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Behavioral Bias among Professionals with Respect to Investment in Mutual Funds

Nelson Mathew
Assistant Professor and Head of Cooperate relations,
Santhigiri Institute of Management,

Vazhithalap. o, Thodupuzha, Idukki - 685583, Kerala,
(PhD Scholar -Karunya Institute of Technology & Sciences,
Department of Management Coimbatore – 641114, Tamilnadu, India)

Dr. Bose George,
Associate Professor,
Marian Institute of Management,
kuttikanamp.o, Peermade Idukki – 685531

Dr. Amudha R.
Associate Prof.
Karunya Institute of Technology &; Sciences, Department of Management Coimbatore – 641114, Tamilnadu, India

Abstract:- Investment in mutual funds is based on market risk as it is connected with the stock market investment and the rate of return depends on the fluctuations in the market. IT professionals in Kerala, India mainly look into mutual funds as a safe mode investment as it provides better returns than other mode of investments like bank deposits, recurring deposits, gold, real estate etc. Majority of the IT professionals earns high number of perks and they look for an investment which can save their tax and beat the inflations. IT professionals mainly invest their money in tax related investments like ELSS ie Equity linked saving schemes in order to save the tax and can with draw the money after the three-year lock in period specified by ELSS Schemes. The study gives a limelight on how the IT professionals uses mutual fund as investment for future prospects like saving money for retirement, building a corpus for buying a house, children's marriage and education. The various behavioral bias like the loss aversion, herding behavior, overconfidence and disposition effect is also included in the study.

Keywords:- *Behavioural Finance, loss aversion Bias, anchoring Bias, Herding behaviour Bias, Disposition Effect bias, Overconfidence Bias.*

I. INTRODUCTION

Investing in mutual funds is one of the modes of investment which gives secure financial future. Diversification is one the most advantage feature of mutual funds. The risk can be reduced if the investments are done in a diversified portfolio. There are various benefits of mutual funds for employees in India namely diversification of investment portfolio, fund managed by professionally qualified fund managers, benefit in tax savings, liquidity, various types of investment options like lumpsum investments and systematic investment plans etc. The professionally qualified fund managers manage each fund under the various AMCs (Asset Management companies) in India and they purchase various assets according to the investment objectives of funds. IT professionals and other employees have guaranteed income during their professional career. Mutual funds come as handy for IT professionals and other salaried people for achieving their financial goals. Many a times employees get into dilemma while choosing mutual funds as there are many options available in Indian market. Herding behavior deals with copying the investment behavior of other investors and investing in those stocks, bonds or mutual fund offered by those investors. This type of investment may also lead to irrational decisions making by the investor and sometimes leads to risky investments and ending up with no return or nominal returns.Once the investor has started getting better return, he/she become more over confident and put all the money into one basket leading to losing the money if the funds are not chosen properly or by an expert. Over confident investor makes money through gambling and he/she thinks that the same return is predicted in the future. Herding behavior is defined as the phenomenon of investors following the investing principles of others and not deciding own basics and information gathered by him/her. Loss aversion also implies in investment behavior where the investor is very much fearful of losing money in investment and they try to avoid a loss than making more gains. Disposition bias is also implies in investment and it is the tendency of the investors to sell the profitable investment or stocks and holding on to the losing stocks. Over confident, loss aversion, disposition effect and herding behavior is been studied among the IT professionals in Kerala.

