

An Empirical Investigation on Factors Influencing upon Investment Decision of Women Entrepreneurs

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The paper comprehends various factors that influence behaviour of women entrepreneur's investment decisions, who feels reluctant while allocating their fund to maintain sustainability due to uncertainty. A well-structured survey questionnaire was sent to accumulate data. We approached 200 potential respondents but only 120 responses were received that we employed using PLS-SEM to empirically test the measurement and structural model of the designed conceptual model in the study. The study revealed that woman entrepreneurs are influenced by social factors, behavioural factors and their distinct investment attitudes for available investment options especially at times of uncertainty. Interestingly, it was found that they are risk averse, sometimes short of government incentives and face political instability that ultimately prevent them from sound investment activity. The findings of the study brought out a better in-depth knowledge regarding the psychology of women entrepreneurs as an investor and would be helpful to the financial consultant to develop productive capital investment plans for the women entrepreneurs. The study would be in the best interest of policymakers in the corporate world and contemporary scholars to comprehend the underlying factors that affect the investment decision of women entrepreneurs, especially at the uncertain circumstances. Finally, it will contribute to provide assistance to women entrepreneurs in understanding and mitigating their reluctances whilst taking decision for investment, enabling them to consider trade-off between the return and risk.

Key words: *Investment Decisions, Uncertainty, Behavioural Factors, Investment Attitude and entrepreneur*



Introduction

Globally entrepreneurs proactively contribute in the activities regarding social, economic and ecological sustainability (Nguyen et al., 2021). OECD (Organization for Economic Cooperation and Development) figures of 2017 and 2019 revealed that start-ups and Small and Medium Enterprises (SMEs) are contributing around 99 percent of business activities and add value approximately 50 to 60 percent towards economy as a whole. Recently, it is very difficult to persuade the investor and predict their investment attitude because a number of influencing factors come across to make the final decision (Salim & Khan, 2020).

People are very conscious and cautious regarding their investment behaviors as everyone take pleasure in the benefits of what they earn through his or her countless efforts (Dang et al., 2019). Similarly, Salim (2015) addresses that relishing the advantage of what we earn refers to best utilization of wealth as it is considered long-term investment. Thus, spending luxuriously should be avoided and refrained (Salim et al., 2016; Al-Nawafah & Almarshad, 2020). Hinkin (1995) recommended that before taking any financial decisions for spending and investing the investor must follow a systematic procedure of diverse choice analysis that is ultimately considered as long-run collateral and sufficiently contributing for sustainable performance of an entity. Salim and Khan (2020) examined that women mostly save money by investing in different financial institutions but they feel reluctant in capital expenditure or other asset classes as people possess different spending habits for their respective investments (Sihotang et al., 2020).

Correspondingly, Mumtaz et al. (2018) pointed out that investment decisions are imperative for any organization that are affected by a number of factors such as right and proper investment decisions augmenting financial outcomes and ultimately enhancing the performance of running enterprise. Behavioral factors positively affect investment decisions of investors (Kengatharan and Kengatharan, (2014); Qadri and Shabbir, (2014); Nofsinger and Varma, 2013). Similarly, Gervais et al. (2002) argued that psychological factors such as optimism also significantly affects investment decision. Parsaeemehr et al. (2013) highlighted that social-science and psychological theories have developed the efficiency of financial markets and elucidated several anomalies, market bubbles and crashes that introduce an innovative subject matter of behavioral finance. These behavioral factors comprehensively analyze the market sensations based on the investment attitude mechanisms.

Theoretically, this study focus on Theory of Social Learning (Bandura Albert, 1977). Entrepreneurial capabilities and activities are regarded with suspicions in uncertainty moreover, their motive is to finish the task and attain their preferred objectives (Markowska & Wiklund, 2020). Similarly, uncertainty makes one to firmly believe in their abilities to accomplish the salient goal focused because it is common that entrepreneurs have scarce resources and liquidity issues at times to acquire the desirable resources (Engel et al., 2014;



Krueger, 2007) therefore, Korsgaard, Ferguson and Gaddefors (2015) argued that entrepreneurs heavily rely on their social networks. Similarly, self-efficacy and experiencing through social networks is the crux of “*Social Learning Theory*” making this theory suitable for establishing base for an entrepreneur decision making model.

Kappal and Rastogi (2020) discussed that the approach of decision making enables women entrepreneur to make preferences among various alternatives and actively contribute through different perspectives to think and make rational and logical conclusions before making any final decision as an entrepreneur. When the women decides to be an entrepreneur she takes active and proactive actions based on several elementary approaches that change with the passage of time and are established by a woman to become self-employed and a good business leader in her respective field. Yuvaraj and Sujatha (2019) pointed out that the innate and well-educated skills of the females in business encourage individual capability to lead their corporate effectively as a good decision maker. The decision of an investor are based on their attitude and thinking styles that enables them to think about the information rationally or innovatively depending on the prevailing situation in the financial market.

Thus, behavioral factors that influence decision making focuses on the attitude that women entrepreneurs adopt while selecting among various alternative asset or opportunities at time of uncertain condition. On other hand, there attitudes towards any financial investment activity reflect their perception regarding available business information keeping in mind the structure and control over their business to survive in the uncertain circumstances effectively. Precisely, the business oriented women’s decisions are characterized into accepting value orientated decisions that helps in tolerating uncertain conditions that exist in the business atmosphere. Therefore, this study comprehensively discusses the behavioural factors, social factors, and the varying investment attitudes of the women entrepreneurs that vary due to uncertainty or any financial crises that ultimately affect the investment decisions of women while running their business.

