Impact of locus of control on financial risk-taking behaviour: A perception study among married earning women in Karnataka

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Preface

SDM Research Center for Management Studies (RCMS), since inception, has endeavored to promote research in the field of management education, in various ways. In this direction, in order to promote applied research, the Research Center has taken a unique initiative to encourage the faculty members to carry out various projects in the areas of management.

After completion of the projects, based on the peer review, reports are published with an ISBN number, by the Institute. The projects help the faculty members, and the students, who assist the faculty members for these projects, in various aspects, to gain practical knowledge, in the field of management.

The institute takes into account the time and resources required by the faculty members to carry out such projects, and, fully sponsors them to cover the various costs of the project work (for data collection, travel, etc).

From the academic viewpoint, these projects provide a unique opportunity to the faculty members and the students to get a first-hand experience, in investigating issues and concerns of targeted organizations or sectors, on a face to face basis, thereby, helping in knowledge creation and its transfer.

Mousumi Sengupta
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Introduction

Locus of control (LOC) is the extent to which individuals believe they tend to have control over circumstances or events taking place in their lives in contrast to factors which are external and beyond their control. Julian B. Rotter in 1954 developed this concept and over a period of time this has become an important aspect of study o personality in psychology and other social sciences. Loci is a 'latin' word meaning 'location' or 'place'. An individual's locus (plural of loci) of control can be conceptualized as internal (a belief that one's life can be controlled) or external (a belief that life is controlled by outside factors which individuals cannot influence, or that chance or fate controls their lives) [Roter, 1966]. Individuals possessing strong internal locus of control believe they are in charge all that happens in their lives and they are in control or events or situations happening to or around them (for example: after results are declared, individuals tending to take the credit or blame of doing well or otherwise on themselves and their own abilities. On the contrary individuals with strong external locus of control tend to praise or blame external factors or circumstances, such as the tutor or the nature of the examination itself (Carlson, 2007).

Locus of control: The Conceptual note

Rotter's (1954) frame work of locus of control is based on social learning theory of personality. Rotter in 1975 was clear to point that the internality and externality in locus of control must be viewed as two ends of a continum and not as either/or typology. People with high locus of control believe they are in charge of situations can influence outcomes by their own doings and hard work and believe that results depend on their own abilities. They essentially believe that positive outcomes in their lives is a result of their ability to work hard in a sustained manner (April, 2004). Their belief is that every action has consequences, and this induces them to believe that they are responsible for all that happens, and it depends on them, if, they want to have control over it or not. Externals believe in the opposite and hold external circumstances (such as fate, luck, other influential or powerful people) as responsible for what happens in their lives and that things are out of their control (Jacobs-Lawson et al, 2011). Such people believe that that the world is too complex for one to predict or successfully control its outcomes. Such people tend to blame others, rather than themselves for their lives' outcomes. These tendencies have implications in terms of differences in psychological conditions and achievement motivation among these two sets of people with internal locus being often linked with higher levels of need for achievement and external locus leading to fatalistic perceptions and accentuation towards clinical depression (Benassi et al, 1988).

According to Rotter (1966), internals tended to exhibit two important characteristics: high achievement motivation and low outer-directedness. This one dimensional or unidimensional explanation and assumption of Rotter has been challenged by other researchers, since, 1970s. For example, Levenson opined that different dimensions of locus of control (such as beliefs that events in one's life are self-determined or organized by powerful others and are chance-based) need to be segregated. Weiner is of the opinion that that orthogonal to the internality-externality dimension, differences should be considered between those who attribute to stable and those who attribute to unstable causes (Weiner, 1974). this new theoretical postuates allows more dimensions to be added into the original framework like, attribute outcomes to ability (an internal stable cause), effort (an internal unstable cause), task difficulty (an external stable cause) or luck (an external, unstable cause). The debate has been furthered with Weiners' theory being challenged in terms of inclusion of other causative factors, like, whether people see luck (for example) as an external cause, whether ability is always perceived as stable, and whether effort is always seen as changing. Hence, in his newer publications, Weiner (1980) is seen to use more elaborate terminologies like "objective task characteristics" instead of "task difficulty" and "chance" instead of "luck". Other psychologists after Weiner has used terminologies

like stable versus unstable effort with the assumption and knowledge that in some instances, effort could be seen as a stable cause (especially given the presence of words such as "industrious" in the English language).

Objectives of the study

The objective of this present study perceives locus of control as a multi-dimensional concept and investigates the perception of married earning women about the role of locus of control in their financial risk-taking behaviour, in the state of Karnataka. In order to do so, the authors reviewed relevant literature, developed a questionnaire consisting of several items representing role of locus of control in the financial risk-taking behaviour, administered the same among the married earning women in the state of Karnataka, developed a factor structure of the financial risk-taking behaviour, and tested whether the respondents differed in their perception in the above context. Based on the data received through the questionnaire and in-depth interview with respondents, the authors discussed and concluded the findings.

Financial risk-taking behaviour in women: Existing literature

Maxfield, Shapiro, Gupta, & Hass (2010) critically evaluated regarding labelling women as risk-averse limits the positive benefits both women and organizations can gain from their risk-taking. The primary objective of this paper is to explore women's risk-taking behaviour and reasons for stereotype persistence in order to inform human resource practice and women's career development. The paper draws on literature about gender and organizations to identify reasons for the persisting stereotype of women's risk aversion. Utilizing literature and concepts about risk appetite and decision making, the paper evaluates results of the Simmons Gender and Risk Survey database of 661 female managers. The paper finds evidence of gender neutrality in risk propensity and decision making in specific managerial contexts other than portfolio allocation. More in-depth research is needed to explore the gender-neutral motivators of risk decision making and to explore risk-taking in a more diverse sample population. The paper explores why women's risk-taking remains invisible even as they take risks and offers suggestions on how women and organizations may benefit from their risk-taking activities. The paper synthesizes evidence on risk-taking and gender, and the evidence of female risk-taking is an important antidote to persisting stereotypes. The paper outlines reasons for this stereotype persistence and implications for human resource development.

Ratna Achuta Paluri (2016) have identified the factors influencing the financial attitudes of Indian women and then classifying Indian women based on these attitudes. These clusters are then studied for their characteristics. Literature reviewed led to the identification of variables influencing financial attitude of women. Nine of these variables (anxiety, interest in financial issues, intuitive decisions, precautionary saving, free spending, materialistic and fatalistic attitude, propensity to plan for long and short-term financial goals) were put through confirmatory factor analysis. These factors were then used as a basis for cluster analysis using convenience sampling. A self-reported questionnaire was used for the survey. Results of the study showed that only a third of the respondents did not buy any financial products. The most preferred financial products of Indian women were fixed deposits and insurance policies. Four clusters of women were identified, based on their financial attitudes – judicious consumers, conservative consumers, acquisitive consumers, unsure consumers. An analysis of the dispersion of the clusters shows that interest in financial issues has the greatest influence in the formation of clusters followed by the propensity to plan and materialistic attitude. Fatalistic attitude had the least influence in the formation of clusters. The current study uses convenience sampling which is non-probability-based sampling and hence, lack generalizability of results. This paper discusses the financial attitudes and behaviour of Indian women and further clusters these women based on their financial attitudes.

Fisher (2010) finds that the gender differences in personal saving behaviours among single person households were investigated using the 2007 Survey of Consumer Finances. The descriptive analysis of men and women in the sample shows that women were less likely than men to have saved over the previous year, while the proportion of the male and female samples reporting to save regularly was similar. The descriptive analysis also shows that women in the sample were older, had lower risk tolerance, had a shorter saving horizon, were more likely to be retired and less likely to be unemployed or self-employed, were more likely to be in fair health, had fewer years of education, were more likely to own a home, and had less wealth on average. Women reporting low risk tolerance were significantly less likely to save over the short term as well as to be regular savers. Poor health also decreased the likelihood of short-term saving for women but not men. Each year of education made men significantly more likely to save in the short term and to save regularly, but this effect does not apply to women. Income was not significant in explaining the likelihood of short-term saving or the likelihood of saving regularly. Wealth was also insignificant in the models.

Megan E. Rowley (2012) conducted a strengths-based study where 17 women ages 25 to 54 participated in focus groups to identify their motivations for positive financial behaviour change. Performing a thematic analysis of data, evidence shows they progressed through the Transtheoretical Model stages of change. Emotion, family influence, and life transitions helped participants progress to the Action and Maintenance stages. Although participants utilized a wide variety of change strategies, motivations to change were either circumstantial, underlying, or both. Most participants used educational, social, or professional support to overcome setbacks. Optimism and using financial tricks were common strategies for successful change. Implications for policy and practice include tailoring marketing messages toward women experiencing life transitions and incorporating Transtheoretical Model concepts into financial education programs.

