

Understanding the influence of Age and Income on Psychological Factors in Investment Decisions

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Abstract

The present study is aimed to determining the influence of sociodemographic variables such as age and income on the psychological factors that shape the investment behaviour of an investor. The study has considered three psychological factors that determine the investment behaviour of an investor such as heuristic, prospects and herding variables. The study has adopted survey by questionnaire method for data collection from a sample of 430 investors. The sample was drawn through a proportionate random sampling method. Findings of the study depict that age and monthly income have a positive impact on the heuristic, prospect and herding variables of psychological dimensions. The findings of the study will be helpful to the investment managers and policy makers to educate their clients to make them a successful investor. Besides, fund managers can use this study to design an appropriate product for their clients to maximize their investment return by minimizing the risk. The study has a unique contribution to the literature by empirically analyzing the degree of association between the different psychological variables (heuristics, prospect, and herding) and demographic variables (age and income).

Keywords: Age, income, heuristics, prospect, herding, psychological variables.

Introduction

Today is the age of research, information, science and technology which has tremendously changed all our affairs. Our life is no longer as simple as it used to be few decades ago. Nowadays, information is available at the fingertips of one and all, be it social, political, economic or religious. The information about our business affairs is also freely and fairly available. Despite the loads of information, flooded from all the directions, it is not the cold calculations of financial wizards, fundamental analysis, technical analysis or the widely accepted Markowitz's efficient market hypothesis and stock performance, but the investor's cold psychological calculations and perceived risk behaviour which decisively seem to drive and dictate the future and fortune of the stock market. According to Lawlor (2009), behavioral finance demonstrates how actual behaviour of individuals in financial settings differs from rational behaviour. Typical behavioral bias, related to decision making, includes anchoring, herding, framing, loss aversion, regret, over-reaction, over-confidence and mental accounting. Study of Kahnman and Tversky (1979) explains that representativeness and anchoring heuristics are sometimes present in the decision making of investors in an uncertain situation where the investors use their judgment in order to facilitate the process of dealing with vague and

complicated information. The heuristics mentioned here may lead to some cognitive biases because of the wrong judgment. They also proposed that the prospect theory, which is well known in the behavioral studies in view of the extensive debate of psychological attitude of investors, needs to be used to understand the psyche based investors' behaviors.

The prospect theory replaced the traditionally used theory of utility maximization. The prospect theory holds that attitude of investors is not consistent when dealing with prospects of gain or loss, but will be opposite in these prospects. This inconsistency in the behavior of investors is against the hypothesis of neo-classical finance which states that the investors' attitude is consistent in profit or loss prospects. This prospect theory ultimately became the cause of rendering Nobel Prize to Kahnman and Tversky for their contribution in the field of behavioral finance in 2002 and recently Richard Thaler was given noble prize on rationality in behavioural economics. To study the financial markets, the researchers have adopted the use of behavior approach in order to overcome the lacking of traditional and neo-classical finance approaches. The basic difference between prospect theory and traditional finance theory is that investors who anticipate profits or gains tend to become risk averse in order to stabilize their gains but become risk takers in the anticipation of the losses, whereas as per the traditional theory of finance, investors all the time are risk averse. Riley and Chow (1992) have observed that most of the investors rely on their instincts and emotional biases while taking decision on trading. This is the reason why it is essential to the various elements which influence an investor to take a certain step. Most economic and financial theories claim that humans act and react rationally. They react to the market sentiments, follow their gut feelings and eventually make a decision. Income level of investor is also affects investors behaviour toward investment. A person with greater wealth takes greater risk (Arano *et al.*, 2002). Persons with higher level of income and millionaires tend to take higher risk as than individual with lower level of income (MacCrimmon, and Wehrung, 1986). In light of the above discussions, this paper is aimed to investigate the extent to which demographic factors (age and income) affect an investor's risk tolerance attitude during decision making with the context of Jammu & Kashmir. This study is primary data based collected from various respondents through a questionnaire. The respondents who were interested in investment were interacted from twin cities of J & K i.e. Jammu and Srinagar.