II. LITERATURE REVIEWS

Over confidence bias where investors are highly optimistic about their investment outcomes and they believe that the information they have is enough to take sound investments decisions. (Chandra & Kumar, 2012) says that the investors make irrational decisions based on their knowledge and experience. (Grover&singh, 2015) investors of any nature irrespective of male or female makes decisions on their information which they have gathered from other sources and investment in stock market. According to parveen&siddiquee(2018) there is a negative relationship between over confidence and investment decision which states that the over confident investor some times bring more losses through the process of gambling. (Boda& Sunitha, 2018) (Baker& Yi, 2016) states that investors are very confident in their decisions making and they believe that they are taking rational decisions based on their limited information.(Barber& oden, 2001) loss averse investors have positive impact on the investment decisions when they are investing in stock market. (Chandra& Kumar 2012) investors always try to avoid losses when they are investing in stock market in order to avoid losses. (Grover & Singh, 2015) investors takes risk when the stock which purchase shows a positive trend and become loss averse when the investors losses money. Herding behavior is followed by every investor while making an investment decision (Grover & Singh, 2015). Herding behavior has a positive response in the investment preference and has showed positive performance in investment decisions. The study across disposition effect conducted has found that the investors sells the superior stocks more and hold on to the losing stocks. According to the study conducted by (Bremer and Kato, 1996) in Tokoyo stock exchange and it has found that the investors are willing to sell of the winning stocks higher than the losing stocks and they have finally conducted that the disposition effects exists in the Japanese stock market. (Odean, 1998) (14) the investors sell all the wining stocks when they get recognizable gain and they continue to hold the losing stocks. (Locke andMann, 2001) (15) found that the professionals' traders from chicago Mercantile Exchange's futures hold losing trades longer than the winning stocks. (Nelson Mathew, Sebin Joseph and Dr Cyriac Joseph, (2020) (11) found that the women investors are more loss averse than male counterpart in terms of investment in mutual fund and stock market. (Kumar &goyal2015) (7) the investors always look for the better investment alternative even at the most uncertain times. (Agarwal et al,2016) (1) the cognitive bias induces the individual investors during the selection of investments. (Kannan b & Vijayakumar 2015) (6) the behavioural finance is about the decision making which affects the behaviour of the investments. (zahera& Bansal,2018) (24) it is the tendency of the investor to get emotionally attached to some information and make irrational decisions in anchoring bias. (Anderson & owen,2005) (3) investors making decision on investment with an intention of knowing about it and only by knowing it the investors makes the decision of investment.(Sebin Joseph, K Karthikeyan, Senthil K Nathan, FJ Peter Kumar, Nelson Mathew&Cyriac Joseph (2023) (20) investment with the help of AI in banking investments leads to herding behaviour.(Ahmed at al., 2020) (2) the investors with less financial literacy will negatively affects the investment decision making.(Ramesh KP, RAmudha, Nelson Mathew,Jayaseelan Clement Sudhahar&EaswaramoorthyRangaswamy 2023) (16) the robo advisory among the millennials are increasing through the fintech model of investment. (Nelson Mathew, KP Ramesh& R Amudha,2023) (12) investors behaviours are based on various behavioural bias and its impacts negatively and positively affects the investment decisions.(Ganapathi, 2014) (4) the competency depends on the investor to select the both long term and speculative stocks.(Shalini Kalra Sahi and Ashok Pratap Arora ,2012) (12) investment depends on the various bias and behavioural bias bring out the investment avenues for the investors.(Warren Bailey, Alok Kumar, David Ng,2011) (23) the behavioural bias exists among mutual fund investors.

III. VARIOUS TYPES OF BIAS

There are various types of behavioral bias in terms of investment in stock market and mutual funds. These includes overconfidence, disposition effect, herding effect, mental accounting, confirmation bias, Hindsight bias, house money effect, endowment effect, loss aversion, framing, home bias, regret aversion and recency.

- ***Overconfidence bias*:** The overconfident investors are highly optimistic about their investment outcomes and they think that the information they have is enough to take sound investment decisions.
- ***Disposition effect:*** It is proposed by shefrin and stateman(1985) and it's says that the investor sells the profitable stocks and hold on to the losing stocks.
- ***Herding effect*:** It is proposed by Shiller (2000) and Kahneman and Tversky (1979). The investors make choice of investment based on the decision of others.
- ***Mental accounting*:** It was introduced by Thaler (1985). The investors divide its investment based on various portfolios and takes it under number of mental accounting or categories they have.
- ***Confirmation bias*:** It was proposed and described by Dickens(1978).The investors always have preconceived impression about something and they fully rely on that information.
- ***Hindsight bias*:** The theory was proposed by Fischhoff and Beyth(1975). The investor believes that the happening of some events can be predicted reasonably.
- ***Endowment effect*:** It was proposed by kaheman et al and its says that the investor or people put too much emphasis on the stocks they are currently holding on and they do not want to make a changes in new investment or they don't want to change their holding in stocks.
- ***Loss aversion*:** Benarti and Thaler(1995)has proposed loss aversion theory . Investors are ready react differently on assured loss and assured profits. When the investors are ready to face with sure profits, they do not want to take risk and when they are with any chances of loses, and then they are ready to take more risks.
- ***Framing:*** This bias was proposed by Tversky and Kahneman (1981). For an investor, if the information is provided in the positive way or frame, investors always avoid risks to make sure profits and when the same or different information is provided in the negative way or frame, they will be ready to take the risks in order toavoid biglosses.
- ***Home bias*:** This theory was first introduced by French and Poterba (1991) and Tesar and Werner (1995). The feeling of belongingness of the investors toward their domestic companies or home companies makes them invest in the domestic companies in their country even if their returns are lower than those of the companies which are international.
- ***Regret aversion*:** This was developed by Bem (1967, 1972). People attribute their success to their own hard work and intelligence, while they blame their failure to the action of others or to some outside factors
- ***Recency:*** *The* investors take the decisions based on some of the recent events that are in news recently and they

neglect or avoid the information that will be useful but have taken place quite a while ago.

