
Original Paper

Does Gender Differences Impact Investment Decisions? Evidence from Kathmandu Valley, Nepal

Dhruba Lal Pandey, PhD¹ & Nischal Risal, MPhil²

¹ Associate Professor, Central Department of Management, Tribhuvan University, Nepal

² Assistant Professor, Nepal Commerce Campus, Tribhuvan University, Nepal

Abstract

The study aims to analyze the impact of gender differences on investment decisions in Kathmandu Valley. The study targeted in the investors of financial market of Kathmandu Valley. The investing decisions and financial socialization and contribution are the independent variables in the study. The investment behavior is the dependent variable in the study. The descriptive research design has been adopted in the study. The correlational research design has been used to see the relationship between investors investing decision and investment behavior. The purposive sampling method has been used and the usable sample size is confined to 250. The study concludes significant differences in male and female risk-taking capacity, preferences and confidence level. The investment decision and financial socialization and contribution positively influenced investment behavior of investors.

Keywords: Investment behavior, Risk difference, Investment preference, Over confidence, Social learning, Agents

1. Introduction

Investment behaviors have been defined as how the investors judge, predict, analyze and review the procedures for decision making, which includes investment psychology, information gathering, defining and understanding, research and analysis (Slovic, 1972; Alfredo & Vicente, 2010). Roszkowski and Grable (2010) described the risk tolerance as the degree of one's preparedness to accept higher investment risk in anticipation of relatively higher returns. Bhushan and Medury (2013) state that an individual who is willing to invest should first conduct a market study and thereafter depending on needs and circumstances, has to make a choice as to which investment option best fits. Leimberg, Satinsky, LeClair and Doyle (1993) had proposed the financial planning and investment model. The financial management model offers investment managers and researchers a conceptualization of the activities involved in working through the investment planning process. The model suggested using the framework as a practical tool to assist investment managers summarize the activities involved in the process of investment and financial planning namely; gathering background information, establishing financial objectives, developing financial plans, controlling and executing plans, and measuring performance. This model had shared similarities with the Deacon and Firebaugh (1988) theory which dwelt on systems discussion of family financial management. A multidisciplinary approach to theoretical framework was adopted by Frese (2003) focused on factors that affect investments of an individual, borrowed heavily from the disciplines of economics, psychology and biology and integrated literature from these divergent fields. Li (2004) considered factors such as expected life, inflation, changing need, and medical expenses as the critical inputs. Rangel (2004) came up with a theoretical model of family decision-making that brought out the responsibility of the individual in the family. This framework focuses on the influence of others within a family in the decision-making process. Hurley (2005) looked at biases associated with risk preferences and job occupation. The investment decision-making outcomes were more consistent and accurate through the reduction of biases. In India, Kesavan, Chidambaram and Ramachandran (2012) indicated that the demographic factors did not influence the type of investment selected. Chitra and Sreedevi (2011) indicated that personality traits of investors had influenced the choice of investment method. Bayyurt,

Karıřık and Cořkun (2013) found that in Turkey, while men investors preferred common stocks and real estate to invest in women investors were more risk averted and invested in funds, time deposit and gold. They however did not find any gender differences in the preference of foreign currency investments. Willows (2012) contrasted the returns of male versus female investors net of trading costs and concluded that; trading frequency lowered the investors' return, males traded more than females and lastly that on a risk adjusted basis, females earned higher returns than males. Shrestha (2020) concluded that the majority of investor preferred to buy stock from primary market and majority of investor analyzed the company before making investment in stock. Parajuli and Shrestha (2020) shown that male investors were more risk-takers than women investors. Cicchiello and Kazemikhasragh (2022) evidenced that both female and male investors were risk-averted and more likely to invest in the equity of firms that were older and offered a higher percentage of equity. Such risk tolerance categorization formed the basis of establishing investment management standards, controlling purchases and sales of investments, and managing overall client resources (Roszkowski & Grable, 2010). In some cases, use of such demographics as the indicator for risk tolerance had actually ended up in financial losses for investors (Bayyurt, Karıřık, & Cořkun, 2013). In addition, there is general consensus among researchers and investment managers that more research concerning the efficacy of certain demographics in categorizing someone into a risk-tolerance cluster was needed (Hira & Loibl, 2006; Roszkowski & Grable, 2010; Lemaster & Strough, 2013). Charness and Gneezy (2007) found that women choose to invest in stocks and personal businesses less often and in low amounts than men. Gender differences in risk bearing might be due to differences in economic status (Estes & Hosseini 1988; Charness & Gneezy 2007; Bajtelsmit & Bernasek 1996). Then, if higher income workers were more willing to bear risk, men would be more risk bearing according to these differences in wealth and income (Bajtelsmit & Bernasek 1996; Hinz, *et al.*, 1997). It was found that women knew less and were less confident about their knowledge of investments as compared to men, which in turn resulted in women investing more conservatively and at the same time in less amounts than men (Estes & Hosseini, 1988; Barber & Odean, 2001; Charness & Gneezy 2007; Eckel & Grossman, 2008; Becker-Blease & Soul, 2008). The unanimous findings and existing research issue have been found in the literature. Thus, the study had aimed to analyze the gender preferences on investment decisions in Nepalese financial market.

2. Literature Review

Gender referred to being either male or female and in the context of the research it had been considered an important investor risk-tolerance consideration factor because more men than women tended to fit the personality trait of a thrill seeker or sensation seeker (Roszkowski & Grable, 2010). There was a prevalent belief in our culture that men should, and did, taken greater risks than women (Daruvalla, 2007). According to Ricciardi and Simon (2000), research into behavioral finance had gained prominence over the last decade with attempts to understand the investment decisions of individuals. They further stated that behavioral finance could be broken down into the three disciplines of psychology, sociology and finance. The empirical study conducted by Jianakoplos and Bernasek (1998) was among the earliest studies that had attempted to use the survey of consumer finance to establish gender differences in investment behavior. When making long-term investment decisions like pension funds, the conservative strategy of women was observed to be more pronounced. This was however partly due to the lower wealth accumulated given that they had lower incomes as compared to their male counterparts. The results were however not significantly different even after controlling for economic and demographic variables (Charness & Gneezy, 2007). Women were found to adopt a risk aversive strategy regardless of their occupation, experience and level of expertise. It was evidenced that a woman fund manager would still assume a risk aversive stance and thus advised her clients to choose lower risk and lower return investment.

