

# Relationship between Financial Literacy and Student's Stock Market Participation

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## Abstract

Many studies have investigated the relationship between financial literacy and stock market participation. However, there are limited studies regarding the association between students' financial literacy level and stock market participation in Nepal. So, the study is aimed to discover the relationship between students' financial literacy level and their stock market participation. The study has explored gender as moderating variable. The independent variable: financial literacy is further classified into basic financial literacy and advance financial literacy, whereas the dependent variable is stock market participation. For data collection, a structured questionnaire was distributed among 144 students, out of which 134 students represent the sample size. Undergraduate students of ward 16 of Kathmandu metropolitan city were the study population, which is 3,040. Thus, the required sample size was only 97 using the Yamane equation. The descriptive and relational research designs were used in the study. The statistical tools used for data analysis were Mann-Whitney U test, and Spearman rank correlation analysis. The finding concludes that financial literacy level and student's stock market participation are positively associated with each other. Further, the finding shows that gender has no moderating effect on financial literacy level but has a significant effect on stock market participation level.

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*Keywords:* basic financial literacy, advance financial literacy, stock market participation, students

## 1. Background of the problem

Knowledge regarding financial assets directs and determines the status of stock market participation among individuals (Guiso & Jappelli, 2005). Even though people of all ages require financial awareness and literacy, young undergraduate students should have

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a high level of financial literacy because their knowledge level affects their family's financial well-being right after they get married (Danes & Hira, 1987). But surprisingly, financial literacy is minimal among young individuals and students between the ages of 18 to 24 (Ibrahim, Harun, & Isa, 2009) and they are unsophisticated regarding effective handling of their money (Feldman, 1976). Many individuals don't participate in the stock market simply because they have little or no knowledge of stocks and the stock market (Rooij, Lusardi, & Alessie, 2011).

The stock market plays a crucial role in the economy. Efficient and effective stock market participation supports the economic growth of the country (Masoud, 2013). For efficient and sustainable market participation and overall growth of the market, investor literacy and their commitment to long-term investment is a must (Kadariya, Subedi, Joshi, & Nyaupane, 2012). In this context, literacy means financial literacy which in simple parlance is understanding of financial instruments and the financial market.

Across the globe, investors are increasing rapidly and are investing more actively than before due to the availability of information and ease of investing remotely (Relli, 2021). In Nepal, after the adaptation of the online trading system in NEPSE in 2018, there has been tremendous growth in investors investing in the stock market (Securities Board of Nepal, 2021). Along with ease of technology, there has been the introduction of various unique and complex types of financial products and services, making it very difficult to analyze and understand these products and services for financially novice investors (Rooji, Lusardi, & Alseeie, 2007).

Additionally, in Nepal, out of the total dematerialized beneficiary accounts, which is the most required element to invest in securities, only 38.7 percent of accounts are owned by women, which indicates their lower participation in the stock market (Dhungana, 2020). There might be substantial welfare loss for women from not participating in the stock market since equity investment and equity return are essential determinants of the long-run return to individual savings (Cocco, Gomes, & Maenhout, 2005). In 2017, the government of Nepal (GoN) shared a vision to create financial awareness among students and promote inclusive participation in all economic activities through Nepal's Financial Sector Development Strategy (FSDS).

But despite the great priority for financial literacy and inclusive participation, there is a lack of studies that examine various determinants of undergraduate students' stock market participation in Kathmandu. Also, limited research was carried out to examine the moderating effect of gender in the relationship between financial literacy and stock market participation. Thus, it is necessary to carry out a study that aims to analyze the relationship between financial literacy and stock market participation and find out if there is a moderating effect of gender in this relationship. This research aims to answer the following questions:

- What is the level of financial literacy and stock market participation across male and female undergraduate students in Kathmandu?
- What is the relationship of financial literacy with the stock market participation of undergraduate students in Kathmandu?

## 2. Objectives of the study

Stock market participation and its determinants being crucial factors contributing to the economic welfare of people are prioritized and studied profoundly in developed countries. However, in developing countries like ours, there are very limited studies. On top of that, minuscule research was carried out using undergraduate students as a sample. Similarly, female counterparts were found to be negligible in terms of both market participation, and previous research carried out. So this paper has attempted to measure gender as moderating variable. The major objective of the study is to examine the relationship of financial literacy with the stock market participation of undergraduate students in Kathmandu. The specific purposes of the study are:

- To examine the level of financial literacy across male and female undergraduate students in Kathmandu;
- To examine the level of stock market participation across male and female undergraduate students in Kathmandu; and
- To analyze the relationship of financial literacy with stock market participation of undergraduate students in Kathmandu.

