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Role of Personality Traits and Perceptive Factors in Determining Stock Market Investment Intentions

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ABSTRACT

The present study intends to comprehend the stock market investment intention among individuals. The **purpose** of the study is to assess the role of perceptive factors, including subjective norms, attitudes and perceived behavioural control, in relation to individual personalities and the theory of planned behaviour. In this regard, the study adopts a quantitative approach with the help of the PLS-SEM technique to predict relationships between variables. The responses were collected through a structured questionnaire from individuals with or without trading experience in the stock market. The key findings indicate a positive impact of perceptive factors on individual investment intentions. Furthermore, it was found that personality characteristics influence individual investment intentions, while gender and age moderately influence the relationship of intuitive factors and personality traits with investment intent. Overall, the study contributes to the individuals' perception regarding Indian stock market investments. Hence, the findings are crucial for governments, investment businesses and financial intermediaries to propel stock market participation and investment.

Keywords: personality traits; big-five; theory of planned behaviour; investor behaviour; stock market investment

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INTRODUCTION

The constantly changing scenario in global financial markets has changed individual investors' outlook on traditional finance. Fama [1] discussed that traditional finance operates on the efficient market hypothesis, presuming information-efficient financial markets and rational investors. However, in reality, investors follow the rule of thumb instead of optimization [2]. This contradiction created a revolutionary shift in research and practice, where conventional finance took a leap to behavioural finance. Behavioural finance focuses on individuals' irrational behaviour in the market owing to the concepts and myths of traditional finance, psychology, and neuroeconomics [3].

Financial markets are competitive, offering flexible investing options among various financial assets and obtaining liquefiable returns from the invested capital [4]. However, stock market investment has always been a challenging decision which demands a rational thought process [5, 6]. Hoffman and Post [7] found that individual investors struggle to align their anticipated returns with their risk tolerance. Nearly 30% of investors think they can make prudent decisions yet fall short of achieving their investment objectives [8]. Hence, it is essential to

comprehend what influences their investment intentions in the stock market. The discussion concerning individual investment decisions has been polarized by numerous scholars [9–13]. However, limited studies have been done on Indian investors' intentions to invest in financial markets [14, 15].

It has been noted that despite the advancements in the financial markets, most Indian consumers have significantly less stock market participation [16]. According to 2021 World Bank data, India is the top 20 saver nation, with a 30% savings rate as a percentage a percentage of GDP, the majority of which is accumulated in bank deposits, physical assets, and currency [17]. In a survey sponsored by the Securities and Exchange Board of India [18] on investment and savings behaviour, it was found that 15% of the total urban Indian households only invested in securities markets, and the remaining are more inclined towards less risky assets like bank deposits, post office schemes, insurance, etc. It has also been observed that the major roadblock is a lack of awareness among investors regarding key instruments. Thus, it becomes more important to study the rationale behind this context. The present study attempts to comprehend investor intentions in the Indian financial

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markets, one of the largest developing economies. In addition, with the aim of understanding the investor behaviour in stock markets, this research also studies those individuals who can be potential investors. This research is an extension to understand the relationship between perceptive factors and social traits and the individual intention to invest [14, 19, 20].

LITERATURE REVIEW

Investment Intentions and Perceptive Factors

According to I. Ajzen [21], the theory of reasoned action asserts that behavioural intentions are insightful and can predict an individual's inclination to behave in a particular manner. The theory of planned behaviour extends the theory of reasoned action, which states that intentions and perceived behavioural control can predict an individual's behaviour [22, 23]. Behavioural intentions work with three critical, independent conceptual frameworks: attitude, subjective norms, and perceived behavioural control [24]. The theory of planned behaviour (TPB) proposes that individual intention precedes behaviour and has been widely used in studies related to behavioural domains [25].

Subjective Norms

The theory of planned behaviour postulates that individuals who are likely to invest in stock markets are influenced by their close peers or family [26]. Further, it creates social pressure on an individual to perform or not perform a specific behaviour in a given situation [22]. While understanding financial choices in family firms, family norms for external debt and equity positively and significantly affect behavioural intentions [27]. Social investors find a stock market investment more attractive when their peers participate [28]. While studying Indian stock markets, it was found that subjective norms show a weak positive effect on investment intention [29]. Thus, the perceptive factor, a subjective norm springing from acquaintances, influences the investment intention of an individual, proposing the following hypothesis:

H1: Subjective Norm positively impacts individual investment intentions towards the stock market.

Attitudes

Attitude is an individual's psychological and cognitive behaviour while assessing a particular aspect and

evaluating the favourable or unfavourable outcomes [30]. A positive attitude will lead to a stronger behavioural inclination, whereas a negative attitude will provide a weaker preference [15]. Sin-Hui et al. [31] identified attitude as the most substantial TPB variable to describe the intentions of accounting practitioners concerning earning management. Attitude towards risk impacts investment behaviour, creating specific behavioural aspirations for different risk-intolerant levels [32]. Further, while studying the theory of planned behaviour in the Indian stock market, investors' attitudes partially mediate the relationship between financial knowledge and investment intentions [33]. Based on the arguments, the attitude of individual investors influences their investment intentions, proposing the following hypothesis:

H2: Attitude positively affects individual investment intentions towards the stock market.

Perceived Behavioural Control

The theory of planned behaviour presumes that perceived behavioural control explains the perception of whether an individual has possession of the required resources, ability, or opportunity to perform a behaviour [34]. Various studies were done under the pretext that perceived behavioural control influences the behavioural intentions of individual investors [35, 36]. Mahastanti & Hariady [37] identified perceived behavioural control and risk preference as influencing the intent of potential female investors to purchase financial products. While understanding the factors influencing the adoption of future products, perceived behavioural control indicates a strong association with investment intentions [38]. Thus, the study proposes the following hypothesis:

H3: Perceived Behavioural Control (H1c) positively impacts individual investment intentions toward the stock market.