Charness and Gneezy (2007) revealed that women chosen to invest in stocks and personal businesses less often and in low amounts than men but they chose to invest more often and in high amounts in low-risk, lower return assets, the certificates of deposit and homes. The approach however adopted by women appeared to be in line with the risk and return relationship theory as postulated by Howells and Bain (2008). Women investors had been found to prefer more certainty and lower returns as a trade-off (Roszkowski & Grable, 2010). However, risk and volatility were perceived and interpreted by

long-term not just as risk but as the opportunity to achieve higher returns (Howells & Bain, 2008). Overconfidence had been well-defined as the tendency for people to overestimate their knowledge, cognitive abilities and the precision of their information and thereby overestimated their own chances of success (Deaves, Luders, & Schröder, 2010). Barber and Odean (2001) concluded that the rational investors trade only if the expected gains exceeded transactions costs. Overconfident investors on the other hand overestimated the level of accuracy of their information and as a result the expected gains of trading were also overestimated. The overconfidence nature of the male species was an evolutionary trait where in the early days of hunters and gatherers men were required by nature to be overconfident in their skills in order to take upon the tasks not only hunting of for food but also for overall survival (Subrahmanyam, 2007). Even after adjusting for experience, education and value of the investment; women were still found to have lower confidence in their investment decisions (Estes & Hosseini, 1988). Gysler, Kruse, and Schubert (2002) concluded that the men were found to be significantly more overconfident in both knowledge groups. Nonetheless, it was observed that as knowledge increased men became more risk averse while women took up more risk thus narrowing the overconfidence gap. Bhandari and Deaves (2006) found that male pension plan participants in Canada were more overconfident than their female counterparts even when there were no notable differences in investment knowledge.

Social learning had been defined as the process of learning behavior from the environment through the process of observation (Bandura, 1977). Financial social learning on the other hand as described by Danes (1994) was much more inclusive than learning to effectively function in the marketplace. Parents may expect their older children to be financially independent but Danes and Hira (1987) found that they had little financial knowledge to draw upon. The students had low levels of knowledge in insurance, credit cards, and overall financial management areas. Of importance was to understand whether gender role in financial socialization was responsible for the perceived lower levels of overconfidence in women and low risk tolerance. As a result of socialization at an early age, men learnt to be outgoing and achievement oriented whereas women learnt to be emotionally oriented and reserved in their relations with others (Chen & Volpe, 2002).

Powell and Ansic (1997) in congruence found out that girls were generally socialized to respect male authority, while on the other hand boys were encouraged through socialization to be assertive and aggressive. The key agents of financial socialization as conceived by Ward (1974) were the family, peer group and mass media. Researchers had in the recent past however included two other agents that had been noticed to greatly influence socialization were the culture and institutions (Beutler & Dickson, 2008; Gudmunson & Danes, 2011). Parent-child interaction about money, financial monitoring and parental warmth were found to explain the observed cognitive behavioral characteristics of adolescents' financial behaviors (Kem, et al., 2011). Parents who were more cautious as money managers found to better socialize their children into avoiding unnecessary debt (Hibbert, et al., 2004). On the other hand, money was viewed as a source of problems by young adults who came from a family where parents argued about money (Allen 2008).

Kim and Chatterjee (2013) argued that parents' inability to provide warmth and comfort during difficult financial periods could also result in the development of financial worry in childhood and consequently fostered reluctance in young adulthood to seek financial and emotional support during times of crisis. Prior investigations had found that parental socialization and instruction in financial matters had exerted a positive influence on a child's efforts to acquire adaptive financial knowledge, skills, and attitudes (Jorgensen & Salva, 2010; Kim, et al., 2011). The parental guidance declined gradually as children develop into adolescents (Danes, 1994; Jorgensen & Savla, 2010). Hare-Mustin and Marachek (1990) concluded that the gender had not necessarily explained whether a person was male or female, but socially interpreted as the way that an individual learnt to act as a stereotyped masculine or feminine. Based on the empirical evidences, the conceptual framework had been developed as under;

Conceptual Framework

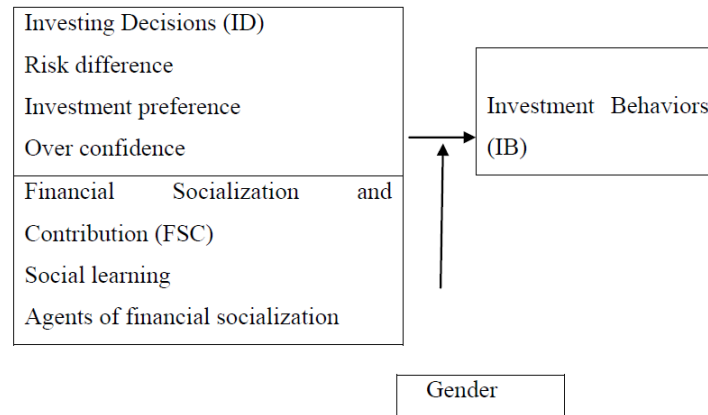


Figure 1. Conceptual Framework

Source: Mukoba (2015)

The investing decisions measured in terms of risk differences, investment preference and over confidence had been taken as the independent variable in the study. The other independent variable in the study was financial socialization and contribution measured in terms of social learning and agents of financial socialization. The investment behaviors had been taken as the dependent variables of the study.

3. Research Methodology

Descriptive research design was used to assess the difference of investment behavior of male and female investor and correlational research design was used to see the relation of investors investing decision and investment behavior. The investors of Kathmandu investing in the financial market had been taken as the population of the study. The 250 usable samples had been selected for the study purpose using purposive sampling method. The required data was collected through self-administered questionnaires. The primary data was collected using survey method. A structured questionnaire was prepared and distributed to the respondents personally where, simple (Yes/No) questions, demographic questions and five-point Likert scale questions were used. A structured questionnaire was used to measure the opinions of the respondents with regard to determine if there were any gender differences in investment behavior of investors in context of Kathmandu valley. The completed questionnaires were edited for completeness, accuracy and consistency before any processing of the responses is done. To test the hypothesis, T-test was used to see the different opinion in gender, correlation matrix was used to associate between investors investing decision and investment behavior, and regression model was used to determine the impact on investment behavior of investor. The Microsoft Excel and SPSS had been used to process and extract the result from the available information.

4. Results and Discussion

Demographic Analysis

Table 1. Gender of the Respondents

Gender	Percentage
Male	57.2
Female	42.8
Total	100.0

Table 1 had indicated that the majority of the respondents were male and there was an indication that both male and female were involved in the financial investment.