IV. RESEARCH METHODOLOGY

The data was collected through empirical study with the help of questionnaire. The sample taken for the study was 350 as the sample size of infinite, the researcher used cochran's formula to determine the same size. The target population was collected from the investors who are IT professionals and are investing in mutual funds. Data was collected through five-point Likert scale. The period of the study was between June to December 2022.

V. RESEARCH GAP

No empirical theory has been studied in regard to the behavioural and cognitive biases (herding behaviour, Loss aversion & over confidence) of IT professionals with regard to investment made in mutual funds with special reference to Kerala. IT professionals are highly paid now a days and they find means to save the money for future with high return expectation and the risk-taking capacity is high compared to other professionals – as many of them fall in young age category with high salary package.

VI. NEED AND SCOPE OF THE STUDY

The study on behavioural and cognitive bias on the investment preference of IT professionals with respect of Mutual funds has not been studied. The study will help in the financial inclusion of mutual funds as one of most preferred mode of investment which can beat the current inflation rate. The financial industry can understand the problems why IT professionals follow the biases like over confidence, herding behaviour and loss aversion and take measures to improve investing behaviour among the IT professionals.

VII. HYPOTHESIS OF THE STUDY

H 1 : There is significant relationship between herding behavior and Investment preference.
H2: There is significant relationship between loss aversion and Investment preference
H3 : There is significant relationship between disposition effect and wealth creation of an investor
H4 : There is significant relationship between Over confidence and wealth creation of an investor
H5: There is significant relationship between demographic factors and investment preference.

VIII. RESEARCH OBJECTIVES AND PROBLEM

The study analysis to establish the impact of behavioural biases and wealth creation on investment preference of IT professionals as individual investors. The study helps to identify the various types of behavioural biases in IT professionals and its impact on investment preference and wealth creation. Similarly, how wealth creation has transformed the investment decisions is also been studied. Investment preference differs from one investor to another based on their needs and wants for the future like saving money for retirement, for the purpose of education and marriage for their children.

IX. METHODOLOGY

In order to find out and examine the impact of herding behaviour on investment preference, loss aversion related to investment preference, disposition effect and over confidence with wealth creation and demographic factors with investment preference was collected through questionnaire method in the google form. There were 15 questions of which 10 questions were related to investment preference, loss aversion, disposition and overconfidence. The questions were made in such a way that it was divided into three parts namely demographic variables like age, gender, occupation, income and experience in investment and the second part was followed by questions on behavioural bias and investment preference and wealth creation and last part was related to the question on suggestions based on investment.

The data was collected from various individual investors of 350 people using the convenient sampling method. The data was collected after visiting various IT parks where the software companies was situated. There are various IT parks in Kerala namely – IT park in Infoparkkochi, IT park in Technopark Trivandrum and IT park in korathy. The criteria looked in to was the investors should invest in mutual funds only as their investment strategy. The questionnaire was distributed among the IT parks in kerala. The validity of the survey was conducted with 40 investors prior to the actual survey. The questionnaire survey was conducted to get the actual data base as to get the efficiency of the data precision. The questionnaire helped the researcher to get exact data and also the clarity of the questions were clearly understood by the respondents.

X. RESULTS AND DISCUSSION

According to the results,it shows that the 71 % of the respondent are male and 29% of the respondent are female candidate. 92% of the respondent falls under the category of age group of 25 – 45, 3 % of the respondent falls under the category of age group of above 45 and 5 % of the respondent falls under the category of age group below 25. 95% of the respondent are with BTech and MCA as their educational qualification, 3% of the respondent are with MBA and MCOM as their qualification and 2% of the respondent are with qualification MTech. 75% of the respondent earns salary ranging between Rs 50000-Rs100000 per month,15% of the respondent earns salary ranging between Rs 100000- Rs 200000 and 10% of the respondent earns more than Rs 200000. 100% of the employee's are IT professionals. 97% of the respondent are married and 3% of the respondent are unmarried. More than 50% of the respondent are illiterate in financial knowledge. More than 30% of the respondent know some knowledge about financial literacy. Less than 10% of the respondent are have good knowledge about the financial investments. Table 1 shows the socio – economic bac ground of the investors who are investing in mutual funds.