Literature Review

Investment decision of an individual is influenced by society, different attitudes, beliefs and behavioral biases that leads to significant understanding of the investor’s psychology and other driving factors while making financial decision. These influencing factors also provide guidelines to the financial institutions and service facilitators to recommend appropriate investment alternatives to the potential entrepreneur while consulting for any investment activity. Several studies conducted regarding behavioural-finance have substantially attracted different scholars and industries alike.

The prevailing “*Utility-Theory*” substituted by the model known as “*The Prospect Theory*” which is well-recognized and regarded as a great achievement in the arena of behavioural-finance where scholars discovered that during uncertainty investor’s decisions differ from the

expected outcome by means of standard theory of economic (Kahneman and Tversky , 1979). According to the behavioural study the basic aim of the study is to explain how and why people invest and also provide guidelines regarding fluctuations in the prices and positioning of various investment assets and opportunities. Pompian (2006) gave a scholastic view on behavioural finance and precisely emphasized on behavioural finance micro that refers to the behaviour of individual investor who takes rational decisions and identifies cognitive factors that highly affect decisions of any investor running or owning successful business. The author also pointed out regarding “*Behavioural Finance Macro*” that it uncovers and describes glitches in an effective market-hypothesis that are further explained by the behavioural models. Thus, this study focuses on the factors affecting investment decision women entrepreneurs in Pakistan.

Investment Decisions determinants

The entrepreneurs before taking final investment decisions among available opportunities should primarily focus on the comprehensive knowledge or should have sufficient financial literacy and carefully worked-out skills. Several studies have identified numerous reasons that greatly affect the entrepreneur’s decision-making. Owners in common while executing business or any business transaction fail to make rational decisions (Kumar et al., 2018; Nigam et al., 2018). Investor’s judgments are biased and depend on their traits, money attitude, gender and varied prejudices. Moreover, when the investor makes financial decisions for their businesses so, they are provoked by the prevailing market reactions and their distinct personal characteristics. Thus, it would be very interesting, to explore the logical reason behind entrepreneur’s behaviour as an investor. The literature of the study discusses the impact of behavioural, social and investment attributes of women entrepreneurs towards diversifying their surplus wealth through minimizing risk and maximizing return at time of uncertainty to make productive final investment decisions considering factors that affect their entrepreneurial judgements regarding capital investments. (Baker et al., 2018; Chavali and Mohanraj, 2016).

Impact of Behavioural Factors

Investors are often biased while making financial decisions regarding their excess fund in the business (Fisher and Statman, 2000; Godoi et al., 2005; Kumar and Goyal, 2015). Similarly, imperfect reasoning or sentiments are the factors that affect an entrepreneur’s investment decisions and ultimately lead to take unreasonable decisions (Godoi et al., 2005). Normally, cognitive-bias instigate from false reasoning. These divergences are a result of memory, insufficient time and attention limits (Godoi et al., 2005). On contrary, overconfidence bias befalls when entrepreneur overvalue their capability of judgement (Fisher and Statman, 2000). Whereas, overestimating and being over-confident about the investment often overlooks any negative information regarding it (Barber and Odean, 2001). Fisher and Statman (2000) also emphasized on anchoring bias that occurs with the propensity of irrelevant number as the reference point. Similarly, the entrepreneur while availability bias easily relate to the most

prevailing and acquainted outcome instead of statistically more possible outcomes (Pompian, 2006). Mostly, consultants are accountable for counselling while maintaining their book of affairs and consider external factors responsible for unexpected losses, referred as “*Self-Attribution Bias*” (Mishra and Metilda, 2015). Likewise, authors have discussed some other behavioural biases for instance cognitive biases also called representativeness bias, mental-accounting bias, ambiguity-aversion bias, confirmation bias, hindsight bias, control illusion and framing bias (Fisher and Statman, 2000; Pompian, 2006).

Godoi et al. (2005) discussed emotional biases categorization as, deviances from a projected financial-behaviour that is accredited to judgements based on emotions. Similarly, Kahneman et al. (1993), Pompian (2006) conducted an in depth studies on emotional, endowment, and optimism bias. Whereas, investigation on loss aversion, regret aversion, and status quo bias was discussed by (Godoi et al., 2005; Barber and Odean, 2000; Kahneman et al., 1993). Thus, with discussion above we propose the hypothesis as:

H1: Uncertainty mediates with Behavioural factors and the women investment decisions.

Impact of Investment Attitude

Investment attitude or type of entrepreneur’s personality highly influences its investment decisions. Extensive investigations have yet comprehended the rapport between the different type of personality and the entrepreneur’s investment behaviour in the industry. Scholars have used different inventories of personal traits and deliberated on the alliance between type of person’s character and its capacity to endure risk. The two well-known trait-inventories are the Big Five (Mayfield et al., 2008; Brown and Taylor, 2014; Zarri and Buccioli, 2017; Akhtar et al., 2018). Similarly, Myers Brigs another of its type (Filbeck and Hatfield, 2005; Parsaemehr et al., 2013). Investment attitude or perception of entrepreneur having a discrepancy can adversely affect their wealth (Kannadhasan et al., 2016).

