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An Empirical Investigation on Behavioral Determinantson, Impact on Investment Decision Making, Moderating Role of Locus of Control

Zahid Ikram
Capital University of Science & Technology, Islamabad

Abstract
This study aims to investigate the influence of behavioral biases (Representative Bias and Availability Bias) on investment decisions with the moderating role of Locus of control. The relationship was examined by administering a questionnaire and by collecting empirical data from investors about their own perception of these biases collected through self administered questionnaire from Stoke Exchange and several brokerage houses. The study was found that the Representative Bias and Availability Bias have a significant positive impact on investor investment decision and Locus of Control play a moderating role between Representative bias and investment decision. Other implications and limitations of the study are also discussed.
Keywords: Representative Bias and Availability Bias, Illusion of Control Biases, Locus of Control, Investment Decision.

Introduction

According to conventional financial theory, investors are perfectly rational and wealth maximize in financial decisions but sometimes emotions and psyche influence their decisions, causing them to behave in an irrational way. Investors make judgment under uncertainty is re-analyzed with combined effect of some other biases (Armstrong, 1984).Investor's attitude towards gain and loss due to static differences across investors (Feng & Seasholes, 2005) and Investor's psyche has strong effect on investment decision making in stock exchanges while making capital investment that is why they behave irrationally (Zaidi & Tauni, 2012) , emotions and psyche are major factors.

Representativeness refers to the way people make subjective probability judgments based on similarity to stereotypes. People use Judgmental heuristic to simply decision making and act as per their previous course of action without taking into consideration current situation (Brockner, 1992).People automatically judge the likelihood that the event will fit into a given category due to similarity with prior happening that is why Investor's Risk taking and Risk aversion priority strongly related with prior Losses and gain, it may cause risk assessment error (Mcnamara & Bromiley, 1997) ,furthermore cognitive and emotional weakness plays vital role (Baker & Nofsinger, 2002)and effect of Representative bias also described by (Sewell, 2007).

Availability Biases refers to the situation when investors make decisions according to available information or Probability of events by available information and when relevance instances come to mind while decision making (Tversky & Kahneman, 1973). One source of information availability is media advertisement and that make investors irrational by quickly reaction on it (Zhu, 2002) and peer actions and interaction influence on investment decision making (Pollock, Rindove & Maggitti, 2008) that is why they react by observing the behaviors of other people as well (Binning,Zaba, & Whattam, 1986) that leads decision making to irrational evaluation.

This study uses moderating effect of Locus of control on the relationship of investment decision making and representative and availability biases respectively. Researcher were also interested how investors overestimate their ability to control outcomes that may arise (Duhaime & Schwenk, 1985) but in reality human memory is not reliable and chance of error is always exist (Macleod & Danial, 2000). Another factor that people think outcome happen due to their own personal effort that's why they may change the outcome (Coleman & DeLeire, 2000).

Prior researchers conducted studies on impact of Representative and Availability biases on investment decision in Individualistic dominated culture, but researchers in collectivist dominated countries are comparatively less concern about this cultural aspect in decision making. This study will fill this contextual gap in prior studies.

Purpose of this study is to explore the representative and availability biases effect on investment decision making and whether locus of control effect on this relationship or not. This study will help the investors to find out the reasons of irrational decision making due to Representative and Availability biases. It will help the researchers how these behavioral biases vary in collectivist and individualist cultures and impact on the psyche of developing countries like Pakistan.

Prospect theory describes the behavioral biases with the effect of disposition and risk and return paradox (Fiegenbaum & Thomas, 1988) . Risk taking and risk aversion priorities vary from securities to securities. It explains the behavior of investor, they become risk averse when prior return was above the target level and risk seeker in case of previous loss (Jegers, 1991) .This theory applies in different perspective when there are so many alternatives because decision makers are not constant in their preferences. Utility of this theory is, it helps investors in rational decision making to overcome cognitive and other behavioral biases in decision making.

