The Role of Psychological and Social Factors in Investment Decision-Making of Individual Investors in the Stock Market

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***Abstract* - Investment decision-making is a complex process that involves selecting the best available option from a range of alternatives. It requires thorough evaluation and consideration of multiple factors before arriving at a decision. This study explores the psychological and social factors that influence the investment decisions of individual investors, and examines how these factors jointly affect the decision-making process. Data were collected from 250 randomly selected individual investors trading on the Stock Exchange through a structured questionnaire. Descriptive statistical techniques were employed to analyze the data. The findings of the study reveal that both psychological and social factors significantly impact the decision-making process of individual investors in the stock market. Investors are increasingly aware of the various situations and factors that can influence their ability to make sound investment decisions.**

The study also highlights differences in how these factors affect male and female investors. For instance, emotions such as anger, fear, and stress, as well as the tendency to follow herd behavior, are found to influence male investors more than females. In contrast, factors like mood and social interactions have a stronger impact on female investors' decision-making processes. Furthermore, experienced investors are more prone to certain biases, such as anger, which may further influence their decisions. These findings underscore the importance of understanding both psychological and social dimensions in the investment decision-making process, particularly in how they differ across gender and experience levels.

Keywords: Behavioral Finance, Investment Decision-Making, Individual Investors, Psychological Factors, Social Factors, Stock Market.

INTRODUCTION

Behavioral finance represents a fusion of finance and psychology, exploring how psychological factors influence financial theories and shape individual investor behaviors. It contrasts with traditional finance, which assumes that investors are entirely rational and make decisions aimed at maximizing their returns. Traditional finance suggests that investors always act logically, making decisions that are entirely in their best interests and, therefore, result in gains. However, behavioral finance challenges this view, asserting that investors often act irrationally, influenced by psychological factors, and may make decisions that are detrimental to their financial well-being. These irrational behaviors are often attributed to psychological biases or predispositions. The concept of bounded rationality, introduced by a Nobel laureate, supports the idea that human rationality is inherently limited, making it impossible to always make optimal decisions [1].

Decision-making, in essence, refers to the process of selecting a particular course of action from a set of alternatives. In the context of investment, it is a complex task that involves evaluating various options to choose the best possible one. Investment decisions vary from individual to individual, depending on a range of demographic and personal factors. Some investors may benefit from a particular decision, while others may find it disadvantageous. This variability can be attributed to differences in investors' personal characteristics, such as emotional responses. For instance, some individuals may react more strongly to both positive and negative events in their lives [3], while others may be more attuned to negative stimuli than positive ones [4].

Individual investors often form their market expectations based on incomplete or biased information, rumors, and emotions, all of which can significantly impact their decision-making process [5]. Two primary factors influence investment decisions: personal factors, such as age, education, income, analytical skills, and investment portfolios, and technical factors, which include financial models like the Capital Asset Pricing Model (CAPM) that account for risk. However, these factors alone are insufficient for making sound investment decisions. A third category—situational factors—also plays a crucial role, encompassing both personal decisions and broader environmental conditions. Investors often behave irrationally when making investment decisions, straying from rational and standard behavior, which is essential for long-term success in the stock market. Overcoming cognitive biases such as heuristics is key to becoming a successful investor. However, it is rare for investors to consistently behave rationally and make decisions that result in gains and profits. One of the earliest studies on decision-making under uncertainty highlighted this tendency [7].

While much research has been conducted on psychological biases, the combined effect of personality, psychological, and social factors on investment decisions has not been extensively studied. Prior research has focused on the impact of psychological factors like fear, mood, and anger on short-term investment intentions, providing future directions for investigating how these personality variables influence investment decisions [8]. The current study addresses this gap by examining how emotions, social factors, and personality traits collectively influence investor behavior.

