*I J A B E R*, Vol. 12, No. 3, (2014): 501-513

# SOCIO-PSYCHOLOGICAL PERSPECTIVE OF STOCK MARKET INVESTORS: A REVIEW

*Rajdeep Kumar Raut* and Niladri Das**

***Abstract:*** *The stock market represents the mood of the society which is unpredictable, unstable, and irrational in nature, outcomes of this fickle mood cannot be predicted merely on the basis of fundamental model of financial economic. Behavioral finance demonstrates the reasons behind this phenomenon. Individual investors behavior is based on the notion of bounded rationality, the psychological and socio-cultural factors are the key determinants of their investment decision in stock market. Number of literature has been advocated the behavioral biases and those biases deviates them from rational decision making and reject the hypothesis of fully efficient market which is the foundation of traditional finance.*

*In this review paper the limitation of traditional finance and the most citing behavioral aspects have been illustrated through a conceptual framework which shows the factors of behavioral changes and the result thereon that is the presence of irrational investors and inefficient market. Through the various literatures it is found that social factors like age, income, education, gender, peers participation in stock market and the psychological patterns like representativeness availability and the anchoring heuristics are the basic key factors to determine the individual decisions.*

***Key words:*** *Stock market, Behavioral finance, Socio-culture, Psychology.*

## 1. INRODUCTION

There are numerous factors which influence the decision of individual investor's participation in the stock market .Traditional finance argues that this is the information which is reflect in the most current price of the stocks as soon as that set of information are available in the market. The traditional finance is based on the notion of rationality of its participating agents who, first, update their knowledge correctly on the basis of available information and, second, make choices that are normatively acceptable. Unfortunately after years of efforts it has become clear that individual trading behavior is not easily understood in this framework. Bermtain (1998) proposed "evidence reveals repeated pattern of irrationality inconsistency and incompetence in the way human being arrived at decision and choice when faced with uncertainty".

* JRF, Department of Management Studies, ISM, Dhanbad-826004, *E-mail: ismrajdeep@gmail.com; niladri_pnu2003@yahoo.co.in*

The investors influence by different number of factors having different mind-set based on their cognition. They perceive the available information differently and make decision accordingly. Daneil, Hirshlefer and Subramanyam(1998) stated that investors overreact to private information and underreact to public. Contrary to the findings of traditional finance, behavioral finance a very new phenomenon in the field of finance neglects the concept of rationality of its participating agents and the efficiency of the market. In the behavioral finance these information are manipulated by individuals self attributes and cognitive biases.

In the field of behavioral finance Number of cognitive biases has been documented by the behavioral economists. Behavioral economists mainly focus on the social and psychological factors moreover the neuroscience has also been implemented to show the irrationality of the investors and which is allowed economists to observe the limits of human cognitive ability and allow them to appreciate the extent to which human biases often result in decision simply at odd with those predicted by traditional financial models. The slightly change in the pre conceived states can arouse the individual emotions to change their decision accordingly mostly abruptly, that deviate them from their well planed rational choices. Even casual observation shows that human beings behave, especially in stock market, vastly different from what is predicted by economic theories.

Based on these conceptions the behavioral economists have been identified the psychological biases like anchoring, representativeness and availability biases. Apart from the psychological factors socio- cultural factors are most prominent dimension of behavioral finance which played a vital role in identifying the behavior of individual investors. The socio- cultural factors like income, education, marital status, gender, locality etc which have been ignored by traditional financial economists, but in behavioral finance these factors are the key drivers of the investors to invest their savings in deferent manner.

Through this article it has been tried to review the behavioral finance literatures categorizing in psychological and socio-cultural dimensions with the objective of understanding the key determinance of individual investor's behavior for investing in capital market. The research paper is structured as follows: Section 2 provides background of the study, Section 3 deals with the overview of literatures, Section 4 presents the type of data and the method adopted for this study, Section 5 provides framework and discussion of social as well as psychological influences on stock market participation and finally section 6 presents concluding remarks.

## 2. BACKGROUND OF THE STUDY

Behavioral finance is a new approach to financial market that has emerged, at least, in part in respond to the difficulties faced by the traditional paradigm. In other words some financial phenomenon's can be better understood using

investor's psychological model under uncertainty. In the word of Sewell (2001) behavioral finance is the study of the influence of psychology on the behavior of financial practitioner and subsequent effect on market.