Literature Review

There is a vast body of literature by eminent scholars, psychologists, behavioral scientists and financial experts on different aspects of the behavioral finance (Welch, 2000). Over the past four decades, investment decisions of the investors have been studied in detail to identify the role of various factors that influence the investment decision of investors. The evolution of behavioral finance led researchers to examine the psychological traits of investors and how they influence their investment decision making. Although the investor behaviour was originally assumed to be rational, in the process it has been identified that investor's investment decisions are affected by the series of psychological and behavioral biases (Nunnally, 1978).

Further it was observed that the market factors like price changes, market information, past trends of stocks, customer preferences, over-reaction to price changes and fundamentals of underlying stocks also have their influence on the investment behaviour of investors (Miles and McCue, 1984). Further, different people perceive risk differently, some of them take personal loans and credits, trade risky equities in the stock market, purchase inefficient or risky products, and accept insecure jobs, as they perceive these risks an opportunity for promised high returns (Hanoch *et al.*, 2006). While others sell the promising securities with the threat that they may burn their hands with the decrease in the value of their securities in the market. It is important to note that risk taking is domain-specific.

Heuristics are defined as the rules of thumb, which makes decision making easier, especially in complex and uncertain environments (Ritter, 2003) by reducing the complexity of assessing probabilities and predicting values to simpler judgments (Kahneman and Tversky, 1974). They are the first writers studying the factors belonging to heuristics while introducing three factors namely representativeness, availability bias and anchoring. Representativeness refers to the degree of similarity that an event has with its parent population (DeBondt and Thaler, 1995) or the degree to which an event resembles its population. Representativeness may result some biases such as, investors put too much weight on recent experiences and ignore the average long-term return rates (Ritter, 2003). In financial market, anchoring arises when a value scale is fixed by recent observations. Anchoring has some connection with representativeness as it also reflects that people often focus on recent experience and tend to be more optimistic when the market rises and more pessimistic when the market falls (Waweru *et al.*, 2008). However, when people overestimate the reliability of their knowledge and skills, it is the manifestation of overconfidence (DeBondt and Thaler, 1995). Overconfidence is believed to improve the persistence and determination, mental facility and risk tolerance. In other words, overconfidence can help to promote professional performance. It is also noted that overconfidence can enhance other's perception of one's abilities, which may help to achieve faster promotion and greater investment duration (Oberlechner and Osler, 2004).

Prospect is considered as an appropriate approach to investment decision-making from different perspectives. Prospect Theory describes the different states of mind affecting an individual's decision-making processes including regret aversion, loss aversion and mental accounting (Waweru *et al.*, 2003). Regret is an emotional occurrence after investors make investment decision mistakes. Investors avoid regret by refusing to sell decreasing value shares and are willing to sell the shares that have increased in value (Holdmstrom *et al.*, 1993). Moreover, investors tend to be more regretful about holding losing stocks too long than selling winning ones too soon (Forgel and Berry, 2006; Lehenkari and Perttunen, 2004). Loss aversion refers to the difference level of mental penalty people have from a similar size of loss or gain (Bencivenga *et al.*, 1996). There is evidence showing that people are more distressed at the prospect of losses than they are pleased by equivalent gains (Barberis and Thaler, 2003). Moreover, a loss coming after a prior gain is proved less painful than usual, while as a loss arriving after a loss seems to be more painful

than usual (Bencivenga *et al.*, 1996). Mental accounting is a term referring to “the process by which people think about and evaluate their financial transactions” (Brian and Dowling, 2005). Mental accounting allows investors to organize their portfolio into separate accounts (Barberis and Thaler, 2003; Ritter, 2003). In this research, three elements of prospect dimension i.e. Loss aversion, Regret aversion, and mental accounting are used to measure their impact levels on the investment decision making as well as the investment performance of individual investors.