Vohra (2015) aims to attempt to identify the attributes that women look for in their financial advisor and to examine if the choice of attributes of a financial advisor among women investors in Punjab is the same across demographics. The understanding of the attributes that women want in their financial advisor will help the financial advisors to be mindful of the opportunities and the challenges they have to face while working with women investors. Studying the impact of demographics on the choice of the investment advisor would enable the service providers to provide women with services relevant to their unique and individual situations. A pre-tested, well-structured questionnaire was constructed and administered personally, and the responses of 200 women investors were analyzed. The sum of the ranks assigned by women to various attributes determining the choice of a financial advisor was used to find out the most preferred attribute on the basis of which women choose their financial advisor. The Kruskal Wallis test was used to analyze the impact of demographics on the choice of the respondents. Along with this, the results also state that the preference for the attribute friendliness and quality of advice is not the same across age groups. The choice of attributes also varies according to the marital status of the respondents. The study will help the financial advisors to cater to the needs of their women clients. Moreover, the study will also benefit women by bringing about a positive change in the attitude of the financial advisors in favor of them. The greater sensitization of the financial advisors toward their women clients would lead to greater stock market participation among women, thereby benefitting the society. The paper is an attempt to identify the attributes that women look for in their financial advisor and to examine if the choice of attributes of a financial advisor among women investors in Punjab is the same across demographics or not. Therefore, the study contributes to the understanding of the investment behaviour of women.

Malone, Stewart, Wilson, & Korsching (2010) investigated the financial well-being of American women using data from a nationwide web survey of 368 women between the ages of 30 and 65 with

household incomes of at least $40,000. Specifically, it is examined that the perceptions of financial well-being among women with and without children who lived in different family forms including marriage, cohabitation, stepfamilies, as well as women who were single. The majority of women reported they had conservative buying behaviours, desired financial independence, had a somewhat negative view of their current financial situation, had worries about retirement and their financial futures, and considered long-term care insurance a necessity. Women in non-traditional families (single mothers, co-habitors, and stepfamilies) had significantly greater worries about their financial futures than women in first marriages. Single mothers were less likely to say that they had their financial house in order and were more likely to express concern that their money would not last through retirement. Cohabiting women were significantly more likely to express fears about becoming a burden. All three groups were more likely than women in first marriages to agree that long-term care insurance is a necessity. Women who were older, were more educated, had higher income, and who contributed more money to the household income had more positive perceptions of their financial situation.

Montalto (2004) Clarifies that information and education can lead to changes in financial behaviour. Credit unions have a high level of visibility within the community, and are trusted by their members-two characteristics that can contribute to more effective delivery of financial education. Education programs for women should be designed to increase women's willingness to accept risk and diversify their portfolios to increase the accumulation of wealth. Educational formats that allow women to actively participate and ask questions, and that provide personalized materials may be most effective in helping women make responsible and informed financial choices.

Wang (2011) aims to understand younger generations' investing behaviours in mutual funds in order to help wealth advisors understand how better to work with younger generations. Using survey data, this study reveals that knowledge, experience, and income are important factors that influence younger generations' investing behaviours in mutual funds. Moreover, gender emerges as the most important factor that differentiates younger generations' investing behaviours in mutual funds. The findings point out challenges for younger women's wealth management, as they tend to exhibit fewer investing behaviours in mutual funds than their counterparts do. Consistent with previous research on wealth management among older generations, gender differences have significant implications for wealth advisors. As a result, wealth advisors should help younger women enhance their wealth management and financial future by facilitating their acquisition of necessary financial knowledge and experiences and their involvement with their wealth management. Wealth advisors are also urged to consider helping their clients manage their wealth by being aware of gender-predicted differences in client situations.

Borstorff, Thomas, & Hearn (2007) examine what are the key defining characteristics for those who are prepared to retire? Why are a disproportionate number of women behind the curve at retirement? How should providers of retirement planning assistance adjust their communications based upon gender? This study tries to shed some light on these variables with particular focus on how gender impacts retirement contributions. While women have made great strides in terms of pay equity, positions, and power, a significant disparity still exists between men and women when it comes to being ready to retire. As employers shift to more defined contribution retirement plans versus defined benefit, the importance of understanding how employees vary in their approach to retirement is greater than ever. Women tend to need more descriptive information, additional counseling in option probabilities, and encouragement to become actively involved in retirement planning.

Yusof (2015) examines the financial investment decision-making and risk behaviours of Malaysian men and women. It uses data obtained from a survey of employed Malaysians to test two opposing models of household decision making, the income

pooling hypothesis and the bargaining model. Ordinal probit regressions are estimated to determine if earning share affects decisions on financial investments, and to identify factors that affect risk tolerance of men and women. The results indicate that although both men and women practice autonomy in decisions related to financial investments, women have lower risk tolerance than men. The results on decision making are consistent with the bargaining model as reflected in the importance of relative earning share in financial decision making.

Bucher-Koenen, Lusardi, Alessie, & vanRooij (2014) evaluate the similar gender differences in financial literacy across countries. When asked to answer questions that measure knowledge of basic financial concepts, women are less likely than men to answer correctly and more likely to indicate that they do not know the answer. In addition, women give themselves lower scores on financial literacy self-assessments than men. Both young and old women show low levels of financial literacy. Moreover, women for whom financial knowledge is likely to be very important—for example widows or single women—know little about concepts relevant for day-to-day financial decisions. Even women in favorable economic conditions are less financially knowledgeable than men. This is important because financial literacy has been linked to economic behaviour, including retirement planning and wealth accumulation. Women live longer than men and are likely to spend time in widowhood. As a result, improving women's financial literacy is key to helping them prepare for retirement and promoting their financial security.

Alcon (1999) concludes that both men and women lack knowledge about financial retirement, it is particularly difficult for women to manage the financial planning challenge. Adequate income in retirement is especially difficult for women to achieve because of traditional sex biases in the workplace, the complexity of women's roles, their longer life expectancy, lower pension self-coverage, inadequate survivors' benefits and a long tradition of women not "managing the finances." Mid-life and older women are at a special disadvantage. More than half of the women surveyed believed that they had a very good understanding of two common types of financial assets: federal government savings bonds and private bank certificates of deposit. Only 14 percent of the women said they were "not at all knowledgeable" about these two options for saving.

Bucher-Koenen, Lusardi, Alessie, & vanRooij (2014) employed structural equation modeling in the attempt to examine the mediating role of financial management practices on the relation between financial literacy and retirement confidence. A mediation model was tested on a sample of Malaysian working women. The sample consisted of 626 of working women in government agencies which was selected through multi stage sampling technique. Five states in Malaysia will be randomly selected in the first stage. At the second stage, a random sampling of the government agencies was identified in urban areas based on a listing of the departments from the government Web sites. The results show the effect of financial literacy on retirement confidence is purely indirect, fully mediated by financial management practices. Clearly, financial management practices significantly mediated the relation between financial literacy and retirement confidence. Significant relations were found between financial literacy, financial management practices, and retirement confidence. The findings of the present study have practical implications on developing effective financial literacy training programmes. There is no doubt that financial literacy training is essential in building retirement confidence. However, future training should include elements that can encourage healthy financial management practices.

Yorke & Hayes (1982) investigated the changing socioeconomic status of women in the UK makes them primary targets for the marketing of commercial bank services. The proportion of married women in the workforce grew 72%. Women's incomes have steadily increased to 73% of male earnings by 1979. In addition, women are having fewer children,

waiting longer to have them, and are becoming better educated. All of these factors suggest growing financial independence for women. Samples of working women participated in discussion groups about banking needs. Unmarried women under 25 tended to have bank accounts but were relatively unsophisticated in their use of other banking services. Unmarried women over 25 expressed the greatest need for independent financial services including car and home loans, credit cards, and financial advice. Married women with children expressed needs for a degree of personal financial independence.

Deshmukh (2017) proposed that herding is being influenced by peers to follow the trend. Herding behaviour appears when following a large group looks better as compared to relying on personal instinct and knowledge. At workplace, it has been observed that there is considerable influence of friends/colleagues- large groups in decision making whether it is a household decision of buying a washing machine or personal decision of upgrading mobile or investment decision like investing into a mutual fund schemes / share etc. Many a time people follow their peers' group blindly, under the impression that a large group cannot be wrong. The researcher has tried to judge the existence of heard investment behaviour among IT/ITES women employees when a friends/ colleagues group act as influencers. The research has been divided into three sub parts - trust on large group 's investment decision making, herd buying behaviour and herd selling behaviour. A sample size of 100 women employees of IT and ITES sector was selected. The data was collected through a well-designed and structured questionnaire. The respondents were asked about their buying/selling decision in response to friends/colleagues - large group's action. The results were analyzed and suitable conclusions were drawn.

Beierlein & Neverett(2013), using a sample of 17,499 first-time, full-time students, compared students who take an elective personal finance course to those that do not. Women, students with higher verbal SAT scores and GPAs, and arts and education majors are less likely to take the course, while men and business, human ecology, and social sciences majors are more likely. Mathematics SAT scores have no effect. Women earn slightly higher grades in the course than men do, on average. If enrollment can be considered a measure of interest, among traditional college students, women demonstrate less interest in personal finance than do men.