Behavioral finance got its pace during 1990s when the inefficiency of market based on socio-cultural and psychological aspects in investment began a central discussion in the field of finance and it came in light through many academic journals, business publications and even in local newspapers. The foundations of behavioral finance, however, can be traced back over 150 years. The concept of behavioral finance revolved around two basic belongings the social factors and the psychological biases. Basically the concept of behavioral finance is proposed by Tversky and Kahneman in 1973 when they introduced the availability heuristic: a judgmental heuristic in which decision maker relies upon knowledge that is readily available rather than examines other alternatives. The reliance on the availability heuristic leads to systematic biases. Again in 1979, Kahneman and Tversky presented an idea called prospect theory, which contends that people value gains and losses differently, and, as such, will base decisions on perceived gains rather than perceived losses. Thus, between the two choices, one expressed in terms of possible gains and the other in possible losses, people would choose the former, rather than considering the final outcome. Going through the various behavioral findings this paper tries to summaries the variables that influence the investment decision making.

In 1992 Seden incorporated psychology with stock market; his book psychology of the stock market based on the belief of that the moment of prices depends on the mental attitude of the investors and trading public. Findings of Nagy, Robert and Obenberger. (1994) suggest that classical wealth maximization criteria are important to investors even though investors employ adverse criteria while choosing stocks. Two leading professors from Santa Clara University, Meir Statman and Hersh Shefrin, have conducted research in the area of behavioral finance. Statman (1995) wrote an extensive comparison between the emerging discipline behavioral finance vs. the old school thoughts of "standard finance." According to Statman, behavior and psychology influence individual investors and portfolio managers regarding the financial decision making process in terms of risk assessment (i.e. the process of establishing information regarding suitable levels of a risk) and the issues of framing (i.e. the way investors process information and make decisions depending how its presented).

Contemporary concerns such as local or international operation, environmental track record and firm ethical posture appear to be given only cursory consideration. Seven factors have been identified that influence the investor's behavior while selecting the equity. These factors are; neutral information, accounting information, self image, classic, social relevance, advocate recommendation and personal financial needs. Number of literature have been presented and reviewed since the

last decades which deals with the various psychological and cognitive biases influencing decision making of individual investors.

## 3. LITERATURE REVIEW

A number of literature have been demonstrated the psychological and socio-cultural observable fact across the world to justify the presence of irrational behavior of the stock market investors. In this study an attempt has been made to review these behavioral patterns specially based on socio-cultural and psychological background. Psychological patterns include the factors like overconfidence, heard behavior, representativeness, availability biases and mental accounting etc. investors in their normal behavior tend to react irrationally on the available information.

In this regard Deniel, Hirshleifer and Subramanyam(1998) developing a theory based on investors overconfidence and on change in confidence resulting from biased self attribution of investment outcomes, this paper states that investors overreact to private information signals and underreact to public information signals. It is also found that positive return autocorrelation can be result of continuing overreaction, thus, short run positive autocorrelation can be consistent with long run autocorrelation. Again Daneil, Hirshleifer and Hang(2001) found that limited attention and overconfidence cause investors credulity about the strategic incentives of informed market participants. It is also found that under reaction to relatively sorter term forecast (one year) is consistent with the post earnings announcement drift in stock return and short term momentum in return whereas the overreaction to longer term forecast is consistent with long term reversals in return. Emotions and psychological biases in judgment and decision seem to have important effects on public discourse and the political process, leading to mass delusions and excessive focus on transiently popular issues.

On the ground of investors psychology Lo, Rapin and Steenbsrger, (2005) shows that extreme emotional responses are counterproductive from the prospective of trading performance. Giving that trading is likely to involve higher brain function such as logical reasoning, numerical computation and long term planning result says that automatic emotional responses such as fear and greed often trump more controlled or higher level responses.

'The subject whose emotional reaction to monetary gain or loss was more intense on both positive and negative side exhibits significant worse trading performance" Lucey and Dowling (2005). Mood fluctuation induced by variation in the weather and the body biorhythms which are argued to partially influence the equity investment decision. People in good mood because of good weather are argued to make optimistic judgment about equity investment than the people in bad mood. Further the image of a stock induced emotions in the investors that partially drive their investment behavior.