Herding effect in financial market is identified as the tendency of investors’ behaviors to follow the others’ actions. Practitioners usually consider carefully the existence of herding variables in the decision making. The investors rely on collective information more than the private information that result the price deviation of the securities from fundamental value. Therefore, there are fair chances for investors to attain above normal profits (Hvide, 2002). Academic researchers also pay their attention to herding variables, because of its impacts on the stock price movements and its influence on the attributes of risk and return a model which in turn impacts the asset pricing theories (Tan *et al.*, 2008). In the security market, herding investors base their investment decisions on the masses’ decisions of buying or selling stocks. In contrast, informed and rational investors usually ignore following the flow of masses, and this in turn makes the market more efficient (Jaswani, 2008). In general, herding investors act the same way as prehistoric men do, which had a little knowledge and information of the surrounding environment and live together in groups to support each other and get safety (Caparrelli *et al.*, 2004). Therefore, herding behavior helps investors to have a sense of regret aversion for their decisions. Herding variables are generally applicable to the individual investors as they are not well informed about the stock market, so they feel a sense of safety while following the masses and make investment decisions as the other investors do (Huy, 2010). However, some investors are confident enough and well informed about the investment markets and therefore they do not find any reason to follow the herd behavior however, up to a limited extent (Kaminsky *et al.*, 1999). This type of rational behaviour of investors act as corrections to the security prices movements in the long run at the stock market.

Several studies have been carried out to examine the perceptions of the investors and the investment preferences with regard to gender, age, education, occupation & income. Stendardi (2006) reveals that though personality is a trait that is very dynamic and has a tendency to waiver and change with time, the process is rather slow, takes considerable period of time and is fairly stable in varying situations and circumstances. Bhavani & Shetty (2017) has found a positive impact of demographic variables (gender, age, income, education level) influence the investment decision of the investors. Old people gain investment knowledge and experience, and make better investment Choices (Korniotis and Kumar, 2011). In contrast some researchers found that increasing age of investors caused decrease in risk tolerance. Young investors (less than 30 years old) tend to be more risk tolerant (Evans, 2004). Young investors with a higher level of income invest their funds in more volatile portfolio composed of more volatile stocks (Barber and Odean,

2001; Schooley and Worden, 1999). Investor's risk tolerance is also affected by the level of education, whereas investors with a higher level of education tolerate more to risk (Bhandari and Deaves, 2006; Lewellen, Lease, and Schlarbaum, 1977; Schooley and Worden, 1999). Lewellen et al. (1977) found that investors' age, sex, income and education affect their investment inclinations. Freeman (1979) explored the relationship of earning, investments and age. He opined that individual's investment and earnings increases gradually as his/her age increases. Research studies have examined the effect of demographic factors based on the investors' level of risk tolerance when investors select investment options and the result showed that demographic factors of investors such as academic education, income level, investment knowledge and investment experience affect the investors' level of risk tolerance, but some other factors such as gender, marital status, occupation and family didn't show any effect on investors' level of risk tolerance (Sadiq & Hafiz Muhammad Ishaq, 2014). From these reviews, it is concluded that very few studies have investigated the effect of age and income on the heuristic, prospects and herding variables with collectively form the psychological behaviour of an investor. In light of the above discussions following hypotheses are put forth:

- H1-** There is a significant difference in the investment behaviour of investors towards heuristics across age.
- H2-** There is a significant difference in the investment behaviour of investors towards prospect across age.
- H3-** There is a significant difference in the investment behaviour of investors towards herding across age.
- H4-** There is a significant difference in the investment behaviour of investors towards heuristics across income.
- H5-** There is a significant difference in the investment behaviour of investors towards prospect across income.
- H6-** There is a significant difference in the investment behaviour of investors towards herding across income.