Literature Review

Investment Decision Making:

Investment is the action or process of investing money with the hope of future benefit but the world of investment can be hot and cold but investing through research and by keeping your head straight can lead you to success. Every investor wants to get desired return from investment to make optimal investment decision , Sharp (1964) explained that maximum level of risk for specific level of return to compare the decision from benchmark . In Financial market ,Managers have superior information than individual investors because investors just interpret external factors while making investment decision rather managers are aware of internal and external as well (Myers & Majluf, 1984).

In past few decades, Some researcher thinks that optimal and rational decision must be depend if the knowledge of finance is advance (Merton, 1987). Investment decision can be irrational from the perspective of researcher but can be rational from the point of view of investor (Harrison & Harrel, 1993) because psychological description of investor's mental processes plays vital role (Jaros, Jermier, Koehler, & Sincich,1993). Factors that influence the investment process can be Returns from investment that depends on whether decision of investor have influence on the policy of firm in which they are going to invest (David,Kochhar, & Levitas, 1998) and cost of investment and benefit from investment can influence, that is why in order to get high returns investor deviate from the right and rational decision (Cascio,Young, & Morris, 1997). Furthermore, investment decision making process is also effected by many contextual factors (Papadakis,Lioukas, & Chamber, 1998).

Researcher from the last two decades highlighted some behavioral phenomenon of investors psyche ,"Cognitive unconscious," term explained to describe the reason why sane investors make error in investment decision (Hilton, 2001).Investors thinking and feelings change decision making from rational to irrational and researchers found some ways to overcome (Baker & Nofsinger, 2002). Decision based on availability of information is somehow reliant but researcher investigate that partial or incomplete information mislead the investors (Macgregor ,Slovic ,Dreman, & Berry, 2000), same as Investment preferences and decisions influenced by nature of securities in which they want to invest whether risk free or risky (Sanders & Carpenters, 2003).Some Researchers were interested in institutional investors, because their influence on financial market is greater than individual investors (David, Hitt, & Gimeno, 2001). Investor's react differently when invest in Stock options and equity ownership (Cetro,Daily,Cannella, & Dalton, 2003) because to get maximum return from investment is core desire of every rational investor (Kale, 2010).

Representative Bias and Investment Decision Making:

Representativeness is when investor use mental short cuts and rule of thumb to make investment decision but pattern recognition can be weak due to neglecting of supporting evidence. Since, mid of 20th century with the emergence of Behavioral Finance, researcher provided some ways to make investment decision based on facts not on probability. Ideally, investors have to calculate financial ratios to calculate future expected returns from the investment but they consider probability of outcome based on their previous experience (Gold & Karus , 1964). Good Quality and Rational Decision based on Information search , resource expenditures and concern of the actions that can affect the rationality of investment decision (Fredrickson, 1985). Apparently, large firm and firms with previous high level of returns will generate high returns too in future (Jacobson ,1994). Complex decision make in high uncertainty often based on intuition and intuition role is crucial in most of the financial decision (Kahneman & Riepe, 1998).

The individual investor should act as an investor and not as a speculator because investors are not one who tells the future because most of the investors believe their previous experience and decision were mostly correct , on the basis of prior experience they will make rational decisions in future too(Rosman, Lubatkin, & O'Neill,1994) and they stuck on the same pattern over and over, they do not have vigilant eye on current scenario (Prechter Jr, 2001). Investors mostly seems passive, they do not change investment planning easily (Benartzi & Thaler, 2007)) but rational and well aware investors knows rigorous analysis before investment decision making is necessary but tendency of rely on past experience is alarming in financial markets (Shimizu, 2007).Investors in capital market act normal rather they should act rational without considering their previous experience (Filbeck,Hatfield,& Horvath, 2010).

At Macro level , in case of investment in foreign capital investment ,investor make probability on the previous performance of foreign stock and macro-economic factors as well (Beill, Filatotchev,& Aguilera, 2014).

H_1: Representative bias is significantly associated with investment decision.

Availability Bias and Investment Decision Making:

Availability Bias in which decision maker relies upon knowledge that is readily available rather than examines other alternative and procedure, that is why decisions turn to irrationality (Folks, 1988). Decision makers in capital market are also influenced by the information they get during problem identification (Haley & Stumpf, 1989) but ideally, they alter or change their investment preference and choice by keeping in mind their cost of capital (Modigliani & Miller, 1958) .