Shu (2010) By slightly modifying the Lucas model this study bridge the gap between empirical findings an financial theories and shows how investors mood variations affect equilibrium assets prices and expected return, both the equity and bill prices positively correlated with investors mood, with higher assets prices associated with batter mood. Overall, this analysis provides a theoretical interpretation for how mood fluctuations influence asset pricing, and it suggests that considering investor mood in asset-pricing models can help interpret the growing body of seemingly anomalous evidence in financial markets.

In an interesting paper Kamstra, Kramer, and levi,(2013) shows the investors psychological change and established the link between depression due to SAD(seasonal affected disorder) and equity market participation through the link between SAD and depression and risk aversion. Seasonal variation in length of the day can translate into seasonal variation in equity return. Authors considering the stock market index data from countries at various latitude on both sides of equator, the result upon it strongly support a SAD effect in the seasonal cycle of stock return that is both significant and substantial even after controlling for well known seasonal and other environmental factors.

In the stock market the herd like behavior is always noticed and discussed in most of the literatures. In Herd behavior the investors follow the trend of investing prevails in the market like they follow a particular group of investors without thinking over the outcomes. Hirshleifer and Heoh(2003) proposed that even as a simple form of social interaction imitation offers a crucial benefit: it allows an individual to exploit information possessed by others about the environment.

Along with the psychological aspects in the field of investor's behavior socio-cultural influences are also allied with their decision making like peers stock market participation, marital status, education, income etc. Nofsinger, (2005) on the basis of the hypothesis that general level of optimism/pessimism in society effects the emotion of most financial decision maker of the same time it found that social mood effect the decision of consumers, investors and corporate managers alike. High (low) Social mood causes an increase of decisions biased by optimism (pessimism) and impact aggregate investment and business activity. It is also proposed that as stock market decisions are completed quickly, the stock market itself is a measure of social mood. Finally as a measure of social mood stock market changes help forecasting future and economic activities. Hong, Kubik and Stein (2004) through the analysis of HRS data it proposed that social households –that those interact with their neighbors or that attend church are more likely to invest in the stock market than other social households. The impact of sociability is much stronger in those states where stock market participation rate are higher. Finally because of the participation of social and non social households the overall participation rate has climbed sharply.

Showing the impact of peers on decision making Brown, Ivkovic, Smith, and weisbermer, (2004) using instrumental variable strategy that uses the variation in the stock ownership of the nun- local parents of one's local peers combined with individual fixed effects, demonstrated that a ten percentage point increase in community stock ownership makes an individual four to five percentage point more likely to participate in the stock market.

Bogan,(2008) after controlling for a number of relevant factors the result of this study conclusively support the idea that households that are using computer/ internet increase participation more in stock market than household those do not use computer/internet. The relation between online trading, lower transaction cost and easier access to stock market means that all type of frictions do significant effect on stock market participation. Georgarakos and Pasini,(2009) examining existing literature this paper shows that trust and sociability has distinct and sizable positive effect on stock market participation and the sociability is likely to partly balance the discouragement effect on stock holding induced by low generalized trust in the region of residents. Trust in advice given by financial institutions represents a prominent factor for stock investing compare to other tangible features in the banking environment.

Li, (2009) using the panel study of income dynamics it is observed that households' investors likelihood of entering the stock market within the next five year is about 30 percent higher if their parents or children's had entered the stock market during previous five years. It is indicated that information share is a two way street, not only can children's investment decision be influence by their parents action but parents investment decision can be influence by their children's action. Kaustia and Knupfer, (2010) in this paper it is showed that the existing investors return in a neighborhood experience in a given month encourage new investors enter the market following month if the returns are positive. Two channels through which peer outcomes could have an impact on individual actions are –extrapolated expectations and selective communication with relative wealth concern. Shanmugham and Ramya,(2012) in their research it is found that social interaction and media were found to have positive relationship with attitude toward trading whereas the factor internet does not seem to influence the investors attitude toward trading.

Grinblatt and Keloharju (2001) documented that investors are more likely to hold buy and sell the stocks of the firms that are located close to the investors, that communicated in the investors' native tongue and that have chief executive of the same cultural background. The influence of distance language and culture is led prominent among the most investment savvy institutions than among both households and less savvy institutions.