## 3. Literature survey

Among various theories, the theory of Financial Self-Efficacy (FSE) is regarded as an important theory in behavioral finance. The theory of Financial Self-Efficacy (FSE) is considered a unifying theory of behavioral change. This theory was developed and derived from the Self-Efficacy theory. The Self-Efficacy theory argues about the perceived ability of an individual that he can do anything if he decides to do it (Bandura, 1997). Financial self-efficacy (FSE) refers to one's belief in their ability to achieve financial goals (Forbes & Kara, 2010). FSE helps to understand how individuals manage their ability to understand financial products and services if they feel the necessity to learn and be well-literate and hence the level of self-efficacy is influenced by various factors such as mastery experiences, vicarious experience or modeling, verbal persuasion, and physiological and affective state (Muizzuddin, Ghasarma, Putri, & Adam, 2017).

Financial literacy is knowledge about the stock market and various financial instruments. Previous studies have focused on advanced financial literacy. We find that basic financial literacy can explain a large part of the gender gap in stock market participation. Several studies were conducted to see the effect of advanced financial literacy on share market participation. But very few studies were done to see if the gap in financial literacy was caused by gender differences (men and women).

Thapa and Nepal (2015) conducted a study to examine the financial literacy of college students in Nepal. The study's main objective was to discover the status of financial literacy among college students in Nepal and examine its relationship based on students' demographic, educational, and personality characteristics. The study concluded college students were familiar with the basic concept of financial literacy, and the level of financial literacy was determined by their family, income, age, stream of education, type

of college they study, and their financial attitude. Similar research was carried out by Ibrahim, Harun, and Isa (2009) which aimed at assessing the level of financial literacy among degree students in the UiTM Kedah campus in Malaysia. The level of financial literacy was found to be influenced by gender and mother's education background but not by programs and semester(parts). Results concluded limited financial literacy among students between 18 and 24 years in Malaysia. Suggestion to conduct money management and financial training targeting students below age 18 was given. Thus, the study hypothesizes:

*H<sub>01</sub>: There is no significant median difference on the financial literacy level across male and female undergraduate students in Kathmandu.*

Danes and Hira (1987) carried out research to describe the money management knowledge of college students and to identify those students' characteristics that justify the differences in knowledge. In the study, money management covered five areas which were credit cards, insurance, personal loans, record keeping, and overall financial management. It was found students had a lower level of knowledge in insurance, credit cards, and overall financial management areas. Students' sex, marital status, and age were significant in explaining the difference in the level of knowledge in various areas.

Kadariya, Subedi, Joshi, and Nyaupane (2012) intended to find out the relationship between investor awareness and volume of equity investment in the secondary market of Nepal. The study also aimed to analyze the accessibility of market information to equity investors. The study concluded that there is a problem with access to market information for equity investors in the secondary market. The study concluded by stating the necessity of information accessibility to investors in order to increase their awareness level which will then increase the level of equity investment.

Dangol and Shakya (2017) aimed to analyze the investment pattern of financially literate persons in Nepal. This study concluded that high financial literacy guides people to choose riskier investments while they expect high returns. Also, Bhushan (2014) conducted research to study how the financial literacy level of salaried individuals affects their awareness and investment preferences toward financial products. The study showed that respondents in the high financial literacy category had a higher level of awareness regarding financial products and were inclined towards investment activities. In contrast, respondents in the low financial literacy group showed a higher preference for bank deposits and post office savings.

Rooji, Lusardi, and Alseeie (2007) researched to understand the independent effect of financial literacy on stock market participation. Results showed even with a higher level of education; financial literacy was very low. A positive relationship between high literacy and participation was found even when a large set of demographic features and income and wealth were controlled. Thus the study concluded that a low level of financial literacy results in low-level stock market participation.