Subjective Norms and Attitude

Various studies have found a direct influence of subjective norms on the attitude of individual investors [39, 40]. Shanmugham and Ramya [41] identified a significant effect of various social factors, including media, the Internet and social interactions, on the attitudes towards trading. This research

evaluates the individual investment intentions in the Indian stock market, where most individual investors are easily affected by others' opinions and the media. In India, the stock market is widely discussed across various media channels, which descriptively provide knowledge and analysis of the stock market. The opinions of peers and financial professionals will influence whether investing or not in stocks is a wise decision for an individual. Thus, the study proposes the following hypothesis:

H4: Subjective Norm positively influence an individual's attitude toward stock market investment intentions.

Investment Intentions and Personality Traits

Personality is a distinct representation of how individuals feel, think, and behave [42]. Multiple researchers, including Raymond Cattell, Donald Fiske, Norman, Smith, Goldberg, McCrae & Costa, have conducted various empirical studies to contract personality attributes [43]. The Big Five Traits taxonomy can be identified by addressing five personality dimensions: extroversion, openness to experience, conscientiousness, emotional stability and agreeableness [44]. Numerous studies have suggested that personality traits can anticipate the purview of human behaviour, preference and effects [20, 45, 46]. Pak and Mahmood [47] found that these attributes affect individual investors' risk tolerance behaviour, ultimately impacting their investment decisions in the financial market.

While studying the perceptions of individual investors and their decisions regarding various investment opportunities, it has been found that anxious people are sensitive to high risk and tend to save more and avoid investment. In contrast, independent and extroverted individuals lean more toward making investments [48]. Researchers have examined various psychological antecedents related to investment intentions and proposed that extroverted individuals have more intentions to invest in the short-term. In contrast, individuals with higher neuroticism and risk aversion avoid investing in short-term investment opportunities [19]. Conscientious, open to experience, and agreeable individual investors carry long-term investment intentions, whereas risk-averse individuals avoid them [49]. This study will extend the literature on how different personality characteristics influence

individual intentions to invest. Subsequently, the following hypothesis is proposed:

H5: Extroversion (H5a), Agreeableness (H5b), Conscientiousness (H5c), Emotional Stability (H5d) and Openness to Experience (H5e) significantly influence individuals' stock market intentions.

Moderating roles of Demographic Factors (Age & Gender)

Several researchers have examined various demographic factors affecting the investment decisions of individuals. It has been found that males are more overconfident than females and often underperform while indulging in excessive trading [50]. While designing a practical application for behavioural finance, women are more risk-averse than men [51]. Various personality traits and emotional intelligence significantly affect the risk tolerance level of males and females [52]. A diverse relationship has been found between different age groups when making an investment decision [53]. It has also been found that risk aversion falls with age, increases until five years before retirement, and then rises again with age [54]. Therefore, the research proposes the following hypothesis to study the moderating role of gender and age:

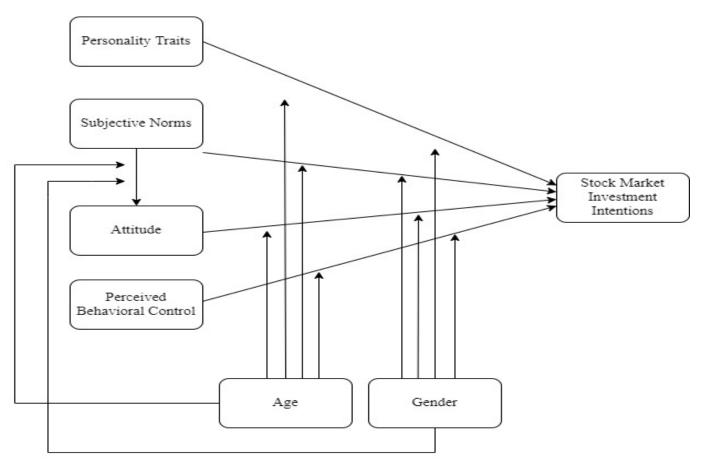
H6: Gender (H6a) and Age (H6b) moderate the relationships between the personality of an individual investor, intuitive factors, and stock market investment intention.

Figure 1 represents the Conceptual Framework for the study. This framework will help to understand factors influencing Stock Market Investment Intentions.

RESEARCH DATA AND METHODOLOGY

Sample and Data Collection

The target population for the present study is individual investors who are 20 years of age and older and eligible to do stock market trading in India with or without prior trading experience. A solicited questionnaire is better for a dispersed population to understand their personal opinions; thus, a well-structured questionnaire was designed. Individual participants from the National Capital Region (NCR), India were approached randomly, and questionnaires were distributed via phone and e-mail using purposive and convenience sampling techniques. In order to



 ${\it Fig.\,1}.$ Conceptual Framework for Studying Stock Market Investment Intentions

prevent sampling errors and ensure the predictability and validity of the research, G* Power Software is a statistical power analysis program used to estimate the sample size and conduct power analyses [55]. With the help of G* Power Software V 3.1.9.7, the minimum sample size was estimated at 160 respondents at 0.80 power at a 0.05 confidence level [56]. For this study, nearly 483 participants were approached with the questionnaire, out of which 422 responses were received, with twelve incomplete responses. At last, 411 responses were found valid [57], with an effective response rate of 85.09%.