Researchers from late 20th century investigate important factors that may cause availability bias .Information about the executives and management of firms, appointment of new CEO of the company in which investor are interested to purchase securities change the decision of company (Lubatkin,Chung,Rogers, & Owers, 1989) and investor sometime make decision without taking into consideration the correct and relevant information due to reputation of firms and stock (Scharfstein & Stein, 1990). In case of financial market crisis, investors have to suffer more than representative of market (Marcus & Goodman, 1991) because investors react negatively when they hear the announcement about the securities and layoff (Worrell, Davidson, & Sharma , 1991) and sometime decision change by keenly observing the actions and news leaked by Representative of Stock Exchange (Stearns & Mizruchi,1993).Nature of investment decision makes investors conscious whether available information should consider more or just omit it (Simon,Pelled,& Smith, 1999).

Collectivism and individualism impact on psyche, these bias vary from culture to culture and personality to personality, the efficiency of every investor in different culture are not alike (Mitchell,Smith,Seawright, & Morse, 2000). Information about Stock exchange gain and losses and Macro Economy influence the decision of investors (Bulmash, 2001).The way in which information report in financial market and role of intermediaries play vital role to alter investment decision and have great influence on investor's psyche (Healy & Palepu ,2001).Investors preferences change according to available information (Harris & Raviv, 2005) and in result information leads to a particular leading pattern and sometime even irrelevant information also influence investment decision (Krichler, Maciejovsky,& Weber, 2010). On the basis available information risk taking behavior of investor about particular security change (Grable,Lytton,& O'Neill, 2010).

H_2: Availability Bias is significantly associated with investment decision making.

Locus of Control:

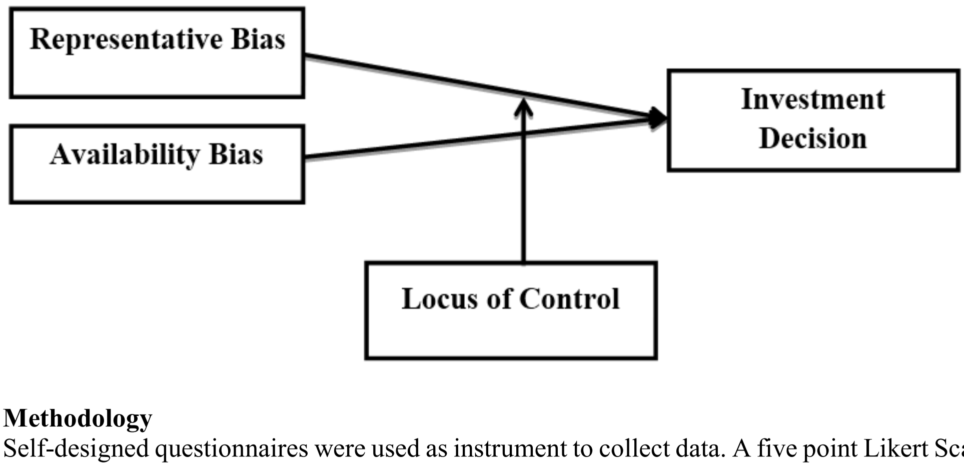
When a person thinks that the desired outcome occur due to his/her own, this is called internal locus of control ,In contrast, if a person thinks the positive result is due to external factors like luck, chance, fate and powerful others, this is called external locus of control (Selart, 2005). Investor's role in investment decision making the extent to which locus of control impact on decision (Szilagyi,Sims,& Keller, 1976). Absence of willingness to accept their mistakes can lead the investor from biased decision making (Davis & Bobko, 1986).

Decision maker on executive level like Managerial and Executive also indulge in this phenomena that outcome of all actions under their control (Boone,Brabander, &Witteloost, 1996). They way in which investors interpret their personal abilities over outcome is associated with nature of investment and time horizon (Lam & Schaubroeck, 2000).Sometime investors do not know their abilities but they want to take credit of success (Gervais & Odean, 2001).

H_3: Locus of Control is moderates the relationship of Representative bias and Investment Decision Making.

