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Fostering The Changing Economic Market Demand from The View of Various Behavioral Social Personal and Economic Transformation: Empirical Evidence from A Developed Country

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ABSTRAK

Tujuan utama dari penelitian ini adalah untuk mendorong perubahan permintaan pasar dari pandangan berbagai transformasi sosial, perilaku, pribadi, dan ekonomi terhadap keputusan investasi individu di pasar saham Shanghai dan Shenzhen di Cina. Penelitian ini menggunakan kuesioner untuk mensurvei total 345 investor yang memiliki saham perusahaan-perusahaan yang terdaftar di bursa saham Shanghai dan Shenzhen. Hasil dari penelitian tersebut menunjukkan bahwa faktor perilaku, faktor pribadi, dan faktor pasar memiliki dampak positif yang signifikan terhadap keputusan investasi investor individu baik di pasar saham Shanghai maupun Shenzhen, sedangkan faktor sosial memiliki dampak negatif yang tidak signifikan terhadap keputusan investasi investor individu baik di pasar saham Shanghai maupun Shenzhen. Para pemangku kepentingan di Cina akan lebih memahami peran berbagai faktor sosial, perilaku, pribadi, dan pasar serta dampaknya terhadap kinerja pasar saham baik di pasar saham Shanghai maupun Shenzhen. Temuan ini memiliki wawasan yang penting bagi berbagai pemangku kepentingan yaitu pemerintah, badan pengatur, praktisi, akademisi, industri, dan peneliti.

Kata Kunci: *Dinamika Pasar Ekonomi, Perubahan Permintaan, Faktor Perilaku, Transformasi Ekonomi, Shenzhen Shanghai, Pasar Saham*

ABSTRACT

The key objective of the study is to foster the changing market demand from the view of various social, behavioral, personal, and economic transformations on individual investment decisions at Shanghai and Shenzhen stock markets in China. The study used a questionnaire to survey a total of 345 investors holding stocks of listed companies at both Shanghai and Shenzhen stock exchanges. The results of the study indicate that behavioral factors, personal factors, and market factors have a significant positive impact on individual investor investment decisions in both shanghai and Shenzhen stock markets while social factors have an insignificant negative impact on individual investor investment decisions in both shanghai and Shenzhen stock markets. Chinese stakeholders will understand better the role of various social, behavioral, personal, and markets factors and their impacts on stock market performance at both Shanghai and Shenzhen stock markets. The findings have important insights for various stakeholders i.e. government, regulatory bodies, practitioners, academia, industry, and researchers.

Keywords: *Economics Market Dynamics, Demand Change, Behavioural Factors, Economic Transformations, Shenzhen Shanghai, Stock Markets*

INTRODUCTION

Individuals always favor investment opportunities based on their behavioral factors of investing in current circumstances therefore investment is incredibly important for an individual investor in such a global market (Dhiman & Raheja, 2018). However, in the globalized economy the stock market dynamics are increasingly competitive with investors increasingly relying on the theme of humanizing their actions to face these global challenges in stock markets. Contemporary research in the field of behavioral finance demonstrates that individual investors desire to make rational

investment decisions due to changing market demands (Kubalay & Bayrakdaroglo, 2016). According to Arore and Kamari (2015) to measure risk and expected return during investment decisions investors use many traditional finance theories and practices. In the stock market investors usually behave irrationally the way they trade is exceptional acquire stocks while not considering the underlying price and usually buy those stocks as their friends purchased and make judgments based on historical information while selling the winning stocks while keeping the losing stocks in such global markets. Investors frequently employ behavioral biases to simplify their decision-making processes. These heuristics result in systematic errors in judgment and lead to satisfied investment decisions but they may not maximize utility (Kahneman & Tversky, 1979). The stock exchange investment decision-making is a lengthy process that involves several factors that must be considered to assist investors in making important investment decisions.

The most significant factors in this study that foster the changing market demand of individual investor investment decisions are investor's social factors, behavioral factors such are overconfidence, representativeness, and availability, social factors, personal factors and market factors. Overconfidence is cognitive bias defined as unjustified trust in individual cognitive thinking, abilities and decisions due to changing market demands (Pompian, 2006). According to Moore and Healy (2008) overestimation, overpricing and over precision are three main characteristics of an individual's suffered from stock market investment decision. Individuals overemphasize their abilities based on focus, perception and performance of their quality of investment decision instead of their real performance in the stock market (Thotley & Vorkink, 2006). Once Individuals believe they are superior to others are said over-confident (Burson & Soll, 2007). Oblivious investors are extremely confident in their act of stock market trading under risk circumstances (Odean, 1999). Representativeness behavior bias is the investor's mental psychological state categorization of all available options whereas making a stock market investment decision due to changing market demands (Shefrin, 2005). DeBondt and Thaler, (1998) stated that representativeness behavior bias is the degree of an event's resemblance with its parental populations. Ritter (2003) stated that due to representativeness behavior bias individuals ignore the future desire rate of return while giving more weightage to their recent stock market experience. Representativeness gives more confidence to individuals based on their information and provides such an optimistic future prediction about their investment decision but in the end, they are not appropriate in certain circumstances (Shefrin, 2008). Availability behavior bias is the investor's mental psychological state categorization based on all available information while making a stock market investment decision due to changing market demands (Ngoc, 2014). Availability behavior bias occurs once investors judge the possibility of a consequence how quickly the consequences arise in their minds due to changing market demands (Kahneman & Tversky, 1974). The availability behavior bias determines the rate of events in the stock market based on its ease of access (Hooy & Ahmad, 2012). Due to availability bias individual cannot diversify their portfolio effectively in stock market investments. Investors make their stock market investment decision based on past information and performance rather than a systematic analysis of different investment options. Since they limit their investment opportunities to make rational investment decision investors choose alternative investments opportunities that seem appropriate.