Previous studies have explored the determinants of herding behavior among investment analysts [9] and the psychological factors that contribute to irrational and uncertain investment decisions [10]. In the USA, research has examined how emotions like fear and social projection affect investment decisions, showing that individuals often rely on their own emotional states to predict others' behavior, which in turn influences their own decisions [11]. Optimism and fear have been identified as key determinants of risk-taking and trading behavior, while a lack of awareness has also been cited as a significant factor in poor decision-making [12].

This study aims to examine how psychological and social factors influence investment decisions, particularly in the context of investors in the Stock Exchange. It also seeks to compare the relative influence of psychological and social factors on investment decisions. Specifically, the study will focus on emotions such as fear, mood, stress, anger, and social interactions like herding to determine which factors play a more significant role in shaping investor behavior.

LITERATURE REVIEW

Heuristics, while often useful, can lead to systematic errors in decision-making [7]. Numerous studies have shown that intuitive judgments, influenced by heuristics, can result in biased investment behavior. Research has demonstrated that emotions play a critical role in decision-making. Individuals with impaired emotional capacity were found to struggle with making rational investment decisions [13]. Investors often make decisions based on their perception of a company, rather than objective data, which can lead to inconsistent investment outcomes that do not align with efficient market theories [14]. Several studies have explored the impact of heuristics on investment decisions through experiments and observations. While heuristics can simplify decision-making, they often lead to systematic errors. Investors may use heuristics either due to a lack of knowledge or to avoid the complexity of financial models, which can result in suboptimal decisions. Understanding these heuristics can help improve decision-making in uncertain and ambiguous situations [7]. Research conducted in Pakistan revealed that investors are not entirely rational when making investment decisions. Only 18.4% of respondents indicated that intuition was ineffective in decision-making, suggesting that most investors rely heavily on intuition rather than gathering comprehensive information before making decisions. This emotional reliance often leads to irrational investment choices [15]. Further studies have examined the role of emotions, such as fear, in investment decisions. Laboratory experiments have shown that emotion-based decisions are often faster than reason-based ones, with moderate emotional responses being quicker than extreme ones [16]. The relationship between mood and investment decisions has also been explored, with evidence suggesting that different mood states—both positive and negative—significantly influence investor behavior [17,18,19]. Research has also investigated how negative mood states, such as anger, influence decision-making. Studies suggest that state mood has a stronger effect than trait mood, with fatigue and risk-taking being particularly influenced by naturally occurring mood changes [20]. The impact of societal mood on individual investment decisions has also been noted, with social mood influencing judgments and decision-making processes [21,22]. The role of emotions like anger in investment decisions has been explored, with findings suggesting that anger is associated with optimism and risk perception. Anger can influence decision-making by affecting investors' ability to assess and control risks [25,27,28]. Conversely, emotions such as fear can make investors more cautious, prompting them to avoid unfamiliar or risky investments [29,30,33]. Social factors, including social interaction and herding, also play a significant role in shaping investment decisions. Social networks, which involve interactions with family, friends, and colleagues, facilitate the exchange of information and can significantly influence individual investment choices [34,35,36]. Social hubs, such as financial advisors, often serve as influential sources of information, leading to social biases that affect investor behavior [41]. Herding behavior, where investors follow the actions of others, is another significant factor in investment decisions, especially in environments where information is scarce or uncertain [42,46,47,48].

OBJECTIVES

1. Objective 1: To examine the impact of psychological factors (such as risk tolerance, overconfidence, and emotional biases) on the investment decisions of individual investors in the stock market.
2. Objective 2: To analyze the influence of social factors (such as peer influence, social media, and family recommendations) on the investment behavior of individual investors in the stock market.

HYPOTHESES

1. Hypothesis 1: Psychological factors, such as risk tolerance and overconfidence, significantly affect the investment decisions of individual investors in the stock market.
2. Hypothesis 2: Social factors, such as peer influence and social media, have a significant influence on the investment decisions of individual investors in the stock market.