Measurement of the variables

The first section of the research survey explained the aim of the study and provided directions for completing the survey. The second section was designed for respondents to submit demographic data. The third section included a research tool with items studied through a seven-point Likert scale, with one being "Strongly Disagree" and seven being "Strongly

Agree". Various exogenous and endogenous variables, along with their latent variables, were adapted from previous studies. Some items were modified in the Indian context for better research analysis. The research is analyzed through the Partial Least Squares — Structural Equation Model (PLS-SEM) with the help of SmartPLS software.

The proposed model for this study includes five variables. The big five-factor model is the most commonly used personality model for research [58]. Romeros et al. [59] suggested that a compact version of the big five personality scale might save research costs, boost participation, and simplify survey administration. In this study, personality traits are measured through a Ten-Item Personality Inventory (TIPI) measure, which is adapted from the study of Gosling, Rentfrow, & Swann [60]. This research examined the cognitive constructs of TPB adopted from the previous work of Taylor and Todd [61] & Elliot and Ainsworth [24] and modified the items to align with the study [3, 4]. For the dependent variable, i.e., the investment intention of individual investors,

Demographic Information

	Characteristics	Frequency	Percentage	
Condor	Male	217	52.8%	
Gender	Female	194	47.2%	
	20-30 years	324	78.8%	
Ago	30-40 years	57	13.9%	
Age	40-50 years	14	3.4%	
	50-60 years	16	3.9%	
	Diploma	18	4.4%	
Educational Qualification	Graduate	115	28.0%	
	Post-graduate	278	67.6%	
Marital Status	Married	127	30.9%	
Marital Status	Unmarried	284	69.1%	
T. P. E.	Yes	168	40.9%	
Trading Experience	No	243	59.1%	

Source: Compiled by the authors.

four items were used for measurement, adapted from the work of Lim, Soutar, & Lee [62].

RESULTS

Demographic Profile

Table 1 summarizes the demographic profile of the survey respondents. Of 411 respondents, 52.8% were male, and 47.2% were female. A total of 78.8% lie in the age group of 20–30 years, 13.9% were in 30–40 years, 3.4% in 40–50 years and 3.9% respondents were from the 50–60 years age group. Most of the respondents were post-graduates (67.6%), followed by graduates (28%) and the rest were diploma qualified (4.4%). Respondents who had trading experience in the stock market stood at 40.9% while 59.1% did not have any trading experience.

DATA ANALYSIS VIA PLS-SEM

Measurement Model

The measurement model is assessed by examining the reliability of the item, internal consistency, and discriminant validity [63]. *Table 2* shows the 28-indicators with their factor loadings in the measurement model. Cronbach's alpha is applied

to determine internal consistency for a detailed reliability check. The value of Cronbach's alpha is within the acceptable limit of 0.7 and above [64]. Furthermore, the internal consistency and composite reliability (CR) of the latent variables are analysed to ascertain the convergent reliability of the constructs, which is between 0.79 and 0.95, exceeding the threshold value of 0.7 [65]. Thus, CR is assured. Additionally, to determine convergent validity, the average variance extracted (AVE) is calculated and is higher than 0.5, which is considered adequate [65, 66].

Discriminant validity is determined to evaluate the degree to which the constructs are different from others [67]. According to Fornell and Larcker [65], to determine discriminant validity, the AVE square root of an identified construct should be greater than the inter-construct correlation in a measurement model, as shown in *Table 3*. The value of the square root of AVE (*in italics*) is greater than the inter-construct correlation. *Table 4* illustrates the Heterotrait-Monotrait ratio (HTMT ratio) to ascertain the discriminant validity of the constructs, which are under the required threshold of 0.85 [68]. Therefore, the results of the discriminant validity analysis are accepted.

Table 2

Standard Loadings of the Measurements

Constructs	Items	Outer Loadings	AVE	Composite Reliability	Cronbach's Alpha	
Extroversion (EX)	I find myself extraverted and enthusiastic	0.977	0.717	0.831	0.786	
, ,	I am reserved and quiet®	0.692				
	I am critical and quarrelsome®	0.971				
Agreeableness (AG)	I am sympathetic and warm to others	0.791	0.784	0.878	0.766	
Conscientiousness (CT)	I am dependable and self- disciplined	0.913	0.743	0.852	0.764	
	I am disorganized and careless®	0.807				
Emotional Stability (ES)	I am anxious and quickly get upset®	0.799	0.742	0.851	0.765	
	I am calm and emotionally stable	0.919				
Openness to Experience (OE)	I am open to new experiences	0.981	0.674	0.798	0.727	
openiness to Expendence (OE)	I am conventional and uncreative®	0.621	0.074	0.770	0.727	
	I will participate in stock markets if: • My colleagues do	0.775				
	The media promote	0.842			0.845	
Subjective Norm (SN)	 The senior management agrees 	0.742	0.608	0.886		
	My family approves	0.777				
	The Government and experts encourage	0.760				
	Investment in the stock market increases the financial knowledge of an individual	0.754			0.044	
	Stock market investment is a smart choice 0.827		0.44			
Attitude (AT)	I perceive stock market investment as substantial	0.882	0.644	0.900	0.861	
	Stock market investment is a fresh concept	0.688				
	I enjoy trading in the stock market	0.848				
	I generally have the information required to invest in the stock	0.910				
Perceived Behavioural	market I invest in the stock market for a significant amount of time	0.956	0.758	0.924	0.886	
Control (PBC)	I invest in the stock market and put forth more effort	0.948	0.730	0.721		
	I have enough money to make stock market investments 0.624					
	I aim to invest in the stock market	0.922				
	I endorse investing in the stock market and will advise others to do the same	0.870		0.951	0.932	
Investment Intentions (IN)	I will keep on investing in the stock market	0.960	0.831			
	I can cope with the disruptions brought on 0.892 the stock market trading	0.892				