Love (2010) proposed that marital status and children can have important effect on optimal household decision making on allocation of portfolio. Using the data

from HRS and PSID, it is found that divorce and widowhood have particularly strong effect on allocation and that these effects differ significantly by gender, as well as by the number and age of children. It also indicated that men moving to a riskier allocation and women to a safer one. Supporting to this argument Ranguid (2012) founds that women increase the fraction of wealth invested in the stock market after marriage and decrease it after divorce whereas men show that opposite investment behavior which indicates that women are more risk averse than man, but also that the member of a married couple adjust the profile of their risky investment towards that of their partner. Marriage increases the likelihood of holding stocks for both men and women. It is further stated that households whose joint labor income risk is reduced more after marriage have a higher increase in their exposure to risky assets. Finally it can be said that marries acts as a financial risk reducer for man and a financial risk increaser for women.

Bertocchi, Brunetti and Torricell, (2008) Based on the dataset drawn from the 1989-2006 Bank of Italy survey of household income and wealth, showed that male and married households heads have a higher propensity to invest in riskier assets than female and single ones. It is also found that the factors like the divorce rate and the rate of female labor, market participation alls played significant regional variables. John, Kumar and Vikkraman (2011) attempted to discover a relationship between dependent variables like risk tolerance and independent variables like age, gender of an individual investor. It is found in this paper that male investors dominate in stock market with age group between 30-40.most of the investors are having higher education and central govt. employees invest more in stock market among the various investors group. The high salaried and experience investors trade more.

## 4. DATA AND METHODOLOGY

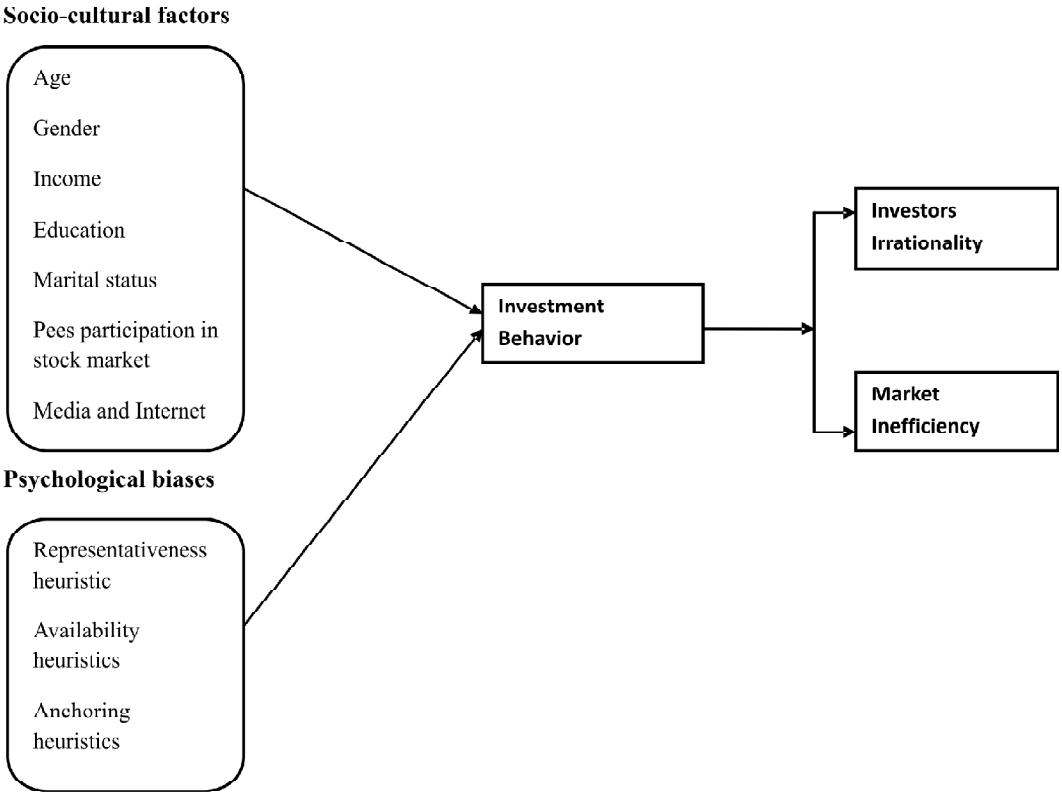
The data for this study has been taken from the secondary sources, number of journals, publications, working papers and books have been reviewed for the purpose. The whole of the study based on the conceptual framework which is framed on the basis of the findings in the various behavioral economic literatures and an attempt have been made to show the relationship between socio-psychological factors and the irrational behavior as well as market inefficiency.