RESEARCH METHODOLOGY

This study focuses on the investors of the Stock Exchange, examining the biases they encounter while making investment decisions. A sample of 250 investors was selected using simple random sampling, ensuring that the sample is representative of the population. The research design includes seven variables: six independent variables (anger, fear, mood, social interaction, herding, and stress) and one dependent variable (investment decisions). Data was collected using questionnaires, and the responses were analyzed to assess the impact of these factors on investment decisions.

Table- 01 Frequency Distribution and Descriptive Statistics with respect to Psychological Factors

No. of Respondents (N=250)							
ITEMS	S.D	D	N	A	S. A	Mean	St. Dev.
I struggle to overcome my nervousness.	62	32	54	76	26	2.89	1.355
When I am satisfied, my level of observation increases.	39	44	49	89	29	3.10	1.271
When I'm excited, I tend to overlook many aspects.	74	42	38	59	37	2.77	1.462
When I'm fed up, I often quit.	31	72	26	69	52	3.16	1.369
When I'm sad, I take time to get over things.	20	80	21	81	48	3.23	1.299
I get angry quickly but also calm down quickly.	0	14	27	147	62	4.03	0.763
When frustrated, I let my irritation show.							
Sometimes, I feel ready to explode with anger.	2	16	27	142	63	3.99	0.831
I consider myself a calm person.							
I use my predictive skills for investment decisions when I'm angry.	0	10	30	134	76	4.1	0.759
Some of my friends think I'm hot-headed.							
I believe my knowledge about stock investment is up to the mark.	0	10	39	100	101	4.17	0.833
In my opinion, the key to success in the stock market is knowledge and experience, not luck.							
Thinking about stock market investments often evokes fear in me.	12	19	64	64	91	3.81	1.152
I believe stocks are risky.	0	28	32	119	71	3.93	0.927
The idea of stock market investments creates a feeling of unpleasant excitement for me.							

I struggle to overcome my nervousness.	0	44	81	101	24	3.42	0.889
When I am satisfied, my level of observation increases.	28	38	72	77	35	3.21	1.195
When I'm excited, I tend to overlook many aspects.	12	50	54	92	42	3.41	1.127
When I'm fed up, I often quit.	4	36	34	113	51	3.68	1.006
When I'm sad, I take time to get over things.							
I get angry quickly but also calm down quickly.	6	69	63	101	41	3.41	1.127

S.D= Strongly Disagree, D= Disagree, N= Neutral, A= Agree And S.A= Strongly Agree

A study of 250 respondents revealed a complex interplay between emotional states and investment decision-making. The participants experienced intense but transient anger, while those who were excited generally did not overlook details. They reported moderate struggles with nervousness and a tendency to take time to recover from sadness, indicating concerns about emotional resilience. The majority believed that knowledge and experience were crucial for success in the stock market, with a high mean score of 4.17 for the belief that their investment knowledge is satisfactory. However, feelings of fear related to stock market investments and the perception of stocks as risky were prevalent, indicating widespread anxiety that may influence investment behavior. The data emphasizes the importance of addressing these psychological factors to enhance decision-making processes in high-stakes environments.

Table- 02 Frequency Distribution and Descriptive Statistics with respect to “Social Factors”

Percentage response rate (N=250)							
Items	S.D	D	N	A	S.A	Mean	St. Dev.
People can easily win debates against me.	5	33	53	149	10	3.5	0.847
I feel like I'm not as happy as other people seem to be.	0	52	63	74	61	3.58	1.074
I believe a person who is skeptical of others does more good.	11	88	46	66	39	3.14	1.185
I feel like I face more troubles than other people do.	0	44	52	114	40	3.6	0.957
I prefer to buy stocks if many "buy" orders have been submitted since the beginning of the trading session.	6	7	24	170	43	3.95	0.77
If the stock market's trading volume was higher than usual in the last month, I would increase my stock market holdings.	0	6	52	133	59	3.96	0.81
I would prefer to sell stock if I notice many people are quitting.	6	21	52	128	43	3.72	0.93
If I think something unpleasant is going to happen, I usually get pretty worked up.	0	8	28	149	65	4.08	0.704
I worry about making mistakes.	6	7	31	142	64	4.00	0.843
Criticism or scolding affects me quite a bit.	6	12	34	134	64	3.95	0.895
When I want something, I usually give it my all to get it.	0	12	14	187	37	4.00	0.631
I often act impulsively.	0	6	36	137	71	4.09	0.719
Even if something bad is about to happen, I rarely feel fear or nervousness.	0	25	59	110	56	3.79	0.905
I feel pretty worried or upset when I know someone is angry with me.	0	36	43	108	63	3.79	0.9

