conservatism bias indicates that investors are sluggish in adjusting their beliefs in light of recent evidence and developments. Márcia et al. (2014) assert that bias may lead to an initial underreaction to newly disseminated information or rumors regarding a company. Consequently, prices will progressively incorporate the new information. Lim (2012) and Kengatharan (2014) discovered that conservatism significantly enhances decision-making.A study by Pompian (2012) identified conservatism as one of the primary biases limiting adaptability in investor behavior. In line with this, Waweru, Munyoki, and Uliana (2014) found that investors were often slow to react to changes in fund performance or shifts in market dynamics. They stick with underperforming funds longer than rational models would predict, especially when they had a strong initial belief in the fund manager or fund category.

Further evidence from the Indian mutual fund industry was provided by Sharma and Vasakarla (2013), who highlighted that conservatism among retail investors often results in sticking to traditional fund types (like large-cap funds or government-backed bond funds), even when evidence supports the advantages of diversification or exposure to mid/small-cap segments.Moreover, Shefrin (2010) emphasized that conservatism bias may be reinforced by a lack of financial literacy, as less informed investors struggle to interpret new data or adjust their expectations in the face of contradictory performance results.

4.3 Herding behavior

Herding behavior refers to the tendency to follow a leader. Individuals often conform to the majority, presuming that the choices of the collective are invariably accurate. Luong & Thu Ha (2011) assert that individuals displaying herding behavior formulate their investment decisions based on the collective buying and selling actions, resulting in speculative bubbles and exacerbating stock market inefficiency. Herding is the inclination to imitate the behaviors of a larger collective, frequently neglecting personal beliefs or information. Kengatharan (2014) determined that herding behavior positively influences investors' decision-making, whereas Lim (2012) concluded that herding has no significant effect on investors' decision-making, irrespective of their personal beliefs or information. Investors in mutual funds, particularly during volatile or uncertain markets, are especially susceptible to herding behavior. A significant study by Bikhchandani and Sharma (2001) laid the groundwork, but more region-specific insights came from Sethi (2015), who identified strong herding tendencies in Indian retail mutual fund investors during market upswings. Moreover, Das and Jain (2014) observed that herding behavior among Indian mutual fund investors led to excessive concentration in a few popular funds, especially those with strong historical NAV performance or those endorsed by celebrity financial influencers.

4.4 Availability Bias

An individual exhibits availability bias when they make decisions based on readily accessible recent information. They exhibit a pronounced inclination to concentrate on a specific fact rather than the broader context, primarily because this fact is more salient or readily accessible in their memory (Nofsingera & Varmab 2013). Qureshi et al. (2012) discovered that availability bias exerts a significant positive influence on investors' decision-making. Luong and Thu Ha (2011) identified a moderate influence of availability bias on investors' decision-making, whereas Nofsinger and Varma (2013) determined a significant effect of availability bias on investors' repurchase decisions in the United States.So, extensive research demonstrated that behavioral biases such as overconfidence, conservatism, herding, and availability bias significantly influence mutual fund investment decisions. These biases challenge the traditional efficient market hypothesis and emphasize the need for investor education, behavioral nudges, and regulatory frameworks to mitigate irrational decision-making.

Based on the above literature following hypotheses have been developed

Table: 1 Research Hypotheses

Hypotheses	Description	Source
H1	Overconfidence (OC) has a significant direct impact on the investors decision making in Mutual fund	(Atif 2014), Barkar & Chui Yi (2015)
H2	Conservatism (CM) positively influences investors' decision making in mutual fund.	(Kengatharan 2014) & Barkar & Chui Yi (2015)
H3	Herding (HG) positively influences investors' decision making in mutual fund.	(Kengatharan 2014) 7 Barkar & Chui Yi (2015)