Almenberg and Dreber (2011) carried out research to explore the relationship between the gender gap in stock market participation and financial literacy. The

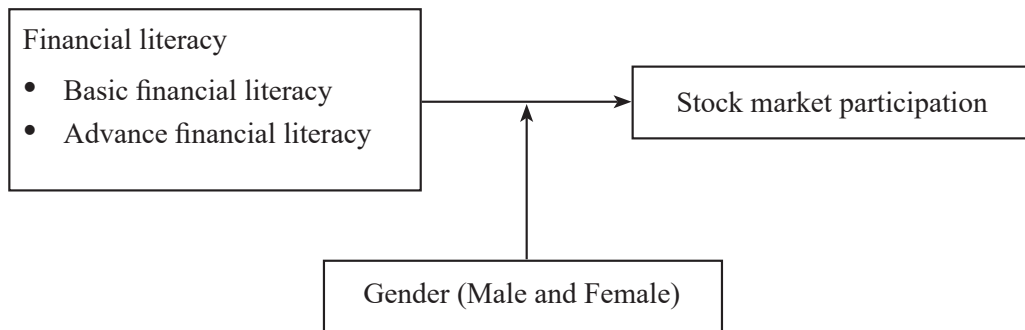
primary objective of this study was to examine whether the widely seen gender gap in stock market participation could be justified by the difference in financial literacy between men and women. The result showed women were less likely to participate in the stock market. Also, women were more educated, had low income, and scored lower on basic as well as advanced financial literacy. Furthermore, the study stated that women were typically less risk-takers than men. The research came to a conclusion that the gender gap in stock market participation disappeared when investment knowledge, risk attitude, and education were controlled. Based on these reviews following hypotheses are formulated:

$H_{02}$ : *There is no significant median difference on the stock market participation level across male and female undergraduate students in Kathmandu.*

$H_{03}$ : *There is no significant relationship of financial literacy with stock market participation of undergraduate students in Kathmandu.*

Barasinska and Schafer (2017) investigated the importance of social norms for shaping the decision of women and men to participate in the stock market and aimed to disentangle the various channels playing a role in this decision. The study claimed that in countries with a higher asymmetry in gender role prescriptions, women were more likely to make investments that were overly adverse risk compared with the self-reported risk tolerance level. The finding of the study was consistent with the interpretation that female investor's behavior is shaped by gender role prescriptions.

In this regard, the research framework of the study is shown in *Figure 1*. Financial literacy was an independent variable and was classified into basic financial literacy and advance financial literacy. Gender was used as moderating variable to see its influence in the relationship between dependent and independent variables.



*Figure 1. Research framework of the study*

Financial literacy is the knowledge and understanding of financial concepts and risks and also having skills, motivation, and confidence to apply such knowledge to make effective decisions in order to enhance the financial well-being of individuals and society (Organization for Economic Co-operation and Development, 2005). Financial literacy is the ability to understand financial products and the financial market. There are large varieties of financial products and also the financial market is very diversified, so financial

literacy is further classified into basic financial literacy and advance financial literacy. Basic financial literacy is measured by one's ability to understand interest compounding, inflation, time value of money, and money illusion. Likewise, advance financial literacy comprises knowledge regarding the function of the market, ownership status of stocks, risk and rewards associated with various financial instruments, and effects of interest fluctuation. Thus, students possessing both basic and advance financial literacy are considered financially literate and will therefore be encouraged to participate in the stock market.

Stock market participation is the ownership of shares in a company or property, and the purchase of these shares can be made through options or by allowing partial ownership rights in exchange for financing (International Monetary Fund, 1988). Household ownership of any shares in publicly held corporations, mutual funds, or investment trusts is considered as stock market participation (Giannetti & Wang, 2016). So, simply stock market participation is purchasing shares either through initial public offerings or directly from the secondary market. Stock market participation is influenced by economic conditions, availability of market information, ease of participation, financial literacy, and the like (O'shea & Davis, 2021). Here in the study, stock market participation is measured by preferability and easiness degree to invest in stocks, level of risk-taking, investment frequency, and choice of channel to invest in stocks. Therefore, this study intends to measure all these determinants of stock market participation.

#### **4. Research methodology**

Research methods are the strategies and processes used in collecting and analyzing data. This section presents the research methods designed to accomplish the study objectives. It briefly describes the research design, population, and analysis tools used in the study.

The research design refers to the overall tactics that the researcher chooses to combine the different components of the study in a systematic and logical way, along with ensuring the chosen design will effectively address the research problem (Vaus, 2001). A quantitative research design was applied in this study. In regard to the study's objectives, descriptive and relational were used to address every issue critically. The descriptive research design was used to develop statistical information regarding student's demographic profiles, behaviors, and traits. Similarly, the relational research design was applied to discover if there is a relationship between independent and dependent variables.