Investors' interaction with media is considered important for social psychological impacts on investors in stock market investment. Investors choose whether to get news about their investments from the media or people they trust or from neutral information sources (Jagongo and

Mutswenje, 2014). The use of the media for communication necessitates online channels such as the internet, Instagram, Facebook, and YouTube, as well as offline channels such as television shows, seminars, articles, various reports and companies' information news that provide information on investment and finance (Singh, 2019). Communication via the media may be a result of a desire for obtaining information from the media or others with similar norms to investors. The media can readily grab the attention of investors who share similar norms and values to its less formal presentation (Almaida et al., 2020). Scholarly work on personality provides a scientific description of an individual's distinctiveness. It also emphasizes the determinants of interior behavioral features such as personality traits, needs, intents, and social aspects of a person's uniqueness due to changing market demands (Ahmad, M. 2018). The analysis of personality traits began and grew over time Allport & Allport (1921). According to Allport (1961) personality is lively participation of psychophysical configuration in the inner personality of the individual to create the individual's characteristic prototype of interactions, decisions, and frame of mind. Various scholars had worked on the principles of (McCrae and Jr 1997). Kourtidis et al. (2011) showed that personality traits and investor behavior such as overconfidence and hazard forbearance had significant impacts on investor behavior. The stock market is the country's economic backbone. The stock market is the most dynamic economic sector and is regarded as a leading indicator of the country's financial condition. The development of the stock market is critical for economic growth and development (Tachawou, 2010). Stock market fluctuations have a significant impact on the financial system and economy of the country. Hence it is critical to comprehend how the stock market operates. Behavioral finance in contrast to traditional finance asserts that the primary factors that influence stock market movement are investor psychology and emotions. Traditional financial theories are built on four fundamental units. Mean-variance portfolio rules should be used to design portfolios because investors are rational and markets are efficient. Risk and return are both factors that influence projected returns (Statman, 2008).

The objective of this paper is to foster the changing market demand from the view of various behavioral, social, personal and economic transformations on individual investment decisions in two prominent provinces such as Shanghai and Shenzhen China. As there is a lack of research on behavioral, social, personal and economic transformations on individual investor investment decisions the current study ultimately fills this research gap. Shanghai and Shenzhen stock markets are the two biggest stock markets that contribute significantly to the economic development of China in terms of stock market trading and various kinds of securities so it is the main theme that is the lack in the current literature. Essentially the results of the current study will provide valuable insights to various practitioners to ascertain the significance of this research area in various dimensions of financial markets. After achieving the above objectives, the study brings several theoretical and practical contributions to the study. Firstly, the study has theoretical contributions to fortify the limitation of traditional financial theories to satisfy the demand of various shareholders in stock markets. Secondly, the study contributes to the limited literature on investors' investment profiles after the pandemic. Thirdly the study has methodological contributions by validating a scale for speed up data collection such as primary data. Fourthly the study contributes to finding out the individual investor investment frequency because china is the first country that recovers from the global pandemic. Finally, the study has several implications in practical perspectives for the different industries of the country. A brief review of various kinds of literature on social and behavioral factors

is described in the subsequent section, which is followed by the research hypothesis of the study. Next, we presented the specific methods used in the current study. We then describe the analysis and results, followed by a detailed explanation of the research findings. The last section highlights certain limitations of the current study and provides several recommendations for future analysis.

LITERATURE REVIEW

A. Theoretical Framework- Expected Utility Theory

According to conventional finance theory, the expected utility hypothesis underpins stock market investment decisions. The concept of rationality is described by the expected utility theory which argues that investors make constant and autonomous decisions amongst numerous existing choices (Komar & Gayal, 2016). This theory posits that investors aim to maximize their utility by setting boundaries on their sentiments and acting solely with their minds as emotionless instruments like calculators or robots. However recent behavioral finance theories argue that such theories are merely assumptions and that individual decision-making is influenced by a variety of behavioral biases (Tatoglu, & Zaim, 2016).

B. Heuristics Theory

This theory developed as simple guidelines that make stock market investment decisions unpretentious and easier especially in challenging or ambiguous situations (Ritter, 2003). It becomes easier to assess a situation by minimizing the challenges and increasing the probability. According to (Kahneman and Tversky, 1979) stated that such bias is valuable for investors specifically in situations of time constraints and need investment decision in critical circumstances but it can lead to a business investment decision. Heuristics theory includes overconfidence, representativeness availability biases, etc.

C. Chinese Context

According to the US Securities and Exchange Commission Shareholders can acquire get more reliable information about a firm's stock market investment decision because modern technology has influenced the stock market variations and prospects. Investors can be informed of recent events such as stock price, market variations on online internet resources. As a result of this information, various parties in stock market investment will be able to completely comprehend this scenario. The stock markets of China are not like the rest of the world's stock markets. It has distinct characteristics such as various economic systems, cultural backgrounds, government policy and investing practices. The first Chinese stock market is much younger. Though the Shanghai Stock Exchange (SSE) has a long history dating back to the 1860s it was shut down on November 26, 1990, when the Communist Party took power. The Shenzhen Stock Exchange (SZSE) was founded the same year making China's stock market barely 30 years old. On other hand, the stock markets of

China have exploded. The stock markets of China have surpassed Japan as Asia's second-biggest market and globally leading the developing market. In recent years China's economy has grown at a quick pace. The stock markets of China have captured the interest of the entire world. Moreover, because of technological advancements, investors can research and purchase stocks. Foreign investors have progressively gained access to China's financial markets encouraging many overseas investment banks and commercial institutions to participate in the stock markets of China. Foreign stakeholders are becoming more active in the Chinese stock market. Since its inception, China's stock market has grown swiftly and for overseas investors, it is becoming increasingly crucial. The low labor cost of china and abundant materials have enticed many global manufacturing businesses to move their manufacturing operations over there. The worldwide stock market experienced significant fluctuations due to the covid-19 pandemic in 2020. However, the fundamental reason for the Chinese stock market's relative stability is that when the epidemic struck China had already begun structural reforms of the financial supply side which mitigated the capital market's hidden risks.

D. Hypothesis Development

1) Overconfidence

Park et al. (2010) stated that overconfidence has a negative effect on investor investment decisions and performance. According to Trinogroho and Sembal (2011), overconfident investors make excessive trading because they believe in their abilities knowledge, and experience in stock markets result in a lower require rate of returns than others. According to Kengatharan and Kengatharan (2014), overconfidence has a negative impact on investment decisions and performance. Bashir et al. (2013) stated that overconfidence bias affects investors' stock market investment decisions. According to Fagerstrom (2008), overconfidence bias and over-optimistic bias inflated the S&P 500. Munyoki and Uliana (2008) revealed that overconfidence bias influenced institutional investors' financial decisions at Kenya (Nairobi) stock market. Debondt (1998) stated that overconfidence bias influences financial decisions. According to Gervais, Simon, and Odean (2001) overconfidence and over-optimism are personal qualities of investors that influence an individual's investment decision. According to Kafayat (2014), overconfidence bias has an insignificant impact on investors' rational investment decisions. Following a review of the literature, the author's concluded that overconfidence bias has a negative impact on rational investment decisions. Overconfident investors are more likely to make wrong or uncertain investments, as well as excessive trading, is likely to make lowering their required rate of returns from their stock market investment decision.