Table 1: Socio-economic back ground

SL	Socio - economic back ground	Variables	Frequency
1	Gender	Male	71%
		Female	29%
2	Age	Between 25 -45	92%
		Above 45	3%
		below 25	5%
3	Education	BTech & MCA	95%
		MBA & MCOM	3%
		MTech	2%
4	Monthly Income	50k-100000	75%
		1lakh - 2lakh	15%
		Above 2lakh	10%
5	Martial status	Married	97%
		Unmarried	3%

Table 2: Test of hypothesis

Hypothesis	beta	SE	Std. coef.	T-value	P-value	Decision	
H1 Herding behaviour → Investment preference	1.000	0.084	0.796	4.510	0.000	Significant	Accept
H2 Loss Aversion → Investment Preference	0.052	0.074	0.678	3.510	0.489	Non-Significant	Reject
H3 Disposition effect → Wealth creation	0.063	0.073	0.079	2.432	0.578	Non-Significant	Reject
H4 Over confidence → Wealth Creation	1.000	0.328	0.087	4.410	0.941	Non-Significant	Reject
H5 Demographic factors → Investment Preference	0.456	0.338	0.253	3.210	0.654	Non-significant	Reject

Based on the above table no 2, it is inferred that the herding behaviour has significant relationship with investment preference as the P Value = 0.000 so the H1 is accepted. The individual investors always take a positive response from a person who is an investor in mutual fund or takes his advises related to the investment. The advices may be from a agent, broker or a person who is a continuous investor in stock market and mutual fund and thus herding behaviour. The loss aversion has no relationship with the investment preference as the P value = 0.0489 so the H2 is rejected. Here the loss averse candidates are not ready to take risk in investment. They are ready to invest in the portfolio which are less risky and they their investment preference also changes according. The individual investor tries to avoid more risky investment like investing in stock market or mutual funds. Disposition effect has no relationship with the wealth creation as the P value = 0.578 so the H3 is rejected. The individual investor sells of the profitable investments during the bull market and hold on to the loss-making investment. When the investor sells the profitable investment, wealth creation is not possible in mutual funds. Wealth creation in happens in mutual funds when the investor stays invested for long period of time.Over confidence is another bias which happens for every investor. here the results show that there is no relationship between the overconfidence and wealth creation as the p value = 0.941 hence the H4 is rejected. Demographic factors like age, gender, education qualification and monthly income has no relationship with investment preference as the p value=0.654 hence the H5 is rejected. Investment preference mainly depends on the investor's knowledge towards the financial literacy.

XI. DISCUSSIONS AND CONCLUSIONS

The study is to examine the behavioural bias among the IT professionals with respect to overconfidence, loss aversion, disposition effect and herding behaviour in relation with wealth creation and investment preference. The investors follow the following behavioural bias in their investment decisions. Investment preference and herding behaviour has a positive response in their investment decisions. The investors mainly depend on information shared by the co workers who is an active investor in mutual funds. They fully depend on the knowledge shared by them in taking a decision for choosing a type of investments. The information shared by an agent/broker also act as a herding behaviour in their investment decisions. The finding shows that herding behaviour, loss aversion, over confidence and disposition effect has a direct relationship with investment preference and wealth creation. Disposition effect is influencing the investors to sell the profitable mutual funds and stick to the loss-making funds. Investors waits for the loss-making funds to become profit when the market is in the bull or bear run and books profit or sell itwhen it turns to profitable investment. There is also a tendency of an investor to be more over confident when the funds chosen by them are giving better returns than the traditional investments. Investor tend to invest again in the bull market but lose the money when they see the bear market. Timing of the market will help the investors to book better profit in mutual fund. Stay invested for a long period of time in equity mutual fund is the winning strategy to be followedby investors to create wealth.

XII. RESEARCH IMPLICATIONS

The study has provided various implications for mutual fund experts and academics. The investors are finding it difficult to judge the investment scenario in terms of mutual fund investment in bear and bull market. The investors long term wealth creation is only possible through long term investment in mutual funds and not through short term investments. The bull and bear markets are difficult to predict for an investor, investing through systematic investment plans built huge corpus for any investment objectives like retirement, buying a house and higher education for children etc. Investor make judgement based on past returns in mutual funds but some times incur losses even in bear market. Bull market always brings good returns for investment but returns in bear market shows negative returns. The success of investment in mutual funds is the combination of various funds like large capital funds which gives consistent returns, Mid cap funds and small cap funds gives good returns in long term investment but risky in terms of market crash. Investors need to accumulate units through SIP investments in both bull and bear markets. Accumulation of more units is possible in bear market though SIP investments. Proper education and training for investors in mutual funds by AMC's asset management companies can bring more investments to them. Lack of proper knowledge about the mutual investments, brings irrational decision making and end up in losses and pull the investor in to loss aversion effect. The policy makers, academicians, banks, stock brokers and asset management companies should provide training on regular basis so that the investors should take rational decisions in any mode of investment like mutual fund investment, bank deposit, stock market investments etc.

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