Hence, it is essential for an entrepreneur that they consult expert financial advisors who would understand the attitude of the potential investor and then offer an investment proposal consisting different alternatives. Moreover, Kappal and Rastogi (2020) investigated that an investor should have sufficient financial knowledge or literate enough to sustain its business and contribute towards economic growth and well-being of its nation and corporation. The author also emphasized on the recommendation given by “*Organization for Economic Co-operation and Development (OECD)*” that financial knowledge about the market amalgamates awareness, expertise, literacy, attitude and assertiveness which enables the owner running business to make sound, and healthy financial decisions to accomplish good fortune financially. Lusardi and Mitchell, (2008) stated that investor can select adequate financial assets through financial knowledge that helps them to secure their future for longer period of time. Moreover, education also effects the entrepreneur’s perception, attitude and behaviour in financial undertakings (Kumar et al., 2018). Studies have witnessed that polished and learned people are

concerned about their sustainability and carefully do capital investment than those who are less educated and fail to do effective strategic planning regarding their investment and fund allocation. It is observed that sufficient education escalates overconfidence and self-attribution bias (Mishra and Metilda, 2015). Similarly, experience years in the field of investment also impacts portfolio selection and develop biases among investors. Businesses are more overconfident if they are more experienced whereas, less experienced owners are conservative and has little effect on self-attribution bias (Mishra and Metilda, 2015).

H2: Uncertainty mediates with Investment Attitude and the women investment decisions.

Impact of Social Factors

The study also focuses on a positive approach that social attributes based on family, society and rival industries certainly affect the financial knowledge (Grohmann et al., 2015). Financial farsightedness exhibited by society greatly impacts the new entrant's financial wisdom. Kappal and Rastogi (2020) also emphasized on social factors that they affect the mental state of an entrepreneur investor that is witnessed when they experience the surroundings while selecting best long run opportunity for their business. Besides to the social influence Akhtar et al. (2018) reveals that the entrepreneur investor's financial decisions are also affected by media and the information generated through the opponent company's profile published yearly and semiannually. Tang and Baker (2016) emphasized on several psycho-graphic causes for instance, attitude, norms and values, lifestyles and prevailing trends that influence the financial decision-making. Entrepreneurs with high self-esteem exhibit better performance. Charness and Gneezy (2012), Lusardi and Mitchell (2008) argued that women-entrepreneurs are risk-averse and they eventually, fail to create sustainable future plans for their business.

Therefore, this study draws attention towards an emergent issue that Pakistani women entrepreneurs can also allocate their funds adequately to attain best possible investment opportunity if they plan, equip their bag of knowledge with logical information and efficiently diversify their wealth to maximize their return and minimize the risk.

H3: Uncertainty mediates with social factors and the women investment decisions.

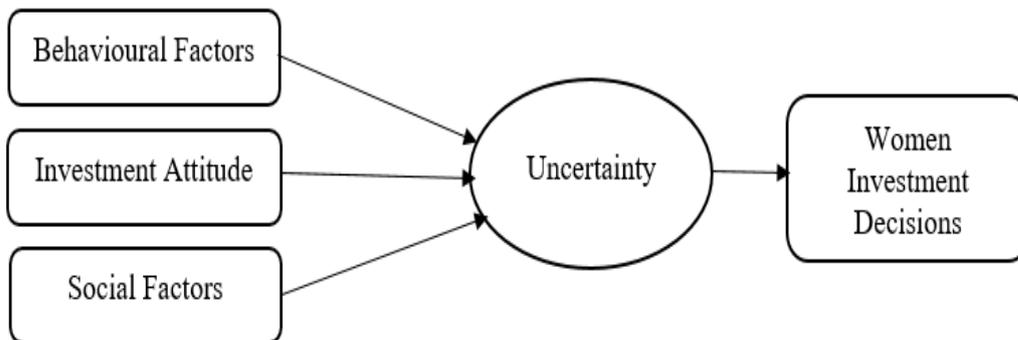
Uncertain Conditions

Women as an entrepreneur absorbs risk (Cramer et al., 2002; Kan and Tsai, 2006). Garrett et al. (2020) explored that, earlier corporate entrepreneurs had a practice of availing opportunity with a great perceived possibility of expected results because in corporations the entrepreneurs prefer investments with more definite payoffs against uncertainty. Thus, uncertainty in the surroundings stimulates them to utilize slack resources because it plays a protective and reassuring role. These surpluses promote experiments and corporate venturing (Fadol et al., 2015; Tan and Peng, 2003). It is essential for entrepreneurs to diversify their resources because it

enables to shift the attention from uncertainty (Fadol et al., 2015; Tan and Peng, 2003). Therefore, women-entrepreneur can overcome uncertainty by adopting adequate strategies keeping in view the prevailing situations of the economy.

The literature review depicts the study of underlying factors that a women entrepreneur investor considers during uncertain conditions to make sound investment decisions. Yet none of the studies have discussed woman-entrepreneur's investment decisions in this domain in Pakistan. Therefore, this empirical study examines the factors affecting the investment decisions of women-entrepreneurs in Pakistani context. Women entrepreneurs contribute substantially in the economy and they can further accomplish their goals through diversifying their funds in varied asset or best available long run opportunities.