## 5. CONCEPTUAL FRAMEWORK AND DISCUSSION

A market is said to be efficient with respect to a set of information, if the price of the stock fully reflect that information set. It means price would be unaffected by revealing that set of information to all participants. Again the information would incorporated with price of the stocks as it make available in the market depends on the rationality of the participants, that says the participants are rational they are calculative, grasp all the information correctly and use the fundamental models.

In such a case no one can affect the price of stock and cannot take the advantage of arbitraging. This concludes that the efficient market hypothesis is based on mainly on two notions: 1 Market is efficient and 2 participants are rational. But in reality whole the market presents the mood of society which is the result of sharing and manipulating the information. This section deals with the concepts of the social as well as psychological factors that have the prominent impact on the decision making behavior of individuals. The various patterns through the following framework have been demonstrated to nullify the doctrine of traditional financial theories.

**Figure 1: Showing the Mechanism of Behavioral Finance**




## SOCIAL INFLUENCE AND STOCK MARKET PARTICIPATION

When, why and how is people behavior influence by the presence of others? How to people influence our own behavior. Social influence is all about how our thoughts feelings and behavioral changes when in the presence of others. It refers to any effect that another person or group has on your own attitude and behavior.

According to the many social scientists social norms and culture are very important in shaping economic behavior and market outcomes. Society is an integral part of economic system it influence the economic activity with its behavior whether the actions are rational or irrational. Much of the research illustrates that the individual investors' decision making have much more impact of socio-cultural factors. People do not make decisions in isolation, the make decision while interacting with others. In daily life we use references to achieve to a decision, that references further generate a level of optimism or pessimism again this level of social mood impact the financial decisions reflects in stock market as a whole. The state of optimism social mood encourage more investment, fosters risk seeking behavior, all the economic participants – individuals, corporate, banks try to extant their tentacles and create the situation of market bubble, as this situation washed out the social mood as well as stock market begins to readjust itself investors, corporate withdraws their investment banks call off their lending whole the market create a situation of pessimism.

Relating economic equilibrium to social equilibrium Pareto (1963) said "state of economic system may be regarded as particular case of the general state of the sociological system." The social interaction and the societal presence of the peoples have been incorporated to the capital market investing. As their personal attributes like age, marital status, education gender, income etc when intermingled with the other social groups their decision making influence accordingly which converted into a social mood and present the mood of an economy. More the interactions more inclination to make decisions frequently the economic fundamentals can only provide the basic information but the decision making ultimately influence by the interaction with others. "The physical approach to modeling stock market behavior is to examine it from the prospective of economic fundamentals that drive their actions. But how investors think about stock market fundamental is influence by their interaction with others" Nofsinger (2003).

Social investors find it more attractive to invest in the market when the participation rate among social investors than among non-social. Hang, Kubie and Sen (2004) found the relationship between interaction with and attending the churches leads to more participation in stock market. More interaction leads to more market education among the social groups and it also reduces the fixed cost, these interaction also inclined them toward making more money. Jain and Mandot (2012) indicate the relationship between level of risk and demographic factors of investors confined to Rajasthan state. This paper reveals that there is a negative correlation between marital status, gender, age, education, educational qualification and occupation of the investors and there is positive relation between cites, income level and knowledge of investors. The findings indicate the clear relationship between the investors' participation and social influences.

## PSYCHOLOGICAL INFLUENCES AND STOCK MARKET PARTICIPATION

The human psychological process is a board term which describes the way people encode, process, remember and use information in decision making. In the previous section it is showed that how social interaction influence peoples decision making. This social information is the attributes of psychological change in the decision making. The psychological phenomenon that has been indicated in the behavioral economic like overconfidence, Anchoring, mental accounting, herd behavior, loss aversion, gambler's fallacy and availability heuristics are basically the results of the influence of social interaction termed as social cognition. Since the inception of behavioral finance the psychological cognitions have been linked to the stock market to show the market inefficiency and individual's irrationality.

Finance researchers in western countries have observed more and more market anomalies since the end of 1970s (Friedman 1953; Kahneman & Tversky, 1979&1982; Le, Roy and Porter, 1981; Shiller, 1981; De Bondt & Thaler, 1985; Mehra & Prescott, 1985) which violated basic principal of neoclassical finance such as the efficient market hypothesis. The most citing heuristics and the base of derived heuristics in the behavioral economics are representativeness heuristic, availability heuristic and anchoring heuristic.