Methodology

Sample and Data Collection

The population for the present study includes the share market investors of Jammu and Kashmir. The survey was conducted using a structured questionnaire, which was directly addressed by the researcher to the respondents. In addition, questionnaires were indirectly forwarded to the respondents via email. A 5-point Likert type scale was used for the sake of uniformity for measuring the variables. The scale was categorized into Strongly Agree (SA), with a value of 5 Agree (A) with a value of 4 Neutral (N) with a value of 3 Disagree (DA) with a value of 2 and Strongly Disagree (SDA) with a value of 1 as proposed by Likerts (1967). In contrast, a list of all the share market brokerage agencies of Jammu and Kashmir was

identified with their respective market share. The sample size was determined on the basis of the following criterion.

- Researchers consider a sample size of 200-500 respondents adequate for most of the social science and management researches (Hill and Alexander, 2000).
- For Structural Equation Modelling (SEM) the criteria of sample size is determined through number of items in the questionnaire i.e. for each item 5 to 10 respondents are adequate (Hair et al., 1998).
- Sample size was also determined on the basis of the sample size formula given by Yamane (1967);
For finite population:

$$SS = N \div 1 - N(e)^2$$

Here, SS = sample size, N = population, e = acceptable sampling error. For current study the N = 5109 at 0.05 significance level, e = 0.05. On the basis of above formula a sample size of 370 was considered. In the light of second criterion sample size of 225-450 is appropriate for this study as 45 statements have been used in the survey instrument. Therefore, taking all the mentioned criteria in consideration, the final sample size of 430 have been fixed for the present study and the sample was drawn through proportionate random sampling technique. The survey was conducted in the two divisions of J&K state i.e., Jammu and Kashmir. The data was collected in Jan 2015 to June 2015.

Reliability Measures of Psychological Factors

Table 1 highlights the examination of reliability analysis of multidimensional Psychological construct across heuristic, prospect and herding variables. For heuristic variable the highest value has been 0.852 for HV1 and the lowest value has been 0.638 for HV3. All the inter item correlation values are above the threshold value of 0.5, the highest correlation value of 0.797 between HV5 and HV1 and the lowest being 0.501 between HV4 and HV3. All the item to item correlation values are above .30 and item to total values are above .50 and Cronbach alpha value is above 0.70. For Prospect variable the highest correlation value of 0.983 between PV4 and PV3 and the lowest value 0.626 between PV3 and PV2. The item to total correlation values are above the threshold limit of 0.5 and the highest value of 0.859 is for PV4 and the lowest value of 0.808 for PV2. Further the Cronbach's alpha value is 0.94 which is above the threshold limit 0.70.

Further all the item to item correlation values of Herding variable are above .30 and the highest correlation value of 0.712 is between HEV4 and HEV1 and the lowest value of 0.626 is between PV3 and PV2. The entire item to total correlation values are above the threshold limit of 0.5, the highest value of 0.716 for HEV1 and the lowest value of 0.507 for HEV3. While as the Cronbach's alpha value is 0.825 which is above the threshold limit 0.70. The examination to the alpha reliability coefficients, inter item correlation and item total correlation of the understudy variables indicate reliability of the Psychological Factors construct. Therefore the reliability analysis of Psychological Factors for stock market investors resulted in a 15-item multidimensional scale which will be subjected to further refinement in the subsequent analysis.

Table 1: Reliability Measures of Psychological Factors

Item to Total Correlation	Item to Item Correlation						Cronbach's Alpha
Heuristic variable	Item Label	HV1	HV2	HV3	HV4	HV5	.900
.852**	HV1	1					
.744**	HV2	.722	1				
.638**	HV3	.550	.509	1			
.738**	HV4	.789	.618	.501	1		
.802**	HV5	.797	.639	.698	.654	1	
Prospect variable	Item Label	PV1	PV2	PV3	PV4	PV5	.940
.857**	PV1	1					
.808**	PV2	.711	1				
.852**	PV3	.823	.626**	1			
.859**	PV4	.841	.632**	.803**	1		
.810**	PV5	.709**	.820**	.630**	.633**	1	
Herding variable	Item Label	HEV1	HEV2	HEV3	HEV4	HEV5	.825
.716**	HEV1	1					
.613**	HEV2	.580**	1				
.507**	HEV3	.559**	.525**	1			
.590**	HEV4	.534**	.574**	.585**	1		
.687**	HEV5	.712**	.567**	.661**	.588**	1	

** . Correlation is significant at the 0.01 level (2-tailed)

KEYWORDS: HV1 to HV5, PV1 to PV5 and HEV1 to HEV5 are the manifest variables of Heuristic Variable, Prospect Variable and Herding Variable respectively.