A study of 250 respondents revealed a moderate level of agreement with themes surrounding social anxiety, self-perception, and decision-making in financial contexts. The majority felt a disparity in happiness compared to others, and heightened anxiety in uncertain situations. Respondents exhibited cautiousness in financial decision-making, preferring to buy stocks if many 'buy' orders have been submitted. They also exhibited an inclination towards impulsive actions and sensitivity to social criticism. The results suggest that individuals in this sample experience a blend of self-doubt and social anxiety, alongside a strategic approach to risk in financial scenarios. These findings emphasize the importance of considering social factors when analyzing individual behavior and decision-making processes. The study underscores the importance of considering social factors when analyzing individual behavior and decision-making processes.

Table- 03 Frequency Distribution and Descriptive Statistics with respect to "Investment Decision"

No. of Respondents (N=250)							
Items	S.D	D	N	A	S.A	Mean	St. Dev.
My investment in stocks has a high degree of safety.	0	0	50	151	49	4.00	0.631
My investment pays higher dividends compared to others.	0	6	83	116	45	3.80	0.755
My investment repays the principal at maturity.	0	12	65	123	50	3.84	0.794
My investment carries lower risk compared to the market in general.	0	26	47	127	50	3.80	0.877
My investment in stocks has shown increased revenue growth over the past five years.	0	6	61	135	48	3.90	0.724

The study reveals that respondents generally have a positive outlook on the safety and growth potential of their stock investments. The statement "My investment in stocks has a high degree of safety" received the highest level of agreement, indicating confidence in the safety of their investments. The statement regarding higher dividends compared to others also received strong agreement, suggesting competitiveness in dividend payouts. The perception of principal repayment at maturity also showed confidence in the reliability of investments. The statement about lower risk compared to the broader market had a mean of 3.80, suggesting variability in opinions. The potential for increased revenue growth was acknowledged by respondents. Overall, the results suggest a generally positive outlook on the safety and growth potential of stock investments, with areas of varying confidence, particularly in risk comparison to the market.

FINDINGS AND DISCUSSION

The study highlights the significant influence of psychological and social factors on investment decisions, particularly in behavioral finance. The six independent variables - anger, fear, mood, social interaction, herding, and stress - have significant effects on individual investors' decision-making processes. The findings align with previous research, indicating that mood fluctuations have limited effect on investment choices. Gender and experience are crucial differentiators, with male investors and those with less experience showing heightened sensitivity to various mood states. Anger plays a significant role in shaping investment decisions, with investors experiencing anger exerting more control over their actions. Fear has a positive impact on investment decisions, as it leads to more vigilant and cautious behavior. However, social interaction, herding behavior, and stress negatively influence investment decisions, as individuals may rely excessively on their social circles rather than conducting their own analyses, leading to poor judgments and losses. Male investors are slightly more impacted by stress compared to female investors. Both inexperienced and highly experienced investors tend to exhibit biases in decision-making, while those with average experience appear less affected. Female investors may be more susceptible to emotional biases, having less capacity to manage their emotions in dynamic situations.