H1: *Overconfidence bias has a positive impact on individual investor investment decisions.*

2) Representativeness

Many studies have been conducted to find out the relationship between representativeness bias and investment decision in stock markets most of these studies suggested that representativeness bias and investment decision have a positive relationship with each other in terms of stock market investment decision. Toma (2015) examined the influence of representative bias on individual investor decisions on the Roman stock market and revealed that representativeness bias significantly influences investor stock market decisions. Moreover, that representativeness bias increases individual investors' returns in the stock market. Further, Hakam (2016) stated that representativeness and investor investment decisions have a positive relationship with each other. According to Ikram (2016) representativeness bias has a significant impact on individual investors' decisions on the Pakistan (Islamabad) stock market implying that representativeness bias improved the returns of individual investors. According to Athur (2014) stated that the impact of representativeness bias on investment decisions is significant in the stock market. According to Yaowen et al. (2015) representativeness bias reduces investor investment decisions. Onsomu (2014) stated representativeness bias affects individual investors' stock market investment decisions at Kenya (Nairobi) stock market. The authors concluded after examining the relevant literature that some research studies show a positive while some research studies show an insignificant negative relationship between representativeness bias and investor investment decision in the stock market.

H2: *Representativeness bias has a positive impact on individual investor investment decisions.*

3) Availability

Many studies have been conducted to find out the relationship between availability bias and investment decision in stock markets most of these studies suggested that availability bias and investment decision have a positive relationship with each other in terms of stock market investment decision. Ikram (2016) examined the impact of availability bias on individual investor investment decisions on the Islamabad stock exchange and found that availability bias had a positive impact on individual investor investment decisions implying that individual investors' returns increased due to availability bias. Khan (2015) stated that availability bias has a positive impact on individual investors' investing decisions. Due to some disagreement with this point of views Clark, an investment counselor studied how availability bias influences investment decisions the results showed that availability bias had a negative effect on stock market decisions. According to Folks (1988), the availability bias positively affects consumers' assessments of product performance. A study conducted by Insead and Simonov (2005) concluded after examining the relevant literature that some research studies show mixed relationship positive relationships between availability bias and investor investment decisions in the stock market.

H3: *Availability bias has a positive impact on individual investor investment decisions.*

4) Social Factors

Social interaction is a type of psychological prejudice known as "social bias" which is concerned with the external factors that influence investors' investment decisions (Baker and Puttonen, 2017). Social bias also known as social commitment is an investment strategy in which investors discuss potential investments prospects in groups before making investment decisions (Tronnberg & Hemlin, 2019). Social interaction is the information, opinions, and suggestions that effects each other's investment decisions (Jaiyeoba et al., 2018). Interesting facts exciting events and related views are frequently discussed in interpersonal interactions to communicate investment information or experiences. Various studies have found that high-income investors tend to implicate in discussions with a variety of people to exchange information about various companies and the stock market in which they have invested or are willing to invest soon (Tronnberg & Hemlin, 2019). Customers, colleagues, managers, neighbors, and others engage in interpersonal talks with others who work in similar or different businesses. Interpersonal discussions involve communication between people who are in similar or different businesses such as customers, colleagues, supervisors, neighbors, and others. Financial consultants as well as family members such as parents, partners, or siblings are consulted during these discussions (Khan and Tan, 2019). The information collected from these close relatives is essential for avoiding risks and overestimating returns (Mahalakshmi & Anuradha, 2018).

H4: *Social factors bias has a positive impact on individual investor investment decisions.*

5) Personal Factors

The most recent literature demonstrated relationships between the various dimensions of different personality traits of investors and investment decisions at stock markets (Dhochak & Sharma, 2016). According to research by Dhiman & Raheja (2018) investors' behavioral characteristics are influenced by emotional intelligence and personality traits. Similarly, Tauni et al. (2017) investigated the relationship between personality characteristics and investor behavior found that individuals with openness and neuroticism characteristics make more regular investments decision such personality characteristics traits buy or sell shares more frequently in the stock market. However, Lazer et al. (2017) investigated Cloninger's model of personality in combination with neuropsychological features of individuals and found a positive relationship between neurotransmitters and risk attitude. They also found a significant positive relationship between Individual investor personality traits and investment decisions in the stock market during the investment process. Raheja and Dhiman (2018) found a positive relationship between personality and financial decisions. He also advised investors must be cautious about what, where, why, when, and how they invest in a variety of circumstances. Kaur (2017) stated that personality traits have a positive impact on investment decisions in the stock market.

H5: *Personal Factors have a positive impact on individual investor investment decisions.*

6) Market Factors

Stock market dynamics have significant positive impacts on individual investors' stock market investment decisions. Waweru et al. (2008) stated that price movement's market information, stock price leanings, investor reaction, and essentials of issuing equities are among the market aspects that affect investor stock market investment decisions. Information's such as price movements, market variations, and responses to various uncertainties and investor reactions all these changes have been empirically proven to have a significant impact on investor stock market investment decisions. DeBondt and Thaler (1995) shareholders have diverse responses to market conditions which influence their investment decisions by determining different trading strategies. Furthermore, DeBondt and Thaler (1995) propose that investor behavior can influence financial markets according to the traditional behavioral finance approach. The investor's actions investment decisions and performance are influenced by several market dynamics. According to Barber and Odean (2000) investors are affected by stock market proceedings (events) that keep their consideration even if they are unable to predict the likelihood of better future investment performance as an outcome of such events in stock markets.