Socio Demographical Description of Sample

Table 2 provides the composition of sample studies for the present research study. The present study has categorised all the respondents into four groups on the basis of their age. It was observed that 36.28 percent of the respondents fall into the age group of 26 to 40 years. Furthermore, the present study categorised all the respondents into four monthly income groups and 34.65 percent of the respondents fall into the monthly income group of rupees 60,000 to 90,000.

Table 2: Demographic Characteristics of Respondents

Socio-Demographic Variables	Category	Frequency	Percentage (%)
AGE (years)	Below 25 years	125	29.07
	26 years to 40 years	156	36.28
	41 years to 55 years	98	22.80
	Above 56 years	51	11.87
MONTHLY INCOME (Rupees)	Below 30,000	87	20.23
	30,000 to 60,000	103	23.95
	60,000 to 90,000	149	34.65
	Above 90,000	91	21.16

Results and Discussions

The descriptive statistics of stock market investors with respect to Psychological Dimensions across Age presented in the Table 3 reveals statistically significant difference in the perceptual subjective evaluation to Heuristic Variables (HV), Prospect Variables (PV) and Herding Variables (HEV) that are indexed by the high F-value. Therefore, hypotheses H1, H2, and H3 are supported. The mean scores for Heuristic Variables (HV) across all the Age groups range from (2.74 to 3.09) on 5-point Likert scale that indicates they are positively skewed towards HV. However, a high mean value of 3.09 in the Age group of above 55 years could be due to their liaison, sense of belongingness and experience throughout the life which they exhibit while they have to make their investment decisions. Further, the mean scores for Prospective Variables (PV) of Psychological Dimensions are fairly distributed between (3.17-3.26), thus highlighting the moderate positive distribution of investors with respect to the Age. Furthermore, Herding Variables (HEV) mean score were found between 3.41 to 3.68 indicate positive skewness on Psychological Dimensions. However, a high mean value of 3.68 in the age group of 25-40 years could be due the interactions and influence of their colleagues which they exhibit while they make their investment decisions. Although, the statistical difference in the means scores is well evident from the p-values, yet further explanation and clarification regarding the magnitude mean differences were required due to small mean differences between the groups and lower F-values. This need was met by the application and interpretation of effect size of observed mean differences. The effect size using eta square indicates the large difference in the mean score across the different age groups. The eta square of HV (0.860), PV (0.103) and HEV (0.841), indicates statistically large differences in the mean scores. Thus, advocates the need for further exploration of underlying homogeneity and heterogeneity among various age groups.

Table 3: Descriptive Statistics of Psychological Dimensions across Age

Age (Years)	Heuristic variables		Prospect variables		Herding variables	
	Mean	SD	Mean	SD	Mean	SD
Below 25	3.00	0.80	3.17	0.80	3.46	0.85
25-40	2.94	0.87	3.26	0.71	3.68	0.88
40-55	2.74	0.89	3.26	0.82	3.56	0.81
Above 55	3.09	0.74	3.17	0.87	3.41	0.75
F-value	4.63		8.26		8.46	
p-value	.000		.000		.000	
Effect size	.860		.103		.841	

*Note: For all tables from 5.11 to 5.48, * Significant at 99% confidence level ($P \leq .01$),
** Significant at 95% confidence level ($P \leq .05$) and SD means standard deviation*