Bertero (2003) proposed aaggression is a natural component of human interaction, and in interfemale relations, indirect aggression is most commonly observed, using such methods as exclusion, gossip, snide remarks, or subtle "putdowns" to attack an opponent or competitor. Indirect aggression has not been widely studied nor understood because it is challenging to measure and define because the attacker's identity usually remains unknown and her tactics are often subtle and somewhat clandestine. This study is an ethnographic field observation involving semi-structured interviews, was designed as a hypothesis-generating project with the hope of attaining better means of measuring and categorizing patterns of indirect competition among women. Thirteen female employees of an investment bank in San Francisco, California, participated in the study. As expected, it was found that women commonly used indirect strategies to compete against one another. This competition was reported by the participants to be isolating, undermining, and was characterized by a general lack of trust among them, which seems to be the basic ingredient fuelling much of their hostility towards one another. Unexpectedly, however, it was also found that the environment itself sets the tone: in this case, a male-dominated microculture characterized by open hostility towards women on occasion and implicit hostility in many instances. In this environment, not surprisingly, women are essentially "set up" to enforce the pre-existing rules of behaviour that maintain the status quo of male dominance. Hence, women are not gaining real status as they "step up the ladder." At best, they are regarded as "token" success stories and used against other women who are less fortunate. In the investment banking environment of this study, women were largely isolated and excluded from the

male fraternity. So, it is found that 35 years after the Women's Movement, at least in this business setting, little about women's competitive strategies has changed. They are still fighting in the service of a male-dominated system and unable to focus on finding their own access to power. Saibal (2018) examines the lending behaviour of women-owned cooperatives (WoCs) by exploiting the natural experiment of the financial crisis, employing a novel data set of Indian cooperative banks during 2004–2013.In view of the longitudinal nature of the data, the authors employ panel data techniques for the purposes of analysis. The findings indicate that WoC banks increased lending to both agriculture and small-scale industries, especially in high-income states. Further disaggregation reveals that the possible weaknesses in asset quality from lending to these sectors in low-income states could be driving the results. To the best of the researcher's knowledge, this is one of the earliest studies for a leading emerging economy to empirically investigate the behaviour of WoC banks and relatedly, how their behaviour evolved during the financial crisis.

Relationship between LOC and financial risk-taking behaviour

Contemporary studies have shown that factors like social preferences and ûnancial literacy have a crucial role in portfolio choice (e.g., Hong et al., 2004; Guiso et al., 2008; Van Rooij et al., 2011). Other growing literature in behavioural finance has focussed on factors like optimism and overconfidence as key drivers for investment behaviour (e.g., De Bondt, 1998; Barber and Odean, 2001; Puri and Robinson, 2007). There are many other studies which have drawn attention towards various aspects of personality (like non-cognitive skills) for a variety of economic outcomes (e.g., Heckman et al., 2006; Borghans et al., 2008; Almlund et al., 2011). Studies by Rotter (1955) on locus of control have been especially found to to be important in a wide range of economic situations. For example, internal locus of control hasbeen to affect labor market outcomes (e.g., Bowles et al., 2001a, b; Coleman and DeLeire, 2003; Heineck and Anger,2010; Caliendo et al., 2015), the credit market (Tokunaga, 1993), as also entrepreneurship (Evans and Leighton, 1989) and savings (Cobb-Clark et al., 2013). At the same time, its role in ûnancial investment decisions has been scantily investigated.

As has been stated earlier, a person's economic locus of control measures the extent to which the person believes that the economic outcomes in his or her life are due to personal eûort, in contrast to the result of luck, fate, or the intervention and inûuence of others.

For a variety of domains, Kallman (2000) has endeavoured to measures the perception of risk, both to oneself and to the public in general, from smoking, alcohol consumption, various diseases, traûc accidents, diûerent forms of radiation, bad food, nuclear waste, war, violence, and aggression. Similarly, Sjo¨berg (2000) analyzed 15 diûerent hazards ranging from lightning strikes to contracting AIDS. In both these studies it has been found that an internal locus of control is strongly associated with a lower degree of risk perception. In order to establish a more direct linkage to economic risk perceptions, Simon et al. (2000) in a sample of prospective entrepreneurs, demonstrated that, internal locus of control is related to a lower perception of risk in launching a new business venture.

A substantive body of evolving literature on finance and economics points out that household investors' decisions are related to factors which are yet to be fully comprehended by classical portfolio theory. For example, Salamanca et al (2016) has demonstrated that that a household head's internal economic locus of control is a key determinant of investment in equity, over and beyond economic preferences (risk and time preferences) and socioeconomic characteristics. They have shown that internal economic locus of control is related to both the decision to participate in equity and the portfolio share of equity and that, this relation is economically, signiûcant. Their argument is that those who have an internal economic locus of control have a lower perception of risk when

investing in equity. This study results are significant in pointing out the important empirical links between locus of control as an important personality trait to a household's investment behaviour.

In a variety of market situations, new information should induce decision-makers to act. Depending on their short and long-term investment planning, investors may want to buyor sell this asset, If the riskiness or the return expectations of an asset, change. Sometimes the wise decision is to stick to a given allocation. Odean (1999) points out that investors with discount brokerage accounts trade too much and when the stocks they buy underperform, they sell. Actually, they may be wiser if they adopting a "buy and hold" strategy and ignoring stock market movements. Likewise, many investors are flooded with lots of market information tend to generally ignore such information and, in the process, may also ignore some vital information which may give them many options to act upon, wisely. The ability to wisely respond to new information is dependent on the individual's ability to correctly interpret the same.

To ascertain the importance of locus of control under uncertain conditions, in the earlier reviewed sections, internal locus of control has been considered as a positive trait. Andrisani (1977), Osborne Groves (2005), Semykina and Linz (2007), Ahn (2015), and Piatek and Pinger (2016) has shown that an internal locus of control is positively correlated with success in labor markets. In other investigations by Coleman and Deleire (2003), it has been shown that internal locus of control positively aûects education decisions by altering teenagers' expectations regarding the returns of human capital investments. In investigations made by

Caliendo et al. (2015) and McGee (2015), it has been found that unemployed individuals with an internal locus of control invest more into job search than externally controlled individuals. Cobb-Clark et al. (2014) in their studies have shown that internally controlled individuals invest more into health capital, while Borghans et al. (2008) opine that such individuals produce better results in cognitive tests. Studies by Cobb-Clark and Schurer (2013) demonstrate that they also accumulate more precautionary savings, while studies by Salamanca etal. (2016) point out that internal locus of control is positively related to investments in risky assets. In recent studies by Lekfuangfu et al. (2018) it has been found that that mothers with an internal locus of control invest more into their children, and consequently, cognitive and emotional development are higher among the children of such mothers.

Pinger et al. (2018) in contrasting studies provide an alternative perspective on the role of internal locus of control for economic success. They demonstrated that in certain cases internal locus of control can induce inefficient behaviours, particularly in such cases, where doing nothing is seen to be the optimal strategy (for example: in the case of the case for most private stock investors most of the time). Hence there is a need to consider locus of control with other with behavioural biases such as overconûdence or conûrmation bias in conducting empirical studies about financial decision-making.

If one considers the fact that locus of control has ambiguous effects on the quality of economic decisions, then it has importance with regard to of non-cognitive skills on economic behaviours and outcomes (see, e.g., Borghans et al. 2008, Chiteji 2010, or Gro¨nqvist et al. 2016). Studies have shown that non-cognitive skills necessarily do not increase the productive capacity of individuals. In all circumstances.3 At best they may induce situation-specific behaviours and pay-offs. On the other hand, in other studies of relationship between personal characteristics and biased probability judgment. Dohmen et al. (2009) found that cognitive ability is negatively related to biased decision-making.

However, in this context it must be made clear that Dohmen et al. (2009) do not measure subjects' locus of control.4 and in their study, only crystallized intelligence (knowledge) has explanatory power. It was found in other studies that ûuid intelligence (capacities of information processing) has a signiûcant impact on behaviour.

Some of the other finding importance in the context of locus of control are:

- subjects with an internal locus of control are more likely to make inconsistent risk choices in the experiment (Pinger et al 2018)

- The above is true with regard to subjects with lower cognitive ability (Pinger et al 2018)

- People or investors with internal locus of control are more likely to bet on assets that were successful in the past.

- Internally controlled individuals invest more into human capital, are more active job seekers, exhibit higher stock market participation, and adopt a more active parenting style.

Having said this, Cobb-Clark and Schurer (2013) that it may lead to "fallacy" to always believe that locus of control (particularly internal) leads to individual making the right choices and taking optimal decisions. There may be also be circumstances where internal locus of control may lead to suboptimal choices.

Methodology and data analysis

In this section, the authors present the methodology used to achieve the objectives of the study.

Building of a Questionnaire

In order to achieve the objectives of the study, a questionnaire was designed and the responses collected. Initially, the questionnaire consisted of 31 items, each item representing one variable (Appendix 1). These items (variables have been considered, keeping in mind the possible role of locus of control in risk-taking behaviour. After preliminary discussions with a small group of 50 respondents, item number 22 was deleted. Therefore, total 30 items (variables) were retailed for the pilot study. However, the numbers for the respective items were retained to maintain uniformity and better readability.

The variables (questions) considered in the questionnaire are measured using a 5 point Likert Scale, where 5 indicates strongly agree, 4 indicates agree, 3 indicates neutral, 2 indicates disagree, and, 1 indicates strongly disagree. It is to be noted that, the numbers mentioned here are the weights assigned, based on the preferences given by the respondents. The variables were proposed, based on the existing literature on the Internal and External Locus of Control and the Financial risk-taking behaviour.