H6: *Market Factors have a positive impact on individual investor investment decisions.*

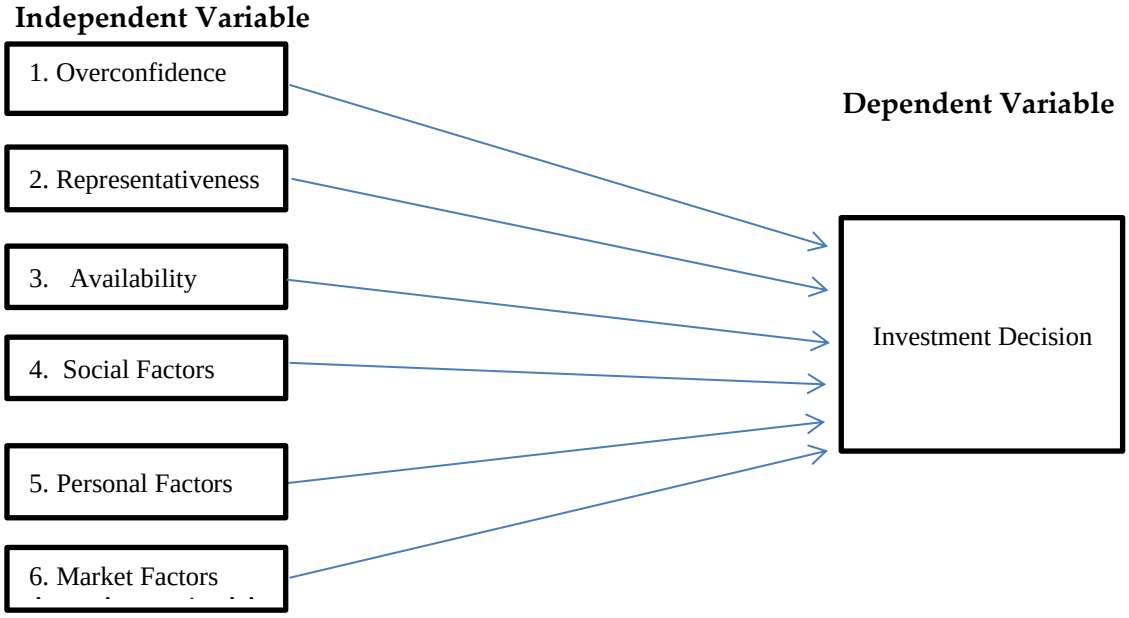

Figure 1. Conceptual framework of the study

METHODS

A. Instrument

Behavioural, social, personal and market factors: The behavioral, social, personal and market factors were measured by using 15 items scale adopted from Tang et al (2018). The variables cover by this scale were overconfidence (OC) representativeness bias (RB) availability (AV), social factors (SF), personal factors (PF), market factors (MF), etc. The items include questions regarding general

information about demographic and investment profiles of investors at both Shanghai and Shenzhen stock markets followed by a focus on various behavioral, social, personal, and market dimensions. For this type of analysis, the survey research design was appropriate because the researcher aims to collect data to determine facts about investment decisions in Shanghai and Shenzhen stock markets. This kind of research technique is useful when the researcher wants to ask about the investor's opinion. It is also used to analyze the general condition of individuals and organizations as it generally explores the perceptions and values of individual investors through interviews.

B. Sample size and Data Collection

To calculate the minimum sample size with a significant level of 0.05 and the power of 0.95, we used G* Power software. The G* Power software analysis suggested that the minimum sample size of the study was 400. Therefore the current sample size of the study (N=400) was considered appropriate for this study. Though due to some non-response rate and outliers from various respondents' a total of 650 questionnaires was distributed among the proposed sample size of the study at both Shanghai and Shenzhen stock markets. However individual investors working in different industrial sectors these sectors contribute significantly to the economic developments of the country. Before data collecting from respondents, they were informed about the ethical consideration and confidentiality of their responses of information. After the consent of respondents, the questionnaire was distributed through a self-administrative approach due to its high response rate of up to 86.5%. This response rate was appropriate and acceptable (Subramanian et al 2015). A total of 345 questionnaires were distributed for the ultimate data analysis. The data was collected between September 2020 and March 2021.

C. Demographic profile of the respondents

The researcher directly obtained data from individual shareholders in the Shanghai stock exchange whereas the data from Shenzhen was gathered with the help of brokerage companies. The respondents were informed about the aims of the study before the data was collected and they were also assured that their information would be kept confidential and secure. After obtaining the consent of investor's the questionnaires were distributed among the individual investors at both shanghai and Shenzhen stock markets. Individual investors from both regions provided information based on their demographic characteristics etc. The total number of the questionnaire was 500 that were distributed in both the regions i.e. Shanghai and Shenzhen. The total number of questionnaires was 345 that was received from both the regions which signify an 86.5% response rate. In gender, the response rate of the male individual was 60% while female individuals were 40% in their respective group. In marital status, the response rate of the married individual was 57.3% while the non-married individual response rate was 43.7% in their particular group. In age, the response rate of individual investors having age range 20-30 years were 25.3% while the response rate of individual investors having age above 60 years was 34.7% in their specific group. In qualification, the response rates of undergraduate students were 25.7% while the response rate of postgraduate students was 34.7% in their respective group. In occupation, the response rates of students were 25.4% while business class individual response rates were 37.3% in their specific group. Finally, in different sectors, the response rate of individual investors in the two sectors of Shanghai and Shenzhen stock markets were 45.5% and 54.5% respectively.

Table 1. Demographic of respondents (N=345)

Demographics Variables	Category	Percentage (%)
Gender	Male	60%
	Female	40%
Marital Status	Married	57.3%
	Non- married	42.7%
Age	20-30	25.3%
	31-40	21.3%
	41-50	20.7%
	51-60	32.7%
	Above 60	34.7%
Qualification	Undergraduate	25.7%
	Graduate	31.3%
	Postgraduate	34.7%
Occupation	Any other	8.3%
	Student	25.4%
	Businessmen	37.3%
	Salaried Personnel	25.3%
	Retired/ Any other	12%
Sectors	Shanghai stock market	45.5%
	Shenzhen stock market	54.5%

RESULT AND DISCUSSION

To achieve the objectives of this research study this study used smartPLS and SEM latest version for data analysis**.** Two methodologies such are assessment of measurement model and structural model were used as recommended by previous literature (Hair J, Sarstadt, Hopkans, & Kuppelweser, 2014). SmartPLS and SEM are similar to multiple regression analysis in that it examines potential associations while keeping low importance on the measurement model (Hair J et al., 2014). The measurement model must satisfy all of the criteria through convergent validity and discriminant validity. The degree to which several items are used to assess the same idea in a study is referred to as convergent validity (Abdul Helim, & Remayah, 2013).