Table 3

Discriminant Validity of the Measurements

	EX	AG	ст	ES	OE	SN	AT	PBC	IN
EX	0.720								
AG	0.593	0.756							
СТ	0.524	0.729	0.765						
ES	0.523	0.601	0.517	0.773					
OE	0.650	0.662	0.668	0.588	0.807				
SN	0.193	0.012	-0.006	0.004	0.023	0.78			
AT	0.162	-0.020	0.089	0.045	0.073	0.53	0.803		
PBC	0.180	-0.025	0.080	0.020	0.067	0.363	0.645	0.87	
IN	0.174	-0.019	0.102	0.078	0.098	0.471	0.778	0.659	0.911

Source: Compiled by the authors.

HTMT Ratio

Table 4

	EX	AG	ст	ES	OE	SN	AT	PBC	IN
EX									
AG	0.409								
СТ	0.486	0.193							
ES	0.447	0.181	0.635						
OE	0.400	0.442	0.534	0.525					
SN	0.289	0.116	0.143	0.121	0.062				
AT	0.219	0.142	0.117	0.101	0.130	0.570			
PBC	0.251	0.082	0.160	0.069	0.095	0.373	0.704		
IN	0.207	0.074	0.149	0.140	0.129	0.472	0.605	0.714	

Source: Compiled by the authors.

Structural Model Assessment

The structural model assessment is based on four parameters, including examination of multicollinearity, structural model relevance, and determination of coefficient (R²) [69]. Collinearity is evaluated by assessing the Variation Inflation Factor (VIF) with the help of latent constructs. According to Hair et al. [67], the value of VIF should not exceed 5 for the data to

follow collinearity. In the present study, no issue of multicollinearity is found, as the VIF values obtained are EX (1.484), AG (1.302), CT (1.435), ES (1.185), OE (1.700), SN (1.428), AT (2.168) and PBC (1.729).

After a successful collinearity check, the significance of the constructs is determined using bootstrapping techniques [67]. *Table 5* represents the results of path coefficients and t-statistics through bootstrapping

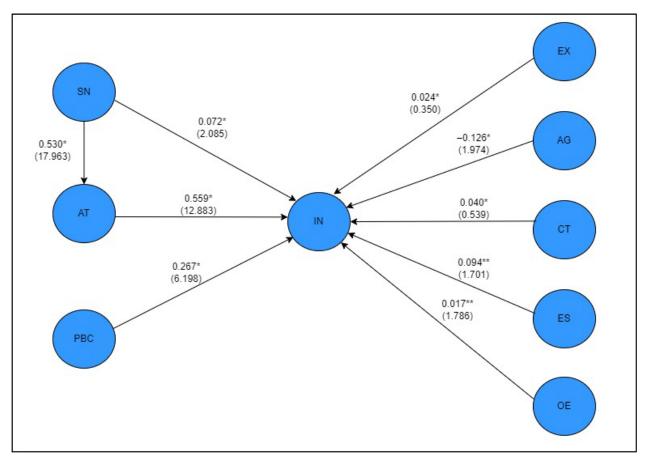


Fig. 2. PLS-SEM Full Model with Path Coefficient and t-Statistics (p < 0.05*, p < 0.10**)

5000 random cases. *Figure 2* shows the structural model results using Partial Least Squares (PLS) analysis with standardized path coefficients and summarizes the PLS analysis of the structural model with t-test statistics. Post-hypothesis testing, the coefficient of determination (R²) is calculated, and the results are satisfactory [70], as shown in *Table 6*.

DISCUSSIONS AND IMPLICATIONS

Discussions Hypotheses Testing

Table 5 represents the path coefficient value and results of the hypothesis. The results support the hypotheses H1, H2 and H3, showing a positive and significant impact of SN, AT and PBC on IN (H1: t=2.085, p<0.05; H2: t=12.883, p<0.05; H3: t=6.198, p<0.05). SN has also shown a significant and positive effect on AT (H4: t=17.963, p<0.05). Thus, the results support hypotheses H4. While talking about the effect of personality traits on investment intentions, ES and OE have a significant

and positive impact on IN (H5d: t=1.701, p<0.10; H5e: t=1.786, p<0.10), while AG has a significant and negative impact on IN (H5b: t=1.974, p<0.05). For testing further hypotheses (H6a and H6b), partial least squares — multi-group analysis (PLS-MGA) is done.

This research confirms the role of personality traits and perceptive factors in determining individual stock market investment intentions. It expands the knowledge of individual investment behaviour rather than sticking to fundamental or traditional theories. This study provides empirical evidence demonstrating individual investors' intentions in the stock market by revalidating TPB. The findings suggest that perceptive factors, including subjective norms, attitudes, and perceived behavioural control, positively and significantly influence the stock market investment intentions and align with the work of Ibrahim and Arshard's [71]. Investment firms can introduce mobile applications and financial analysis software to promote new and innovative portfolio management techniques. Investment organizations or security firms can also

Table 5
Results of Hypothesis Testing. ** and * Represents a Significant Level at 5% and 10% (Two-Tailed Test)

	Hypothesis	Path Coefficients	t-Value
H1	SN->IN	0.072	2.085*
H2	AT->IN	0.559	12.883*
НЗ	PBC->IN	0.267	6.198*
H4	SN->AT	0.530	17.963*
H5a	EX->IN	0.024	0.350
H5b	AG->IN	-0.126	1.974*
H5c	CT->IN	0.040	0.539
H5d	ES->IN	0.094	1.701**
H5e	OE->IN	0.017	1.786**

Coefficient of Determination (R2)

Table 6

Variables	Coefficient of Determination (R ²)			
AT	0.288			
IN	0.657			

Source: Compiled by the authors.