Population, sampling design, data collection

The population for the study were the married earning women, in the state of Karnataka. The data was collected during the period from April to September 2018. For the current study, Judgmental sampling method was used. The earning women, working in the entry-level and middle-level positions in the organizations, across the sectors, such as, automobile, IT and ITES, banking, financial services, retail, and other sectors, were requested to participate in the survey, and based on their acceptance, the responses were collected. Data was collected from the many cities across the state of Karnataka, such as, Bangalore, Mysore, Hubli, Dharwad, Chikkamangalore, Davanagere, and Belgaum. Data collection methods include administration of questionnaire by mail and personal visits. Personal and telephonic interviews were also conducted to gather in-depth view on the perception of the respondents on their risk-taking behaviour. Data was collected in two phases. In the first phase, a Pilot study was conducted, and at a later stage, final study was conducted.

Pilot study

A pilot study was conducted to test for the reliability of the questionnaire, and also to check whether the respondents will be comfortable in answering the questions. Using the exploratory factor analysis, an effort was made to group the variables under certain latent factors.

Testing the reliability of the questionnaire

In many studies, related to understanding the perception of the individuals, it is a regular practice to build a questionnaire containing the variables on which responses are collected. Sometimes, a set of variables together are expected to measure a latent construct and, in such cases,, it is important to have internal consistency among the variables in measuring the construct. The responses taken on the variables are used to measure the internal consistency and this is termed as reliability of the questionnaire. To achieve this, it is a regular practice to use Cronbach alpha proposed by Cronbach (1970) to measure the degree of reliability of the questionnaire considered in the current study. The following is the given cut-off points for Cronbach alpha. One can note that a value of alpha close to one is considered to be excellent and a value less than 0.50 is not desirable.

Cut-off points for Cronbach alpha

Cronbach's alpha	Internal consistency
$0.9 \leq \alpha$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: Wikipedia-retrieved on 25.10.2017

In the current study, authors have used Cronbach alpha to check for the consistency of the questionnaire in measuring the behaviour associated with the financial risk-taking.

Exploratory Factor analysis

Exploratory Factor Analysis (EFA) aims to find the latent factors, which are the resultants of observed variable-grouping. Formation of factors is based on the concept of correlation. That is, observed variables that have high correlations with a factor will be listed under that factor and the process is iteratively used till all the factors are identified. Note that, the set of variables together are expected to measure the latent factors, and, also the factors are expected to contain the essence of the set of variables. Finally, EFA gives a variable-factor structure which can be used for model building. The method is exploratory in nature because, the researcher does not know the variable-factor structure and the analysis gives the structure.

It is to be noted that, EFA is used in the pilot study, and, in the final study. This is to ensure that the variables proposed to measure the factors satisfy the required cut-offs of the EFA and have the necessary consistency levels. Based on the results, the factor structure was proposed.

Data Analysis

The questionnaire with 30 items was administered on 200 married earning women, across the state of Karnataka. Total 99 responses were received, which were used for the purpose of analysis. The target of 200 respondents was chosen, based on the population size and researchers' experience. The demographic details of the respondents are as follows (Table 1):

Table 1: Demographic details

	Actual number of respondents	% of respondents (n = 99)
Age		
22 – 28 yrs	62	62.63
29 – 35 yrs	13	13.13
36 – 42 yrs	14	14.14
50 yrs and above	10	10.10
Nature of earning		
salaried	76	76.77
Self-employed	23	23.23
Education		
10th standard	2	2.02
12th standard	7	7.07
Degree	64	64.65
Post-Graduate and above	36	36.36
Earning		
less than 10,000/-	4	4.04
10,001/- to 25,000/-	42	42.42
25,001/- to 50,000/-	38	38.38
50,001/- to 1 lakh	11	11.11
More than 1 lakh	4	4.04
No. of children		
0-1 child	73	73.73
2-3 children	25	25.25
More than 3 children	1	1.01
No. of family members		
1-2 members	35	35.35
3-5 Members	52	52.53
More than 5 members	12	12.12

The Cronbach's alpha was .85 for the questionnaire, which proved internal consistency among the variables in measuring the construct of financial risk-taking behaviour. The data was analyzed with Exploratory Factor Analysis. Total 7 factors were extracted by using rotated varimax factor structure analysis (Table 2). For all the items, communalities value is more than .5. Therefore, the percentage of variance in each of the variables, met the required levels. However, one can note that, in certain variables (items), KMO values were less (Table 3). Variables with low KMO values have been identified and re-examined (variable no. 5, 6, 15, 16, 17, and 26). Except variable 6, all such variables were deleted from the questionnaire, as the overall essence of such variables explained in the other variables.

Table 2: Factor Matrix (rotated Varimax)

Items*	1	2	3	4	5	6	7	Commun
1. I take financial decisions on my own.	0.11129	-0.06114	-0.04335	0.787599	-0.09572	-0.02997	0.139377	0.667801
2. I take financial decisions of my family.	0.445176	0.078524	0.060082	0.675225	0.212973	0.171747	-0.25226	0.802378
3. My financial decisions depend on my past experience.	0.294491	0.026074	0.479558	0.078751	0.197792	-0.22419	-0.54738	0.712595
4. My financial decisions depend on my competence on analysing market scenario.	0.14417	0.733104	0.094238	0.202457	0.168234	0.092244	0.199148	0.684567
5. I have the liberty to choose the level of risk in my financial decisions.	-0.0257	0.140315	-0.13944	0.723648	0.311049	-0.02693	-0.22985	0.713767
6. I invest in financial instruments, keeping my short-term financial needs a top priority.	0.04966	-0.09389	-0.00674	-0.1135	0.791366	-0.03267	-0.08364	0.658531
7. I invest in financial instruments, keeping my long-term financial needs a top priority.	0.22714	0.186051	0.285808	0.132941	0.701212	-0.17351	-0.00581	0.707407
8. Success in my financial investments originate from my meticulous planning.	0.102995	0.392652	0.048866	0.123582	0.659606	0.26326	0.180821	0.719526
9. Success in my financial investments originate from my timely investment.	0.230435	0.248642	0.207977	0.008904	0.453073	0.150051	0.532267	0.669355
10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.	0.089438	0.367836	-0.06154	0.017213	0.439339	0.416308	0.297977	0.602508

11. I decide about the budget for my children's education.	0.59473	0.256169	-0.14845	-0.13313	0.248714	0.178583	0.015537	0.553078
12. I decide about the budget for the month family expenditure.	0.809477	-0.00349	0.139668	-0.04912	0.055255	0.111366	0.010284	0.692747
13. I decide the budget for my family's monthly savings.	0.840741	-0.00644	0.180605	0.108644	0.07913	0.14542	-0.06007	0.782326
14. I decide on purchasing long-term household assets.	0.633572	0.117755	-0.10297	0.267895	-0.00591	-0.40173	-0.14625	0.680459
15. I believe earning women should have liberty in deciding financial commitments.	-0.16959	-0.03742	0.774417	0.053661	0.227765	-0.11594	0.117985	0.712
16. My financial decisions are influenced by the level of my job security.	0.051041	0.193939	0.811994	0.107283	0.008024	-0.1375	0.033655	0.731166
17. My financial decisions are influenced by my family members.	0.19134	0.041663	0.805674	-0.24892	-0.07838	0.080719	-0.13137	0.779335
18. My financial decisions are influenced by my financial consultant.	0.018694	0.839657	-0.01315	0.040913	0.015494	0.363412	0.095441	0.848638
19. My financial decisions are influenced by my friends.	-0.06956	0.424603	-0.00759	0.080873	-0.0845	0.770109	-0.11069	0.804185
20. My financial decisions are influenced by my colleagues.	-0.00249	0.299807	-0.1529	-0.08534	-0.05255	0.875765	-0.07672	0.896165
21. My financial decisions are a matter of chance.	0.033568	-0.08087	0.049518	-0.13203	0.25675	0.765583	0.230681	0.732803
23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.111811	0.802783	0.091411	-0.13778	0.069358	0.261468	-0.14423	0.77828

24. My decisions in taking risk in financial investments are influenced by my friends.	-0.00934	0.286268	-0.16286	-0.06365	-0.04461	0.790093	0.100247	0.748897
25. I believe that success in financial investments depends on market scenario.	0.173629	0.551397	0.256602	-0.27101	0.347315	0.002078	-0.18476	0.628245
26. I believe that getting successful returns in financial investments depends on luck.	0.097973	0.054803	-0.11558	-0.657	0.255713	0.30152	-0.06966	0.618766
27. I believe that success in financial investments is beyond my control.	0.082849	0.247889	-0.16088	-0.44805	0.450836	0.421423	-0.18617	0.710456
28. I have the liberty to decide about the budget for my children's education.	0.659297	0.138811	-0.2645	0.050376	0.18031	0.125274	-0.34321	0.692436
29. I have the liberty to decide about the budget for the month family expenditure.	0.885934	-0.00961	0.152765	-0.04212	0.04162	-0.08293	0.049309	0.821123
30. I have liberty to decide the budget for my family's monthly savings.	0.890961	0.048317	0.017994	-0.01189	0.030896	-0.06708	0.041482	0.803786
31. I have liberty to decide on purchasing long-term household assets.	0.731535	0.201902	-0.08912	0.262313	0.04156	-0.30729	0.226764	0.800234

