# A STUDY OF BEHAVIOURAL FINANCE AND ITS IMPACT ON INVESTMENT DECISION OF WOMEN MICRO ENTREPRENEUR- A PILOT STUDY

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## ABSTRACT

The main objective is to study the various behavioral biases which are going to impact on the women micro entrepreneur investment decision. On respect of that mainly we are study the six main behavioral biases which include the Overconfidence Bias, Heuristic Bias, Availability Bias, Optimisms Bias, Loss Aversion Bias, Disposition Effect. For studying this research topic we are also analyze some other factors such as Anchoring Bias, Regret Aversion Bias, Confirmation Bias, Herd Behavior etc. which are also going to impacted on the investment decision. The cross-sectional research is going to conduct to perform this research study and also helps arrive at the appropriate conclusion. This research study are mainly going to conducted in the Pune city having the population of 45,69,000 peoples. The primary data is collected from the 181 women micro-entrepreneur who run their business Pune city by using a simple random sampling method and secondary data collected from the existing research paper, journals, newspaper, research article to get the updated knowledge about the research topic. Questionnaire method are going to use for the purpose of collection of data with the help of the quantitative data are obtained. The descriptive statistics are going to for arriving at the appropriate conclusion.

**Keywords:** Behavioral Biases, Investment Decision, Behavioral Finance, Decision Making Etc

## 1. INTRODUCTION

The behavioural finance is derived from the behavioural economic which tend to focus on the individual investment decision and how these investment decision are impacted on the different behavioural anomalies which exists. Tradition finance theories believe that the making a decision making is scientific process which where the decision can be taken on the basis of systemic analysis. Meanwhile the standard finance observed the two major assumptions taken into consideration while making investment decision one is investors rationality and market efficiency. Scientific analysis includes the rational investment decision taken by the investors. Some decision imperfection and abnormalities are observed which going to impact on the investor's decision making. In the behavioural finance, specifically focus on how the psychology is impacted on the investment decision making. Behavioural biases are considered to be factors which deviate the investors from making a rational decision. These biases can deviate the investors from gaining the suboptimal profit after the investment over a period of time which are also going too impacted on the financial outcome.

The primary aim of study is to improve the quality of investment decision which can be made by women micro entrepreneur investors. These studies are mainly going to conduct in Pune on women micro entrepreneur. Women Micro entrepreneur is considered to the people having their small business. Research study includes how the women micro entrepreneur earns and invests their money amount in the hope that getting a more money. Another important aim behind study is that risk management of the individual women micro entrepreneur investors also studying the risk mitigation strategy. The behavioural finance helps to understand and manage the behavioural bias which helps to avoid the individual investors making an impulsive investment decision. We are mainly going to focus on the six behavioural biases which are going too impacted on the investor's investment decision which mainly contain Overconfidence Bias, Herd Behaviour, Loss Aversion Bias, Optimism Bias, Disposition Effect, and Availability Bias. Apart from these also study the awareness and financial literacy level among women micro entrepreneur which also helps to reduce the risk which can associate with the investment decision. It is impossible to reduce the total risk but by studying the various behavioural biases helps to significantly reduce the risk as well as helps to take suboptimal decision.

## 2. LITERATURE REVIEW

The behavioural finance is the generally the way to study the various behavioural biases and going analyse the how it goes impact on the investment decision. Most of the take a suggestion and advice from the experts while taking an investment decision, all these considered that the behavioural finance plays an important role in investment decision (J., 2019). Creating awareness about the various behavioural biases and make the peoples to financially literate about would definitely going a positive impact on the decision making made by the individual investors (BAJWA, 2018). Some of them argue that investors investment decision are never be rational because decision are going to impacted on some psychological factors, cognitive factors and emotional factors. This research paper is going the fill the gap between the actual decision and expected decision while taking the investment decision (Durri, 2015). There is significant difference which are going to observed between the traditional finance and behavioural finance which lead to observed in different research results, some of the cognitive, psychological and emotional factors are going to impacted on the investors investment decision making (Muhammad Zulqarnain Asab, 2014). The preference of the individual investors define how's the decision goes on after the focus is to be set on the investors choice (Brad M. Barber, 2007). It is observed that the some behavioural patterns are going under a mathematical model (Scheemaekere, 2009)