Table 2. Cross Tabulation of Age and Gender Wise Profile

Age	Gender (%)		Total (%)
	Male	Female	
Below 25 years	16.8	20.0	36.8
26 to 40 years	35.6	21.6	57.2
41 to 55 years	3.6	1.2	4.8
above 55 years	1.2	–	1.2
Total	57.2	42.8	100

Table 2 had shown that the respondent to indicate their age on gender basis found that most of the respondents, as indicated by 57.2 percentages were aged between 26 to 40 years from which 35.6 percentages were male respondents and 21.6 percentages were female respondents. This implied that respondents of the different age and gender categories were engaged in the study. The findings depicted that result could be generalize for the youngster be implemented to the younger investor age below 25 years and age between 26 to 40 years.

Table 3. Cross Tabulation of Education and Gender Wise Profile

Education	Gender (%)		Total (%)
	Male	Female	
PhD	1.6	0.4	2
Master's Degree	25.2	19.6	44.8
Bachelor's Degree	22.4	16	38.4
+2	4.0	3.2	7.2
None	4.0	3.6	7.6
Total	57.2	42.8	100

Table 3 had shown that the majority of the respondents as shown by 44.8 percentages indicated that they were at Master's degree level from which 25.2 percentages were male and 19.6 percentages were female respondents. Similarly, 38.4 percentages of the respondents indicated their highest level of education as Bachelors' degree of which 22.4 percentages from male respondents and 16 percentages were from female. The major data provided by the respondents were at education level of bachelors and master's degree. This indicated that the respondents were educated well enough to understand the questions and thus would give credible information related to this study.

Table 4. Cross Tabulation of Work Experience and Gender Wise Profile

Work Experiences	Gender (%)		Total (%)
	Male	Female	
Less than 1 year	7.2	6	13.2
1- 5 years	22	9.6	31.6

5-10 years	5.2	2.8	8.0
Above 10 years	5.6	2.8	8.4
Not yet	17.2	21.6	38.8
Total	57.2	42.8	100

Source: Field survey, 2022

Table 4 had shown that the majority of the respondents, as represented by 38.8 percentages were found to have not served in any organization yet from which 17.2 percentages were male and 21.6 percentages were female. Similarly, 31.6 percent of the respondents specified that they had served for 1 to 5 years from which 22 percentages were male and 9.6 percentages were female. The majority of the respondents had worked for a considerable period of time and therefore they were in a position to give credible information relating to this study. In addition, the majority of the respondents had not worked meant that they had engaged in the investment in the financial market.

Descriptive Statistics

Table 5. Position of Investment Behavior, Investment Decision and Financial Socialization and Contribution (Male)

Variables	Mean	Std. Deviation
Investment Behavior (IB)	2.4436	0.60484
Investment Decision (ID)	2.2378	0.44506
Financial Socialization and Contribution (FSC)	1.8442	0.59404

Table 5 had shown that the mean value of investment behaviour (dependent variable) was 2.4436 with standard deviation of 0.60484. The mean value of investing decision was 2.2378 with standard deviation of 0.44506. The mean value of financial socialization and contribution was 1.8442 with standard deviation of 0.59404. The number of male observations was 143. The study had indicated highest mean value for IB with highest variances in the data.

Table 6. Position of Investment Behavior, Investment Decision and Financial Socialization and Contribution (Female)

Variables	Mean	Std. Deviation
Investment Behavior (IB)	2.5661	.41946
Investment Decision (ID)	2.4527	.33447
Financial Socialization and Contribution (FSC)	1.9031	.55723

Table 6 had shown that the total number of observations for female was 107. The mean value of IB was 2.5661 with standard deviation of 0.41946. The mean value of ID was 2.4527 with standard deviation of 0.33447. The mean value of financial socialization and contribution was 1.9031 with standard deviation of 0.55723. The study had indicated highest mean value for IB whereas the variances in the data was found more in FSC. *Gender Differences in Investing Decisions*

Table 7. Extent to Which Gender Differences Contribute to Investing Decisions

Extent	Frequency	Percentages
Very great extent	58	23.2
Great extent	103	41.2
Moderate extent	57	22.8
Less extent	12	4.8
Not at all	20	8.0
Total	250	100

Table 7 had shown that the majority of the respondents as shown by 41.2 percentages specified that gender differences had contributed in determining gender financial behavior to a great extent. Another 23.2 percentages of the respondents indicated to a very great extent, whereas 22.8 percentages of the respondents indicated to a moderate extent. These findings depicted that gender differences did contribute in determining gender financial behavior to a great extent.

Independent Samples Test (t-test)

Table 8. Difference in Investing Decision (ID) between Male and Female Investors

		Levene's Test for Equality of Variances				t-test for Equality of Means						
		Mean	SD	F	P-val.	T	df	P-val.	Mean Difference	SE	95% CI	
											L	U
ID	F	2.45	.334	7.984	.005	4.187	248	.000	.2149	.0513	.11384	.3160
	M	2.24	.445			4.359	247.9	.000	.2149	.0493	.11782	.3120

Table 8 had shown that there was significance difference in the male mean scores with mean scores for female as per Levene's test for equality of variances. Since, $p < 0.05$, the investment decision of male and female were significantly different. The results supported the alternative hypothesis that the investment decision of male and female had affected the investment behavior. However, the study had not found the equal or same type of investment decisions.

Table 9. Statements Relating to Gender Differences in Investing Decisions (Male)

The Five Point Likert Scale had been used to measure the attributes of the respondents. The response of the respondents had been measured from Strongly Agree (SA), Agree (A), Neutral (N), Disagree (DA) to Strongly Disagree (SDA) and the score assigned as 1,2,3,4 and 5 respectively.

Statements	SA	A	N	DA	SDA	Mean	SD
I am willing to take financial risks.	33	86	15	8	1	2.00	1.62
I try to avoid risk.	23	78	25	12	5	2.48	1.96
I think changes in a situation can result in new risks.	27	100	15	1	0	1.93	1.45
I lack in confidence to invest independently without other support & guidance.	45	65	14	13	6	2.09	1.85

I believe long length of time period considers risk in investment.	23	86	23	8	3	2.17	1.80
I choose to invest in stocks.	28	66	30	15	4	2.30	2.0
I choose to invest in personal businesses.	30	82	27	3	1	2.04	1.63
I choose to invest more often and in high amounts in low-risk, lower return assets, the government bonds.	21	83	31	5	3	2.20	1.81
I choose to invest more often and in high amounts in low-risk, lower return assets, the certificates of deposit.	16	59	55	8	5	2.48	2.12
I prefer to invest in risky assets which provides higher returns.	29	82	27	3	2	2.06	1.67
I prefer more certainty and lower returns as a trade-off during investment decisions.	27	75	33	6	2	2.16	1.79
Men are more prone to overconfidence than women, especially in male-dominated fields such as finance.	71	49	13	7	3	1.75	1.49
As knowledge increase, I become more risk averse.	18	57	39	25	4	2.58	2.25
Increase in overconfidence is depend on the complexity of the task at hand and the perceived accompanying uncertainty.	22	48	27	43	3	2.69	2.41
Decrease in overconfidence is depend on the complexity of the task at hand and the perceived accompanying uncertainty.	15	61	55	9	3	2.46	2.08
Lower inclination towards overconfidence in investment decisions usually display an increased risk aversion.	13	53	69	5	3	2.52	2.11