* The original number of the items are retained, as per the original proposed questionnaire

(Refer Appendix 1)

Source: From data analysis

Table 3: KMO values of all the 30 items Items *	KMO values
1. I take financial decisions on my own.	0.674679
2. I take financial decisions of my family.	0.726361
3. My financial decisions depend on my past experience.	0.70024
4. My financial decisions depend on my competence on analysing market scenario.	0.758123
5. I have the liberty to choose the level of risk in my financial decisions.	0.47559
6. I invest in financial instruments, keeping my short-term financial needs a top priority.	0.566722
7. I invest in financial instruments, keeping my long-term financial needs a top priority.	0.741906
8. Success in my financial investments originate from my meticulous planning.	0.8328
9. Success in my financial investments originate from my timely investment.	0.725555
10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.	0.814664
11. I decide about the budget for my children's education.	0.724186
12. I decide about the budget for the month family expenditure.	0.664624
13. I decide the budget for my family's monthly savings.	0.696636
14. I decide on purchasing long-term household assets.	0.85744
15. I believe earning women should have liberty in deciding financial commitments.	0.478139
16. My financial decisions are influenced by the level of my job security.	0.57084
17. My financial decisions are influenced by my family members.	0.549546
18. My financial decisions are influenced by my financial consultant.	0.759515
19. My financial decisions are influenced by my friends.	0.642101
20. My financial decisions are influenced by my colleagues.	0.732853
21. My financial decisions are a matter of chance.	0.788238
23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.70803
24. My decisions in taking risk in financial investments are influenced by my friends.	0.690985
25. I believe that success in financial investments depends on market scenario.	0.685454
26. I believe that getting successful returns in financial investments depends on luck.	0.529309
27. I believe that success in financial investments is beyond my control.	0.751834
28. I have the liberty to decide about the budget for my children's education.	0.647689
29. I have the liberty to decide about the budget for the month family expenditure.	0.655957
30. I have liberty to decide the budget for my family's monthly savings.	0.761376
31. I have liberty to decide on purchasing long-term household assets.	0.647067

* The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

Source: From data analysis

With this, total 25 variables were retained and the same was submitted for Factor analysis, again, for the same sample. The Cronbach's alpha is 0.869 for the internal consistency among 25 items, which proved that the variables had the required consistency level. The KMO values for all the variables was more than .5 (Table 4). Total 6 factors have been extracted with rotated varimax. For all the variables, communalities value were more than .5 (Table 5). Based on the above analysis, the questionnaire with 25 items has been retained, and used for the final data collection.

Table 4: KMO values for the retained 25 items*

1. I take financial decisions on my own.	0.582127
2. I take financial decisions of my family.	0.738438
3. My financial decisions depend on my past experience.	0.609346
4. My financial decisions depend on my competence on analysing market scenario.	0.740975
6. I invest in financial instruments, keeping my short-term financial needs a top priority.	0.511396
7. I invest in financial instruments, keeping my long-term financial needs a top priority.	0.680693
8. Success in my financial investments originate from my meticulous planning.	0.824088
9. Success in my financial investments originate from my timely investment.	0.785215
10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.	0.795293
11. I decide about the budget for my children's education.	0.803934
12. I decide about the budget for the month family expenditure.	0.711666
13. I decide the budget for my family's monthly savings.	0.798941
14. I decide on purchasing long-term household assets.	0.847947
18. My financial decisions are influenced by my financial consultant.	0.756045
19. My financial decisions are influenced by my friends.	0.72571
20. My financial decisions are influenced by my colleagues.	0.72665
21. My financial decisions are a matter of chance.	0.811063
23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.74017
24. My decisions in taking risk in financial investments are influenced by my friends.	0.714044
25. I believe that success in financial investments depends on market scenario.	0.636434
27. I believe that success in financial investments is beyond my control.	0.750173
28. I have the liberty to decide about the budget for my children's education.	0.721377
29. I have the liberty to decide about the budget for the month family expenditure.	0.810772
30. I have liberty to decide the budget for my family's monthly savings.	0.777439
31. I have liberty to decide on purchasing long-term household assets.	0.686423

* The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

Source: From data analysis

Table 5: Factor analysis with varimax rotation for 25 retained variables*

Items *	1	2	3	4	5	6	Commun
1. I take financial decisions on my own.	0.08527	-0.05316	-0.0284	**0.87478**	0.0148	0.0199	0.776755
2. I take financial decisions of my family.	0.42503	0.16171	0.20851	**0.61951**	-0.0765	-0.4061	0.804861
3. My financial decisions depend on my past experience.	0.24447	-0.28493	0.16886	0.02984	-0.0612	**-0.7526**	0.740561
4. My financial decisions depend on my competence on analysing market scenario.	0.11412	0.08412	0.28507	0.22286	**-0.7588**	0.0452	0.72886
6. I invest in financial instruments, keeping my short-term financial needs a top priority.	0.05436	-0.00886	**0.72195**	-0.2024	0.1605	-0.1872	0.62603
7. I invest in financial instruments, keeping my long-term financial needs a top priority.	0.22899	-0.21442	**0.70631**	0.01337	-0.1994	-0.2027	0.678306
8. Success in my financial investments originate from my meticulous planning.	0.07347	0.27003	**0.71834**	0.14651	-0.3646	-0.0531	0.751529
9. Success in my financial investments originate from my timely investment.	0.2259	0.06681	**0.62698**	-0.016	-0.2872	0.4055	0.695762
10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.	0.06114	0.45232	**0.52019**	0.08783	-0.3174	0.0896	0.59542
11. I decide about the budget for my children's education.	**0.63567**	0.26061	0.19923	-0.2036	-0.1715	0.0486	0.584886
12. I decide about the budget for the month family expenditure	**0.78446**	0.05328	0.12829	-0.0203	-0.017	-0.025	0.635996
13. I decide the budget for my family's monthly savings.	**0.83724**	0.0987	0.11259	0.08428	-0.0101	-0.1184	0.744614
14. I decide on purchasing long-term household assets.	**0.65421**	-0.37115	-0.0806	0.22902	-0.134	-0.1063	0.65394
18. My financial decisions are influenced by my financial consultant.	0.03334	0.39814	0.06098	0.00033	**-0.8266**	0.0973	0.856105
19. My financial decisions are influenced by my friends.	-0.0733	**0.77873**	-0.0726	0.10596	-0.4003	-0.0734	0.79392
20. My financial decisions are influenced by my colleagues.	0.0041	**0.90502**	-0.0594	-0.0776	-0.2406	0.0187	0.886839
21. My financial decisions are a matter of chance.	0.02192	**0.69926**	0.33935	-0.0907	0.0936	0.2235	0.671535

23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.13271	0.30616	0.05742	-0.2307	**-0.7712**	-0.1402	0.782263
24. My decisions in taking risk in financial investments are influenced by my friends.	0.00237	**0.84346**	-0.0223	-0.0424	-0.2171	0.1153	0.774126
25. I believe that success in financial investments depends on market scenario.	0.16851	0.03515	0.32702	-0.3298	**-0.5188**	-0.3429	0.632055
27. I believe that success in financial investments is beyond my control.	0.12084	0.49609	0.31992	**-0.5379**	-0.1531	-0.1057	0.686979
28. I have the liberty to decide about the budget for my children's education.	**0.67759**	0.2232	0.04097	0.00709	-0.0556	-0.2944	0.60041
29. I have the liberty to decide about the budget for the month family expenditure.	**0.86572**	-0.10211	0.0992	0.00482	0.0025	-0.0627	0.773701
30. I have liberty to decide the budget for my family's monthly savings.	**0.8837**	-0.05861	0.05546	0.01268	-0.0346	-0.0155	0.789025
31. I have liberty to decide on purchasing long-term household assets.	**0.73978**	-0.28798	0.07375	0.2861	-0.2182	0.1767	0.79636

* The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

Source: From data analysis

Based on the above, the final study has been conducted.

Final study

The questionnaire with 25 items was administered on 250 married earning women, across the sate of Karnataka. Total 147 responses were received, which were used for the purpose of analysis. The pilot size study 250 was chosen, based on the population size and researchers' experience. The demographic details of the respondents are as follows (Table 6):

Table 6: Demographic details

	Actual number of respondents	% of respondents (n = 147)
Age		
22 – 28 yrs	74	50.34
29 – 35 yrs	25	17.01
36 – 42 yrs	35	23.81
43 – 49 yrs	2	1.36
50 yrs and above	11	7.48
Nature of earning		
salaried	95	64.63
Self-employed	52	35.37
Education		
10th standard	3	2.04
12th standard	13	8.84
Degree	69	46.94
Post-Graduate and above	62	42.18
Earning		
less than 10,000/-	2	1.36
10,001/- to 25,000/-	49	33.33
25,001/- to 50,000/-	60	40.82
50,001/- to 1 lakh	25	17.01
More than 1 lakh	11	7.48
No. of children		
0-1 child	91	61.90
2-3 children	46	31.29
More than 3 children	10	6.80
No. of family members		
1-2 members	58	39.46
3-5 Members	76	51.70
More than 5 members	13	8.84

The Cronbach's alpha was .807, for the overall questionnaire with 25 variables for the 147 respondents, which proved internal consistency among the variables in measuring the construct of financial risk-taking behaviour. The data was analyzed with Exploratory Data Analysis. Total 6 factors were extracted by using rotated varimax factor structure analysis (Table 7). For all the items, communalities value is more than .5. Therefore, the percentage of variance in each of the variables, meets the required levels. Also, data analysis revealed that the KMO values of each variable (Table 8).