Investors rational and irrational decision are to be based or affected by some psychological biases where the rational decision are made after the systematic analysis of the available data and irrational decision are taken at random on the basis of some expert opinion, hunch, available information, and the investors behaviour (Zaheer Ahmed, 2021). The risk perception has the significant relationship with the overconfidence of the investors that they have and the heuristic biases (Maqsood Ahmad, 2020). It is observed that lack of attention on the financial term lead because of the irresponsible behaviour (Tang1, 2024). It is observed that in India the financial literacy rate among the women are considered to be less as compared to be the men, so to make or to empower the women in India it is necessary to give the financial knowledge to every woman in India (Rashmi Sharma, 2023). The rate of investment is more as compared to the rate of saving among the women entrepreneur in india. Without the proper financial knowledge, we are unable to make the efficient allocation of money so the people are unable to make a good financial decision which gives a better return in future (Gala, 2022). Financial literacy have impact on the women investment decision, due to the lack of sufficient knowledge, she will make the investment decision which will not give her a fruitful results in future (Serin Peter, 2025). Risk evaluation is considered as important parameter of decision making, it indicate risk taking capacity or ability of individual (Rudolf B. Jongejan, 2011).

Risk evaluation and risk acceptance are considered to be the important parts while making the investment decision. Risk can never be eliminated totally but it can be minimise by getting the proper knowledge which helps to improve the individual decision making (Aven, 2016). Everyone try to earn a better amount of return after they investing money amount into certain investment avenue, but analysing the risk associated with that investment avenues will also be equally important (W, 2013). The above literature are discussing about the individual person investment behaviour, also helps to create the financial awareness and financial literacy among the individual. This research paper also referred which are based on risk acceptance and risk tolerance level of the women micro entrepreneur who want invest the money and want to get a more return on it.

## 3. BEHAVIOURAL BIASES

Behavioural biases refer to the factors which get impacted on the investor's investment decision. It may include some the psychological factors, emotional factors and social factors as well. Behavioural finance proposes the existence biases which have significant impact on the investor's investment decision. Behavioural finance tries to focus various biases some of them are overconfidence, herding, regret aversion, over-reaction, representativeness, availability, Gambler's fallacy, and anchoring etc. the major psychological biases which are given below

- **Representativeness Bias:** In the Representative Bias the investors recall the past experience and compare it with the presents, so it can be considered as past experience is representative of the present decision.
- **Loss Aversion Bias:** The Loss aversion bias considered that investors feel more pain when they incurred losses as compared to if they get an equivalent gain from the same investment.
- **Overconfidence Bias:** Overconfidence Bias refers to overestimation of ones skill, knowledge and prediction about the future success incurred after the investment.
- **Availability Bias:** Availability Bias refers to the investors make the investment decision on the basis of available information which they get first. Sometimes the investors may suffer from the losses when they get the incomplete available information.
- **Anchoring Bias:** In the anchoring bias show people tendency to heavily rely on the first piece of information which they receive first on the respective subject topic irrespective of the accuracy of that information investors use that information as reference point for making the investment decision.
- **Optimism Bias:** Optimism Bias refers to overestimation of the positive return will be getting on the risky investment.
- **Narrow Framing:** Investors make the investment decision without considering the entire portfolio. It considers mental shortcuts that bring about the oversimplification.
- **Mental Accounting:** Mental Accounting shows how the investors code, categories and evaluate the economic outcome of the investment decision. It is focus on people value the money differently based on the subjective criteria.
- **Gambler's Fallacy:** It means the tendency of the investor to erroneously believe that a particular random event is more or less likely to happened another event or a series of events.
- **Disposition Effect:** It shows the investors behaviour to hold the stock whose price is decreasing and sell the stock whose price is increasing in the future.
- **Herding Bias:** It shows the tendency of investors to follow the others opinion and not believing on oneself.
- **Status Quo Bias:** Investor stay focus on the same investment decision irrespective of the rise and fall happen in the financial market.