Table 2. Measurement Model

Model	Constructs	Indicators	Indicator Loading	Cronbach Alpha	Composite Reliability	Average
PLS-SEM	**OC**	**OC1**	**0.798**	**0.820**	**0.859**	**0.556**
		OC2	0.595			
		OC3	0.790			
		OC4	0.814			
	RF	**RF1**	**0.768**	**0.791**	**0.849**	**0.589**
		RF2	0.703			
		RF3	0.848			
		RF4	0.763			
	AL	**AL1**	**0.808**	**0.841**	**0.857**	**0.509**
		AL2	0.713			
		AL3	0.719			
		AL4	0.768			
	IR	**IR1**	**0.796**	**0.811**	**0.877**	**0.708**
		IR2	0.811			
		IR3	0.824			
	SF	**SF1**	**0.786**	**0.823**	**0.853**	**0.548**
		SF2	0.601			

	SF3	0.881			
	SF4	0.814			
PF	**PF1**	**0.857**	**0.896**	**0.887**	**0.574**
	PF2	0.697			
	PF3	0.693			
	PF4	0.742			
MF	**MF1**	**0.818**	**0.827**	**0.872**	**0.590**
	MF2	0.832			
	MF3	0.799			
	MF4	0.673			

Table 2 depicts the accepted value for each component of factor loading that must be greater than the value 0.6 (Chin & hurdle 2010). The Average AVE means the squared loading total mean value that must be equal to 0.5 or more which specifies approximately half of the variation in the constructs of latent variables. While comparing to Cronbach's alpha it is used to verify the reliability of items measurement and its typical value must be equal to 0.70 or higher as stated by PLS-SEM (Hair et al., 2010). All of the measurements are indicated in the table below.

Table 3. Fornell-Larcker Criterion

	OC	**RP**	**AL**	**IR**	**SF**	**PF**	**MF**
OC	**0.756**						
RP	0.242	**0.744**					
AL	0.001	0.073	**0.766**				
IR	0.125	0.316	0.125	**0.839**			
SF	0.069	0.171	0.045	0.162	**0.712**		
PF	0.124	0.571	0.156	0.285	0.143	**0.738**	
MF	0.242	0.521	0.049	0.147	0.143	0.534	**0.756**

Table 3 depicts that discriminant validity is defined as a circumstance in which two or more different measurements have no relationship with one another (Sekaran, 2013). The Fornell and Larcker (1981) criterion was used to determine the construct's discriminant validity which states that each column's upper level should be higher than the column's lower values. Discriminant validity exists in the constructions as realized by the above table.

Table 4. Discriminant Validity (HTMT 0.90 Criterion)

	OC	**RP**	**AL**	**IR**	**SF**	**PF**	**MF**
OC							
RP	0.286						
AL	0.069	0.101					
IR	0.121	0.378	0.153				
SF	0.117	0.209	0.115	0.187			
PF	0.210	0.749	0.200	0.346	0.189		
MF	0.318	0.657	0.101	0.155	0.189	0.636	

The Heterotrait-monotrait (HTMT) correlation ratio can also be used to measure discriminant validity. A threshold of close to 1 indicates that discriminant validity is lacking. The study used a structural model to measure the hypotheses after getting reasonable outcomes from the

measurement model. For each of the hypotheses of the study, R2 beta and matching values of t are calculated.

Table 5. Structural Model Summary

	S Beta	S. Error	t-value	p-value	Decision
Overconfidence -> R on investment	0.197	0.046	3.988	0.000	**Accepted**
Representativeness -> R on investment	0.08	0.065	2.379	0.013	**Accepted**
Availability -> R on investment	0.097	0.050	2.842	0.000	**Accepted**
Social Factors -> R on investment	0.029	0.044	0.685	0.486	**Rejected**
Personal Factors -> R on investment	0.106	0.065	2.464	0.009	**Accepted**
Market Factors -> R on investment	0.132	0.159	2.573	0.005	**Accepted**

As for hypothesis is concerned the first hypothesis of the study presumed that overconfidence bias has a significant positive influence on individual investor investment decisions. However, the results showed that H1 is accepted due to t value 3.988 and p-value 0.000 which demonstrates that overconfidence bias has significant positive influence on investor decision-making. The second hypothesis of the study presumed that representativeness has a significant positive influence on individual investor investment decisions. However, the results showed that H2 is accepted due to t value of 2.379 and p-value 0.013 which demonstrates that representativeness bias has a significant positive influence on investor decision-making. The third hypothesis of the study presumed that availability bias has a significant positive influence on individual investor investment decisions. However, the results showed that H3 is accepted due to t value 2.842 and p-value 0.000 which demonstrates that availability bias has a significant positive influence on investor decision-making. The fourth hypothesis of the study presumed that social factors have a significant positive influence on individual investor investment decisions. However, the results showed that H4 is rejected due to t value of 0.685 and p-value 0.486 which demonstrates that social factors have insignificant negative influence on investor decision-making. Now a day in the context of china it is clear that investors' social contacts with different individuals or groups of individuals don't need to have stock market experience its means that social contacts may not necessarily affect investor investment decisions. The fifth hypothesis of the study presumed that personal factors have a significant positive influence on individual investor investment decisions. However, the results showed that H5 is accepted due to t value of 2.464 and p-value 0.009 which demonstrates that personal factors have a significant positive influence on investor decision-making. The sixth hypothesis of the study presumed that market factors have a significant positive influence on individual investor investment decisions. However, the results showed that H6 is accepted due to t value of 2.573 and p-value 0.005 which demonstrates that market factors have a significant positive influence on investor decision-making.

Table 6. Multi-Group Analysis of both regions

	Parametric Test		Walch-Saterthwait Test	
Hypotheses	**t-value (R1vs R2)**	**P-Value (R1 vs. R2)**	**t-Value (R1 vs. R2)**	**p-Value (R1 vs R2)**
OC-> RI	2.508	0.007	2.517	0.007
RP -> RI	3.806	0.000	3.739	0.000
AL-> RI	0.210	0.824	0.210	0.825
SF -> RI	0.405	0.571	0.562	0.566

PF -> RI	2.561	0.002	2.669	0.003
MF -> RI	0.155	0.753	0.305	0.752

R1 = Region 1 (Shanghai) R2 = Region 2 (Shenzhen)
OC= Overconfidence; RP = Representativeness; AV= Availability; SF = Social factors:
PF= Personal factors; MF = Market factors; IR = Investment Returns