Table 7: Factor Matrix (rotated Varimax)

item*	1	2	3	4	5	6	commun
1. I take financial decision on my own	0.25594	-0.1	-0.1	-0.8	-0.14	0.13	0.82
2. I take financial decision of my family	-0.03705	0.08	0.05	-0.8	-0.15	-0.1	0.75
27. I belive that success in financial investment is beyond my control	0.20021	-0.1	-0.3	0.28	0.68	-0.1	0.7
6. i invest in financial instruments, keeping my short-term financial needs a top priortiy.	0.14997	-01	0.42	-0.448	-0.1	0.02	0.41
7. I invest in financial instrument, keeping my long-term financial needs a top priority.	-0.09574	0.2	0.42	0.01	0.22	-0.5	0.49
8. Success in my financial investments originate from my meticulous planning.	0.030045	0.12	0.72	-0	-0.05	-0.1	0.54
9. Success in my financial investments originate from my timely investment.	-0.00649	-0.1	0.77	-0.1	0.32	0.03	0.72
10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.	0.077968	-0.1	0.75	-0	0.06	-0.2	0.62
11. I decide aboute the budget for my children's education.	-0.07239	-0.2	0.32	-0.1	0.74	-0.1	0.7
12. I decide aboute the budget for the month family expenditure.	0.778988	-0.1	0.06	0.02	0.16	0.09	0.65
13. I decide the budget for my family's monthly savings.	0.799881	-0.1	0.17	-0	-0.04	-0.1	0.68
14. I decide on purchasing long-term household assets.	0.802609	-0.1	0.15	-0.2	-0.05	-0.1	0.72

28. I have the liberty to decide about the budget for my children's education.	0.174108	-0.2	0.22	0.17	**0.68**	-0		0.61
29. I have the liberty to decide about the budget for the month family expenditure.	**0.791923**	0.01	-0.2	-0.1	0.03	0.06		0.68
30. I have liberty to decide the budget for my family's monthly savings.	**0.852329**	0.08	-0	-0.1	0.09	-0.1		0.76
31. I have liberty to decide on purchasing long-term household assets.	**0.859164**	0.01	-0	-0.1	0.05	0		0.75
19. My financial decisions are influenced by my friends.	-0.04021	-0.8	0.1	-0	0.02	0.02		0.63
20. My financial decisions are influenced by my colleagues.	-0.10504	-0.8	-0.1	-0.2	0.15	-0.1		0.79
21. My financial decisions are a matter of chance.	0.016296	-0.8	-0.2	0.08	0.22	0.01		0.72
24. My decisions in taking risk in financial investments are influenced by my friends.	0.10655	-0.7	0.2	0.11	-0.06	-0		0.53
23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.354006	-0.5	0.32	0.29	0.1	-0.1		0.57
25. I believe that success in financial investments depends on market scenario.	0.143008	-0.7	-0.1	-0.1	0.28	0.21		0.71
4. My financial decisions depend on my competence on analysing market scenario.	0.099574	0.29	0.12	-0.3	0.17	-0.6		0.6
18. My financial decisions are influenced by my financial consultant.	0.036755	-0.2	0.08	0.11	-0.06	-0.8		0.75
3. My financial decisions depend on my past experience.	0.379942	-0	0.26	-0.7	0.15	-0.1		0.72

* The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

Source: From data analysis

Table 8: KMO values of 25 items for final study

Items *	KMO values
1. I take financial decisions on my own.	0.6127465
2. I take financial decisions of my family.	0.5311812
27. I believe that success in financial investments is beyond my control.	0.6710561
6. I invest in financial instruments, keeping my short-term financial needs a top priority.	0.6411689
7. I invest in financial instruments, keeping my long-term financial needs a top priority.	0.5519102
8. Success in my financial investments originate from my meticulous planning.	0.5979706
9. Success in my financial investments originate from my timely investment.	0.6668382
10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.	0.7292523
11. I decide about the budget for my children's education.	0.6787922
12. I decide about the budget for the month family expenditure.	0.8578065
13. I decide the budget for my family's monthly savings.	0.8462746
14. I decide on purchasing long-term household assets.	0.8380289
28. I have the liberty to decide about the budget for my children's education.	0.7055967
29. I have the liberty to decide about the budget for the month family expenditure.	0.8428256
30. I have liberty to decide the budget for my family's monthly savings.	0.7934975
31. I have liberty to decide on purchasing long-term household assets.	0.7749203
19. My financial decisions are influenced by my friends.	0.7701977
20. My financial decisions are influenced by my colleagues.	0.7372024
21. My financial decisions are a matter of chance.	0.7652456
24. My decisions in taking risk in financial investments are influenced by my friends.	0.7956186
23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.8308528
25. I believe that success in financial investments depends on market scenario.	0.7734446
4. My financial decisions depend on my competence on analysing market scenario.	0.6187105
18. My financial decisions are influenced by my financial consultant.	0.5072915
3. My financial decisions depend on my past experience.	0.7739716

* The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

Source: From data analysis

Based on the above, the following factor structure is proposed, to measure the perception, on financial risk-taking behaviour, of the earning married women. In order to so that, the existing literature on locus of control and financial risk-taking behaviour have been considered. Based on the same, the factor structure and nomenclature of the variables and the factors have been proposed.

Factor1: Financial liberty in decision making

Variables	Items representing the variables *
Making monthly family budget decision	12. I decide about the budget for the monthly family expenditure.
Making family's monthly savings decision	13. I decide the budget for my family's monthly savings.
Deciding on Long-term assets purchase	14. I decide on purchasing long-term household assets.
Liberty o decide monthly family budget	29. I have the liberty to decide about the budget for the monthly family expenditure.
Liberty to decide family's monthly savings.	30. I have liberty to decide the budget for my family's monthly savings.
Liberty to decide family's monthly savings.	31. I have liberty to decide on purchasing long-term household assets.

Factor 2: Influence of external factors

Variables	Items representing the variables *
Friends' influence on financial decisions	19. My financial decisions are influenced by my friends.
Colleagues' influence on financial decisions	20. My financial decisions are influenced by my colleagues.
Influence of chance	21. My financial decisions are a matter of chance.
Friends' influence on financial risk-taking	24. My decisions in taking risk in financial investments are influenced by my friends.
Financial consultants' influence on financial risk-taking	23. My decisions in taking risk in financial investments are influenced by my financial consultant.
Role of market scenario	25. I believe that success in financial investments depends on market scenario.

Factor 3: Planning and proactivity

Variables	Items representing the variables *
Meticulous planning	8. Success in my financial investments originate from my meticulous planning.
Timely investment	9. Success in my financial investments originate from my timely investment.
market data	10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.

Factor 4: Experience and confidence

Variables	Items representing the variables *
Taking own decision	1. I take financial decisions on my own.
Taking decision on family's behalf	2. I take financial decisions of my family.
Short-term financial needs	6. I invest in financial instruments, keeping my short-term financial needs a top priority.
Past experience	3. My financial decisions depend on my past experience.

Factor 5: Priority

Variables	Items representing the variables *
Deciding children's education budget	11. I decide about the budget for my children's education.
Liberty to decide children's education budget	28. I have the liberty to decide about the budget for my children's education.
Control on financial success	27. I believe that success in financial investments is beyond my control.

Factor 6: informed decision in investing

Variables	Items representing the variables *
Competence on market analysis	4. My financial decisions depend on my competence on analysing market scenario.
Role of financial consultant	18. My financial decisions are influenced by my financial consultant.
Long-term financial needs	7. I invest in financial instruments, keeping my long-term financial needs a top priority.

*The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

The descriptive statistics for the above factors and variables are given below (Table 9):

Table 9: Descriptive statistics

	Mean	Std dev	Skewness	Kurtosis
Factor 1				
12. I decide about the budget for the month family expenditure.	3.59864	0.88874	-0.42179	-0.00535
13. I decide the budget for my family's monthly savings.	3.81633	0.86024	-0.55147	-0.17179
14. I decide on purchasing long-term household assets.	3.88435	0.84818	-0.6638	0.07527
29. I have the liberty to decide about the budget for the month family expenditure.	3.73973	0.79702	-0.32462	-0.22336
30. I have liberty to decide the budget for my family's monthly savings.	3.85714	0.86007	-0.76711	0.19207
31. I have liberty to decide on purchasing long-term household assets.	3.84354	0.88132	-0.72231	0.00935
Factor 2				
19. My financial decisions are influenced by my friends.	3.47619	1.08118	-0.74546	-0.08207
20. My financial decisions are influenced by my colleagues.	3.51701	0.90927	-0.49449	-0.23716
21. My financial decisions are a matter of chance.	3.5102	0.87872	-0.64551	0.21339
24. My decisions in taking risk in financial investments are influenced by my friends.	3.51701	1.00923	-0.5334	-0.3777
23. My decisions in taking risk in financial investments are influenced by my financial consultant.	3.89116	0.79493	-1.04623	1.98584
25. I believe that success in financial investments depends on market scenario.	3.63265	0.91473	-0.61768	-0.00084