Table 7
Result of PLS-MGA.* and ** Represent a Significant Level at 5% and 10% (Two-Tailed Test)

	Path Coefficients		Candan	Path Coe	A	
Variables	Male	Female	Gender Differences	Below 40 years	Above 41 years	Age Differences
SN->IN	0.124	0.091	0.657	0.071	-0.234	0.057**
AT->IN	0.76	0.255	0.000*	0.536	0.549	0.939
PBC->IN	0.076	0.535	0.000*	0.258	0.249	0.963
SN->AT	0.473	0.667	0.000*	0.498	-0.805	0.000*
EX->IN	-0.091	0.03	0.328	-0.017	-0.09	0.774
AG->IN	-0.014	-0.237	0.191	0.045	-0.139	0.552
CT->IN	-0.076	0.204	0.064**	-0.007	0.213	0.49
ES->IN	0.009	0.076	0.603	0.067	0.009	0.777
OE->IN	0.182	0.012	0.32	-0.02	-0.079	0.866

Source: Compiled by the authors.

influence an individual's perception of participating in stock market trading by providing accurate information and efficient infrastructure and technology. More media reporting will help promote the stock market, which will escalate an individual's investment intention. The empirical results of this study also indicate that subjective norms positively affect an individual's attitude towards stock market investment. It implies that individual opinions will also turn positive towards stock markets if their family or peers participate in trading.

The result also suggests a positive and significant association between personality traits like emotional stability and openness to experience and the investment intentions of individual investors in the stock market. However, agreeableness negatively impacts investment intentions. These results extend the work of Aren & Nayman [72]. As every individual carries different characteristics, the social trait of being emotionally stable and open to new experiences positively boosts the intention to invest. Investment organizations may seek happy individuals who are excited about new opportunities and can invest more time and energy participating in stock markets. Besides expecting investors to develop efficient portfolios, a financial adviser might ask for preferences and build a behavioural portfolio based on their personality attributes.

Multi-group Analysis using PLS

PLS-MGA has been suggested as a practical approach to study group comparison research [70]. The current research examines the moderating effect of Gender and age through PLS-MGA using SmartPLS. The Gender is divided into male and female, while the construct age is categorized into below 40 and above 41 to compensate for the unequal age distribution of the sample. The findings of PLS-MGA are summarized in *Table 7*. The group difference of path coefficients of the male and female groups is significant and, thus, moderates the relationship between AT and IN, PBC and IN, and SN and AT at p < 0.05. The findings also suggest that Gender moderates the association of CT and IN at p < 0.10. Thus, H6a is partly supported. The path coefficient difference of age category significantly moderates two relationships, including SN and IN at p < 0.10 and SN and AT at p < 0.05. Consequently, H6b is partly supported. This study tries to understand the moderating effect of demographic factors, i.e., Gender

and age, on the relationship between perceptive variables and traits with individual investment intentions. The empirical results extend the research work of Mayfield et al. [20] and Barber & Odean [12]. The research findings suggest that males form an attitude toward their investments; in contrast, females have a perceived difficulty while investing and develop attitudes towards their investments based on social pressure.

A substantial influence of Gender is also seen between conscientiousness and investment intentions, suggesting that females are more anxious and conscientious regarding their investments when compared with males. Furthermore, the results suggest a difference in the impact of an investor's age on their intent to invest. It was found that young investors have a positive intent to invest in the Indian stock markets. However, they are swayed away by social pressure and develop an attitude of their own. In contrast, older investors are experienced and are not influenced by social anxiety. The policymakers can deliver a clear-cut fair-trading process with transparent corporate details to enhance individuals' stock market trading experience. As a result, the government and financial intermediaries should work more to rebuild investor confidence, develop better attitudes toward investing, consequently booming the stock market.

CONCLUSION

The traditional finance theories state that investors make their choices rationally and maximize their utility [1]. Whereas behavioural finance research works on the premise that investors behave irrationally and proposes various models to understand investment decision-making. This research examines the association between individual investors' perceptions, their personalities, and the effect on stock market investment intentions. The results show a significant effect of perceptive factors on the investment intentions of individuals. It also suggests that personality traits like agreeableness, emotional stability, and openness to experience influence an individual's investment intentions.

The study found a meaningful moderating role of socio-economic factors like age and Gender on the association of perceptive factors, personality traits and investment intentions. The research will help the media report about the stock market and escalate new government policies to promote the same in a way that will induce an individual's intention to invest. Accordingly, if investment firms and policymakers consider these implications to promote participation and investment in the stock market, they can change individual investors' perceptions about the Indian stock market. These measures will make it easier for businesses to obtain low-cost financing, resulting in long-term growth.

OF STUDY

The findings of this survey may not be universally applicable because it was conducted in limited parts of India, with respondents aged 20 and above who earn a salary or have investment income, including

those with and without stock trading expertise. Although the questionnaires are disseminated to be proportional to the demographic background, more empirical variation in other geographic locations and settings, such as Asia and Western countries, will broaden the scope of the current study's applicability. Furthermore, it is observed that the data is not proportionally distributed among different age-groups. Future studies might focus on the effects of the Big Five personalities and intuitive factors on other financial decision-making processes, such as herding, disposition effects, and ability heuristics. Finally, this research thoroughly examines people's intent to participate in stock markets, and the research model may be used as a theoretical framework for future sustainable development research.