Table 10. Statements Relating to Gender Differences in Investing Decisions (Female)

Statements	SA	A	N	DA	SDA	Mean	SD
I am willing to take financial risks.	11	37	34	20	5	2.72	2.40
I try to avoid risk.	14	58	25	8	2	2.30	1.93
I think changes in a situation can result in new risks.	16	75	13	2	1	2.03	1.59
I lack in confidence to invest independently without other support & guidance.	47	24	24	10	2	2.02	1.81
I believe long length of time period considers risk in investment.	8	68	19	9	3	2.35	1.97
I choose to invest in stocks.	11	35	34	26	1	2.72	2.37
I choose to invest in personal businesses.	14	49	34	10	0	2.37	1.98
I choose to invest more often and in high amounts in low-risk, lower return assets, the government bonds.	13	50	36	8	0	2.36	1.96
I choose to invest more often and in high amounts in low-risk, lower return assets, the certificates of	9	36	53	8	1	2.58	2.17

deposit.							
I prefer to invest in risky assets which provides higher returns.	5	43	44	13	2	2.66	2.25
I prefer more certainty and lower returns as a trade-off during investment decisions.	13	53	33	7	1	2.34	1.95
Men are more prone to overconfidence than women, especially in male-dominated fields such as finance.	57	34	11	3	2	1.68	1.40
As knowledge increase, I become more risk averse.	11	37	41	18	0	2.61	2.23
Increase in overconfidence is depend on the complexity of the task at hand and the perceived accompanying uncertainty.	8	22	33	38	6	3.11	2.76
Decrease in overconfidence is depend on the complexity of the task at hand and the perceived accompanying uncertainty.	6	42	45	12	2	2.64	2.24
Lower inclination towards overconfidence in investment decisions usually display an increased risk aversion.	6	28	69	4	0	2.66	2.20

Table 9 and Table 10 revealed that majority of the respondents agreed that women were less willing to take financial risks as compared to men. The women tried to avoid risk as compared to men. Both men and women lacked in confidence to invest independently without other support and guidance. Comparatively women lacked in confidence to invest independently without other support and guidance. The women thought changes in a situation could result in new risks and believed long length of time period considered risk in investment as their mean was lower than mean of men. On investment preferences, the study findings revealed that majority of the respondents agreed that men chosen to invest in stocks as compared to female. Also, men chosen to invest in personal businesses as shown by mean of 2.041958(male) < 2.373832(female), whereas men preferred to invest in risky assets which provided higher returns as compared to women. The women chosen to invest more often and in high amounts in low-risk, lower return assets, the government bonds and the certificates of deposit and more certainty and lower returns as a trade-off during investment decisions as compared to men.

On influence of overconfidence in investment decisions, majority of the male respondents agreed that decrease in overconfidence was dependent upon the complexity of the task at hand and the perceived accompanying uncertainty whereas, increase in overconfidence was dependent upon the complexity of the task at hand and the perceived accompanying uncertainty. The women with lower inclination towards overconfidence in investment decisions usually displayed an increased risk aversion compared with men. The knowledgeable men become more risk averted than women as shown by a mean of 2.58042 < 2.616822. The men were more prone to overconfidence than women, especially in male-dominated fields such as finance, as shown by a mean of both men and women lower than average mean.

Impacts of Investing Decision (ID) of Investors on Investment Behavior (IB)

Table 11. Analysis of Variance

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	16.730	16.730	75.731	.000
	Residual	54.786	.221		
	Total	71.516			

From Table 11 ANOVA statistics, the study established the regression model was fit ($p = 0.000$ & $F = 75.731$). This indicated that investing decision of investors significantly influenced investment behaviour.

Table 12. Model Coefficients

Model		B	Std. Error	T	Sig.
1	(Constant)	1.040	.170	6.116	.000
	ID	.625	.072	8.702	.000

Results in Table 12 revealed that investment decision of investors had statistically significantly impacted the investment behaviour, which indicated that increased in investing decision of investors would lead to increase in investment behaviour.

Financial Socialization and Contribution in Investment Behaviour

Table 13. Extent to Which Financial Socialization Contribute to Investing Decisions

Extent	Frequency	Percent
Very great extent	117	46.8
Great extent	63	25.2
Moderate extent	51	20.4
Less extent	14	5.6
Not at all	5	2.0
Total	250	100

Table 13 shown that the majority of the respondents as shown by 46.8 percentages indicated that financial socialization contributed in determining the gender financial behaviour to a very great extent, 25.2 percentages of the respondents indicated to a great extent, whereas 20.4 percentages of the respondents indicated to a moderate extent. Similarly, 5.6 percentages of the respondents indicated to a less extent and two percentages of the respondents indicated not at all. These findings depicted that financial socialization did contribute in determining gender financial behaviour to a very great extent.

Independent Samples Test (T-test)

Table 14. Difference in FSC in between Male and Female Investors

		Levene's Test for Equality of Variances				t-test for Equality of Means						
		Mean	SD	F	Sig.	T	df	Sig.	Mean Difference	SE	95% CI	
											Lower	Upper
FSC	Female	1.90	.557	.033	.857	.796	248	.427	.0589	.0739	-.08677	.20456
	Male	1.84	.594			.804	235.70	.422	.0589	.0732	-.08547	.20326

Table 14 had shown the results of an independent samples t-test concluded that there was no significance difference in male and female in FSC. So, the study could assume FSC of male and female were equal or same.