Figure 1 Factors influencing women investment decision via uncertainty



Methodology

Population and sampling

Data of the study was accumulated form the women entrepreneurs of Pakistan. We accosted approximately 200 women running their business successfully in the two big cities Lahore and Karachi of Pakistan. A total of 150 women entrepreneurs responded to our survey questionnaire and provided us with the required facts. After thorough screening 30 cases were eliminated from the available information because the responses were unengaged and missing values were found. Hence, 120 cases were further analyzed and processed. Table 1 shows the distribution of the ultimate sample used in the study to empirically test the hypothesis.



Table 1 Demographic Distribution

Profile	Percentage
Age	
30 to 35	11%
36 to 40	41%
41 to 45	31%
46 to 50	13%
More than 51	4%
Qualification	
Non-Graduate	18%
Graduate	62%
Post Graduate	20%
PhD	
Experience	
3 years	15%
Above 3 < 6 years	37%
≥ 6 years ≤ 10 years	28%
Above 10 years	20%
Where n = 120	

A large number of respondents were contacted to assemble the primary data. We used questionnaire to survey our potential respondents as it considered a reliable tool to collect information. A close-ended questionnaire was developed to gather the data. Table 2 reveals the detail of the constructs with their respective sources. The employed questionnaire in the study had two portions Part-A enclosing the demographic information of the respondent and Part-B containing the items related to our conceptual framework. The variables were evaluated on “five-point Likert scale; 1 (Strongly Disagree) 2 (Disagree) 3 (Neutral) 4 (Agree) 5 (Strongly Agree)”. Explanation of each variable or construct is illustrated below in Table 3.

Table 2 Sources of the Respective Construct

Construct	Indicators	Sources
Behavioral Factors	9 items	Agarwal & Lenka, (2018); Baker et al., (2018); Camerer & Lovallo, (1999); Kleinübing Godoi et al., (2005); Kumar & Goyal, (2015); Ritter, (2003); Son & Rojas, (2011).
Investment Attitude	9 items	Baporikar & Akino, (2020); Barber & Odean, (1998); Baum & Ingram, (1998); Bowen & Hisrich, (1986); Burton, (1995); Casson & Giusta, (2007); Hibbert et al., (2004); Prasad et al., (2014); Sahi et al., (2013).
Social Factors	9 items	Akhtar et al., (2018); Gaudecker, (2015); Greve & Salaff, (2003); Imtiaz et al., (2019); Narayan & Pritchett, (1999); Webley & Nyhus, (2006).
Uncertainty	9 items	Kappal & Rastogi, (2020); Yıldırım-Karaman, (2018); Zahera & Bansal, (2018); Zeb & Ihsan, (2020).
Investment Decisions	9 items	Almenberg & Dreber, (2015); Baig & Khalidi, (2020); Baum & Ingram, (1998); Bowen & Hisrich, (1986); Brown & Taylor, (2014); Casson & Giusta, (2007); Charness & Gneezy, (2012); Mishra & Metilda, (2015); Parimalakanthi & Kumar, (2015); Rashid & Ratten, (2020); Shakeel et al., 2020; Wing Yan Man, (2006).

Table 3 Definitions of the Constructs

Construct	Definitions
Behavioral Factors	Behavioral Factors refers to a field comprising psychological, economical and other social sciences attributes that enables investor to identify and comprehend the variety of financial choices to help them develop long-term strong relationship with their clientele and build diversified portfolio in the best interest of their clients.
Investment Attitude	Investment attitude defines the association between competing demographic, personal and perceived conducts to risk. Moreover, it is the common behaviour or perception that shapes the attitude of the investor towards allocating their wealth efficiently to gain productive outcome.
Social Factors	Social factors are those general factors that affect human in the society concerning social structure and processes. Moreover, these factors influence the mental state of an individual through experiencing the surroundings while performing any investment activity.
Uncertainty	Uncertainty refers to lack of sureness or suspicion about some event ranging from a falling short of certainty to an absolute lack of knowledge or conviction about a certain consequence or outcome.
Investment Decisions	Investment decision refer to the act of scrutinizing and deliberating to invest funds into different asset classes to earn maximum return. Investment decision is also known as capital budgeting where the funds are allocated for the long-run to achieve sustainability.

Analytical Method

The prevailing study exercised “*Partial Least Square-Structural Equation Modeling (PLS-SEM)*”. SEM is considered a multivariate approach that is extensively used by scholars to comprehend structural relationships. It enables a researcher to analyze several variables together in an integrated model simultaneously (Hair et al., 2016). It also provides valuable and convenient insight to conceptualize all the constructs of the given study and the aligned theories to test data empirically. Moreover, it reveals complex causal modeling. Similarly, estimation of a model having a small sample with many exogenous and endogenous variables can also be executed through this approach (Akter et al., 2017). Thus, PLS was favored over other approaches because it does not restrict small sample and non-parametric data. It successfully estimates a relatively small sample size and is considered an effective technique for analyzing the given data that is not normally distributed (Hair et al., 2016).