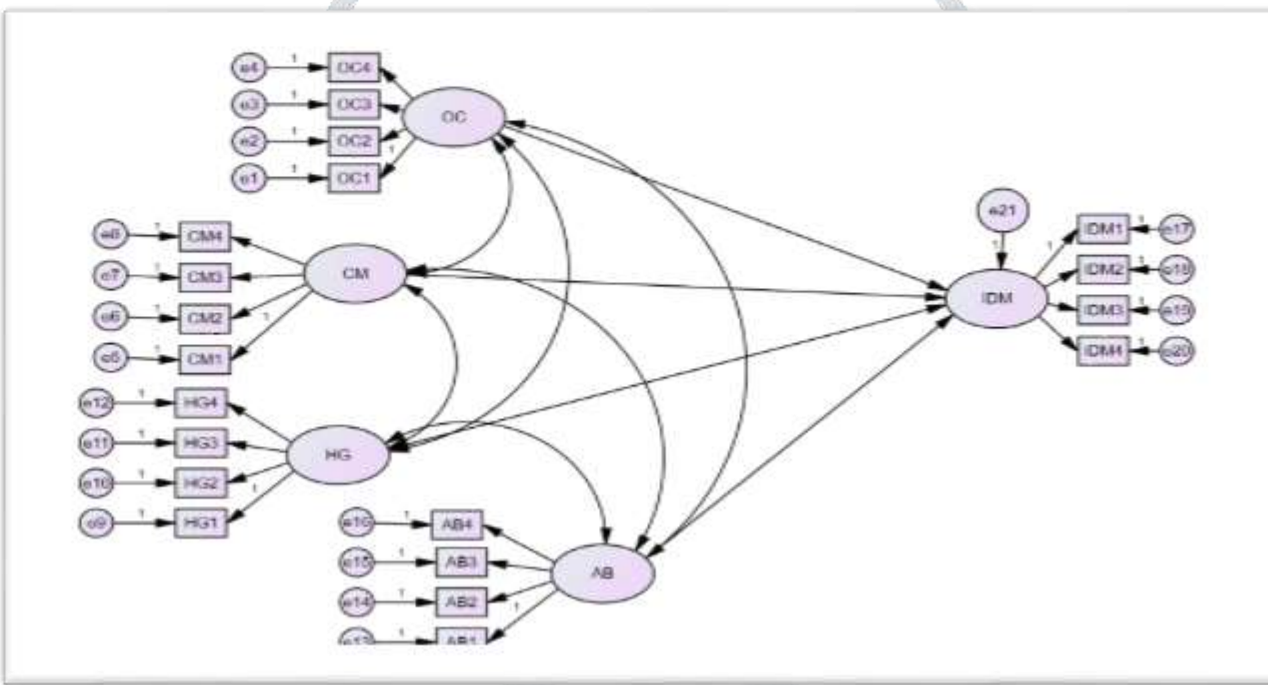
H4	Availability Bias (AB) Positively influences investors' decision making in mutual fund.	(Nofsingera & Varmab 2013) & Barkar & Chui Yi (2015)

4. Research Methodology

A sample of 317 investors participated as responders (the sample unit is defined as any individual who has invested in a mutual fund). The participants have filled out a standardized questionnaire using a five-point Likert scale. The collection period for this study was from October to November 2015. All participants were from the Northern Region of West Bengal. Statistical Package for the Social Sciences (SPSS) 21 has been used for this study, and the Analysis of Moment Structures (AMOS) has been used for the final output.

Research Model

Figure-1 Research conceptual Model with the hypotheses development



Source: Barkar & Chui Yi (2015)
Note: OC= overconfidence; CM= conservatism; HG= herding; AB= availability bias

5. Structural model assessment

Table-2 Path Hypotheses Testing

Hypotheses	**Original sample (O)**	**Standard deviation (STDEV)**	**T statistics (|O/STDEV|)**	**P values**
AB -> IDM	0.389	0.063	6.126	0.000
CM-> IDM	- -0.188	0.057	3.295	0.001
HG-> IDM	0.495	0.052	9.441	0.000
OC> IDM	0.027	0.034	0.790	0.001

Note: OC= overconfidence; CM= conservatism; HG= herding; AB= availability bias, IDM= Investment decision making