The basic aim of the study is to compare and contrast the investment behavior of two regions: Shanghai and Shenzhen. The difference in each location was determined using multi-group analysis (MGA). The results of the MGA show that Individual investors' investing practices differ in both regions for several factors. As per individual investor behavior as a concern there is no significant difference is exist in both regions. The parametric test and the Welch-Satterthwaite test show that variables such are overconfidence bias, representativeness bias and personal factors demonstrate differences in individual investors' investment practices in both regions because all of these variables had significant t-values of 2.517, 3.739, and 2.669, respectively. While the investment behavior of individual investors in Shanghai and Shenzhen shows no difference in the other variables such are availability bias, social factors and market factors the parametric test and the Welch-Satterthwaite test both show that these variables have t-values of 0.210, 0.562 and 0.305 respectively which are all insignificant. Moreover, a path coefficient table can be used to justify this difference; for example, in the instance of overconfidence bias the value of t for Shandong investors is 0.285, while the value of t for Shenzhen investors is 2.412 showing that Shenzhen investors possess the impact of overconfidence bias influence while Shanghai investors do not possess the impact of overconfidence bias on their investment decision in Chinese stock markets. Furthermore, the value of t for the representativeness bias for Shanghai investors is 4.428 while the value of t for Shenzhen investors is 1.381 indicating that Shanghai investors possess the impact of representativeness bias while Shenzhen investors do not possess the impact of representativeness bias on their investment decision in Chinese stock markets. Similarly, the value of t for availability bias in the case of Shanghai shareholders is 1.396 and the value of t for representativeness in the case of Shenzhen shareholders is 1.908 indicating that investors in Shanghai and Shenzhen do not possess the impact of availability bias on their investment decision in Chinese stock markets. Furthermore, the value of t for social factors in the case of Shanghai investors is 0.744 while the value of t for availability in the case of Shenzhen investors is 0.769 indicating that investors in Shanghai and Shenzhen do not possess the impact of social factors on their investment decision in Chinese stock markets. Similarly, the value of t for personal factors in the case of Shanghai investors is 1.730 while the value of t for personal factors in the case of Shenzhen investors is 2.710 indicating that investors in Shanghai and Shenzhen do not possess the impact of neutral information bias on their investment decision in Chinese stock markets. Furthermore, the value of t for the market factors bias for Shanghai investors is 0.735 while the value of t for Shenzhen investors is 0.222 indicating that Shanghai investors possess the impact of regret aversion bias whilst Shenzhen investors do not possess the impact of market factors to bias on their investment decision in Chinese stock markets.

CONCLUSION

Behavioral elements that influence investor stock market investment decisions have subsequent impacts on investor investment returns. Furthermore, the study looked at

disparities in investing behavior in two significant Chinese provinces such as Shanghai and Shenzhen. The research looked at the most critical behavioral traits that determine individual investor stock market investment performance. The hypotheses were generated using existing literature that suggested that these key elements have a significant influence on returns on investment for investors. The research is quantitative and primary data was used in the study. The information was gathered via a modified questionnaire from people of various ages, genders, educational backgrounds, investment experience, and soon. Partial Least Squares, structural equation modeling, and SmartPLS 3.2.7 were used to examine the acquired data to test the hypotheses of the study. The structural equation model can be used to test the hypotheses of the study. The structural model's findings show that social factors have an insignificant relationship with individual investor stock market investment decision in China and its impact on trade performance whereas all other factors such as overconfidence, representativeness, availability, social factors, personal factors and market factors all have a significant relationship with individual investor stock market investment decision. As is shown by the above results that individual investors use behavioral biases in their stock market investment decision that affect their trading returns. The multi-group analysis (MGA) was used in the study to determine whether there are substantial variations exist between both groups to examine the variance in investing actions of Shanghai and Shenzhen shareholders. The analysis of MGA shows a non-significant variation in behavior of investors in both Shanghai and Shenzhen concerning availability bias, social factors and market factors, although there is a significant variation revealed by MGA concerning overconfidence bias, representativeness bias and personal factors. The lack of difference could be due to the large number of individual investors who are from Shanghai but live or work in Shenzhen and thus have similar living standards and investment choices. The explanation for the disparity may be because the investors in these two locations have distinct characteristics in terms of investment realization, investing experience, financial literacy, and so on. It can be concluded from the above results that stated that all of the above behavioral factors have a significant impact on stock market trading of individual investors in China and that there is a considerable variation in investing behavior between Shanghai and Shenzhen. The conclusion is consistent with previous studies (Shikuku, 2014). It is suggested that future researchers perform research in the domain of behavioral finance in China with more diversified data from different Chinese cities. Furthermore, different Asian countries' investment behavior can be examined to see whether substantial differences exist in their investing behavior in stock markets investment. Moreover, it is suggested that this study is based on primary data further study should be conducted on secondary data on an individual as well as institutional investor's behavioral factors.

A. Theoretical Implications

The findings of the study have numerous theoretical implications. First, the study contributes to the limited literature of various behavioral, social, personal and market factors on individual investment decisions in two eminent cities of china such as Shanghai and Shenzhen by raising the understandings of their nexus. Secondly, there is limited literature on various behavioral, social, personal and market factors and investment decisions, particularly in the perspectives of a developed economy. Hence this study partially validates the newly developed ORASPM scale authors Tang et al (2017) in the context of the developed country. Thirdly the study supports the crux of shareholder theory for subjective and practical relationships and implications for various stock market agents and shareholders to implement and integrate various behavioral, social, personal and market factors on individual investment decisions for the satisfaction of various shareholders' interest in developed country context.

B. Practical implications

From a practical perspective, the study suggests that investors should aware of the subsequent impacts of various behavioral, social, personal and market factors and their impacts on decision making to make their current investment decision effective for the future return based on various portfolio allocations in different securities. The results of the study help the various organizations, practitioners, and various internal and external parties to address the broad agenda of various behavioral, social, personal, and market factors and their impacts on investment decisions in various stock markets. The findings of the study are also helpful for financial institutions as issued regular policies towards implementing their financial law and regulations. Similarly, these results are also useful for various institutional investors to adopt the broad agenda of investment practices in various stock markets.

C. Limitations and Future directions

This study has several inclinations that should be addressed in forthcoming studies. Firstly this study analyzes various behavioral, social, personal and market factors and their subsequent effect on individual investment decisions in two eminent cities of china such as Shanghai and Shenzhen. In future studies, the model should be replicated to a more diverse sample considering different stock markets in other provinces. Secondly, the study should be directed the capture the perceptions of institutional investors in the light of various behavioral, social, personal and market factors and their subsequent effect on individual investment decisions. Thirdly the future study should be directed towards the qualitative aspects of various behavioral, social, personal and market factors and their subsequent effect on individual investment decisions. Fourthly future study should be carried out to find the moderating relationship between various behavioral, social, personal and market factors and individual investment decisions. Finally, in the case of secondary data analysis

Multigroup analysis and longitudinal nature of studies should be considered in future directions.

REFERENCE

Ahmad, M. (2018). Impact of neurotransmitters, emotional intelligence, and personality on investor's behavior and investment decisions. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, *12*(1), 330–362. https://www.econstor.eu/bitstream/10419/188348/1/pjcss427.pdf.