H_4: Locus of Control is moderates the relationship of Availability bias and Investment Decision Making.

Theoretical framework:



Methodology

Self-designed questionnaires were used as instrument to collect data. A five point Likert Scale was used to measure the variables. A total of 250 questionnaires were distributed and out of which 150 were received back making the response rate as 60%.

The sample consists of investment sector of Pakistan and specifically stock exchange of Pakistan. The convenient Sampling technique was used and questionnaires were distributed among investors of Rawalpindi and Islamabad.

Investment Decision:
We asses investment decision by using 8 scale items designed to capture the impact of representative bias and availability bias on investment decision making and moderating role of locus of control. It contains reverse items as well.We treated reverse items by reversing entries. The internal consistency reliability for this scale is 0.703.

Representative bias:
We asses Representative bias by using 5 scale items measure designed to capture the impact of Representative bias in investor investment decision making. The internal consistency reliability for this scale is 0.716.

Availability bias:
We asses Availability bias by using 7 scale items measure designed to capture the impact of Availability bias in investor investment decision making. The internal consistency reliability for this scale is 0.702.

Locus of Control:
We asses internal and external Locus of Control by using 12 scale items measure designed to capture the impact of moderating role of locus of control in investor investment decision making. The internal consistency reliability for this scale is 0.777.

Results:

Table 1
Mean, Standard Deviation and Correlations

	Mean	S.D	1	2	3	4
1. ID_Mean	3.6008	.56919	1			
2. RB_MEAN	3.3840	.65642	.389**	1		
3. AB_MEAN	3.3438	.61842	.220**	.363**	1	
4. LOC_MEAN	3.2589	.54334	.017	-.045	.256**	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
N=150, Control variables= Age, Gender, Qualification, Experience, ID=Investment Decision ,RB= Representative Bias, AB= Availability Bias, LOC=Locus of Control

The above table (table 1) results show the descriptive statistics as well as correlation among the variables. Correlation analysis shows that there is positive and significant correlation among Representative bias, Availability bias and investment decision .Locus of control is also positively and significantly correlated with investment decision but there is no correlation between Locus of Control and Availability bias.

Table 2
Regression for Outcomes

Investment Decision			
Predictors	***β***	***R^2***	***ΔR^2***
Step 1:			
Control variable		0.80	
Step 2:			
Representative bias	0.287***		
Availability bias	0.076		
		0.178	0.098

*N=150 ,**P< .05, ***P<.001*

Table 3
Regression for Moderation

Predictors	**Investment Decision**		
	β	***R^2***	***ΔR^2***
Step 1:			
Control variable		0.80	
Step 2:			
Representative bias	0.287***		
Availability bias	0.076		
Step 3:			
Locus of Control	0.078	0.085	0.06
Step 4:			
Representative bias X Locus of control	0.329 **		
Availability bias X Locus of control	-0.034		
		0.166	0.087

***P< .05, ***P<.001, Control variables= Age, Gender*

The regression and moderated regression analysis were used to examine the impact of Representative bias and Availability bias on investment decision . The results show that the interaction term for Representative bias (β = 0.329**, p = .001) have a significant impact on Investment Decision. In the study Locus of Control is significantly moderating the relationship between Representative bias and investment decision.

Discussion

Overall, of the four hypotheses, one was accepted $H_1$and H_3 but three were not accepted (H_2 and H_4).There are two paradigms, whether Representative bias and Availability bias have significant impact on investment decision making or not. The moderating role of Locus of control is unique relation of this study.

Investors become biased while making investment decisions. Being the rational and well aware investors, there are certain optimized decisions are supposed to be part of their decision making. There is strong support of hypothesis (H_1) that past experiences, prior gain and loss trends deviate the investment decision from rationality, previous studies also support this relation (Fredrickson, 1985).This is general perception that biasness from Availability of information (media, Peer's actions, market signaling etc)inversely associated with investment decision making (Modigliani & Miller, 1958) but in this study outcomes do not support the hypothesis (H_2) because investor in financial market of Pakistan are influenced by family, culture, norms and values because collectivism is the integral part of culture in Pakistan (Hofstede, 1984).