Table 15. Statements Relating to Financial Socialization in Investing Decisions (Male)

Statements	SA	A	N	DA	SDA	Mean	SD
Parents expect their older children to be financially independent.	81	47	9	5	1	1.58	1.26
Financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial behaviour.	73	48	18	3	1	1.67	1.34
Children more often not imitate and role plays their parents' financial behaviour when they are with their peers.	61	56	19	6	1	1.81	1.49
With training and support, individuals can strengthen cognitive and behavioral skills across the gender divide.	34	78	26	3	2	2.02	1.64
Socially stereotyped gender roles have an impact on financial behavioral differences in males and females.	48	70	19	4	2	1.89	1.54
Family, peer group, mass media, culture and institutions, are the agents of financial socialization.	87	43	7	5	1	1.53	1.20
The family is the principal socializing agent and contributes the most influence on values, attitudes and practices throughout life.	75	48	14	6	0	1.65	1.32
People are motivated and gain higher self-esteem through participating in identified groups.	38	74	19	10	2	2.04	1.71
Parents who are more cautious as money managers are better in socializing their children into avoiding unnecessary debt.	35	82	16	10	0	2.00	1.63
Parents' inability to provide warmth and comfort during difficult financial periods results in the development of financial worry in childhood.	22	85	22	10	4	2.22	1.87
Socialization plays a significant role in amplifying the differences between the boys and girls.	60	60	15	5	3	1.81	1.51

Table 16. Statements Relating to Financial Socialization in Investing Decisions (Female)

Statements	S A	A	N	D A	SD A	Mean	SD
Parents expect their older children to be financially independent.	73	22	10	2	0	1.44	1.093
Financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial behavior.	57	34	15	1	0	1.62	1.260
Children more often not imitate and role plays their parents' financial behaviors when they are with their peers.	35	37	26	8	1	2.09	1.798
With training and support, individuals can strengthen cognitive and behavioral skills across the gender divide.	24	51	26	5	1	2.14	1.777
Socially stereotyped gender roles have an impact on financial behavioral differences in males and females.	26	59	17	5	0	2.00	1.617
Family, peer group, mass media, culture and institutions, are the agents of financial socialization.	63	32	11	1	0	1.53	1.152
The family is the principal socializing agent and contributes the most influence on values, attitudes and practices throughout life.	61	34	0	12	0	1.65	1.407
People are motivated and gain higher self-esteem through participating in identified groups.	20	62	20	4	1	2.10	1.707
Parents who are more cautious as money managers are better in socializing their children into avoiding unnecessary debt.	16	64	17	9	1	2.20	1.829
Parents' inability to provide warmth and comfort during difficult financial periods results in the development of financial worry in childhood.	15	65	17	9	1	2.21	1.834
Socialization plays a significant role in amplifying the differences between the boys and girls.	31	50	18	6	2	2.04	1.729

Table 15 and Table 16 had shown the statements relating to Financial Socialization in Investing Decisions of male and female. The study additionally sought to determine the respondent's level of agreement with some statements that were related to financial socialization and contribution in investment behaviour from analyzing their responses. On social learning, the study findings revealed that majority of the male and female respondents agreed that parents expect their older children to be financially independent. Financial socialization was the building block for modelling financial knowledge, financial attitudes and future financial behaviour. Whereas, majority of the male respondents agreed that children more often than not, imitated and role played their parents' behaviors when they were with their peers. They agreed that with training and support, individuals could strengthen cognitive and behavioral skills across the gender divide. Socially stereotyped gender roles had an impact on behavioral differences in males and females. On agents of financial socialization, majority of the male and female respondents agreed that family, peer group, mass media, culture and institutions were the agents of financial socialization. The parents who were more cautious as money managers were better in socializing their children into avoiding unnecessary debt. The people were

motivated and gained higher self-esteem through participating in identified groups. Whereas, the family was the principal socializing agent and contributed the most influenced on values, attitudes and practices throughout life. The parents' inability to provide warmth and comfort during difficult financial periods resulted in the development of financial worry in childhood. Socialization had played a significant role in amplifying the differences between the boys and girls.

Impacts of Financial Socialization and Contribution (FSC) on Investment Behaviour (IB)

Table 17. Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.118	1	3.118	11.305	.001
	Residual	68.398	248	.276		
	Total	71.516	249			

From the Table 17, ANOVA statistics, the study established the regression model was fit. This had indicated that financial socialization and contribution (FSC) significantly influenced investment behaviour (dependent variable).

Table 18. Model Coefficients

Model		B	Std. Error	t	Sig.
1	(Constant)	2.134	.113	18.950	.000
	FSC	.194	.058	3.362	.001

Table 18 results revealed that financial socialization and contribution (FSC) had statistically significant impact on investment behaviour, which indicated that increased in financial socialization and contribution (FSC) would lead to increase in investment behaviour of investors.

Independent Samples T-Test

Table 19. Difference in Investment Behaviour between Male and Female Investors

		Levene's Test for Equality of Variances				t-test for Equality of Means						
		Me an	SD	F	Sig.	T	df	Sig	Mean Difference	SE	95% CI	
											Lower	Upper
IB	Female	2.56	.419	6.413	.012	1.997	248	.044	.12253	.06820	-.01179	.25686
	Male	2.44	.604			2.090	246.683	.030	.12253	.06483	-.00515	.25022

Table 19 had shown that an independent samples t-test was conducted to compare the investment behaviour for male and female. There was significant difference ($t(248) = 1.997, p = 0.044$) in the scores with mean score for female ($t = (M = 2.56, SD = 0.419)$) was higher than male ($M = 2.44, SD = 0.604$). Since $p < 0.05$, so the investment behaviour of male and female were significantly different. So, the study could not assume that investment behaviour of male and female were equal or same.

Correlation Analysis

Table 20. Correlation Matrix

	RD	IP	OC	SL	AFS	IB
RD	1					
IP	.356**	1				
OC	.273**	.469**	1			
SL	.433**	.235**	.224**	1		
AFS	.328**	.274**	.204**	.767**	1	
IB	.336**	.444**	.316**	.163**	.223**	1

***. Correlation is significant at the 0.01 level (2-tailed).*

Table 20 had shown that Pearson product correlation of risk difference and investment behaviour was found to be low positive and statistically significant at 1 percent ($r = 0.336$, $p < 0.01$). This shown that increased in risk difference behaviour would lead to increase in investment behaviour of investors. Similarly, the correlations of investment preference and investment behaviour (IB) was found to be low positive and statistically significant at 1 percent ($r = 0.444$, $p < 0.01$). Likewise, correlations of overconfidence and investment behaviour was found to be low positive and statistically significant at 1 percent ($r = 0.316$, $p < 0.01$), correlations of social learning and investment behaviour was found to be very low positive and statistically significant at 1 percent ($r = 0.163$, $p < 0.001$) and the correlations of agents of financial socialization and investment behaviour (IB) was found to be very low positive and statistically significant at 1 percent ($r = 0.223$, $p < 0.01$). The results depicted that increased in independent variables (RD, IP, OC, SL and AFS) would lead to increase in investment behaviour of investors.

Impact of Independent variables (ID and FSC) on Dependent variable (IB)

The major independent variables that affected the investment behaviour (IB) of investors were the risk difference (RD), investment preference (IP), overconfidence (OC), social learning (SL) and agents of financial socialization (AFS).