REFERENCES

- 1. Fama E.F. Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*. 1970;25(2):383–417. DOI: 10.1111/j.1540–6261.1970.tb00518.x
- 2. Jain J., Walia N., Gupta S. Evaluation of behavioral biases affecting investment decision making of individual equity investors by fuzzy analytic hierarchy process. *Review of Behavioral Finance*. 2020;12(3):297–314. DOI: 10.1108/RBF-03-2019-0044
- 3. Albaity M.S., Rahman M. Gender, ethnicity, and religion and investment decisions: Malaysian evidence. *Journal of Sociological Research*. 2012;3(2):502–519. DOI: 10.5296/jsr.v3i2.2649
- 4. Akhtar F., Das N. Predictors of investment intention in Indian stock markets: Extending the theory of planned behaviour. *International Journal of Bank Marketing*. 2019;37(1):97–119. DOI: 10.1108/IJBM-08–2017–0167
- 5. Muhammad N.M., Abdullah M. Investment decision-making style: Are Malaysian investors rational decision makers. *Interdisciplinary Journal of Contemporary Research in Business*. 2009;1(3):96–108.
- 6. Rubaltelli E., Pasini G., Rumiati R., Olsen R.A., Slovic P. The influence of affective reactions on investment decisions. *Journal of Behavioral Finance*. 2010;11(3):168–176. DOI: 10.1080/15427560.2010.507409
- 7. Hoffmann A.O.I., Post T. How return and risk experiences shape investor beliefs and preferences. *Accounting & Finance*. 2017;57(3):759–788. DOI: 10.1111/acfi.12169
- 8. 2016 Global survey of individual investors. Paris: Natixis Global Asset Management; 2016. 28 p. URL: https://www.fa-mag.com/userfiles/stories/whitepapers/2016/June/Individual-Investor-Survey-2016_white_paper-052516c.pdf (accessed on 07.03.2023).
- 9. Mittal S.K. Behavior biases and investment decision: Theoretical and research framework. *Qualitative Research in Financial Markets*. 2022;14(2):213–228. DOI: 10.1108/QRFM-09–2017–0085
- 10. Nagy R.A., Obenberger R.W. Factors influencing individual investor behavior. *Financial Analysts Journal*.1994;50(4):63–68. DOI: 10.2469/faj.v50.n4.63
- 11. Korniotis G.M., Kumar A. Do older investors make better investment decisions? *The Review of Economics and Statistics*. 2011;93(1):244–265. DOI: 10.1162/REST a 00053
- 12. Barber B.M., Odean T. The behavior of individual investors. In: Constantinides G.M., Harris M., Stulz R.M., eds. Handbook of the economics of finance. Vol. 2B. Amsterdam: North Holland; 2013:1533–1570. DOI: 10.1016/B 978–0–44–459406–8.00022–6

- 13. Ainia N.S.N., Lutfi L. The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making. *Journal of Economics, Business, & Accountancy Ventura*. 2019;21(3):401–413. DOI: 10.14414/jebav.v21i3.1663
- 14. Nandan T., Saurabh K. Big-five personality traits, financial risk attitude and investment intentions: Study on Generation Y. *International Journal of Business Forecasting and Marketing Intelligence*. 2016;2(2):128–150. DOI: 10.1504/IJBFMI.2016.078154
- 15. Sivaramakrishnan S., Srivastava M., Rastogi A. Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing*. 2017;35(5):818–841. DOI: 10.1108/IJBM-01–2016–0012
- 16. Kanojia S., Singh D., Goswami A. Impact of herding on the returns in the Indian stock market: An empirical study. *Review of Behavioral Finance*. 2022;14(1):115–129. DOI: 10.1108/RBF-01–2020–0017
- 17. Gross savings (%). World Bank national accounts data, and OECD National Accounts data files. World Bank Group. 2021. URL: https://data.worldbank.org/indicator/NY.GNS.ICTR.ZS (accessed on 25.11.2022).
- 18. SEBI investor survey 2015. Mumbai: Securities and Exchange Board of India; 2015. 151 p. URL: https://www.sebi.gov.in/sebi data/attachdocs/1491452612271.pdf (accessed on 27.11.2022).
- 19. East R. Investment decisions and the theory of planned behaviour. *Journal of Economic Psychology*. 1993;14(2):337–375. DOI: 10.1016/0167–4870(93)90006–7
- 20. Mayfield C., Perdue G., Wooten K. Investment management and personality type. *Financial Services Review*. 2008;17(3):219–236. URL: https://csinvesting.org/wp-content/uploads/2014/06/Investing-and-Personality-Type.pdf
- 21. Ajzen I., Fishbein M. Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall; 1980. 288 p.
- 22. Ajzen I. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 1991;50(2):179–211. DOI: 10.1016/0749–5978(91)90020-T
- 23. Yadav R., Pathak G.S. Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite*. 2016;96:122–128. DOI: 10.1016/j.appet.2015.09.017
- 24. Elliott M.A., Ainsworth K. Predicting university undergraduates' binge-drinking behavior: A comparative test of the one- and two-component theories of planned behavior. *Addictive Behaviors*. 2012;37(1):92–101. DOI: 10.1016/j.addbeh.2011.09.005
- 25. Zhang K. Theory of planned behavior: Origins, development and future direction. *International Journal of Humanities and Social Science Invention*. 2018;7(5):76–83. URL: https://pdf4pro.com/view/theory-of-planned-behavior-origins-development-and-670b07.html
- 26. Cialdini R.B., Trost M.R. Social influence: Social norms, conformity and compliance. In: Gilbert D.T., Fiske S.T., Lindzey G., eds. The handbook of social psychology. 4th ed. New York, NY: McGraw-Hill Book Co.; 1998:151–192.
- 27. Koropp C., Kellermanns F.W., Grichnik D., Stanley L. Financial decision making in family firms: An adaptation of the theory of planned behavior. *Family Business Review*. 2014;27(4):307–327. DOI: 10.1177/0894486514522483
- 28. Hong H., Kubik J.D., Stein J.C. Social interaction and stock-market participation. *The Journal of Finance*. 2004;59(1):137–163. DOI: 10.1111/j.1540–6261.2004.00629.x
- 29. Akhtar F., Thyagaraj K.S., Das N. The impact of social influence on the relationship between personality traits and perceived investment performance of individual investors: Evidence from Indian stock market. *International Journal of Managerial Finance*. 2018;14(1):130–148. DOI: 10.1108/IJMF-05–2016–0102
- 30. Eagly A. H., Chaiken S. The psychology of attitudes. New York, NY: Harcourt Brace Jovanovich College Publishers; 1993. 794 p.
- 31. Yen S.-H., Chang Y.-S., Wu M.-C. Behavioral intention of earnings management: The explanation of agency problem, moral development and theory of planned behavior. *Tai Da Guan Li Lun Cong.* 2016;26(2):107–138. (In Chin.). DOI: 10.6226/NTUMR.2016.FEB.R.12028
- 32. Wood R., Zaichkowsky J.L. Attitudes and trading behavior of stock market investors: A segmentation approach. *Journal of Behavioral Finance*. 2004;5(3):170–179. DOI: 10.1207/s15427579jpfm0503_5