The population is defined as the pool of individuals from which a statistical sample is drawn for any given study. A good sample should adequately represent the characteristics of the entire population. The population selected for the study was undergraduate students from ward 16 of Kathmandu metropolitan city. Samples were drawn conveniently representing students enrolled in management and non-management programs in both government and private colleges. According to the University Grant Commission (2021) population of undergraduate students in Bagmati province is around 3.6 percent. Using this assumption, 3.6% of the total

population of ward 16 of KMC is our sample population i.e. 3,040. Hence, the required sample size is 97, which assumes a margin error of  $\pm 10$  (Yamane, 1967). However, 134 valid samples were gathered and used in the study. The day before the collection of the sample, permission to collect the sample was received from the college head of that particular college. The sample was collected from 26<sup>th</sup> September to 28<sup>th</sup> September, 2021. On the day of sample collection, respondents were gathered together in classrooms in their respective colleges and were requested to fill out the questionnaire. Respondents responded in real-time in the classroom in a somewhat controlled setting.

Both primary and secondary data were used in the study. For the collection of primary data, a survey questionnaire was designed. A structured questionnaire consisting of 18 items was developed, and a total of 144 questionnaires were self-administrated. The questionnaire was kept confidential among participants till the time of the survey, and the use of a calculator, mobile phone, and the internet was restricted. A total of three sets of unique questionnaires were prepared by changing the order of questions and answers from the first set of questionnaires. This was done to control students from copying answers from each other which will increase the validity of responses. 13 questions were in the form of 5 points Likert scale. Among these 13 Likert scale questions, the first 9 questions were objective in nature so each had a different choice of answer and had a particular correct answer. Out of 9 questions, 4 questions were aimed at measuring basic and 5 questions were aimed at measuring advanced financial literacy, and these questions were compiled and used by Rooji, Lusardi, & Alseeie (2007). And remaining 4 items with answers ranging from strongly disagree to strongly agree were used to measure stock market participation level. These items were derived from the research work of Bhushan (2014) and were slightly modified. Likewise, secondary data was used to compliments primary data, which was collected through various textbooks, journals, and research articles.

Various statistical tools were used after coding and inputting surveyed data. Different descriptive statistical tools were used for data representation such as frequency, percentage cross-tabulation, bar-diagram, mean, median, mode, standard deviation, and variance. Similarly, different inferential tools were used for data analysis and testing hypotheses, such as Mann- Whitney U test and Spearman rank correlation analysis. In the study, the Mann- Whitney U test is performed to calculate the median differences in financial literacy and stock market participation across males and females. In addition, spearman rank correlation analysis is performed for this study due to the ordinal nature of data in independent variables. Here, correlation is carried out to find the degree of association between independent and dependent variables for all samples.

## **5. Presentation and analysis of the data**

Various statistical tools and techniques are used to measure the effect of financial literacy on student's stock market participation. Both descriptive and inferential analysis are employed for uncovering results and findings.