CONCLUSION AND RECOMMENDATIONS

This study investigates the impact of psychological and social factors on investment decisions within the Islamabad Stock Exchange. It focuses on actual investment behaviors rather than theoretical norms, aiming to identify strategies to mitigate the negative impacts of these biases. The research identifies six psychological variables: fear, mood, stress, social interaction, herding, and anger. It recommends investors pay closer attention to biases that may unconsciously affect their decision-making, as the adverse effects can lead to significant investment failures. While some mood and psychological factors may yield positive outcomes, it is crucial to approach their negative aspects with caution to ensure secure future implications. The study is valuable for economists, investors, institutional, and business perspectives, offering critical insights into how psychological and social factors can impact investment performance. It elucidates whether these biases produce positive or negative effects and their intensity. Enhancing investment performance at individual and institutional levels can stimulate economic growth and increase the value of organizations.

Future Directions

Future research should delve deeper into the effects of varying mood states (such as sadness, contentment, happiness, and nervousness) on investment decisions, exploring how these feelings might lead investors to incur significant costs or, conversely, offer advantages. Additional studies could apply diverse methodologies to verify the results of this research, enriching the understanding of emotional influences on investment behaviors.

REFERNCE

[1] Simon, H. A. (1955). A behavioural model of rational choice. *The Quarterly Journal of Economics*, 69(1), 99– 118.

[2] Chandra, A., & Kumar, R. (2008). Decision Making in the Stock Market: Incorporating Psychology with Finance.In the Proceedings of *the Conference on Forecasting Financial Markets* in India at IIT Kharagpur. (Available at:h#p://ssrn.com/abstract=1501721).

[3] Larsen, R.J., & Diener, E. (1987). Affect intensity as an individual difference characteristic; A review. *Journal ofResearch in Personality*, *21*, 1-39.

[4] Larsen, R.J., & Diener, E. (1992). Promises and problemswith the circumflex model of emotion. In M. S. Clark (Ed.), *Review of personality and social psychology: Emotion* (Vol. 13, pp. 25-59). Newbury Park, CA: Sage.

[5] Pham, M. T. (2007). Emotion and rationality: A critical review and interpretation of empirical evidence. *Review of general psychology*, *11*(2), and 155.

[6] Simon, H. A. (1987). Making management decisions: The role of intuition and emotion. *Academy of Management Executive*, 1(1), 57–64.

[7] Tversky, A. and Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases Science. *American Association for the Advancement of Science*, 185(4157), 1124-1131.

[8] Lerner, J. S. and Keltner, D. (2001). Fear, Anger, and Risk. *Journal of Personality and Social Psychology*, 81(1), 146-159.

[9] Youssef, M. and Rajhi, M. T. (2009). Determinants of Herding Behavior among, Financial Analysts: A Study of French Listed Firms. *International Journal of Business and Management*, 4(9).

[10] Lin, H. W. (2011). Elucidating rational investment decisions and behavioral biases: Evidence from the Taiwanese stock market. *African Journal of Business Management*, 5(5), 1630-1641.

[11] Lee, C. And Andrade, E. (2011). Fear, Social Projection and Financial Decision Making. *Journal of Marketing Research*. Vol. XLVIII (Special Issue),121–129.

[12] Hoffmann, A. O., & Post, T. (2012). What Makes Investors Optimistic, What Makes Them Afraid? In *Boulder Summer Conference on Consumer Financial Decision Making, University of Boulder at Colorado*.

[13] Damasio, A. (2008). *Descartes' error: emotion, reason and the human brain*. London: Vintage.

[14] ucey, B.M., and Dowling, M. (2005). The role of feelings in investor decision-making. *Journal of* economic *surveys*, 19(2), 211-237.

[15] Ahmed, N., Ahmad, Z. and Khalil, S. (2011). Behavioral Finance: Shaping the Decisions of Small Investors of Lahore Stock Exchange. *Interdisciplinary Journal of Research in Business*, 1(2), 38-43.

[16] Pham, M., Joel, B., John, C., Pracejus, G. and Hughes, D. (2001). Affect Monitoring and the Primacy of Feelings in Judgment. *Journal of Consumer Research, Inc*., 28(1), 167-188.

[17] Forgas, J. P. (1989). Mood effects on decision making strategies. *Australian Journal of Psychology*, 41, 197– 214.

[18] Forgas, J.P. 1995. Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin* 117: 39– 66.