Factor 3				
8. Success in my financial investments originate from my meticulous planning.	3.85714	0.91412	-0.96619	0.9977
9. Success in my financial investments originate from my timely investment.	3.94558	0.76554	-0.65013	0.49741
10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.	4.12245	0.60701	-0.06307	-0.32279
Factor 4				
1. I take financial decisions on my own.	3.97279	0.767	-1.0616	1.51743
2. I take financial decisions of my family.	3.66667	0.78804	-0.35315	-0.18398
6. I invest in financial instruments, keeping my short-term financial needs a top priority.	3.79592	0.85158	-0.74129	0.13276
3. My financial decisions depend on my past experience.	3.53061	0.88601	-0.60305	-0.61979
Factor 5				
28. I have the liberty to decide about the budget for my children's education.	3.77551	0.77456	-0.93163	1.22326
27. I believe that success in financial investments is beyond my control.	3.57143	0.85207	-0.39446	-0.15201
11. I decide about the budget for my children's education.	3.85714	0.844	-0.83159	0.72166
Factor 6				
7. I invest in financial instruments, keeping my long-term financial needs a top priority.	3.88276	0.80367	-1.08598	1.9653
4. My financial decisions depend on my competence on analysing market scenario.	3.85034	0.69592	-1.14884	2.62867
18. My financial decisions are influenced by my financial consultant.	4.03401	0.78875	-0.82463	1.18388

* The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

Source: From data analysis

It was also noted that, varibales has required consistency level, in measuring each of the factors proposed (Table 10).

Table 10: Testing the reliability of the questionnaire

	No. of items	Cronbach Alpha
Overall consistency	25	0.807438
Factor1 : Financial liberty in decision making	6	0.904855
Factor2 : Influence of external factors	6	0.839295
Factor3 : Planning and proactivity	3	0.696929
Factor4 : Experience and confidence	4	0.763372
Factor5 : Priority	3	0.76
Factor6 : informed decision in investing	3	0.6

Source: From the author's analysis

Taking into consideration the average score in the Descriptive statistics (Table 9), one can note that, the respondents give similar (more or less) consideration towards almost all the variables, under each factor. Taking this as the basis, it was hypothesized that, the average opinion of the respondents towards variables explaining financial risk-taking behaviour are more or less same. That is, there is no significant difference between the average importance levels given to the variables, by the respondents, under each factor. This is the null hypotheses tested against the alternative that, there is significant difference.

$H_{1.0}$: *There is no significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Financial liberty in decision making'.

$H_{1.A}$: *There is significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Financial liberty in decision making'.

$H_{2.0}$: *There is no significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Influence of external factors'.

$H_{2.A}$: *There is significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Influence of external factors' .

$H_{3.0}$: *There is no significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Planning and proactivity'.

$H_{3.A}$: *There is significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Planning and proactivity'.

$H_{4.0}$: *There is no significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Experience and confidence'.

$H_{4.A}$: *There is significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Experience and confidence'.

$H_{5.0}$: *There is no significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Priority'.

$H_{5.A}$: *There is significant difference between the average importance level to the variables, given by the respondents, under the factor* 'Priority'.

$H_{6.0}$: *There is no significant difference between the average importance level to the variables, given by the respondents, under the factor* 'informed decision in investing'

$H_{6.A}$: *There is significant difference between the average importance level to the variables, given by the respondents, under the factor* 'informed decision in investing' .

All the above null hypotheses can be tested, using either ANOVA or Kruskal-Wallis Test, based on whether the assumptions of null hypothesis are satisfied by the data, or not. In order to test the assumption of normality, we used Shapiro-Wilk Test. From the test, we note that, normality assumption is not satisfied by the data (Table 11). Hence, Kruskal-Wallis Test (K-W Test) was used to investigate the proposed hypotheses. Analysis revealed that there was significant *difference between the average importance level to the variables, given by the respondents,* for Factor 1, 2, 4, and 5 (Table 12).

Table 11: Shapiro-Wilk Test

		W-stat	p-value	alpha	normal
	1. I take financial decisions on my own.	0.73232	4.66E-15	0.05	no
	2. I take financial decisions of my family.	0.84613	4.17E-11	0.05	no
	27. I believe that success in financial investments is beyond my control.	0.86693	3.51E-10	0.05	no
	6. I invest in financial instruments, keeping my short-term financial needs a top priority.	0.80225	8.18E-13	0.05	no
	7. I invest in financial instruments, keeping my long-term financial needs a top priority.	0.78446	2.49E-13	0.05	no
	8. Success in my financial investments originate from my meticulous planning.	0.82476	5.65E-12	0.05	no
	9. Success in my financial investments originate from my timely investment.	0.81338	2.08E-12	0.05	no
	10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.	0.7661	4.93E-14	0.05	no
	11. I decide about the budget for my children's education.	0.81832	3.20E-12	0.05	no
	12. I decide about the budget for the month family expenditure.	0.87784	1.17E-09	0.05	no
	13. I decide the budget for my family's monthly savings.	0.84213	2.83E-11	0.05	no
	14. I decide on purchasing long-term household assets.	0.82703	6.93E-12	0.05	no
	28. I have the liberty to decide about the budget for my children's education.	0.78539	2.12E-13	0.05	no
	29. I have the liberty to decide about the budget for the month family expenditure.	0.85218	8.40E-11	0.05	no
	30. I have liberty to decide the budget for my family's monthly savings.	0.80425	9.65E-13	0.05	no
	31. I have liberty to decide on purchasing long-term household assets.	0.81382	2.16E-12	0.05	no
	19. My financial decisions are influenced by my friends.	0.85892	1.51E-10	0.05	no
	20. My financial decisions are influenced by my colleagues.	0.86509	2.89E-10	0.05	no
	21. My financial decisions are a matter of chance.	0.85247	7.81E-11	0.05	no
	24. My decisions in taking risk in financial investments are influenced by my friends.	0.8726	6.52E-10	0.05	no

	23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.79111	3.32E-13	0.05	no
	25. I believe that success in financial investments depends on market scenario.	0.85608	1.13E-10	0.05	no
	4. My financial decisions depend on my competence on analysing market scenario.	0.7336	5.11E-15	0.05	no
	18. My financial decisions are influenced by my financial consultant.	0.81759	3.00E-12	0.05	no
	3. My financial decisions depend on my past experience.	0.78994	3.03E-13	0.05	no

* The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

Source: From data analysis

Tale 12: Kruskal-Wallis Test(The significance level is .05)

Null Hypothesis	P value	Alpha	Decision
$H_{1.0}$ *: There is no significant difference between the average importance level to the variables, given by the respondents, under* Financial liberty in decision making.	**0.0155**	**.05**	**Reject the null hypothesis $H_{1.0}$**
$H_{2.0}$ *: There is no significant difference between the average importance level to the variables, given by the respondents, under* Influence of external factors.	**0.0008**	**.05**	**Reject the null hypothesis $H_{2.0}$**
$H_{3.0}$ *: There is no significant difference between the average importance level to the variables, given by the respondents, under* Planning and proactivity.	0.074	.05	Retain the null hypothesis $H_{3.0}$
$H_{4.0}$ *: There is no significant difference between the average importance level to the variables, given by the respondents, under* Experience and confidence.	**.0000**	**.05**	**Reject the null hypothesis $H_{4.0}$**
$H_{5.0}$ *: There is no significant difference between the average importance level to the variables, given by the respondents, under* Priority.	**0.003**	**.05**	**Reject the null hypothesis $H_{5..0}$**
$H_{6.0}$ *: There is no significant difference between the average importance level to the variables, given by the respondents, under* informed decision in investing .	0.052	.05	Retain the null hypothesis $H_{6..0}$

Source: From the author's analysis

In order to identify, in which of the variables, there were significant differences, in the context of Factor1, 2, 4 and 5, non-parametric post-hoc comparison test (Tukey's HSD / Kramer Test) was used (Table 13). From the results it was noted that, for the following variables (items), p value was less than .05. Thus, it was concluded that, the following variables differed significantly, with respect to average importance level assigned by the respondents (where P value < .05):

Table 13: Tukey's HSD / Kramer Test

Factor 1*				
sample 1	sample 2	*mean*	*std err*	*p-value*
12. I decide about the budget for the month family expenditure.	14. I decide on purchasing long-term household assets.	0.28571	0.07064	.04
Factor 2				
sample 1	sample 2	*mean*	*std err*	*p-value*
19. My financial decisions are influenced by my friends.	23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.41497	0.07719	0.002
20. My financial decisions are influenced by my colleagues.	23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.37415	0.07719	0.008
21. My financial decisions are a matter of chance.	23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.38095	0.07719	0.006
24. My decisions in taking risk in financial investments are influenced by my friends	23. My decisions in taking risk in financial investments are influenced by my financial consultant.	0.37415	0.07719	0.008
Factor 4				
sample 1	sample 2	*mean*	*std err*	*p-value*
1. I take financial decisions on my own.	2. I take financial decisions of my family.	0.306122	0.068007	0.008
1. I take financial decisions on my own.	3. My financial decisions depend on my past experience.	0.442177	0.068007	.0000
6. I invest in financial instruments, keeping my short-term financial needs a top priority.	3. My financial decisions depend on my past experience.	0.265306	0.068007	0.03042
Factor 5				
sample 1	sample 2	*mean*	*std err*	*p-value*
11. I decide about the budget for my children's education.	27. I believe that success in financial investments is beyond my control.	0.285714286	0.067985	0.00876