Table 21. Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.770	2	8.385	37.830	.000
	Residual	54.747	247	.222		
	Total	71.516	249			

From the Table 21, ANOVA statistics, the study established the regression model was fit. This indicated that investing decision (ID) and financial socialization and contribution (FSC) significantly influenced investment behaviour.

Table 22. Model Coefficients

Model		B	Std. Error	t	Sig.
1	(Constant)	1.025	.174	5.902	.000
	ID	.612	.078	7.848	.000
	FSC	.024	.056	.424	.672

Table 22 results revealed that investing decision (ID) had statistically significant impact on investment behaviour as p-value was less than 0.05, which indicated that increased in investing decision (ID) of investor would lead to increase in investment behaviour (IB). Whereas, financial socialization & contribution (FSC) had no significant impact on investment behaviour as p-value was greater than 0.05. But the overall independent variables had significant impact on investment behavior as their overall p-value was less than 0.05.

5. Discussions

The study established that gender differences do contribute in determining investment behaviour to a great extent. Okech and Mukoba (2016) also found out that majority of the respondents that gender differences contributed in determining gender financial behavior to a great extent. The study further revealed that on risk differences, the study findings revealed that women were less willing to take financial risks and tried to avoid risk as compared to men. Comparatively women lack in confidence to invest independently without other support and guidance and they thought changes in a situation could result in new risks and believed long length of time period considered risk in investment. These findings were found to concur with the findings of Jianakoplos and Bernasek (1989). Similarly, it was found that females were less likely to take business risks than males (Zinkhan & Karande, 1991). Parajuli and Shrestha (2020) found that male investors were more risk-takers than women investors. This might occur due to variations between males and females in risk preferences. These investors' mentality, decision-making capacity, problem-solving skills, and bias might also cause differences in risk perceptions. Study further revealed that on investment preference, women investors preferred to invest more often and in high amounts in low-risk, lower return assets, the government bonds and the certificates of deposit and more certainty and lower returns as a trade-off during investment decisions as compared to men. These findings were found to concur with the findings of Charness and Gneezy (2007). Bayyurt, Karışık and Coşkun (2013) found that in Turkey, while men investors preferred common stocks and real estate to invest in and women investors were more risk averted and invested in funds, time deposit and gold. Mathew, Joseph and Joseph (2020) also found out that majority of women were likely to invest in risk free investment options like bank deposits, savings deposits etc. On influence of overconfidence in investment decisions, majority of the male respondents agreed that increase or decrease in overconfidence was dependent upon the complexity of the task at hand and the perceived accompanying uncertainty and that as knowledge increase men become more risk averse than women. These findings were found to be consistent with the findings of Estes and Hosseini (1988) who found out those women had considerably lower confidence in an investment assignment than men. Similarly, the findings concurred with Dittrich, Guth and Maciejovsky (2001) who found out that increase or decrease in overconfidence was dependent upon the complexity of the task at hand and the perceived accompanying uncertainty. They asserted that overconfidence increased with the complexity of the task and overconfidence decreased when the perceived uncertainty was high. Mukoba (2012) findings were found to concur with the findings that financial socialization influences investment decisions among male and female employees of Safaricom Limited to a great extent. On social learning, the study findings revealed that majority of the male and female respondents agreed that parents expect their older children to be financially independent and financial socialization was the building block for modelling financial knowledge, financial attitudes and future financial behaviour. These findings were found to concur with the findings of Danes and Hira (1987). Similarly, the findings concurred with those of Bandura (1977). The majority of the respondents agreed that family, peer group, mass media, culture and institutions were the agents of financial socialization. These findings were found to be

consistent with the findings of Keranne and Hogg (2010). Kim and Chatterjee (2013) argued that parents' inability to provide warmth and comfort during difficult financial periods could result in the development of financial worry in childhood and consequently fostered reluctance in young adulthood to seek financial and emotional support during times of crisis.

6. Conclusions

The study shown that males and females have significant different in risk taking capacity, preferences and confidence level. The females are less willing to take financial risks, try to avoid risk and lack in confidence to invest independently as compared to men. Whereas, men are more prone to overconfidence than women. This may occur due to variations between males and females in risk preferences, experience and knowledge in investing as well. In Kathmandu valley, the reason behind this consequence could be the income disparity between males and females' investors. These investors' mentality, decision-making capacity, problem-solving skills, and bias may also cause differences in risk perceptions. So, there seems the difference in investment behavior of male and female. Hence, there is significant relationship between investing decision of male and female and investment behavior. Whereas, there is no significant relationship between financial socialization and contribution and financial behavior of male and female as both investors agreed that family, peer group, mass media, culture and institutions, are the agents of financial socialization, and financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial. Finally, it is concluded that investing decision and financial socialisation and contribution influence investment behavior of investors. There was a positive relationship between investing decision and financial socialisation and contribution and investors investment behaviour. The study established that financial socialization contributes in determining gender financial behaviour to a very great extent. Investing Decision and Financial socialization was found to be a significant variable and positively affects investment decision among investors. The study therefore concludes that increase in investment decisions and financial socialization & contribution enhances investment behaviour of investors.

7. Implications

There is need to promote financial socialization since it is the building block for modelling financial knowledge, financial attitudes and future financial behaviour. This way, everyone in the society who has undergone adequate financial socialization would find it easier to make viable investment decisions. Future research could replicate this study, as increasing importance of female investors in the investment industry. Whereas the investment industry has recently recognised the wisdom of targeting female investors as a separate market segment, this acknowledgement has been based largely on the premise that female investors look for a different type of relationship with financial professionals than do male investors. This research would be useful for financial institutions, and investment companies. These organizations would better design their products/services and be able to target the market more effectively. They should recognize male and female investors as different market segments, as each segment has its criteria as strategies. Nepalese financial institutions and investment firms should recognize these realities to achieve their organizational goals by attracting both male and female investors in the capital market. In order to make the research more valuable, future research concerning investment behavior of male and female should extend to other areas of the Nepal or to the other regions or districts of Nepal.

References

- Allen, M. W. (2008). Consumer Finance and Parent-Child Communication. In J. J. Xiao, *Handbook of Consumer Finance Research*. New York: Springer.
- Al-Ajmi, J. Y. (2008). Risk tolerance of individual investors in an emerging market. *International Research Journal of Finance and Economics*, 17, 15-26.
- Arti, G., Sunita, S., & Julee, A. (2011). Difference in gender attitude in investment decision making in India. *Research Journal of Finance and Accounting*, 2(12), 1-7.
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barber, B. M., & Odean, T. (2001). Boys Will Be Boys: Gender, Overconfidence, And Common Stock

Investment. *The Quarterly Journal of Economics*, 1, 261-292.