Reliability and validity

Procedures recommended by Hair et al. (2019) are kept in view before assessing the reliability and validity of the proposed constructs. To check the reliability first we examined the Factor Loadings. Loadings above 0.708 are recommended as they specify that the construct elucidates more than 50 % variance of the item. Hence, our study depicts indicator loadings > 0.5 thus, stipulating acceptable reliability of all the indicators. We also calculated the values of Composite Reliability (CR). The threshold values of CR for the constructs are greater than the threshold values of 0.70. Similarly, to observe the validity of the proposed construct we determined twofold approach thus; we ascertained the convergent validity through estimating Average Variance Extracted (AVE) values. The AVE values of all variables are greater than 0.50 ensuring convergent validity of the constructs. Further, we ascertained discriminant validity of the construct through estimating Fornell-Larcker criteria as exhibited in Table 4. Hence, AVE square rooted values shown diagonally in Table 5, are bigger than inter-construct correlations.

Table 4 Validity and Reliability

Construct	Indicators	Factor Loadings	AVE	CR
Behavioural Factors	BH1	0.78	0.57	0.92
	BH2	0.84		
	BH3	0.76		
	BF4	0.77		
	BF5	0.78		
	BF6	0.77		
	BF7	0.82		
	BF8	0.65		
	BF9	0.58		
Investment Attitude	IA1	0.77	0.73	0.96
	IA2	0.85		
	IA3	0.86		
	IA4	0.90		
	IA5	0.90		
	IA6	0.82		
	IA7	0.96		
	IA8	0.90		
	IA9	0.75		
Social Factors	SF1	0.80	0.64	0.94
	SF2	0.84		
	SF3	0.76		
	SF4	0.80		
	SF5	0.80		
	SF6	0.80		
	SF7	0.81		
	SF8	0.89		
	SF9	0.69		
Uncertainty	U1	0.79	0.59	0.79
	U2	0.72		
	U3	0.78		
	U4	0.81		
	U5	0.70		
	U6	0.72		
	U7	0.79		
	U8	0.81		
	U9	0.77		
Women Investment Decisions	ID1	0.75	0.58	0.83
	ID2	0.73		
	ID3	0.77		
	ID4	0.76		
	ID5	0.79		
	ID6	0.71		
	ID7	0.77		
	ID8	0.79		

ID9 0.88

Table 5 Fornell-Larcker Criteria

	Behavioural Factors	Investment Attitude	Social Factors	Uncertainty	Women Investment Decisions
Behavioural Factors	0.75				
Investment Attitude	0.77	0.85			
Social Factors	0.77	0.79	0.80		
Uncertainty	0.68	0.71	0.74	0.77	
Women Investment Decisions	0.60	0.64	0.68	0.72	0.76

The outcomes of hypothesis are depicted in Table 6. The results revealed that uncertainty mediates the relationship between behavioural factors ($t = 10.115$, $p = 0.000$) investment attitude ($t = 4.106$, $p = 0.000$), social factors ($t = 16.004$, $p = 0.000$) and women investment decision. The study demonstrated partial mediation as the direct and indirect effect of the construct displayed significant relationship.

Table 6 Testing Hypothesis

	T Statistics	P-Values	Decision
Behavioural Factors -> Uncertainty -> Women Investment Decisions	10.115	0.000	Supported
Investment Attitude -> Uncertainty -> Women Investment Decisions	4.106	0.000	Supported
Social Factors -> Uncertainty -> Women Investment Decisions	16.004	0.000	Supported

Conclusion

The study intends to discover and examine those factors that are determining the decisions regarding investment, of women-entrepreneurs in two big cosmopolitan urban cities such as Karachi and Lahore, well-known for startups. The investigation revealed factors that influenced women entrepreneur's decisions in uncertainty. Since, they are considered a valuable asset who play substantial role towards economic growth. The study argues that women-entrepreneurs when invest their surplus for long-term so they exhibit conservative attitude and often consult their respective legal advisors to mitigate their risk. The preferences among investment assets are shaped by the investment attitude, social and behavioural factors. They strongly come across challenges but always seek financial independence to take own decisions. Limited knowledge regarding capital budgeting, uncertain situations, and government instability hinder them from riskier investment opportunities. The present research exhibits that if they are



equipped with appropriate knowledge about the alternative investment products so they will invest adequately and if the market is stable so this will develop a positive attitude towards their financial decisions.

Limitations and Future Scope

The study has certain limitations that social, behavioural factors along with the women entrepreneur's investment attitude that influence their investment decisions through uncertainty in two urban cities of Pakistan, with a sample of 120.

Thus, there is a wide-scope for an investigation that conducts a comprehensive strength of this relationship in the Pakistani context where, more factors can be considered to test the investment decisions of women in Pakistan in more than two cities. Similarly, a comparative analysis between different regions or countries can be conducted, that will widen the scope of knowledge provided by this research. Furthermore, would depict a different investment behaviour in different regions. Similarly, a pool of scholastic can be accompanied to explore the impact of cultural-factors affecting the attitude of women-entrepreneurs in relation to capital investments.

Implication

This study will provide assistance to women entrepreneurs in understanding and alleviating their averseness during investment decisions and enable them to make sound decisions regarding investments, thereby, considering the tradeoff between risk and return.