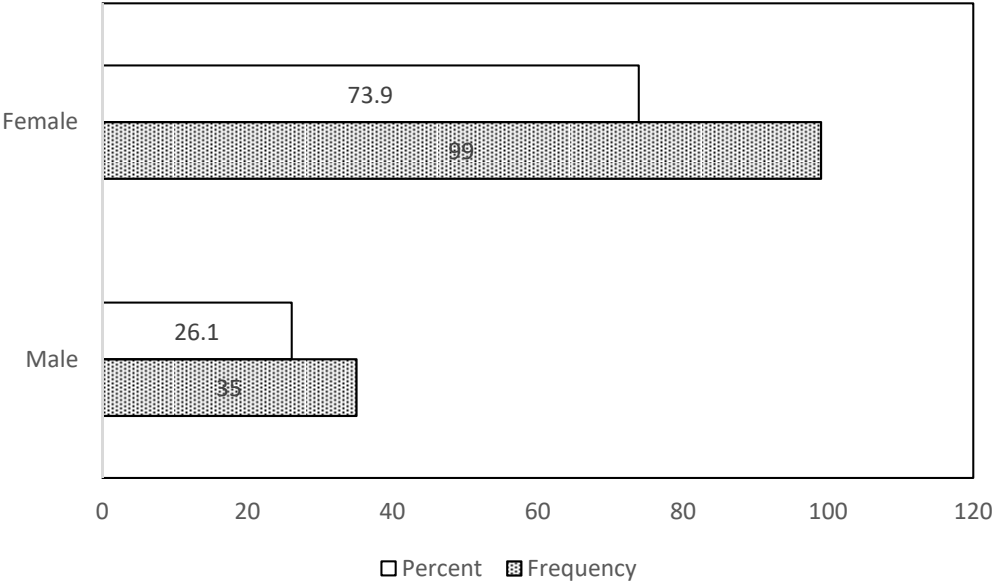


Figure 2. Gender of the respondents

The Figure 2 needless to say, describes the respondent’s outline according to their gender. There is a difference in participation in terms of gender, as evident in Figure 2. There were 134 respondents in the study. Among 134 respondents, 35 were male, and 99 were female. Hence, the majority 73.9 percent of the respondents were female, and the remaining 26.1 percent of the respondents were male.

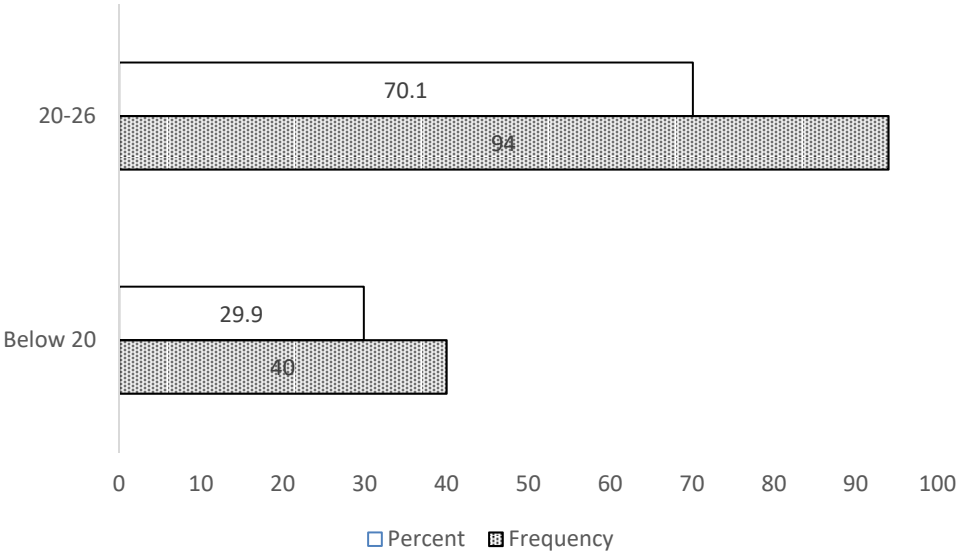
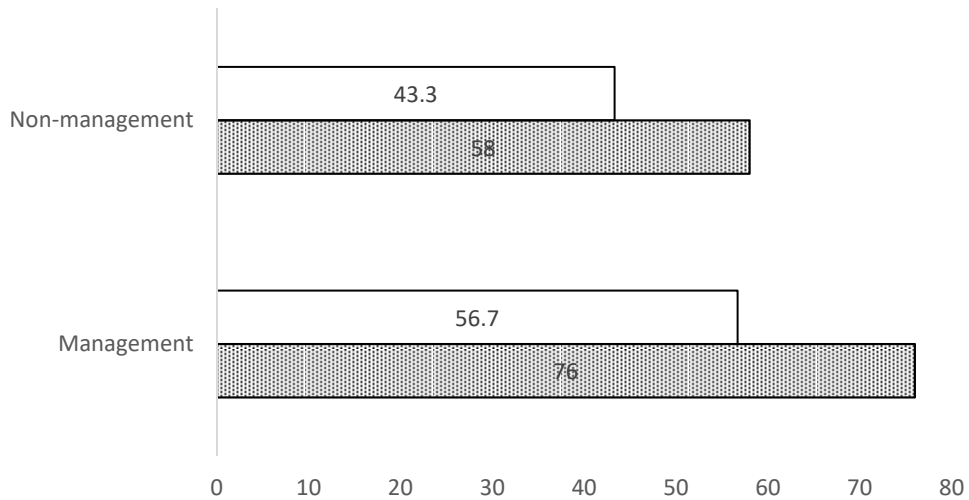


Figure 3. Age group of the respondents



The *Figure 3* illustrates the respondent's outline on the basis of their age group. Out of total 134 respondents, 40 respondents were below 20 years, and 94 respondents were between 20 and 26 years. The *Figure 3*. clearly portrays the majority 70.1 percent belong to the 20-26 age group, whereas the rest 29.9 percent were below 20 years.