*The representativeness heuristics* is the tendency to allocate a set of attributes to someone if the match the prototype of a given category (Kehneman and Tversky, 1973). Representativeness is essentially a stereotype which leads to overreaction. In most of the cases if a sector of the market is doing well, then investors may begin to judge past performance as being representative of future performance.

*The availability heuristic* is the tendency to judge the frequency or probability of an event in term of how easy is to think of example of that event (Tversky and kehneman, 1973). In such heuristic individuals relies knowledge that are readily available, rather examine other alternatives and procedures. That leads to judgmental error where the investors make nippy decisions based on the set of information available in their mind.

*The anchoring heuristic* is the tendency to be biased toward the starting value in making quantitative judgments (Wyer, 1976). With the effect of anchoring individuals prefer relative thinking to absolute thinking. Anchoring can cause stock market to underreact to fundamental information. It is like such a mind- set where we think like if we are happy with the things which we have then why should try new one, this behavior is otherwise also called conservatism.

The assumptions of market efficiency and the rationality of its participants are found totally false from the view point of behavioral finance. Behavioral finance deals with the social and psychological prospective of individuals which argue against the concept of risk and return trade off that there are so many other factors

that impact the decision making. These arguments of behavioral economists on the basis of literatures reviewed a framework (see fig.1) has been developed which shows that individual investors confront with many social and psychological factors. These factors influence their behavior where they make decisions against the fundamental theories. In the framework the variables like age, income, gender, peers participation and psychological patterns like representativeness, availability biases and anchoring influence the decisional behavior of individuals and these leads to unpredictable and instable decisions. Finally because of such behaviors the whole process resulted into irrationality of participants and the inefficient market conditions.

## 8. CONCLUSION

The stock market represents the mood of the society which is unpredictable, unstable, and irrational in nature outcomes of this fickle mood cannot be predicted merely on the basis of fundamental model of financial economic. Behavioral finance promotes the concepts of psychology of the individuals and incorporates it to the decision making of participating agents of stock market. Behavioral finance presents the notion of bounded rationality which says the participants cannot be fully rational and the market cannot be efficient. With the influence of various behavioral factors individuals utilize modified version of rational choices which is the result of individuals' diversified personal attributes and their cognitive biases. In this it has been tried to show the limitations of traditional finance in the light of behavioral finance.

### Findings

Through the review of literature and going though the findings of behavioral finance it is found that the concept of individuals fully rationality and the market efficiency is not real this is vogue and unacceptable. The decision making of individual investors' is mostly influence by socio-cultural factors like age, income, gender, marital status, peers participation in stock market media and internet etc. and psychological factors like representativeness, availability and anchoring heuristics.

### Implication

The findings of behavioral finance cannot predict the future earnings and the actual movement of the stock market but it advocates the psychological biases which are repeatedly found in decision making of individuals. By understanding these common errors people can avoid them while putting their savings in the risky alternatives. These findings not only educate the individuals alone but also the investment managers who can incorporate the sentiments of individuals with financial models for batter performance of their portfolio.

## *References*

Bertocchi, G. Brunetti, M. and Torricelli C. (2008), "Portfolio Choice, Gender and Marital Status. Rivitsa di politica economic", Vol. 98, pp. 119-154.

Bogan V. (2008), "Stock Market Participation and the Internet. *Journal of Financial and Quantitative Analysis*", Vol. 43, pp. 191-212.

Brown R. J. Ivkovic, Z. Smith, P. A. and Weisbenner, S. (2004), "Neighbors Matter: Community Effects and Stock Market Participation". Working Paper, University of Illinois at Urbana Champaign.

Chandra, A. (2008), "Decision Making in the Stock Market: Incorporating Psychology with Finance". National Conference, FFMI, IIT, Kharagpur.

Daniel, K.D. Hirshleifer, D.A. and Teoh, S.H. (2001), "Investor Psychology in Capital Markets: Evidence and Policy Implications". *Journal of Monetary Economics*, Vol. 49, pp. 139–209.

Ghose, K. (2010), "Influence of Individuals' Psychology on their Investment Behavior- An Empirical Inquest in Indian Context". *Globsin Management Journal*, Vol. 4, pp. 75-92.

Grinblett, M. and Keloherjle M. (2001), "How Distance, Language, and Culture Influence Stock Holding and Traders". *The Journal of Finance*, Vol. 56, pp. 1053-1073.