[19] Johnson, E., & Tversky, A. 1983. Affect, generalization, and the perception of risk. *Journal of Personality and Social Psychology*, 45: 20–31.

[20] Hockey, G. R. and Maule, A. J., Clough, P. J., Bdzola, L. (2000). Effects of negative mood states on riskin everyday decision making, *Cognition and Emotion*, 14 (6), 823–855.

[21] Chou, K. L., Lee, T., Andy H. Y. (2007). Does Mood State Change Risk Taking Tendency in Older Adults.*The American Psychological Association*, 22(2), 310–318.

[22] Hon-Snir, S., Kudryavtsev, A., Cohen, G. (2010). Stock Market Investors: Who Is More Rational andWho Relies on Intuition? *International Journal of Economics and Finance*, 4(5), 56-72.

[23] Seo, M. and Feldman, L. (2007). Being Emotional During Decision Making—Good or Bad? An Empirical Investigation. *Acad Manage Journal*, 50(4), 923–940.

[24] Small, D. and Lerner, J. S. (2008). Emotional Policy: Personal Sadness and Anger Shape Judgments about a Welfare Case. *Political Psychology*, 29(2), 148-168.

[25] Lerner, J. S., & Tiedens, L. Z. (2006). Portrait of the angry decision maker: How appraisal tendencies shape anger's influence on cognition. *Journal of Behavioral Decision Making*, 19(2), 115–137.

[26] Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgment and choice. *Cognition and Emotion*, 14(4), 473–493.

[27] Sjoberg, L. (2007). Emotions and Risk Perception. *Risk Management*, 9, 223-237.[28] Shiv, B., Loewenstein, G., Bechara, A., Damasio, H. and Antonio R. (2005). Investment Behavior and the Negative Side of Emotion. *American Psychological Society*, 16(6), 435-439.

[28] Coget, J. F., Haag, C. and Gibson, D. E. (2011). Anger and fear in decision making: The case of film directors on set. *European Management Journal*, 29(6), 476-490.

[27] Cao, H. H., Han, B., Hirshleifer, D., & Zhang, H. H. (2009). Fear of the Unknown: Familiarity and Economic Decisions*. *Review of Finance*, rfp023.

[28] Hassan, E., Shahzeb, F. and Shaheen, M., Abbas, Q., Hameed, Z., and Hunjra, I. A. (2013). Impact of Affect Heuristic, Fear and Anger on the Decision Making of Individual Investor: A Conceptual Study. *World Applied Sciences Journal*, 23 (4), 510-514.

[29] Gambetti, E. and Giusberti, F. (2012). The effects of anger and anxiety traits on investment decisions. *Journal of Economic Psychology*, 33(1), 1059-1069.

[30] Loewenstein, G., 2000, Emotions in economic theory and economic behavior, *American Economic Review* 90, 426-432.

[31] Watts,A, 2001, A dynamic model of network formation: *Games and Economic Behavior*, v. 34, p. 331-341.

[32] Watts,A. and Strogatz, S.H. (1998), Collective dynamics of ‘small-world‘ networks. *Nature 393* [4], p. 440-442.

[33] Jager, W. (2003). How to decide how to decide: an integrated and dynamical perspective on human decision making, working paper.

[34] Ames, D. R. (2004). Strategies for Social Inference: A Similarity Contingency Model of Projection and Stereotyping in Attribute Prevalence Estimates. *Journal of Personality and Social Psychology*, Vol. 87, No. 5, 573–585.

[35] Janssen, M.A. and W. Jager (2001) Fashions, habits and changing preferences: Simulation of psychological factors affecting market dynamics, *Journal of Economic Psychology*, 22: p. 745-772.

[36] Daniel, R. (2004). Strategies for Social Inference: A Similarity Contingency Model of Projection and Stereotyping in Attribute Prevalence Estimates. *Journal of Personality and Social Psychology*, 87(5), 573–585.