Allport, F. H., & Allport, G. W. (1921). Personality Traits: Their Classification and Measurement. *The Journal of Abnormal Psychology and Social Psychology*, *16*(1), 6. http://www.excelcentre.net/Personalitytraits.pdf.

Ako-Nai, A., & Singh, A. M. (2019). Information technology governance framework for improving organizational performance. *South African Journal of Information Management*, *21*(1), 1–11. https://journals.co.za/doi/pdf/10.4102/sajim.v21i1.1010.

Arora, M., & Kumari, S. (2015). Risk-taking in financial decisions as a function of age, gender: the mediating role of loss aversion and regret. *International Journal of Applied Psychology*, *5*(4), 83–89. DOI: 10.5923/j.ijap.20150504.01.

Athur, A. D. (2014) Effect of behavioral biases on investment decisions of individual investors in Kenya (Doctoral dissertation, University Of Nairobi). http://erepository.uonbi.ac.ke.

Baker, H. K., and Puttonen, V. (2017) Investment traps exposed: navigating investor mistakes and behavioral biases, Emerald Group Publishing, WA. DOI: 10.1108/9781787142527.

Barber, B.M., & Odean, T. (2000). Trading is hazardous to your wealth: The common stock investment performance of individual investors. Journal of Finance, 55(2),806. https://doi.org/10.1111/0022-1082.00226.

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, *116*(1), 261–292. http://faculty.haas.berkeley.edu/odean/Papers/gender/BoysWillBeBoys.pdf.

Bashir, D. T., Javed, A., Ali, U., Meer, U. I., & Naseem, M. M.(2013). Empirical testing of heuristics interrupts the investor's rational decision-making. European Scientific Journal, 9(28), 1857-7881. https://core.ac.uk/download/pdf/236418178.pdf.

Brahmana, R. K., Hooy, C., & Ahmad, Z. (2012). Psychological factors on irrational financial decision making: Case of day-of-the-week anomaly. *Humanomics*. https://doi.org/10.1108/08288661211277317.

Berdimuratova, A. K., & Mukhammadiyarova, A. J. (2020). Philosophical and methodological aspects of the interaction of natural environment and man. International Journal of Pharmaceutical Research. https://doi.org/10.31838/ijpr/2020.12.03.235

Chang, C., Jiang, J., & Kim, K. A. (2009). A test of the representativeness bias effect on stock prices: A study of Super Bowl commercial likeability. *Economics Letters*, *103*(1), 49–51. https://doi.org/10.1016/j.econlet.2009.01.018.

Chin, W., & Härdle, W. K. (2010). *Handbooks of Computational Statistics Series, Springer Series: Springer Handbook of Computational Studies.* https://doi.org/10.1007/978-3-319-05542-8_15-1.

De Bondt, W. F., & Thaler, R. H. (1995) Financial decision-making in markets and firms: A behavioral perspective Handbooks in operations research and management science, 9, 385-410. https://doi.org/10.1016/S0927-0507(05)80057-X.

De Bondt, W. F. M. (1998). A portrait of the individual investor. *European Economic Review*, *42*(3–5), 831–844. https://doi.org/10.1016/S0014-2921(98)00009-9.

Dhochak, M., & Sharma, A. K. (2016). Identification and prioritization of factors affecting venture capitalists' investment decision-making process An analytical hierarchal process (AHP) approach. *Journal of Small Business and Enterprise Development, 23* (4), 964 - 983. https://www.inderscienceonline.com/doi/pdf/10.1504/IJMDM.2016.076838.

Dhiman, B., & Raheja, S. (2018). Do personality traits and emotional intelligence of investors determine their risk tolerance? *Management and Labour Studies*, *43*(1–2), 88–99. https://doi.org/10.1177/0258042X17745184.

Ee, O., Abdul Halim, H., & Ramayah, T. (2013) the effects of partnership quality on business process outsourcing success in Malaysia: Key users perspective. *Service Business*, *7*(2), 227–253. https://doi.org/10.1007/s11628-012-0152-z.

Fagerstrom (2008) Behavioral Finance: The psychological impact and Overconfidence in financial markets: University of skivde. https://www.diva-portal.org/smash/get/diva2:2468/Fulltext01.pdf.

Folks, v. s. (1988) The availability heuristic and perceived risk Journal of consumer research, 15(1), 13-23. https://doi.org/10.1086/209141.

Fornell, C., & Larcker, D. (1981) Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research, 1*, 382–388. https://doi.org/10.1177/002224378101800313.

Gervais, S., Simon, H. and Odean, T. (2001). Learning to be overconfident The Review of Financial Studies, 14 (1), 1-27. https://doi.org/10.1093/rfs/14.1.1.

Hair J, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014) Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review, 26*(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128.

Ikram, Z. (2016) An Empirical Investigation on Behavioral Determinants on Impact on Investment Decision Making, Moderating Role of Locus of Control Journal of Poverty, Investment and Development, Vol.26. https://core.ac.uk/download/pdf/234695651.pdf.

Irshad, S., Badshah, W., & Hakam, U. (2016) Effect of Representativeness Bias on Investment Decision Making. 26-30-with-cover-page-v2.pdf. http://journalofsocial.com/Makaleler/1504145196_2_45_ID781_Uygun%20ve%20Dongul_1709-1720.pdf.

Jaiyeoba, H. B., Adewale, A. A., Haron, R. and Ismail, C. M. H. C. (2018) "Investment decision behavior of the Malaysian retail investors and fund managers", Qualitative Research in Financial Markets, 10(2), pp. 134-151. https://doi.org/10.1108/QRFM-07-2017-0062.

Kafayat, A. (2014). Interrelationship of biases: effect investment decisions ultimately. Theoretical and Applied Economics, 21(6 (595)), 85-110. Microsoft Word - 7_kafayat_engl.docx.

Kengatharan, L., & Kengatharan, N. (2014). The influence of behavioral factors in making investment decisions and performance: Study on investors of Colombo Stock Exchange, Sri Lanka. Asian Journal of Finance & Accounting, 6(1), 1. Sri_Lanka-with-cover-page-v2.pdf.

Kahneman, D., & Tversky, A. (1979). *On the interpretation of intuitive probability: A reply to Jonathan Cohen.* https://doi.org/10.1016/0010-0277(79)90024-6.

Kaur, N. (2017). The Narcissistic Personality: Perspectives in Organizational Behaviour. *International Conference on Technology and Business Management, 10* (4), 39-43. http://www.ictbm.org/ictbm17/ictbm17cd/pdf/T119-final.pdf.