Homogeneity of Psychological Dimensions based on the Age

The results from the post hoc test using turkey's method of multiple group comparison have been presented in the Table 4. It furnishes the empirical evidence to the existence of two homogenous subsets for each significant psychological domain. The test classifies age into two significant groups with reference to Heuristic Variables (HV), Prospect Variables (PV) and Herding Variables (HEV). Therefore, it is clearly evident that the investors in the age group of 40-55 years were relatively less sensitive towards Heuristic Variables (HV) than the respondents of below 25 years and above 55 years that were highly affected by Heuristic Variables (HV). However, respondents in the Age group of 25-40 years were moderately affected by Heuristic Variables (HV). Further homogeneity of Prospect Variables (PV) re-enforces the fact the investors in the age group of below 25 years and above 55 years were least affected by Prospect Variables (PV), while investors in the age group of 25-40 years and 40-55 years were highly affected by Prospect Variables (PV). Similarly, respondents in the age group of above 55 years and below 25 years were least affected by Herding Variables (HEV) whereas respondents in the age group of 40-55 years and 25-40 years were highly affected by the Herding Variables (HEV) for making their investment decisions.

Table 4: Homogeneity of Psychological Dimensions based on the Age

Age (Years)	Subset for alpha =0.05							
	Heuristic variables		Age (Years)	Prospect variables		Age (Years)	Herding variables	
	1 st Group	2 nd Group		1 st Group	2 nd Group		1 st Group	2 nd Group
40-55	2.74		Below 25	3.17		Above 55	3.41	
25-40	2.94	2.94	Above 55	3.17		Below 25	3.46	3.46
Below 25		3.00	25-40		3.26	40-55		3.56
Above 55		3.09	40-55		3.26	25-40		3.68

The ANOVA result presented in the Table 5 exhibit statistically significant differences across Heuristic Variables, Prospect Variables, and Herding Variables (HEV) of Psychological Dimensions with reference to Monthly Income of stock investment investors indexed by the high F- value. Therefore, hypotheses H4, H5, and H6 are supported. The mean score for Heuristic Variables across all the income groups range from 2.82 to 3.26 on 5-point Likert scale, which indicate that they are positively skewed towards Heuristic Variables. Further, descriptive statistics reveals that the mean score of 3.26 was highest for the income group above Rs. 90,000, while as the lowest for income group with less than Rs. 30,000, which can be attributed to the sense of fulfillment of basic needs and availability of funds in abundance. Similarly, the mean scores for Prospect Variables of psychological dimensions are fairly distributed from 3.05 to 3.30 highlighting the moderate Prospect Variable of Psychological Dimensions of investors with respect to the Monthly Income of investors. Further, Herding variables of Psychological Dimensions mean score have been found between the ranges of 3.46 to 3.61, which indicate that they are positively skewed towards psychological dimensions.

Although, the statistical difference in the mean scores is well evident from the p-value, yet further explanation and clarification regarding the magnitude of mean differences were required. This need was met by the application and interpretation of effect size of observed mean differences. The effect size using eta square indicates small difference in the mean score across the different Educational Qualification groups. The eta square of Heuristic Variables (0.031) and Prospect Variables (0.021) and Herding Variables (0.024) indicate statistically small differences in the mean scores of investor's.

Table 5: Descriptive Statistics of Psychological Dimensions across Monthly Income

Monthly income (Rupees)	Heuristic variables		Prospect variables		Herding variables	
	Mean	S D	Mean	SD	Mean	SD
Less than 30,000	2.82	0.83	3.19	0.73	3.61	0.87
30,000 to 60,000	2.86	0.75	3.30	0.78	3.46	0.88
60,000 to 90,000	2.95	0.88	3.23	0.81	3.57	0.78
Above 90,000	3.26	0.89	3.05	0.79	3.58	0.81
F-value	3.96		3.36		3.34	
p-value	.002		.010		.002	
Effect size	.031		.020		.024	