* The original number of the items are retained, as per the original proposed questionnaire (Refer Appendix 1)

Source: From data analysis, significance level 0.05

Discussion and conclusion

As discussed in the earlier sections, for the purpose of the present study, a questionnaire was developed in order to investigate the perception of the married earning women about the role of internal and external locus of control in their financial risk-taking behaviour. For the same purpose, a questionnaire was developed and tested. The population for the study were the married earning women, in the state of Karnataka. Data was collected from the many cities across the state of Karnataka, such as, Bangalore, Mysore, Hubli, Dharwad, Chikkamangalore, Davanagere, and Belgaum. Based on the Pilot and Final study, the factor structure of the financial risk-taking behaviour among the married earning women was emerged (mentioned in the earlier section). The factor structure clearly indicates that locus of control plays a role in the financial risk-taking behaviour among the married earning women. This corroborates with the literature review, which advocates that various dimensions of internal and external locus of control, as follows:

Locus of control	Dimensions mentioned in the literature review	Similar factors as per the factor structure emerged and proposed in the present study
Internal	one's fundamental appraisal of oneself, such as, self-efficacy and self-esteem, self-confidence. This means that when a person believes that he or she can act so as to maximize the possibility of good outcomes and to minimize the possibility of bad outcomes he is said to have higher internal locus of control.	Financial liberty in decision making (Factor 1); Planning and proactivity (Factor 3); Experience and confidence (Factor 4); Priority (Factor 5)
External	Those who are always at the mercy of luck, fate and unforeseen uncontrollable outside force and feel helpless all the time and never like to take the responsibility for their bad outcomes and miserable performances in life are said to have external locus of control.	Influence of external factors (Factor 2)
Internal and external (combined)	Combination of information about external environment and taking confident and calculated risks	Informed decision in investing (Factor 6)

Effort was also made to identify whether there was significant *difference between the average importance level to the variables, given by the respondents,* for the factors. Interestingly, significant differences in the average perception was identified only for the Factors 1, 2, 4, and 5 , i.e. Financial liberty in decision making, Influence of external factors, Experience and confidence, and Priority, respectively. Post-Hoc Test identified that significant existed for these factors, only in the context of the following scenario. In-depth interview was conducted to gain complementary insight in regard to such findings.

Factor 1: Financial liberty in decision making

Average perception of the respondents was significant different for the item 'I decide about the budget for the month family expenditure vi-a-vis item 'I decide on purchasing long-term household assets. The varied income structure, family size, number of children, the respondents had, due to which, the respondents might have different levels of finical and family responsibilities and needs. This may lead to different perception towards the above-mentioned items, among the respondents.

Factor 2: Influence of external factors

Average perception of the respondents was significant different for the item 'My decisions in taking risk in financial investments are influenced by my financial consultant' vis-à-vis items, such as, 'My financial decisions are influenced by my friends'; My financial decisions are influenced by my colleagues; My decisions in taking risk in financial investments are influenced by my friends; and, 'My financial decisions are a matter of chance'. This is an interesting finding and needs further research, as Factor 2 explains the Influence of external factors for the financial risk-taking behaviour among the respondents. Clearly, the respondents perceived the role of financial consultants (as an internment expert) vis-à-vis the suggestions given by the amateurs, such as family and colleagues. Also, respondents differenced significantly in perceiving the role of chance (luck), vis-à-vis the role of financial consultants. This may be due to the fact that, in general, respondents believed that the role of luck may be substantially minimized with the intervention of an expert in the field (the consultant).

Factor 4: Expereince and confidence

Average perception of the respondents was significant different for the item 'I take financial decisions on my own' vis-à-vis items, such as, 'I take financial decisions of my family' and, 'My financial decisions depend on my past experience'. This may be the consequence of the varied age group and the income level of the respondents, whose experience and exposure in investment and spending for family may be of varied nature. Also, there was significant difference in the average perception among the respondents about the item 'I invest in financial instruments, keeping my short-term financial needs a top priority' vis-a-vis 'My financial decisions depend on my past experience'. As mentioned above, due to limited exposure in investing and the varied nature of financial requirements (resulting from age, number of children, number of family members, education, and income level), the average perception of the respondents differed.

Factor 5: Priority

Average perception of the respondents was significant different for the item 'I decide about the budget for my children's education' vis-à-vis ' I believe that success in financial investments is beyond my control'. . As mentioned above, due to limited exposure in investing and the varied nature of financial requirements (resulting from age, number of children, number of family members, education and income level), the average perception of the respondents differed.

Scope for further research

The factors explained in the present study represent the role of both, internal and external, locus of control, in financial risk-taking behaviour of married earning women, in Karnataka. This study may be extended in future to investigate whether the married earning women of other states of India have the similar perception. Also, future study can be conducted to investigate the difference among the perception of the unmarred a married woman. It can also be investigated whether there is a gender-specific perception about the role of locus of control in financial risk-taking behaviour.

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Financial risk taking behaviour of earning women

Hello Madam,

Greetings from SDMIMD Mysore!!!

We are conducting a national level management survey on earning women. The basic objective of the study is to identify the issues, concerns, and challenges, the earning women face, while taking financial decision. We request you to kindly read the statements mentioned below and select the most suitable option, applicable to you, from the respective multiple choices, by marking a ***cross***[**x**]in the respective designated place.

The information provided in this questionnaire will be used only for pure academic purpose. Full confidentiality will be maintained. We thank you for all your time and cooperation extended for the survey.

Sincere Regards.

Professor Kannadas S., Assistant Professor, SDMIMD Mysore
Dr. Nilanjan Sengupta, Professor, SDMIMD Mysore
Dr. Mousumi Sengupta Professor, SDMIMD Mysore

Section A						
1.	Name of the city, where I live: …….					
2.	My age	22 – 28 yrs [ ]	29 – 35 yrs [ ]	36 – 42 yrs [ ]	43–49 yrs [ ]	50 yrs and above [ ]
3.	No. of family members stay with me:	1-2 members[ ]	3-5 Members [ ]	More than 5 members [ ]		
4.	No. of children	0-1 child [ ]	2-3 children [ ]	More than 3 children [ ]		
5.	Nature of earning	Salaried [ ]	Self-employed [ ]	Entrepreneur[ ]		
6.	No. of yrs. of earning	1 yr to 5 yrs [ ]	6-10 yrs [ ]	11-15 yrs [ ]	16-20 yrs [ ]	More than 20 yrs [ ]
7.	Level of education	10th [ ]	12th [ ]	Degree [ ]	Post-graduation & above [ ]	
8.	Average monthly income	Less than 10,000/- [ ]	10,001/- to 25,000/- [ ]	25,001/- to 50,000/- [ ]	50,001/- 1 Lakh [ ]	More than 1 Lakh [ ]
9.	Type of investment	Savings instrument (e.g.; LIC, Bonds) [ ]	Short-term instrument (e.g.; FD in bank) [ ]	Long-term instruments (e.g.; Recurring deposits) [ ]	Valuable metals [ ]	others [ ]

Section B

1. I take financial decisions on my own.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

2. I take financial decisions of my family.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

3. My financial decisions depend on my past experience.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

4. My financial decisions depend on my competence on analysing market scenario.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

5. I have the liberty to choose the level of risk in my financial decisions.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

6. I invest in financial instruments, keeping my short-term financial needs a top priority.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

7. I invest in financial instruments, keeping my long-term financial needs a top priority.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

8. Success in my financial investments originate from my meticulous planning.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

9. Success in my financial investments originate from my timely investment.
   Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

10. Success in my financial investments depends on the amount of effort I put in, in collecting data about the market scenario.
    Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

11. I decide about the budget for my children's education.
    Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

12. I decide about the budget for the month family expenditure.
    Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

13. I decide the budget for my family's monthly savings.
    Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

14. I decide on purchasing long-term household assets.
    Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

15. I believe earning women should have liberty in deciding financial commitments.
    Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

16. My financial decisions are influenced by the level of my job security.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

17. My financial decisions are influenced by my family members.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

18. My financial decisions are influenced by my financial consultant.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

19. My financial decisions are influenced by my friends.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

20. My financial decisions are influenced by my colleagues.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

21. My financial decisions are a matter of chance.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

22. My decisions in taking risk in financial investments are influenced by my family.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

23. My decisions in taking risk in financial investments are influenced by my financial consultant.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

24. My decisions in taking risk in financial investments are influenced by my friends.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

25. I believe that success in financial investments depends on market scenario.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

26. I believe that getting successful returns in financial investments depends on luck.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

27. I believe that success in financial investments is beyond my control.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

28. I have the liberty to decide about the budget for my children's education.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

29. I have the liberty to decide about the budget for the month family expenditure.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

30. I have liberty to decide the budget for my family's monthly savings.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )

31. I have liberty to decide on purchasing long-term household assets.
Strongly Agree ( ) Agree ( ) Not sure ( ) Disagree ( ) Strongly Disagree ( )