Kourtidis, D., Šević, Ž., & Chatzoglou, P. (2011). Investors' trading activity: A behavioral perspective and empirical results. *The Journal of Socio-Economics*, *40*(5), 548–557. https://doi.org/10.1016/j.socec.2011.04.008.

Kubilay, B., & Bayrakdaroglu, A. (2016). Empirical research on investor biases in financial decision-making, financial risk tolerance, and financial personality. *International Journal of Financial Research*, *7*(2), 171–182. URL: http://dx.doi.org/10.5430/ijfr.v7n2p171.

Larrick, R. P., Burson, K. A., & Soll, J. B. (2007). Social comparison and confidence: When thinking you're better than average predicts overconfidence (and when it does not). *Organizational Behavior and Human Decision Processes*, *102*(1), 76–94. https://doi.org/10.1016/j.obhdp.2006.10.002.

Lazer, S. G., Geva, R., Gur, E., & Stein, D. (2017). Reward Dependence and Harm Avoidance among Patients with Binge-Purge Type Eating Disorders. *European Eating Disorders Review, 25*(3), 205-213. https://doi.org/10.1002/erv.2505.

Mahalakshmi, T. N., & Anuradha, N. (2018). Factors affecting Investment decision-making & investment performance among individual investors in India. *International Journal of Pure and Applied Mathematics*, *118*(18), 1667–1776. https://www.acadpubl.eu/jsi/2018-118-18/articles/18b/56.pdf.

Mahalakshmi, T. N., and Anuradha, N. (2018) "Gender-based study on the Implications of Behavioral Biases in Investment Decision making", International Journal on Global Business Management and Research, 7(1), pp. 35-43. 56fa16976079ca9a794b2e23198905d5.pdf.

Moore, D. A., & Healy, P. J. (2008). The trouble with overconfidence. *Psychological Review*, *115*(2), 502. https://doi.org/10.1037/0033-295X.115.2.502.

Massa, M., Insead, & Simonov, A. (2005). Behavioral biases and investment. Science Journal of Finance, 50(2), 549-572. https://doi.org/10.1007/s10679-005-4998-y.

Mutswenje, V. S., & Jagongo, A. (2014). A survey of the factors influencing investment decisions: the case of individual investors at the NSE. *International Journal of Humanities and Social Science*, *4*(4), 92–102. http://erepository.uonbi.ac.ke/handle/11295/13223.

Ngoc, L. T. B. (2014). The behavior pattern of individual investors in the stock market. *International Journal of Business and Management*, *9*(1), 1. URL: http://dx.doi.org/10.5539/ijbm.v9n1p1.

Onsomu, Z. N. (2014). The impact of Behavioural biases on investor decisions in Kenya: Male vs Female. International Journal of Research in Humanities, Arts and Literature, Vol. 2, Issue 6. http://41.204.161.209/handle/11295/72986.

Park, J., Konana, P., Gu, B., Kumar, A., & Raghunathan, R. (2010). Confirmation bias, overconfidence, and investment performance: Evidence from stock message boards. papers.ssrn.com/sol3/papers.cfm?abstract_id=1639470.

Pompian, M. M., & Wood, A. S. (2006). *Behavioral finance and wealth management: How to build optimal portfolios for private clients*. Wiley Finance.

Pirnazarov, N. (2020). Philosophical analysis of the issue of spirituality. International Journal of Advanced Science and Technology, 29(5).

Ritter, J. R. (2003). Behavioral finance. *Pacific-Basin Finance Journal*, *11*(4), 429–437. http://sssjournal.com/Makaleler/804838668_01_91_7_ID3634_Sipahi%20D%c3%b6ngel_5037-5046.pdf.

Sekaran, U. (2013) *Research methods for business* (Vol. 65) https://doi.org/10.1017/CBO9781107415324.004

Shikuku, C. O. (2014) *the Effect of Behavioral Factors on Individual Investor Choice at the Nairobi Securities Exchange.https://d1wqtxts1xzle7.cloudfront.net*.

Statman, M., Thorley, S., & Vorkink, K. (2006). Investor overconfidence and trading volume. *The Review of Financial Studies*, *19*(4), 1531–1565. , https://doi.org/10.1093/rfs/hhj032.

Subramanian, N, Abdulrahman, MD and Wu, L and Nath, P (2015) Green competence framework: Evidence from China. International Journal of Human Resource Management, 27 (2) 151 - 172. ISSN 0958-5192 DOI: https://doi.org/10.1080/09585192.2015.1047394.

Tachiwou, A. M. (2010). Stock market development and economic growth: the case of West African monetary union. *International Journal of Economics and Finance*, *2*(3), 97–103. https://pdfs.semanticscholar.org/deec/bbdc3171c725bebc74d5900bb3634fe06cda.pdf.

Toma, F. M. (2015). Behavioral Biases of the Investment Decisions of Romanian Investorson the Bucharest Stock Exchange. Procedia Economics and Finance, 32, 200-207. https://doi.org/10.1016/S2212-5671(15)01383-0.

Tauni, M. Z., Fang, H. X., Rao, Z. R., & Yousaf, S. (2017). The influence of Investor personality traits on information acquisition and trading behavior: Evidence from Chinese futures exchange. *Personality and Individual Differences*, *87* (12), 248-255. https://doi.org/10.1016/j.paid.2015.08.026.

Trinugroho, I., & Sembel, R. (2011) Overconfidence and excessive trading behavior: An experimental study International Journal of Business and Management, 6(7). https://core.ac.uk/download/pdf/20334908.pdf.

Trönnberg, C. C. and Hemlin, S. (2019) "Challenging investment decision-making in pension funds", Qualitative Research in Financial Markets, ahead-of-print(ahead–of–print). https://doi.org/10.1108/QRFM-03-2018-0039.

Waweru, N. M., Munyoki, E., & Uliana, E.(2008). The effects of behavioral factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange International Journal of Business and Emerging Markets, 1(1), 24–41. https://www.inderscienceonline.com/doi/abs/10.1504/IJBEM.2008.019243.

Yaowen, X. U. E., Suqing, S. U. N., ZHANG, P., & Tian, M. E. N. G. (2015) Impact of Cognitive Bias on Improvised Decision-Makers' Risk Behavior: An Analysis Based on the Mediating Effect of Expected Revenue and Risk Perception. Management Science and Engineering, 9(2), 31-42. DOI: 10.3968/6843.