Locus of control is moderates the association between Representative bias and Investment Decision making, investors who thinks they have control over outcomes prefer to make decision on the basis of prior experience and past gain and loss, our hypothesis support this phenomena significantly (H_3).Contrary to the prior research our hypothesis (H_4) does not support the association between Availability bias and investment decision. It indicates in Collectivist culture investors are not influenced by Availability of information rather they make decision by keeping in mind family, traditions and norms that is why they do not believe they can control the outcome by their personal abilities and luck.

Practical Implications

Our results provide the optimal investment decision choice to the investors. They can eliminate the factors that create hurdles to get maximum benefit from investment. Individual investors in collectivist society like Pakistan can identify cultural hurdles to make themselves aware of all possible failure in the way of best portfolio investment selection.

Limitations and future research direction:

This research design and its outcome effectively applicable in developing and those countries where power distance is high influenced by Collectivism, furthermore this research model consist of those variable which effect investment decision making 17.8%, it shows 82.2% impact of other variable effect investment decision making, future researchers need to investigate those factors.

References

Allen, D. W., & Ellan,A.D. (2010). Bidding And Overconfidence In Experimental Financial Markets. Journal of Behavioral Finance, 6(3), 108-120.
Armstrong, T. (1984). Judgment Under Uncertainty . Journal of Forecasting, 3(2), 235-239.
Arrfelt, M.,Wiseman,R.M., & Hult,G.M.T. (2013). Looking Backward Instead Of Forward: Aspiration-Driven