*Figure 4. Education stream of the students*

The *Figure 4* shows respondent's profiles on the basis of their education stream. Out of the total 134 respondents, 76 respondents were from the management stream, and 58 respondents were from the non-management stream. The *Figure 4* shows that 56.7 percent of respondents belong to the management stream, whereas 43.3 percent are from the non-management stream.

Table 1  
*Basic financial literacy*

Basic literacy questions	Correct		Incorrect		Total	
	N	%	N	%	N	%
Interest compounding	51	38.10%	83	61.94%	134	100.04%
Inflation	44	32.80%	90	67.16%	134	99.96%
Time value of money	53	39.60%	81	60.45%	134	100.05%
Money illusion	53	39.60%	81	60.45%	134	100.05%
Mean	50.25	37.53%	83.75	62.50%	134	100.03%

Basic financial literacy measures the knowledge of respondents on different aspects, namely interest compounding, inflation, time value of money, and money illusion. *Table 1* shows student's literacy level in basic finance. Out of a total of 134 students, only about 50 students know the correct answers to questions related to basic financial literacy, which is just 37.53%. Maximum of respondents about 63% gave the wrong answers. Since very few students state they do not know the answer, they are treated similarly as

students giving wrong answers. Among four questions asked, inflation-related questions were answered incorrectly by most of the respondents.

Table 2  
*Advance financial literacy*

Advance literacy questions	Correct		Incorrect		Total	
	N	%	N	%	N	%
Which of the following statements describes the main function of the stock market?	75	56.00%	59	44.03%	134	100.03%
Which of the following statements is correct? If somebody buys the stock of firm B in the stock market.	72	53.70%	62	46.27%	134	99.97%
Considering a long time period (for example 10 or 20 years), which asset normally gives the highest return?	57	42.50%	77	57.46%	134	99.96%
When an investor spreads his money among different assets, does the risk of losing money:	55	41.00%	79	58.96%	134	99.96%
If the interest rate falls, what should happen to bond prices?	32	23.90%	102	76.12%	134	100.02%
Mean	58.2	43.42%	75.8	56.57%	134	100.0%

*Table 2* illustrates the advance financial literacy level of students in Kathmandu. Advance financial literacy includes understanding the functioning of the stock market, the risk and return of different assets, and the effect of interest fluctuation in the price of bonds. Among 134 students, on average only about 58 students know the correct answer which is around 43% of the total sample. The remaining 57% of students do not know the correct answer.

Due to a minuscule number of students stating that they do not know the answer, they are generalized and treated similarly to students giving wrong answers. Question with the maximum correct answer is about the functioning of the stock market. Likewise, the question with the minimum correct answer is regarding the effect of interest rate fluctuation on bond price.

Student's stock market participation was accessed by asking their opinions regarding different statements related to market participation. To collect their opinion, a 5-point Likert scale was used. From interpreting tabulated responses of the students in *Table 3*, it shows that students are undecided about the statement of being comfortable investing in stock with a weighted mean of 3.27. Respondents also cannot decide their preference to invest in stocks over bank savings and fixed deposits with a weighted mean of 3.32.

Similarly, students have a neutral response to statements regarding taking high risk for high return and regarding frequently investing in stocks with a weighted mean of 3.01 and 3.08 respectively.

Table 3  
*Survey on stock market participation*

Statements	Rating					Total responses	Weighted value	Weighted mean
	SDA	DA	U	A	SA			
I find it comfortable to invest in stocks.	25	9	32	41	27	134	438	3.27
I prefer investing in stocks more than bank saving and fixed deposits.	18	18	37	25	36	134	445	3.32
I am willing to take high risk for high return.	25	20	41	24	24	134	404	3.01
I invest frequently in stock market.	20	25	35	32	22	134	413	3.08
Grand weighted mean								3.17

Results of descriptive statistics for the dependent variable, stock market participation is given in *Table 4*. Descriptive statistics mean, median, and standard deviation of stock market participation for all sample respondents and for male respondents and female respondents separately is given in the table.