[37] Duclos, R., Echo, W. and Jiang, Y. (2012). Show Me the Honey! Effects of Social Exclusion on Financial Risk- Taking. *Journal of Consumer Research*, 40(1), 122-135.

[38] Hirschleifer,D, S H Teoh, 2003, Herd behaviour and cascading in capital markets: a review and synthesis:*European Financial Management*, 9, 25-66.

[39] Olsen, R.A. (1998), Behavioral finance and its implications for stock-price volatility: *Financial Analysts Journal*, Vol. March/April, p. 10-18.

[40] Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual review of psychology*, *62*, 451- 482.

[41] Preston, S. D. T., Buchanan, W., Stansfield, R. B.and Bechara, A. (2007). Effects of Anticipatory Stress on Decision Making in a Gambling Task. Behavioral Neuroscience, *American Psychological Association*, 121(2), 257–263.

[42] Bechara, A., Damasio, A., Tranel, D. and Damasio, A.R. (1997). Deciding

advantageously before knowing the advantageous strategy. Science 275: 1293–1295.

[43] Cipriani, M. and Guarino, A. (2008). Herd Behavior in Financial Markets: An Experiment with Financial Market Professionals. *International Monetary Fund*, 47(2), 576-605.

[44] ubash, R. (2012). Role of Behavioral Finance in Portfolio Investment Decisions: Evidence from India, Charles University in Prague Faculty of Social Sciences Institute of Economic Studies, Master Thesis. Available at http://ies.fsv.cuni.cz/default/file/download/id/20803.

[45] Scharfstein, D. S. & Stein, J. C. (1990). Herd behavior and investment. *American Economic Review*, 80(3), 465- 479.

[46] Mitchell, M. S., & Ambrose, M. (2012). Employees‘ Behavioral Reactions to Supervisor Aggression: An Examination of Individual and Situational Factors. *Journal of Applied Psychology*, DOI: 10.1037/a0029452

[47] Mayer, J. D., & Gaschke, Y. N. (1988). The experience and meta-experience of mood. *Journal of Personality and Social Psychology*, 55(1), 102-111.

[48] Tariq, P. N. (1991). *A comparative psychological profile of professional and non-professional criminals in Pakistan* (Doctoral dissertation, Quaid-i-Azam University Islamabad, Pakistan 1991, 4).

[49] Porcelli, A. J., and Delgad, M. R. (2009). Acute Stress Modulates Risk Taking in Financial Decision Making. *A Journal of the Association for Psychological Science*, 20(3), 278-283.

[50] Qureshi, S.A., Rehman, k., Humjra, A. I. (2012). Factors affecting investment decision making of equity fund manager. *Wulfenia Journal, 19 (10)*, 280-291.

[51] Schwarz, N., & Clore, G. L. (1988). How do I feel about it? The informative function of mood. In K. Fiedler & J. Forgas (Eds.), *Affect, cognition, and social behaviour* (pp. 44-62). Toronto: C. J. Hogrefe.

[52] Schwarz, N., & Clore, G. L. (1996). Feelings and phenomenal experiences. In E. T. Higgins & A.Kruglanski (Eds.), *Social psychology: A handbook of basic principle* (pp. 433-465). New York: Guilford Press.

[53] Vries, M., Holland, R. W., Corneille, O., Rondeel, E. and Witteman, C. (2010). Mood Effects on Dominated Choices: Positive Mood Induces Departures from Logical Rules. *Journal of Behavioral Decision Making*. 25, 74-81.

[54] Spielberger, C. D., Jacobs, G., Russell, S., & Crane, R.S. (1983). Assessment of anger: The state-trait anger scale. *Advances in personality assessment*, *2*, 159-187.

[55] Spielberger, C. D. (Ed.). (2013). *Anxiety: Current trends in theory and research*. Elsevier.

[56] Katkin, E.S.,S.Wiens and A. Ohman, 2001. Nonconscious fear conditioning, visceral perception and the development of gut feelings. *Psychological Science*, 12(5): 366-370.