Influences On The Efficiency Of The Capital Allocation Process. Academy of Management Journal, 56(4), 1081-1103.
Baker,H.K.,& Nofsinger,J.R. (2002). Psychological Biase Of Investors. Financial Service Review,Vol 11 (1), 97-116.
BELL,R.G.,Filatotchen,I. ,& Augilera,R.V. (2014). Corporate Governance And Investors' Perceptions Of Foreign Ipo Value: An Institutional Perspective. Academy of Management Journal ,Vol.57 (1), 301–320.
Brauer, M.F.,&Wisrsma,M.F. (2012). Industry Divestiture Waves How a Firm's Position Influences Investor Returns. Academy of Management Journal,Vol.55(6), 1472–1492.
Brockner, J. (1992). The Esclation of Commitment to a Falling Course of Action. Academy of Management Journal, 17(1), 39-61.
Bulmash, S.B. (2001). A Behavioral Model of Stock Market Investors' Impact on Consumption. The Journal of Psychology and Financial Markets,Vol 21 (2), 135–149.
Cascio, W.F., Young,C.F.,& Morris,J.R. (1997). Financial Consequences of Employment-Change Decisions in Major U.S. Corporations. Academy of Management Journal,Vol.40(5), 1175-1189.
Cetro, S. nnella,A.A.,&ltan,D.R. (2003). Giving Money to Get Money: How Ceo Stock Options and Ceo Equity Enhance Ipo Valuations. Academy of Management Journal,Vol.46(5), 643–653.
Davis, M.A.,& Bobko,P. (1986). Contexual Effect on Esclation Processes in Public Sector Decision Making. Organizational Behavior and Human DEciison Making Process,Vol 37, 121-138.
Dhuamaie, I.S. (1985). Conjectures on Cognitive Simplification in Acquonjectures on Cognitive Simplification in Acquisition and Divestment Decision Making. Academy of Management Review, 10(2), 287-295.
Feignbaum, A., & Thomas,A.(1988). Attitide Toward Risk and Return Paradox:Prospect Theory Explanation . Academy of Management Journal, 31(1), 85-106.
Fredrickson, J.W. (1985). Effects of Decision Motive and Organizational Performance Level on Strategic Decision Processes. Academy of Management Journal,Vol.28(1), 821-843.
Gervais, S., & Odean,T. (2001). Learning to be Overconfident. The Review of Financial Studies,Vol 14 (1), 1-27.
Gold, B., &Karus,R.M. (1964). Integrating Physical with Financial Measures for Managerial Controls. Academy of Management Journal, 109-127.
Grable, J.,Lytton,R., & Nell,B. (2010). Projection Bias and Financial Risk Tolerance. Journal of Behavioral Finance,Vol 5 (3), 142-147.
Graham, J.R.,Harvey,C.R., & Huang,H. (2009). Investor Competence, Trading Frequency and Home Bias. Management Science,Vol.55 (7), 1094–1106.
Healy, P.M., & Palepu,K.G.(2001). Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. Journal of Accounting and Economics,Vol.31, 405–440.
Hiller, N. H. (2005). Conceptualizing Executive Hubris: The Role of (Hyper-)Core Self-Evaluations in Strategic Decision-Making. Strategic Management Journal,Vol 26, 297-319.
Hilton, D. (2001). The Psychology of Financial Decision-Making: Applications to Trading Dealing, and Investment Analysis. The Journal of Psychology and Financial Markets,Vol 2 (1), 37-53.
Hofstede, G. (2006). What did Globe Really Measure? Researchers'smind Versus Respondents'minds.Journal of International Business Studies. Vol37, 882-896.
Jacobson, C.K.(1994). Investor Response to Health Care Cost Containment Legislation: is American Health Policy Designed to Fail? .Academy of Management Journal,Vol.37 (2), 440-452.
Jaros, S.J., Jeremier,J.M., Koehler,J.W., & Sincich,T.(1993). Effects of Continuance, Affective, and Moral Commitment on The Withdrawal Process: an Evaluation of Eight Structural Equation Models. Academy af Managemetil Journal,Vol.36 (5), 951-995.
Jergers. (1991). Prospect Theory and the Risk-Return Relation:Some Belgian Evidence. Academy of Management Journal, 34(1), 215-225.
kale, J.K.(2010). Growth Optimization with Downside Protection: A New Paradigm for Portfolio Selection. Journal of Behavioral Finance,Vol 7 (1), 29-42.
Kaustia, M. , & Patulla,M. (2012). Overconfidence and Debiasing in the Financial Industry. Review of Behavioral Finance,Vol 4 (1), 46-62.
Kehneman, D., & Riepe,M.W. (1998). Aspects of Investors Psychology . The Journal of Portfolio Management, 52-65.
Kirchler, E.,Maciejovsky,B.& weber,M.. (2010). Framing Effects, Selective Information, and Market Behavior: An Experimental Analysis. Journal of Behavioral Finance,Vol 6 (2), 90-100.
Lam, S.S.K., & Schaubroeck, J. (2002). The Role of Locus of Control in Reactions to Being Promoted and to Being Passed Over: a Quasi Experiment. Academy af Management Journal,Vol.43 (1), 66-78.
Lubatkin, M.H.,Chung,K.H., & Schlarbaum,G.G. (1989). Stockholder Reactions to Ceo Changes in Large Corporations. Acodemy of Manogemenl Journa,Vol.32(1), 47-68.
Ma, D., Rhee,M., & Yang,D.(2013). Power Source Mismatch and the Effectiveness of Inter Organizational

Relations: the Case of Venture Capital Syndication. Academy of Management Journal,Vol.56 (3), 711–734.

Merton, R.C. (1987). A Simple Model of Capital Equilibrium with Incomplete Information. Journal of Finance,Vol,XLII(3), 483-510.

Mitchell, R. K.(2000). Cross-Cultural Cognitions and the Venture Creation Decision. Academy of Management Journal,Vol.43 (5), 974-993.

Modigliani, F., & Miller, H.M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. The American Economic Review, Vol. 48 (3), 261-297.

Moser, D. (1989). The Effect of output interference Availability and accounting information on investors predictive judgment. The Accounting Review, LXIV(3), 433-448.

Papadakis, V.M., Lioukas,S.& Chamber,D. (1998). Strategic Decision Making Processes. The Role of Management and Context. Strategic Management journal, Vol.19, 115-147.

Paruchuri, S. , Misangyi,F. (2012). Investor Perceptions of Financial Misconduct: The Heterogeneous Contamination of Bystander Firms. Academy of Management Journal.

Pollock, T.M. (2008). Market Watch: Information and Availability Cascades Among the Media and Investors in the U.S. IPO Market. Academy of Management Journal, 51(2), 335–358.