REFERENCES

- Agarwal, S., & Lenka, U. (2018). Why research is needed in women entrepreneurship in India: A viewpoint. *International Journal of Social Economics*, 45(7), 1042–1057. <https://doi.org/10.1108/IJSE-07-2017-0298>
- Akhtar, F., Thyagaraj, K. S., & Das, N. (2018b). 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*, 14(1), 130–148. <https://doi.org/10.1108/IJMF-05-2016-0102>
- Al-Nawafah, S. S., & Almarshad, M. N. (2020). The role of decentralization for balancing employee performance in governmental universities in Jordan. *Management Science Letters*, 3217–3224. <https://doi.org/10.5267/j.msl.2020.6.017>
- Baig, U., & Khalidi, M. A. (2020). A grounded theory exploration of appraisal process of capital investment decisions - capex appraisal model (cam). 11(7), 27.
- Baker, H. K., Kumar, S., & Singh, H. P. (2018a). Behavioural biases among SME owners. 25.
- Bandura Albert. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. 25.
- Baporikar, N., & Akino, S. (2020a). Financial Literacy Imperative for Success of Women Entrepreneurship: *International Journal of Innovation in the Digital Economy*, 11(3), 1–21. <https://doi.org/10.4018/IJIDE.2020070101>
- Barber, B. M., & Odean, T. (2001). BOYS WILL BE BOYS: GENDER, OVERCONFIDENCE, AND COMMON STOCK INVESTMENT. *QUARTERLY JOURNAL OF ECONOMICS*, 32.
- Baum, J. A. C., & Ingram, P. (1998). Survival-Enhancing Learning in the Manhattan Hotel Industry, 1898–1980. *Management Science*, 44(7), 996–1016. <https://doi.org/10.1287/mnsc.44.7.996>
- Bowen, D. D., & Hisrich, R. D. (1986). *The Female Entrepreneur: A Career Development Perspective*. 16.
- Brown, S., & Taylor, K. (2014). Household finances and the ‘Big Five’ personality traits. *Journal of Economic Psychology*, 45, 197–212. <https://doi.org/10.1016/j.joep.2014.10.006>
- Buccioli, A., & Veronesi, M. (2014a). Teaching children to save: What is the best strategy for lifetime savings? *Journal of Economic Psychology*, 45, 1–17. <https://doi.org/10.1016/j.joep.2014.07.003>
- Burton, D. (1995). Women and financial services: Some directions for future research. *International Journal of Bank Marketing*, 13(8), 21–28. <https://doi.org/10.1108/02652329510098882>
- Camerer, C., & Lovo, D. (1999). Overconfidence and Excess Entry: An Experimental Approach. *THE AMERICAN ECONOMIC REVIEW*, 89(1), 13.
- Casson, M., & Giusta, M. D. (2007). Entrepreneurship and Social Capital: Analysing the Impact of Social Networks on Entrepreneurial Activity from a Rational Action



- Perspective. *International Small Business Journal: Researching Entrepreneurship*, 25(3), 220–244. <https://doi.org/10.1177/0266242607076524>
- Charness, G., & Gneezy, U. (2012). Strong Evidence for Gender Differences in Risk Taking. *Journal of Economic Behavior & Organization*, 83(1), 50–58. <https://doi.org/10.1016/j.jebo.2011.06.007>
- Chavali, K., & Mohanraj, M. P. (2016). *Impact of Demographic Variables and Risk Tolerance on Investment Decisions: An Empirical Analysis*. 6(1), 7.
- Cramer, J. S., Hartog, J., Jonker, N., & Praag, C. M. V. (2002). *Low risk aversion encourages the choice for entrepreneurship: An empirical test of a truism*. 8.
- Dang, T. T. H., v, T. K., Tran, V. T., Tran, T. N. T., & Pham, T. L. (2019). The impact of accounting disclosures on individual investors' decision making in Vietnam Stock Market. *Management Science Letters*, 2391–2402. <https://doi.org/10.5267/j.msl.2019.7.016>
- Engel, Y. (2014). Uncertain but able_ Entrepreneurial self-efficacy and novices' use of expert decision-logic under uncertainty. *Journal of Business Venturing Insights*, 6.
- Fadol, Y., Barhem, B., & Elbanna, S. (2015). *The mediating role of the extensiveness of strategic planning on the relationship between slack resources and organizational performance*. 24.
- Filbeck, G., Hatfield, P., & Horvath, P. (2005a). Risk Aversion and Personality Type. *Journal of Behavioral Finance*, 6(4), 170–180. https://doi.org/10.1207/s15427579jpfm0604_1
- Fisher, K. L., & Statman, M. (2000). Cognitive Biases in Market Forecasts. *The Journal of Portfolio Management*, 27(1), 72–81. <https://doi.org/10.3905/jpm.2000.319785>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *JOURNAL OF MARKETING RESEARCH*, 12.
- Garrett, R., Mattingly, S., Hornsby, J., & Aghaey, A. (2020a). *Impact of relatedness, uncertainty and slack*. 18.
- Gaudecker, H.-M. V. (2015). How Does Household Portfolio Diversification Vary with Financial Literacy and Financial Advice?: Financial Literacy and Household Portfolio Diversification. *The Journal of Finance*, 70(2), 489–507. <https://doi.org/10.1111/jofi.12231>
- Gervais, S., Heaton, J. B., & Odean, T. (2002). *The Positive Role of Overconfidence and Optimism in Investment Policy*. 49.
- Greve, A., & Salaff, J. W. (2003). Social Networks and Entrepreneurship. *Entrepreneurship Theory and Practice*, 28(1), 1–22. <https://doi.org/10.1111/1540-8520.00029>
- Grohmann, A., Kouwenberg, R., & Menkhoff, L. (2015). Childhood roots of financial literacy. *Journal of Economic Psychology*, 51, 114–133. <https://doi.org/10.1016/j.joep.2015.09.002>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>