- 33. Raut R.K. Past behaviour, financial literacy and investment decision-making process of individual investors. *International Journal of Emerging Markets*. 2020;15(6):1243–1263. DOI: 10.1108/IJOEM-07–2018–0379
- 34. Sheeran P., Trafimow D., Armitage C. J. Predicting behaviour from perceived behavioural control: Tests of the accuracy assumption of the theory of planned behaviour. *British Journal of Social Psychology*. 2003;42(3):393–410. DOI: 10.1348/01446603322438224
- 35. Lin H.-F. Applicability of the extended theory of planned behavior in predicting job seeker intentions to use job-search websites. *International Journal of Selection and Assessment*. 2010;18(1):64–74. DOI: 10.1111/j.1468–2389.2010.00489.x
- 36. Palamida E., Xanthopoulou D., Papagiannidis S., Stamati T. Exploring intentions towards human, social and financial capital investments in a turbulent economic environment. *The International Journal of Entrepreneurship and Innovation*. 2017;18(2):79–90. DOI: 10.1177/1465750316669908
- 37. Mahastanti L.A., Hariady E. Determining the factors which affect the stock investment decisions of potential female investors in Indonesia. *International Journal of Process Management and Benchmarking*. 2014;4(2):186–197. DOI: 10.1504/IJPMB.2014.060407
- 38. Dzung P.T., Thanh N.T., Anh T.P. Factors affecting market adoption toward futures derivatives in Vietnam. *International Journal of Business and Emerging Markets*. 2021;13(3):253–268. DOI: 10.1504/IJBEM.2021.116564
- 39. Chang M.K. Predicting unethical behavior: A comparison of the theory of reasoned action and the theory of planned behavior. *Journal of Business Ethics*. 1998;17(16):1825–1834. DOI: 10.1023/A:1005721401993
- 40. Lai C.-P. Personality traits and stock investment of individuals. *Sustainability*. 2019;11(19):5474. DOI: 10.3390/su11195474
- 41. Shanmugham R., Ramya K. Impact of social factors on individual investors' trading behaviour. *Procedia Economics and Finance*. 2012;2:237–246. DOI: 10.1016/S 2212–5671(12)00084–6
- 42. Holzman P.S. Personality. Britannica. 2024. URL: https://www.britannica.com/topic/personality (accessed on 02.12.2022).
- 43. Cherry K. What are the Big 5 personality traits? Verywell Mind. 2019 URL: https://www.verywellmind.com/the-big-five-personality-dimensions-2795422 (accessed on 02.12.2022).
- 44. Costa P. T., Jr., McCrae R. R. The revised NEO personality inventory (NEO-PI-R). In: Boyle G. J., Matthews G., Saklofske D. H., eds. The SAGE handbook of personality theory and assessment. Vol. 2: Personality measurement and testing. Thousand Oaks, CA: Sage Publications, Inc.; 2008:179–198. DOI: 10.4135/9781849200479.n9
- 45. Durand R.B., Newby R., Sanghani J. An intimate portrait of the individual investor. *Journal of Behavioral Finance*. 2008;9(4):193–208. DOI: 10.1080/15427560802341020
- 46. Ben-Shahar D., Golan R. Real estate and personality. *Journal of Behavioral and Experimental Economics*. 2014;53:111–119. DOI: 10.1016/j.socec.2014.08.008
- 47. Pak O., Mahmood M. Impact of personality on risk tolerance and investment decisions: A study on potential investors of Kazakhstan. *International Journal of Commerce and Management*. 2015;25(4):370–384. DOI: 10.1108/IJCoMA-01-2013-0002
- 48. Gambetti E., Giusberti F. Personality, decision-making styles and investments. *Journal of Behavioral and Experimental Economics*. 2019;80:14–24. DOI: 10.1016/j.socec.2019.03.002
- 49. Thanki H., Goyal A.K., Junare S.O. Personality traits, financial risk attitude, and long term investment intentions: Study examining moderating effect of gender. *Finance India*. 2020;34(2):785–798. URL: https://financeindia.org/data/2020/FI342/FI-342-CP25.pdf
- 50. Barber B.M., Odean T. Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*. 2001;116(1):261–292. DOI: 10.1162/003355301556400
- 51. Pompian M.M., Longo J.M. A new paradigm for practical application of behavioral finance: Creating investment programs based on personality type and gender to produce better investment outcomes. *The Journal of Wealth Management*. 2004;7(2):9–15. DOI: 10.3905/jwm.2004.434561