Table-3 Model Fit Indices

Goodness of Fit Indices	CMIN/DF	CFI	GFI	AGFI	NFI	RMSEA
Calculated Value	1.860	0.965	0.898	0.867	0.928	0.057
Criterion	<3	>.0.90	>0.90	>0.80	.>0.90	<0.08

Source: Own compilation

Model fitness evaluates the adequacy of the structural model based on the sample data (Table 3). The results provided by AMOS are presented in Table 2. The chi-square value is 297.7, which is significant at the 5% level of significance. The CMIN/DF value is below the stipulated threshold of 3 (Carmines and Mclver, 1981). The goodness-of-fit index (GFI) surpasses 0.90, and the adjusted goodness-of-fit index exceeds 0.85, both of which are deemed acceptable thresholds. The root mean square error of approximation (RMSEA) is a minimum of 0.1, which aligns with the acceptable threshold established by Hu and Bentler (1999)

6. Discussion

The table-1 presents the outcomes of the research model. Among the 4 hypotheses of the current research model, four hypotheses (H_1, H2, H3 &H_4) were supported (Table-2).Availability bias, conservatism,, Herding, and over confidence acts as determinants of investment decision regarding their investment in mutual fund. . The factors that favorably impacted investor' decision making encompass availability bias (β=0.389, P<0.05), conservatism (β=0.188, P<0.05),herdings (β=0.495, P<0.05) and over confidence ((β=0.027, P<0.05) thereby corroborating all hypotheses . Other researchers (Lim 2012; Luu 2014; Atif Kafayat,2014) also observed similar findings.The investors' decision-making would primarily be influenced by herding, provided that all other factors—overconfidence, conservatism, herding, and availability bias—are maintained at zero, as indicated in the established table. The herding factor positively influences investors' decision-making, evidenced by a positive estimated coefficient of 0.495. Specifically, if all other variables remain constant, a unit increase in herding will result in a 0.495 increase in investors' decision-making regarding mutual funds, and vice versa. The herding factor significantly influences investors' decision-making. They typically adhere to market trends and are readily swayed by peer influence. This finding aligns with the results of the study conducted by Wamae (2013). The availability bias significantly influences investors' decision-making positively. Investors typically rely heavily on accessible information. They typically forecast future stock prices based on current prices. This conclusion is corroborated by the research conducted by Qureshi et al. (2012) and Luong & Thu Ha (2011).The conservatism factor is a crucial determinant in investment decision-making. Consequently, the hypothesis is affirmed, leading to the conclusion that conservatism exerts a substantial negative influence on investors' decision-making processes. The majority of investors are inclined to invest in familiar stocks of reputable companies with established products. Investing in familiar stocks is thought to produce superior returns. This conclusion is corroborated by Lim (2012) and Kengatharan (2014).Consequently, the results indicate that overconfidence significantly influences investors' decision-making positively. This indicates that investors predominantly exhibit overconfidence in their decisions, believing themselves to be correct. They ascribe their investment success to their proficiency as investors. This finding corresponds with the results of studies by Qadri & Shabbir (2013), Lim (2012), Qureshi et al. (2012), and Bashir et al. (2013), which demonstrated that overconfidence positively and significantly influences investors' decision-making.

7. Conclusion

Traditional finance theory assumes that investors are rational and markets are efficient. However, the global financial crisis of 2008 and several other anomalies have exposed the limitations of this assumption. This has led to the emergence of behavioural finance, an interdisciplinary field that combines psychology and economics to explain why investors often behave irrationally.These studies collectively emphasize the value of understanding psychological factors, such as overconfidence, in the context of investment behavior. As investors continue to rely on their perceived abilities, it becomes crucial for financial educators and advisors to address these biases to promote more informed and rational decision-making. Behavioural finance provides a powerful lens to understand why investors often make irrational or suboptimal choices, even in a well-regulated environment. As India continues its journey toward deeper financial markets, incorporating behavioural insights into policy, product design, and investor education will be critical to ensuring long-term success for both investors and the mutual fund industry.

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