- Hibbert, J. R., Beutler, I. F., & Martin, T. M. (2004b). *Financial Prudence and Next Generation Financial Strain*. 15, 9.
- Hinkin, T. R. (1995). A Review of Scale Development Practices in the Study of Organizations. *Journal of Management*, 21(5), 967–988. <https://doi.org/10.1177/014920639502100509>
- Intiaz, R., Kazmi, S. Q. ul A., Amjad, M., & Aziz, A. (2019). The impact of social network marketing on consumer purchase intention in Pakistan: A study on female apparel. *Management Science Letters*, 1093–1104. <https://doi.org/10.5267/j.msl.2019.3.015>
- Kahneman, D., & Lovallo, D. (1993). Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking. *Management Science*, 39(1), 17–31. <https://doi.org/10.1287/mnsc.39.1.17>
- Kahneman, D., & Tversky, A. (1979). On the interpretation of intuitive probability: A reply to Jonathan Cohen. *Cognition*, 7(4), 409–411. [https://doi.org/10.1016/0010-0277\(79\)90024-6](https://doi.org/10.1016/0010-0277(79)90024-6)
- Kannadhasan, M., Aramvalarthan, S., Mitra, S. K., & Goyal, V. (2016a). Relationship between Biopsychosocial Factors and Financial Risk Tolerance: An Empirical Study. *Vikalpa: The Journal for Decision Makers*, 41(2), 117–131. <https://doi.org/10.1177/0256090916642685>
- Kappal, J. M., & Rastogi, S. (2020). Investment behaviour of women entrepreneurs. *Qualitative Research in Financial Markets, ahead-of-print*(ahead-of-print). <https://doi.org/10.1108/QRFM-04-2020-0053>
- Kleinübing Godoi, C., Marcon, R., & Barbosa daSilva, A. (2005a). Loss aversion: A qualitative study in behavioural finance. *Managerial Finance*, 31(4), 46–56. <https://doi.org/10.1108/03074350510769613>
- Korsgaard, S., Ferguson, R., & Gaddefors, J. (2015). The best of both worlds: How rural entrepreneurs use placial embeddedness and strategic networks to create opportunities. *Entrepreneurship & Regional Development*, 27(9–10), 574–598. <https://doi.org/10.1080/08985626.2015.1085100>
- Krueger, N. F. (2007). What Lies Beneath? The Experiential Essence of Entrepreneurial Thinking. *ENTREPRENEURSHIP THEORY and PRACTICE*, 16.
- Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making – a systematic literature review. *Qualitative Research in Financial Markets*, 7(1), 88–108. <https://doi.org/10.1108/QRFM-07-2014-0022>
- Kumar, S., Goyal, N., & Basu, R. (2018). Profiling emerging market investors: A segmentation approach. *International Journal of Bank Marketing*, 36(3), 441–455. <https://doi.org/10.1108/IJBM-03-2017-0058>
- Lusardi, A., & Mitchell, O. S. (2008). Planning and Financial Literacy: How Do Women Fare? *American Economic Review*, 98(2), 413–417. <https://doi.org/10.1257/aer.98.2.413>
- Markowska, M., & Wiklund, J. (2020). Entrepreneurial learning under uncertainty: Exploring the role of self-efficacy and perceived complexity. *Entrepreneurship & Regional Development*, 32(7–8), 606–628. <https://doi.org/10.1080/08985626.2020.1713222>