Prechter ,J.R.R.(2001). Unconscious Herding Behavior as the Psychological Basis of Financial Market Trends and Patterns. The Journal of Psychology and Financial Markets,Vol 2(3), 120–125.

Rosman,A., Lubatkin,M., & Nell, H. (1994). Rigidity in Decision Behaviors: a Within-Subject Test of Information Acquisition using Strategic and Financial Informational Cues. Academy of Management Journal,Vol.37(9), 1017-1033.

Sanders, W.G., & Carpenter,M.A. (2003). Strategic Satisficing? A Behavioral-Agency Theory Perspective on Stock Repurchase Program Announcements. Academy nf Management Journal,Vol.46(2), 160-178.

Selart, M. (2005). Understanding the role of locus of control in consultative decision-making: a case study. Management Decision,Vol 43 (3), 397-412.

Sharp, W.F.(1964). Capital Asset Prices: A Theory of Market Equilibrium under Condition of Risk. Journal of Finance,Vol.19 (3), 425-442.

Soars, A.S. (2007). Hofstede's dimensions of culture in international marketing studies. Journal of Business Research,Vol 60, 275-284.

Spector, P.E., Cooper,C.L.,& Sanchez. (2002). Locus of Control and w=Well-Being at Work How Generalizable are Western Findings? Academy of Management Journal,Vol.45 (2), 453-466.

Stearns, L.B.,& Mizruchi,M.S. (1993). Board Composition and Corporate Financing:the Impact of Financial Institution Representation on Borrowing. Academy of Managemenl Journal,Vol.36 (5), 603-618.

Stearns, L.B.,& Mizruchi,M.S. (1993). Board Composition and Corporate Financing:the Impact of Financial Institution Representation on Borrowing. Academy of Managemenl Journal,Vol.36 (5), 603-618.

Szilagyi, A.D., Sims, H.P., & Keller,R.T.(1976). Role Dynamic, Locus of Control,Employee Attiitude and Behavior. Academy of Management Journal,Vol.19 (2), 259-276.

Szilagyi, A.D., Sims, H.P., & Keller,R.T.(1976). Role Dynamic, Locus of Control,Employee Attiitude and Behavior. Academy of Management Journal,Vol.19 (2), 259-276.

Tversky, A. ,& Kehnemn,D.(1979). Availibilty:A Heuristic for Judging Frequency and Probibilty. Econometrica, 47(2), 263-292.

Tversky, A. ,& Kehnemn,D.(1979). Availibilty:A Heuristic for Judging Frequency and Probibilty. Econometrica, 47(2), 263-292.

Tversky, A., & Kehneman,D.(1973). Availibilty:A Heuristic for Judging Frequency and Probibilty. Cognitive Psychology, Vol5, 207-232.

Tversky, A., & Kehneman,D.(1973). Availibilty:A Heuristic for Judging Frequency and Probibilty. Cognitive Psychology, Vol5, 207-232.

Wang, C., Rodan,S., Fruin,M., & XU,X.(2014). Knowledge Networks, Collaboration Networks and Exploratory Innovation. Academy of Management Journal,Vol.57(2), 484–514.

Wang, C., Rodan,S., Fruin,M., & XU,X.(2014). Knowledge Networks, Collaboration Networks and Exploratory Innovation. Academy of Management Journal,Vol.57(2), 484–514.

Worrell, D.L., Davidson,W.N., & Sharma,V.M.(1991). Layoff Announcements and Stockholder Wealth. Academy of Monogement Journal ,Vol,34(3), 662-678.

Worrell, D.L., Davidson,W.N., & Sharma,V.M.(1991). Layoff Announcements and Stockholder Wealth. Academy of Monogement Journal ,Vol,34(3), 662-678.

Zaidi, F. , & Tauni. (2012). Influence of Investor’s Personality Traits and Demographics on Overconfidence Bias. Interdisciplinary Journal of Contemporary Research in Business, 4(6), 730-746.

Zhu, N. (2002). The Local Bias of Individual Investors. Yale School of Management, 1-7.