Homogeneity of Psychological Dimensions based on Monthly Income of Investors

The results from the post hoc test using the Tukey's method of multiple group comparison as presented in the Table 6 furnishes empirical credence to the existence of two homogenous subsets for Heuristic Variables (HV) and Prospect Variables (PV) while as only one set for Herding Variables (HEV) of Psychological Dimensions of investors. Further, it exhibited that the group with less than Rs 30,000 are less sensitive towards Heuristic Variables unlike the group having income Rs 30,000 to 60,000 which are significantly affected by Heuristic Variables, while as the group having income between Rs 60,000 to Rs 90,000 were moderately affected by Heuristic Variables. Further, the homogeneity of Prospect Variables reinforces the fact that the group having income of above Rs. 90,000 were least effected by Prospect Variables, while as the group having income between Rs 30,000 to 60,000 and Rs 60,000 to 90,000 were significantly affected by Prospect Variables. Similarly, the group having monthly income of less than Rs.30000 were least affected by Prospect variables. While as all the groups with different income categories were found equally affected by Herding Variables of psychological dimensions.

Table 6: Homogeneity of Psychological Dimensions based on Monthly Income

Monthly Income (Rupees)	Subset for alpha =0.05				
	Heuristic Variables	Monthly Income	Prospect Variables	Monthly Income	Herding

			(Rupees)			(Rupees)	variables
	1st Group	2nd Group		1st Group	2nd Group		1st Group
Less than 30,000	2.82		Above 90,000	3.05		30,000 to 60,000	3.46
Above 90,000	2.86		Less than 30,000		3.19	60,000 to 90,000	3.57
60,000 to 90,000	2.95	2.95	60,000 to 90,000		3.23	Above 90,000	3.58
30,000 to 60,000		3.26	30,000 to 60,000		3.30	Less than 30,000	3.61

Conclusion and Implications

Considering the above analysis and the subsequent discussions, it is concluded that there is a significant association between socio demographic (i.e. age and monthly income) and psychological variables in the investment decision. The results have shown that investor's age positively influences all the three dimensions of psychological variables such as heuristics, prospects and herding. The higher age investors make more rational decisions as compared to lower age consumers as revealed from the mean scores. It is clearly evident from the post hoc statistics that the investors in the age group of below 25 years and above 55 years are highly affected by Heuristic Variables (HV). Further investors in the age group of 25-40 years and 40-55 years were highly affected by Prospect Variables (PV). Similarly, respondents in the age group of 40-55 years and 25-40 years were highly affected by the Herding Variables (HEV) for making their investment decisions. The results have also shown that investor's monthly income positively influences the heuristic, prospects and herding variables. After the application of Tukey's homogeneity test it was revealed that investors in the income group Rs 30,000 to 60,000 are significantly affected by Heuristic Variables, Further, the homogeneity of Prospect Variables reinforces the fact that the group having between Rs 30,000 to 60,000 and Rs 60,000 to 90,000 are significantly affected by Prospect Variables. Similarly, all the groups with different income categories were found equally affected by Herding Variables of psychological dimensions. Hence, the investors with higher age and income prefer to invest more in the stock markets as compared to lower age and income consumers.

Findings of this study will be useful to investment analysts to know the importance of age and income in determining their investment behaviour. Furthermore, this study is also assist the investment analysts, broking firm, bank executives and investment managers to educate their clients to make them a successful investor. Besides, fund managers can use this study to design an appropriate product for their clients to maximize their investment return by minimizing the risk. The study will also assist the policy makers and managers of companies in identifying the different age and income groups and segments of investors that will appeal the identified psychological dimensions (heuristics, prospects and herding), in an attempt to make the investment climate and the market environment friendly and attractive to the investors.

Future Research Scope

In this study, age and income are the only demographic factors taken to find out its influence on investors' investment behaviour. Other demographic factors have not been considered in the study. The other demographic factors such as level of education, prior experience, gender, etc., and their influence of individual's investment behaviour is being a promising area of future research related to this topic.

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