- Mishra, K. C., & Metilda, M. J. (2015). A study on the impact of investment experience, gender, and level of education on overconfidence and self-attribution bias. *IIMB Management Review*, 27(4), 228–239. <https://doi.org/10.1016/j.iimb.2015.09.001>
- Mumtaz, A., Saeed, T., & Ramzan, M. (2018). Factors affecting investment decision-making in Pakistan stock exchange. *International Journal of Financial Engineering*, 05(04), 1850033. <https://doi.org/10.1142/S2424786318500330>
- Narayan, D., & Pritchett, L. (1999). Cents and Sociability: Household Income and Social Capital in Rural Tanzania. *Economic Development and Cultural Change*, 47(4), 871–897. <https://doi.org/10.1086/452436>
- Nguyen, M.-H., Pham, T.-H., Ho, M.-T., Nguyen, H. T. T., & Vuong, Q.-H. (2021). On the social and conceptual structure of the 50-year research landscape in entrepreneurial finance. *SN Business & Economics*, 1(1), 2. <https://doi.org/10.1007/s43546-020-00002-z>
- Nigam, R. M., Srivastava, S., & Banwet, D. K. (2018). Behavioral mediators of financial decision making – a state-of-art literature review. *Review of Behavioral Finance*, 10(1), 2–41. <https://doi.org/10.1108/RBF-07-2016-0047>
- Nofsinger, J. R., & Varma, A. (2013). Availability, recency, and sophistication in the repurchasing behavior of retail investors. *Journal of Banking & Finance*, 37(7), 2572–2585. <https://doi.org/10.1016/j.jbankfin.2013.02.023>
- Paluri, R. A., & Mehra, S. (2016). Financial attitude based segmentation of women in India: An exploratory study. *International Journal of Bank Marketing*, 34(5), 670–689. <https://doi.org/10.1108/IJBM-05-2015-0073>
- Parimalakanthi, K., & Kumar, Dr. M. A. (2015). A Study on Investment Preference and behaviour of Individual Investors in Coimbatore City. *Bonfring International Journal of Industrial Engineering and Management Science*, 5(4), 170–174. <https://doi.org/10.9756/BIJIEMS.8122>
- Parsaemehr, M., Rezeai, F., & Sedera, D. (2013). PERSONALITY TYPE OF INVESTORS AND PERCEPTION OF FINANCIAL INFORMATION TO MAKE DECISIONS. *Asian Economic and Financial Review*, 11.
- Pompian, M. M. (2006). *Behavioral finance and wealth management: How to build optimal portfolios that account for investor biases*. Wiley.
- Prasad, D., Shollapur, M. R., & Patted, S. V. (2014). Indian Women Investors: Emotional Decision Makers? *Journal of Small Business and Entrepreneurship Development*, 2, 18.
- Qadri, S. U., & Shabbir, M. (2014). An Empirical Study of Overconfidence and Illusion of Control Biases, Impact on Investor's Decision Making: An Evidence from ISE. *European Journal of Business and Management*, 8.
- Rashid, S., & Ratten, V. (2020). Commodifying skills for survival among artisan entrepreneurs in Pakistan. *International Entrepreneurship and Management Journal*. <https://doi.org/10.1007/s11365-020-00688-5>
- Ritter, J. R. (2003). Behavioral finance. *Pacific-Basin Finance Journal*, 11(4), 429–437. [https://doi.org/10.1016/S0927-538X\(03\)00048-9](https://doi.org/10.1016/S0927-538X(03)00048-9)



- Sahi, S. K., Arora, A. P., & Dhameja, N. (2013). An Exploratory Inquiry into the Psychological Biases in Financial Investment Behavior. *Journal of Behavioral Finance*, 14(2), 94–103. <https://doi.org/10.1080/15427560.2013.790387>
- Salim, A. S. (2015). *A Study on Customer Preferences towards Selected Local Omani (FMCG) Products*. 6(4), 5.
- Salim, A., & Khan, S. (2020). The effects of factors on making investment decisions among Omani working women. *Accounting*, 657–664. <https://doi.org/10.5267/j.ac.2020.6.019>
- Shakeel, M., Yaokuang, L., & Gohar, A. (2020). Identifying the Entrepreneurial Success Factors and the Performance of Women-Owned Businesses in Pakistan: The Moderating Role of National Culture. *SAGE Open*, 10(2), 215824402091952. <https://doi.org/10.1177/2158244020919520>
- Sihotang, J. (2020). Core competencies of women entrepreneur in building superior online business performance in Indonesia. *Management Science Letters*, 1607–1612. <https://doi.org/10.5267/j.msl.2019.12.006>
- Son, J., & Rojas, E. M. (2011). Impact of Optimism Bias Regarding Organizational Dynamics on Project Planning and Control. *Journal of Construction Engineering and Management*, 137(2), 147–157. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000260](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000260)
- Tan, J., & Peng, M. W. (2003). Organizational slack and firm performance during economic transitions: Two studies from an emerging economy. *Strategic Management Journal*, 24(13), 1249–1263. <https://doi.org/10.1002/smj.351>
- Tang, N., & Baker, A. (2016). Self-esteem, financial knowledge and financial behavior. *Journal of Economic Psychology*, 54, 164–176. <https://doi.org/10.1016/j.joep.2016.04.005>
- Truong, D. V., Giao, N., & Ly, L. T. T. (2020). Factors affecting the role of women in the economic development of rural household families in Vietnam: A case study in Trieu Son district Thanh Hoa province. *Accounting*, 267–272. <https://doi.org/10.5267/j.ac.2020.2.009>
- Webley, P., & Nyhus, E. K. (2006). Parents' influence on children's future orientation and saving. *Journal of Economic Psychology*, 27(1), 140–164. <https://doi.org/10.1016/j.joep.2005.06.016>
- Wing Yan Man, T. (2006). Exploring the behavioural patterns of entrepreneurial learning: A competency approach. *Education + Training*, 48(5), 309–321. <https://doi.org/10.1108/00400910610677027>
- Yıldırım-Karaman, S. (2018). Uncertainty in financial markets and business cycles. *Economic Modelling*, 68, 329–339. <https://doi.org/10.1016/j.econmod.2017.08.001>
- Yuvaraj, D. S., & Sujatha, M. (2019). *Factors Influencing Women Entrepreneurial Decision-Making Styles In Msmes*. 8(11), 3.
- Zahera, S. A., & Bansal, R. (2018). Do investors exhibit behavioral biases in investment decision making? A systematic review. *Qualitative Research in Financial Markets*, 10(2), 210–251. <https://doi.org/10.1108/QRFM-04-2017-0028>



Zeb, A., & Ihsan, A. (2020a). Innovation and the entrepreneurial performance in women-owned small and medium-sized enterprises in Pakistan. *Women's Studies International Forum*, 79, 102342. <https://doi.org/10.1016/j.wsif.2020.102342>