Hershliefer, D. (2001), "Investors Psychology and Assets Pricing". *The Journal of Finance*, Vol. 56, pp. 1533-1597.

Hong, H. Kubik J. D. and Stein, J. C. (2004), "Social Interaction and Stock Market Participation". *The Journal of Finance*, Vol. 54, pp. 137-163.

Jain, D. and Mandot, N. (2012), "Impact of Demographic Factors on Investment Decision of Investors in Rajasthan". *Journal of Arts Science and Commerce*, E-ISSN 2229- 4686, ISSN 2231-4172.

John, K. C. Kumar, S. and Vikkraman, P. (2011), "A Study on Socio-economic Characteristics of Indian Share Market Investors (with special reference to Coimbatore)". *International Journal of Multidisciplinary Research*, Vol. 1, pp. 257-278.

Kahneman, D. and Tversky, A. (1979), "Prospect Theory: An Analysis of Decision under Risk". Econometrica, Vol. 47, pp. 263-292.

Kahneman, D. and Piepe, W. M. (1998), "Aspect of Investors' Psychology". *The Journal of Portfolio Management*, Vol. 24, pp. 52-65.

Kamstra, M. Kramer, L. and Levi, M. (2002), "Winter Blue: A SAD Stock Market Cycle". Working Paper Federal Reserve Bank, Atlanta.

Kaustia, M. and Knupfer, S. (2010), "Peer Performance and Stock Market Participation". *The Journal of Financial Economics*, Vol. 104, pp. 321-338.

Kent, D. Hersliefer, D. and Teoh, S. H. (2002), "Investors Psychology in Stock Market: Evidence and Policy Implications". *Journal of Monetary Economics*, Vol. 49, pp. 139-209.

Li, G. (2009), "Information Sharing and Stock Market Participation: Evidence from Extended Families". Working paper, Federal Reserve Bank.

Lo, W.A. Repin, U.D. and Steenbarger, B. (2005), "Fear and Greed in Financial Market: A Clinical Study of Day Traders". Working paper 11243, National Bureau of Economic Research.

Love, D. A. (2010), "The Effect of Marital Status and Children on Saving and Portfolio Choice". *The Review of Financial Studies*, Vol. 23, pp. 385-432.

Lucey, B.M. and Dowling, M. (2005), "The Role of the Feeling in Investors Decision Making". *Journal of Economic Surveys*, Vol. 19, pp. 211-237.

Nagy, R. A. and Obenberger, R. W. (1994), "Factors Influencing Individual Investor Behavior". *Financial Analyst Journal*, Vol. 50, pp. 63-68.

Nofsinger, J. R. and Baker H. K. (2002), "Psychological Biases of Investors". *Financial Services Review*, Vol. 11, pp. 97-116.

Nofsinger, J. R. (2005), "Social Mood and Financial Economics". *Journal of Behavioral Finance,* Vol. 6, pp. 144-160.

Pareto, V. (1963), "The Mind and Society". Dover Publications, New York.

Pasini, G. and Georgorakos, D. (2009), "Trust Sociability and Stock Market Participation". *Review of Finance*, Vol. 15, pp. 693-725.

Sewell, M. (2001), Behavioral Finance. *http://www.behaviouralfinance.net*

Shanmugham, R. and Ramaya, K. (2012), "Impacts of Social Factors on Individual Investors' Trading Behavior". *Procedia Economics and Finance*, Vol. 2, 237-246.

Shu, CH. (2010), "Investors Mood and Financial Markets". *Journal of Economic Behavior & Organization*, Vol. 76, pp. 207-282.

Statman, M. (1995), "Behavioral Finance vs. Standard Finance". Behavioral Finance and Decision Theory in Investment Management. Charlottesville, VA: AIMR: 14-22.

Subrahmanyam, A. Hirshliefer, D. and Danial K. (1998), "Investors Psychology and Security Market under and Overreactions". *The Journal of Finance*, Vol. 53, pp. 1839-1885.

Tversky, A. and Daniel, K. (1973), "Availability: A Heuristic for Judging Frequency and Probability". *Cognitive Psychology*, Vol. 5, pp. 207-232.

Wyer, R. S. (1976), "An Introduction of Relations among the Probability Estimates Organizational behavior and Human Performance", Vol. 15, pp. 1-18.