## 4. RESEARCH PROBLEM

The education level among the individual investors differs from person to person and according to their knowledge and understanding they want to get a better return. Individual financial position are also get impacted on the individual investors investment decision. According to the understanding and knowledge about the various investment avenues, the individual investors take the decision. Some of the factors such as psychological, demographic, emotional factors which have impact on the risk acceptance and risk tolerance level of the individual investors. The main problem which observed during the study is Financial Awareness, Risk Acceptance Level and the impact of various behavioural biases on the investment decision taken by the individual investors.

## 4.1. OBJECTIVE OF THE STUDY

The objectives of the study are as given below:

1) To study the financial awareness and financial literacy level among the women micro entrepreneur investors.

2) To study the behavioural fiancé and the impact of various behavioural biases on the investment decision of women micro entrepreneur.

3) To study the risk acceptance level among the women micro entrepreneur.

## 5. RESEARCH METHODOLOGY

Descriptive research designs are used for conducting the research study. The primary data requires for the analysis of the objectives which was collected by using the questionnaire method. In the structured questionnaire method, bunch of sequential question are ask to individual investors so that we can get the appropriate data for the analysis purpose. The secondary data is collected by referring the existing research paper, article, journal, book etc. the data are collected from the respondent using a simple random sampling method, which only include the people who are living in Pune city and want to invest a money amount getting a more return. The Pune region is considered as demographic area for conducting the study. The data are collected from the sample, in respect of that near about 181 women micro entrepreneur successfully filled the questionnaire and helps in providing a data and reaching the appropriate conclusion.

## 5.1. DATA ANALYSIS

Data analysis is based on the data collection and the data is collected from the 181 Women micro entrepreneur. Mainly the data are gathering from the women entrepreneur in Pune city.

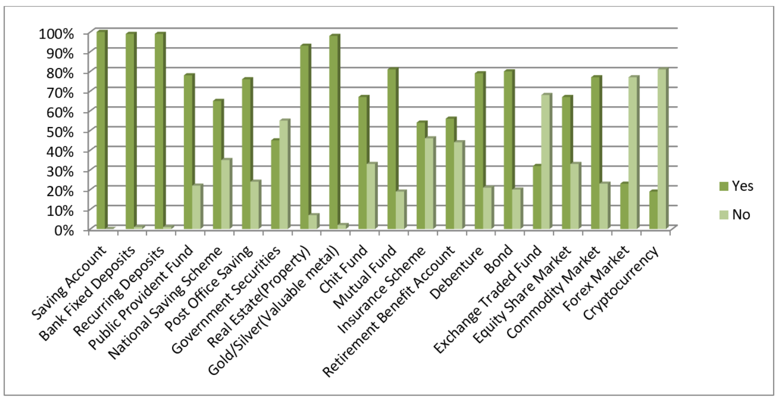


**Figure 1** shows the financial awareness level among the women micro entrepreneur

The above graph shows the financial awareness among the women entrepreneur in Pune city. It is observed from the above graph that most of the women entrepreneur are aware about the various financial product and services offered by the different financial institution which mainly include the Saving Account(SA), Bank Fixed Deposit(BFD), Recurring Deposit(RD), Public Provident Fund(PPF), National Saving Certificate(NSC), Post Office Saving (POS), Government Securities(GS), Real Estate(RE), Valuable Metal(VM), Chit Fund, Mutual Fund(MF), Insurance Scheme (IS), Retirement Benefit Account (RBA), Debenture, Bond, Exchange Traded Fund (ETF), Equity Share Market (ESM), Commodity Market(CM), Forex market(FM), Cryptocurrency.

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .0149 | .90 | 181 |

| Summary Item Statistics | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Mean | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
| Item Means | 1.300 | 1.200 | 1.400 | .200 | 1.167 | .011 | 181 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Inter-Item Correlations | .012 | -.667 | 1.000 | 1.667 | -1.500 | .247 | 181 |

Scale Statistics

| Mean | Variance | Std. Deviation | N of Items |
|---|---|---|---|
| 10.40 | 2.300 | 1.517 | 181 |

The above statistics show the data collected from the 181 respondent showing the cronbach's alpha value is 0.90, mean is 10.40; variance and standard deviation can be 2.300 and 1.517.