Bajtelsmit, V. L., & Bernasek, A. (1996). Why do women invest differently than men?. *Financial counseling and planning*, 7.

Bayyurt, N., Karışık, V., & Coşkun, A. (2013). Gender Differences in Investment Preferences. *European Journal of Economic and Political Studies*, 6(1), 71-83.

Benos, A. V. (1998). Aggressiveness and Survival of Overconfident Traders. *Journal of Financial Markets*, 1(4), 353-382.

Berenbaum, H. (2002). Varieties of joy-related pleasurable activities and feelings. *Cognition & Emotion*, 16(4), 473-494.

Berggren, J., & Romualdo, G. (2010). Gender difference in financial decision making: A quantitative study of risk aversion and overconfidence between the genders.

Bernheim, B. D., & Rangel, A. (2004). Addiction and cue-triggered decision processes. *American economic review*, 94(5), 1558-1590.

Beutler, I. F., & Dickson, L. (2008). Consumer Economic Socialization, w: Handbook of Consumer Finance Research, ed. JJ Xiao.

Bhandari, G., & Deaves, R. (2006). The demographics of overconfidence. *The Journal of Behavioral Finance*, 7(1), 5-11.

Bhushan, P., & Medury, Y. (2013). Determining tax literacy of salaried individuals-An empirical analysis. *IOSR Journal of Business and Management*, 10(6), 76-80.

Biswakarma, G. (2019). Organizational Behavior. Kathmandu: Samjhana Publication Pvt. Ltd.

Borad, S. B. (2009). In *efinancemanagement*. Retrieved from: <https://efinancemanagement.com/financial-management/types-of-financial-decisions>

Bruce, A., & Johnson, J. (1994). Male and female betting behavior: new perspectives. *Journal of Gambling Studies*, 10, 183-198.

Charness, G., & Gneezy, U. (2007). *Strong Evidence for Gender Differences*. California: Department of Economics, University of California at Santa Barbara.

Chen, R., Bao, W., & Jin, C. (2021). Investor sentiment and predictability for volatility on energy futures Markets: Evidence from China. *International Review of Economics & Finance*, 75, 112-129.

Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial services review*, 11(3), 289-307.

Chitra, K., & Sreedevi, V. R. (2011). Does personality traits influence the choice of investment?. *IUP Journal of Behavioral Finance*, 8(2), 47.

Chordia, T., Huh, S. W., & Subrahmanyam, A. (2007). The cross-section of expected trading activity. *The Review of Financial Studies*, 20(3), 709-740.

Cicchello, A. F. F., & Kazemikhasragh, A. (2022). Tackling gender bias in equity crowd funding: an exploratory study of investment behaviour of Latin American investors. *European Business Review*.

Clark-Murphy, M., & Soutar, G.N. (2013). What individual investors' value: some Australian evidence? *Journal of Economic Psychology*, 25(4), 539-55.

Cooper, D. R., & Schindler, P. S. (2003) *Business Research Methods*. 8th Edition McGraw-Hill Irwin, Boston.

Danes, S. M. (1994). Parental Perceptions of Children's Financial Socialization. *Journal of Financial Counselling and Planning*, 5, 127-149.

Danes, S. M., & Hira, T. (1987). Money Management Knowledge of College Students. *Journal of Student Financial Aid*, 17(1), 4-16.

- Daniel, K., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor psychology and security market under-and overreactions. *the Journal of Finance*, 53(6), 1839-1885.
- Daruvala, D. (2007). Gender, risk and stereotypes. *Journal of Risk and uncertainty*, 35(3), 265-283.
- Deaves, R., Luders, E., & Schröder, M. (2010). The Dynamics of Over-Confidence: Evidence from Stock Market Forecasters. *Journal of Economic Behavior and Organization*, 17, 402-412.
- Eckel, C. C., & Grossman, P. J. (2008). Forecasting Risk Attitudes: An experimental Study using Actual and Forecast Gamble Choices. *Journal of Economic Behavior and Organization*, 68(1), 1-17.
- Fama, Eugene F., & French, K. (1992). The cross-section in expected stock returns. *Journal of Finance*, 47, 427-466.
- Flynn, J., Slovic, P., & Mertz, C. (1994). Gender, race, and perception of environmental health risk. *Risk Analysis*, 14, 1101-1108.
- Gladchenko, T. P., Hinz, K., Eldholm, O., Meyer, H., Neben, S., & Skogseid, J. (1997). South Atlantic volcanic margins. *Journal of the Geological Society*, 154(3), 465-470.
- Grey, J. (1992). *Men Are from Mars, Women Are from Venus*. America: HarperCollins Publishers LLC.
- Gudmunson, C., & Danes, S. (2011). Family financial socialization: Theory and Critical Review. *Journal of Family Economic Issues*, 1(32), 644-667.
- Gysler, M., Brown Kruse, J., & Schubert, R. (2002). Ambiguity and gender differences in financial decision making: An experimental examination of competence and confidence effects. *Working papers/WIF*, 2002(23).
- Hare-Mustin, R. T., & Marecek, J. (1990). Gender and the meaning of difference: Postmodernism and psychology.
- Hira, T., & Loibl, C. (2006). *Gender Differences in Investment Behavior*. Ohio: NASD Investor Education Foundation.
- Hibbert, J., Beutler, I., & Martin, T. (2004). Financial prudence and next generation financial strain. *Journal of Financial Counseling and Planning*, 15(2), 51-59.
- Hung, A., Yoong, J., & Brown, E. (2012). *Empowering Women Through Financial Awareness and Education*. Paris: OECD Publishing.
- Iyer, S. B., & Bhaskar, R. K. (2012). Investor's psychology: a study of investor behavior in the Indian Capital Market. *Finance India*, 4(3), 47-84.
- Jain, A. (2017). A study on investment preference. *International Journal of Current Research*, 9(5), 51638-51641
- Jianakoplos, N., & Bernasek, A. (1998). Are women more risk averse? *Economic Inquiry*, 36, 620-630.
- Jørgensen, C. R. (2010). Invited essay: Identity and borderline personality disorder. *Journal of Personality Disorders*, 24(3), 344.
- Jørgensen, B. L., & Savla, J. (2010). Financial Literacy of Young Adults: The Importance of Parental Socialization. *Family Relations*, 59(1), 465-478.
- Kesavan, S. K., Chidambaram, V., & Ramachandran, A. (2012). An evidence-based investigation into the implications of socio-economic factors for private investment decision-making in the context of India. *Investment management and financial innovations*, 9(1), 126-136.
- Kim, J., & Chatterjee, S. (2013). Childhood financial socialization and young adults' financial management. *Journal of Financial Counseling and Planning*, 24(1), 61.
- Langer, E. J., & Roth, J. (1975). Heads I win, tails it's chance: The illusion of control as a function of the sequence of outcomes in a purely chance task. *Journal of personality and social psychology*, 32(6), 951.