- 52. Dhiman B., Raheja S. Do personality traits and emotional intelligence of investors determine their risk tolerance? *Management and Labour Studies*. 2018;43(1–2):88–99. DOI: 10.1177/0258042X17745184
- 53. Charles M.A., Kasilingam D.R. Does the investor's age influence their investment behaviour? *Paradigm: A Management Research Journal*. 2013;17(1–2):11–24. DOI: 10.1177/0971890720130103
- 54. Rana M.H., Murtaza S., Noor F., Rehman K. Effects of demographic factors on risky decision-making behaviour. *European Journal of Social Sciences*. 2011;25(3):69–76.
- 55. Kang H. Sample size determination and power analysis using the G*Power software. *Journal of Educational Evaluation for Health Professions*. 2021;18:17. DOI: 10.3352/jeehp.2021.18.17
- 56. Faul F., Erdfelder E., Lang A.-G., Buchner A. G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*. 2007;39(2):175–191. DOI: 10.3758/BF03193146
- 57. Wolf E.J., Harrington K.M., Clark S.L., Miller M.W. Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement*. 2013;73(6):913–934. DOI: 10.1177/0013164413495237
- 58. Woods S.A., Hampson S.E. Measuring the Big Five with single items using a bipolar response scale. *European Journal of Personality*. 2005;19(5):373–390. DOI: 10.1002/per.542
- 59. Romero E., Villar P., Gómez-Fraguela J.A., López-Romero L. Measuring personality traits with ultra-short scales: A study of the Ten Item Personality Inventory (TIPI) in a Spanish sample. *Personality and Individual Differences*. 2012;53(3):289–293. DOI: 10.1016/j.paid.2012.03.035
- 60. Gosling S.D., Rentfrow P.J., Swann W.B., Jr. A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*. 2003;37(6):504–528. DOI: 10.1016/S 0092–6566(03)00046–1
- 61. Taylor S., Todd P. An integrated model of waste management behavior: A test of household recycling and composting intentions. *Environment and Behavior*. 1995;27(5):603–630. DOI: 10.1177/0013916595275001
- 62. Lim K.L., Soutar G.N., Lee J.A. Factors affecting investment intentions: A consumer behaviour perspective. In: Harrison T., ed. Financial literacy and the limits of financial decision-making. Cham: Palgrave Macmillan; 2016:201–223. DOI: 10.1007/978–3–319–30886–9_10
- 63. Barclay D., Higgins C., Thompson R. The partial least squares (PLS) approach to casual modeling: Personal computer adoption and use as an illustration. *Technology Studies*. 1995;2(2):285–309. URL: https://www.researchgate.net/publication/242663837_The_Partial_Least_Squares_PLS_Approach_to_Causal_Modeling_Personal Computer Use as an Illustration
- 64. Urbach N., Ahlemann F. Structural equation modeling in information systems research using partial least squares. *Journal of Information Technology Theory and Application (JITTA)*. 2010;11(2):2. URL: https://www.researchgate.net/publication/228467554_Structural_equation_modeling_in_information_systems_research_using_Partial_Least_Squares
- 65. Fornell C., Larcker D.F. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*. 1981;18(1):39–50. DOI: 10.1177/002224378101800104
- 66. Bagozzi R.P., Yi Y. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*. 1988;16(1):74–94. DOI: 10.1007/BF02723327
- 67. Hair J.F., Sarstedt M., Pieper T.M., Ringle C.M. The use of partial least squares structural equation modeling in strategic management research: A review of past practices and recommendations for future applications. *Long Range Planning*. 2012;45(5–6):320–340. DOI: 10.1016/j.lrp.2012.09.008
- 68. Henseler J., Ringle C.M., Sarstedt M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*. 2015;43(1):115–135. DOI: 10.1007/s11747–014–0403–8
- 69. Cohen J. Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum Associates Publishers; 1988. 567 p. DOI: 10.4324/9780203771587
- 70. Sarstedt M., Henseler J., Ringle C.M. Multigroup analysis in partial least squares (PLS) path modeling: Alternative methods and empirical results. In: Sarstedt M., Schwaiger M., Taylor C.R., eds. Measurement

- and research methods in international marketing. Leeds: Emerald Group Publishing Limited; 2011:195–218. (Advances in International Marketing. Vol. 22). DOI: 10.1108/S 1474–7979(2011)0000022012
- 71. Ibrahim Y., Arshad I. Examining the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of individual investors in Pakistan. *Investment Management and Financial Innovations*. 2018;14(4):181–193. DOI:10.21511/imfi.14(4).2017.15
- 72. Aren S., Hamamci H.N. Relationship between risk aversion, risky investment intention, investment choices: Impact of personality traits and emotion. *Kybernetes*. 2020;49(11):2651–2682. DOI: 10.1108/K-07–2019–0455

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C. Gautam — research problem development, justification of hypothesis, and assessment of consistency between theoretical and practical frameworks.

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