## 6. FINANCIAL LITERACY

Financial literacy refers to how the women micro entrepreneur utilise their financial knowledge and financial skill to obtain a better financial return. Financial literacy is the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and making the investment decision.

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .730 | .914 | 181 |

**Summary Item Statistics**

| | Mean | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
|---|---|---|---|---|---|---|---|
| Inter-Item Correlations | .200 | -.357 | .832 | 1.189 | -2.330 | .101 | 181 |

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Higher inflation rate leads to decrease in return | Between Groups | .000 | 1 | .000 | .687 | .000 |
| | Within Groups | 0.500 | 8 | .563 | | |
| | Total | 0.500 | 9 | | | |
| As the time increase of investment, the value of money decrease | Between Groups | 0.600 | 1 | 1.600 | .788 | .005 |
| | Within Groups | 0.500 | 8 | .313 | | |
| | Total | 1.100 | 9 | | | |
| Interest rate is the additional money earn over the original investment | Between Groups | .025 | 1 | .025 | .679 | .009 |
| | Within Groups | 2.375 | 8 | .297 | | |
| | Total | 2.400 | 9 | | | |
| Increase in income lead to increase in investment | Between Groups | .005 | 1 | .225 | .854 | .000 |
| | Within Groups | 0.005 | 8 | .172 | | |
| | Total | 1.00 | 9 | | | |
| A high amount of investemnt alwaya lead to high return and also associated with high risk. | Between Groups | .100 | 1 | .100 | .675 | .000 |
| | Within Groups | 0.000 | 8 | .250 | | |
| | Total | 0.100 | 9 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| If you have 100000 Rs. And you invest that money and getting return after 1 year and the inflation rate is 5%, will it be a profitable investment. | Between Groups | 4.225 | 1 | 4.225 | .744 | .003 |
| | Within Groups | 1.875 | 8 | .234 | | |
| | Total | 6.100 | 9 | | | |
| Five friends won the prize of 10,000 Rs. in a competition and one of them gives a 2000 Rs. Each, do you agree he/she distribute a equal prize amount. | Between Groups | .005 | 1 | .225 | .675 | .000 |
| | Within Groups | 2.005 | 8 | .234 | | |
| | Total | 2.00 | 9 | | | |

From the above statistics the cronbach's alpha value comes out to be 0.914 which shows the data we obtain is valid. The mean come out to 0.200 and the variance come out to .101. As we analyse the awareness and financial literacy level among women micro entrepreneur. As the F critical is 5.32 is less than 5% level of significance(p-value)) so the null hypothesis is rejected, and accept the alternate hypothesis i.e. awareness and financial literacy level observed medium to high in women micro entrepreneur.

The below graphical representation of the financial literacy level which are observed among the women entrepreneur which are given below. People understand that higher amount of inflation rate which lead to decrease in return, some the women entrepreneur consider that amount invested in various investment avenues always not give the significant return to the investors and they are also know about as the time have the negative impact on the value of money that you can get in future.