- Lemaster, P., & Strough, J. (2013). Beyond Mars and Venus: Understanding Gender Differences in Financial Risk Tolerance. *Journal of Economic Psychology*, 42(1), 148-160.
- Leimberg, S. R., Roszkowski, M., & Snelbecker, G. E. (1993). Risk tolerance and risk aversion. *The tools and techniques of financial planning*, 213-225.
- Lusardi, A., & Mitchell, O. (2008). *Planning and Financial Literacy: How do Women Fare?* Washington: NBER Publishing.
- Lusardi, A., & Tufano, P. (2009). *Debt Literacy, Financial Experiences, and Over indebtedness*. Cambridge, MA: National Bureau of Economic Research.
- Masters, R. (1989). Study examines investors' risk-taking propensities. *Journal of Financial Planning*, 36, 151-155.
- Mathew, N., Joseph, S., & Joseph, C (2020). An Empirical Analysis on Investment Behavior among working Women: Are Women Taking the right Investment Decisions for their Future?
- Maehr, M. L., & Braskamp, L. A. (1986). *The motivation factor: A theory of personal investment*. Lexington Books/DC Heath and Com.
- Messina, J., & Silva, J. (2021). Twenty years of wage inequality in Latin America. *The World Bank Economic Review*, 35(1), 117-147.
- Miler, D. T., & Ross, M. (1975). Self-serving biases in the attribution of Causality: fact Orfiction. *Psychological efri*, 82-213.
- Mukoba. M. T. (2015). *Gender Differences in Investment Behavior among Employees: A study of employees of safaricom Limited*. A Research Project Report (MBA), United states international university africa.
- Nagpal, S., & Bodla, B. S. (2009). Impact of Investors' lifestyle on Their Investment Pattern: An Empitital Study. *The Icfai University Journal of Behavioral Finance*, 6(2), 28-51.
- Ngechu, M. (2004). Understanding the Research Process and Methods. *An Introduction to Research Methods*. Nairobi: Acts Press.
- OECD. (2013). *Women and Financial Literacy: OECD/INFE Evidence, Survey and Policy Responses*. Paris: OECD Publishing.
- Okech, T. C., & Mukoba, M. T. (2016). Analysis of Gender Differences in Investment Behavior Among Employees in Kenya's Listed Companies. *International Journal of Economics, commerce and Management*, 4(5), 707-723.
- Parajuli, D., & Shrestha, P. (2020). Gender-Based Risk Tolerance Behavior of Investors in Nepalese Capital Market. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 11(6), 01-06.
- Perry, V. G., & Morris, M. D. (2005). The Role of Self-Perception, Knowledge, and Income in Explaining Consumer Financial Behavior. *The Journal of Consumer Affairs*, 39(2), 299-313.
- Powell, M., & Ansic, D. (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of economic psychology*, 18(6), 605-628.
- Ricciardi, V., & Simon, H. K. (2000). What is Behavioral Finance? *The Business Education and Technology Journal*, 2(2), 26-34.
- Roszkowski, M. J., & Grable, J. E. (2010). Gender Differences in Personal Income and Financial Risk Tolerance: How Much of a Connection? *The Career Development Quarterly*, 58, 270-275.
- Sánchez-Ancochea, D. (2020). *Beyond a single model: explaining differences in inequality within Latin America*. Helen Kellogg Institute for International Studies.
- Schubert, R. (2006). Analyzing and managing risks—on the importance of gender differences in risk attitudes. *Managerial Finance*.

- Shannon, J. (2019). Gender differences or gendered differences: Understanding the power of language in training and research in supervision. *International Journal for the Advancement of Counselling*, 41(4), 598-608.
- Sharma, D. R., Chalise, M., & Dangol, J. (2017). Risk tolerance behaviour of individual Nepalese investors. *Global Management Review*, 11(2), 63-70.
- Sharpe, W. C., Bailey, J. W., & Alexander, G. J. (2008). *Investments*. America: Prentice Hall.
- Shefrin, H. (1999). *Beyond Greed and Fear*. Boston: Harvard Business School Press.
- Shrestha, P. M. (2020). Factors Influencing Investment Decisions of Nepalese Investors. *Management Dynamics*, 23(2), 145-160.
- Slovic, P. (1972). Psychological study of human judgment: Implications for investment decision making. *The Journal of Finance*, 27(4), 779-799.
- Spigner, C., Hawkins, W. E., & Loren, W. (1993). Gender differences in perception of risk associated with alcohol and drug use among college students. *Women & health*, 20(1), 87-97.
- Stango, V., & Zinman, J. (2009). Exponential Growth Bias and Household Finance. *The Journal of Finance*, 64(6), 2807-2849.
- Subrahmanyam, A. (2007). Behavioural Finance: A Review and Synthesis. *European Financial Management*, 14(1), 12-29.
- Suda, C. (2002). Gender Disparities in The Kenyan Labour Market: Implications for Poverty Reduction. *Nordic Journal of African Studies*, 11(3), 301-321.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: a social psychological perspective on mental health. *Psychological bulletin*, 103(2), 193.
- Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial Literacy and Stock Market Participation. *Journal of Financial Economics*, 101(2), 449-472.
- Venter, G. Van de, Michayluk, D., & Davey, G. (2012). A longitudinal study of financial risk tolerance. *Journal of Economic Psychology*, 33, 795-796.
- Ward, S. (1974). Consumer Socialization. *Journal of Consumer Research*, 1(1), 1-14.
- Willows, G., & West, D. (2012). Differential Investment Performance Based on Gender - A Review of Literature. In *SAAA Western Cape Regional Conference*.
- Xiao, J. J., Ford, M. W., & Kim, J. (2011). Consumer financial behavior: An interdisciplinary review of selected theories and research. *Family and Consumer Sciences Research Journal*, 39(4), 399-414.
- Yoong, J. (2010). *Financial Illiteracy and Stock Market Participation: Evidence from the RAND American Life Panel*. Pension Research Council Working Paper: The Wharton School of the University of Pennsylvania, Philadelphia, PA.
- Zinkhan, G. M., & Karande, K. W. (1991). Cultural and gender differences in risk-taking behavior among American and Spanish decision makers. *The Journal of social psychology*, 131(5), 741-742.