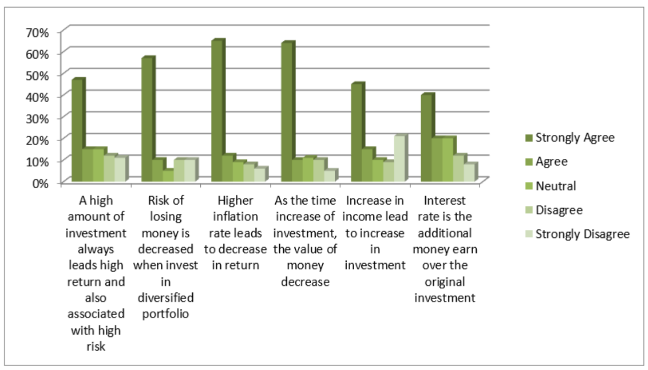


**Figure 2** shows financial literacy level among the women micro entrepreneur

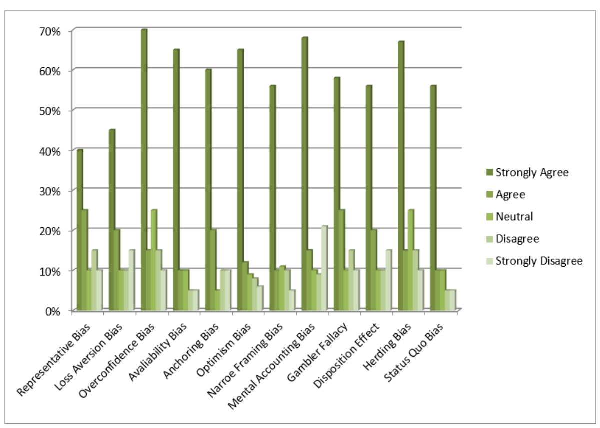


**Figure 3** shows the different behavioural bias have an impact on investment decision of women micro entrepreneur

The graph show the various behavioural bias such As Representative Bias(40%), Loss Aversion Bias(45%), Overconfidence Bias(70%), Availability Bias(65%), Anchoring Bias(60%), Optimisms Bias (65%), Narrow Framing Bias(56%), Mental Accounting Bias(68%), Gambler Fallacy(58%), Disposition Effect(56%), Herding Bias(67%), Status Quo Bias(56%). From the above graph it is observed that near about 70% people takes investment decision under the influence of overconfidence bias followed by 68% of the investors take an investment decision under mental accounting bias, 67% of the investors take their decision on the basis of Heard an information from some other people, 65% of the people have taken their investment decision on the basis of overestimation or optimism bias and rarely 40% of the investor take their investment decision on the basis of representative bias.

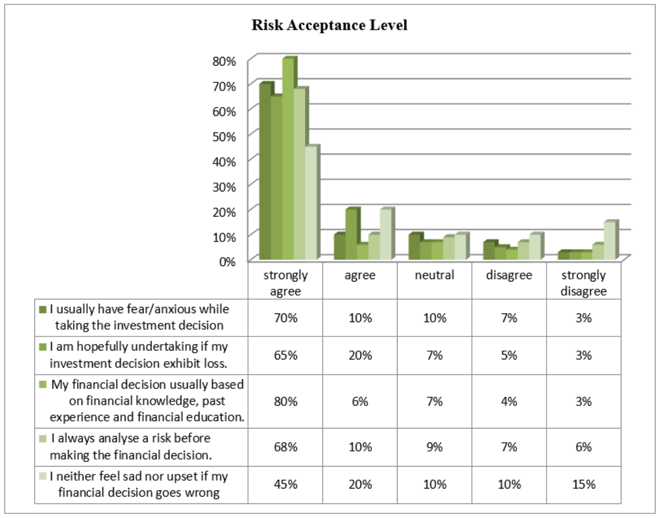


**Figure 4** shows the risk acceptance level among women micro entrepreneur

The above graph show that 70% of investors/ women micro entrepreneur have some fear and feel anxious while taking the investment decision. 65% of women entrepreneur hopefully accepting the undertaking if any losses incurred due to investment decision. Most of women entrepreneur i.e. 80% said their financial decision usually based on the financial education, financial knowledge, and past experience data. 68% of women entrepreneur strongly agree on the statement that they analyse the risk before making the financial decision and 45% of them said that they neither feel up and down if the financial decision goes wrong.

| Reliability Statistics | | |
|---|---|---|
| Cronbach's Alpha[a] | Cronbach's Alpha Based on Standardized Items[a] | N of Items |
| .890 | .902 | 181 |

| Summary Item Statistics | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Mean | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
| Item Means | 4.380 | 3.700 | 4.800 | 1.100 | 1.297 | .217 | 181 |
| Item Variances | .424 | .178 | .767 | .589 | 4.312 | .051 | 181 |

| Tests of Normality | | | | | | |
|---|---|---|---|---|---|---|
| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
| | Statistic | df | Sig. | Statistic | df | Sig. |
| I usually have fear/anxious while taking the investment decision. | .381 | 10 | .000 | .640 | 10 | .000 |
| I am hopefully undertaking if my investment decision exhibit loss. | .248 | 10 | .002 | .805 | 10 | .017 |
| My financial decision usually based on financial knowledge, past experience and financial education. | .482 | 10 | .000 | .509 | 10 | .000 |
| I always analyse a risk before making the financial decision. | .472 | 10 | .000 | .532 | 10 | .000 |
| I neither feel sad nor upset if my financial decision goes wrong. | .272 | 10 | .035 | .802 | 10 | .015 |
| a. Lilliefors Significance Correction | | | | | | |

| ANOVA |
|---|

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| I usually have fear/anxious while taking the investment decision. | Between Groups | .025 | 1 | .025 | .780 | .000 |
| | Within Groups | 2.375 | 8 | .297 | | |
| | Total | 2.400 | 9 | | | |
| 0I am hopefully undertaking if my investment decision exhibit loss. | Between Groups | 2.025 | 1 | 2.025 | 0.993 | .000 |
| | Within Groups | 4.875 | 8 | .609 | | |
| | Total | 6.900 | 9 | | | |
| I always analyse a risk before making the financial decision. | Between Groups | .100 | 1 | .100 | .786 | .000 |
| | Within Groups | 4.000 | 8 | .500 | | |
| | Total | 4.100 | 9 | | | |
| I neither feel sad nor upset if my financial decision goes wrong. | Between Groups | .225 | 1 | .225 | .805 | .000 |
| | Within Groups | 3.875 | 8 | .484 | | |
| | Total | 4.100 | 9 | | | |

From the above statistics indicate the cronbach's alpha value is 0.902 shows validity of the responses which are obtained is correct. We can also check the normality by using Kolmogorov-Smirnova and Shapiro-Wilk test which shows all are significant. ANOVA test are applied to compare the mean of two group and which shows the significant relationship obtained between risk acceptance levels among the Women micro entrepreneur.

## 7. LIMITATIONS OF THE STUDY

In the above research study is conducted only in the Pune region. They are collected from only those people who have earning and want to invest into certain investment avenues. There is scope that the same study are going to conducted on the another demographic area as well. This research paper also helps in understand the financial awareness level among the individual investors like women micro entrepreneur only and also provide the scope for further study in some respect as well. The research study is useful for the reference who is studying a similar topic in the same or different demographic area.

## 8. SCOPE FOR THE FURTHER STUDY

Behavioral finance is a newly developed area of finance. It is still in the phase of developing. The concept is interdisciplinary in nature by combining together Economics, Psychology, and Sociology. The area of behavioral finance needs to formulate behavioral finance theories.

The concept was developed and popular in western countries and research has been carried on different aspects related to behavioral finance there. But in the Indian context, research carried on behavioral finance is very limited. There is ample scope to carry out research in the field of behavioral finance in India. The following are the area where future research can be done:

1) It is found that there is no such work to find out the factors that affect the women micro entrepreneur investor's decision making.
2) Most of the research has been done taking the popular psychological biases like heuristic, overconfidence, loss aversion, etc. that affect the investment decision-making behaviour but there are a number of biases like anger, fear, etc. which also affect the investment behavior which has not been taken into consideration neither in the Indian context nor outside India.
3) Apart from Psychological Factors, Demographic Factors also affect the investment decision. But no such research work has been done integrating together both the demographic and psychological factors affecting the investment decision-making behavior.
4) No research work has been done in order to develop a quantitative research method that can better estimate the behavior of the investor.

## 9. CONCLUSION

Behavioural finance gives a standard viewpoint on investment navigation by perceiving the human component in monetary business sectors. Behavioural finance perceives the effect of Overconfidence, Narrow Framing, Herding, Mental Tendency, Feelings, and social factors on people's investment choices. This field of study appear as a reaction to noticed characteristic in investment decision that couldn't be made sense of by ordinary financial speculations alone by mixing experiences from data science and financial aspects. Although the illusions or behavioural biases mentioned above are frequently seen, behavioural finance does not assert that all women entrepreneur will experience the same experience at the same time. The above analysis about the risk acceptance level shows that women entrepreneur have the capability to accept the risk and consequence obtained after the taking the investment decision.

## CONFLICT OF INTERESTS

None.


## ACKNOWLEDGMENTS

None.


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