Table 4  
*Descriptive statistics of stock market participation*

Sample/Statistics	N	Mean	Median	STD
Male	35	3.62	3.75	0.97
Female	99	3.01	3.00	0.95
All	134	3.17	3.25	0.99

The table shows that the mean stock market participation for all samples is 3.17. The mean for a male sample is 3.62, which is higher than all sample mean and also higher than the mean for a female sample, which is 3.01. The median of the total sample is 3.25. Likewise, the median for just male sample is 3.75 and for a female sample is 3.00. Both mean and median tell us that stock market participation of male students is greater than female students. The standard deviation for all samples is 0.99, which is greater than the values of both male and female samples. The female sample is found to have the lowest standard deviation of 0.95, whereas the male sample has a standard deviation of 0.97. This output interprets that there is more variation in male's mean stock market participation than female's mean stock market participation.

The Mann-Whitney U test is used to measure median difference when there are only two levels in moderating variables. Here in *Table 5*, Mann-Whitney U test is performed to measure the median difference of stock market participation across gender: male and female. The median difference in this study was preferred over the mean as it reduces the effect of extremely large or small values in data.

Table 5

*Mann-Whitney U test across gender*

Test Statistics <sup>a</sup>	Basic financial literacy	Advance financial literacy	Stock market participation
Mann-Whitney U	1378.5	1357	1114
Wilcoxon W	6328.5	6307	6064
Z	-1.852	-1.95	-3.145
Asymp. Sig. (2-tailed)	(0.064)	(0.051)	(0.002)

<sup>a</sup> Grouping Variable: Gender. The values in parentheses are p-values.

The p-value for basic financial literacy and advance financial literacy is found to be 0.064 and 0.051 respectively. Both the p-values are greater than 0.05 which concludes that there is no significant median difference on each basic financial literacy level and advance financial literacy level across male and female respondents. Similarly, the p-value for stock market participation is 0.002, which is less than 0.01. So, the null hypothesis is rejected at a 99% confidence level. Therefore, there is a significant median difference on stock market participation across male and female undergraduate students in Kathmandu.

Table 6

*Correlation analysis*

Variables		Basic financial literacy	Advance financial literacy	Stock market participation
Basic financial literacy	Correlation Coefficient	1		
	Sig. (2-tailed)			
Advance financial literacy	Correlation Coefficient	.422**	1	
	Sig. (2-tailed)	(0.001)		
Stock market participation	Correlation Coefficient	.293**	.370**	1
	Sig. (2-tailed)	(0.001)	(0.001)	

\*\* Correlation is significant at the 0.01 level (2-tailed). The values in parentheses are p-values.

Spearman correlation analysis of the variable is performed for all samples which is presented in *Table 6*. The table visualizes that the p-value of 0.001 is less than 0.01 so, the correlation between basic financial literacy and stock market participation is positive and significant at a 99% confidence level with a correlation coefficient of 0.293. Thus, it concludes a significant relationship between basic financial literacy and undergraduate students' stock market participation. Similarly, a p-value of 0.001 which is less than 0.01, makes the association between advance financial literacy and stock market participation positive and significant at a 99% confidence level with a correlation coefficient of 0.370. Therefore, it concludes a significant relationship between advance financial literacy and stock market participation.

## 6. Findings and discussion

The major findings of the study are as follows:

- There is no significant difference in basic financial literacy level across male and female undergraduate students since the p-value is 0.064, which is greater than 0.05. It indicates that the basic financial literacy level is the same among male and female undergraduate students. Likewise, no significant difference was found in advance financial literacy level among male and female undergraduate students as the p-value of 0.051 is greater than 0.05. Thus, the advance financial literacy level is equal among male and female undergraduate students.
- There is a significant difference in stock market participation level across male and female undergraduate students since the p-value is 0.002, which is less than 0.01. Therefore, the stock market participation level across gender is not the same, which is statistically significant at a 99 percent confidence level.
- The relationship of basic financial literacy level with students' stock market participation level is found positive and significant at 99 percent confidence level with a correlation coefficient of 0.293. Here, the p-value is 0.001. Since the p-value is less than 0.01, a significant relationship is obtained. Likewise, the relationship of advance financial literacy level with students' stock market participation level is positive and significant at 99 percent confidence level with a correlation coefficient of 0.370. The p-value is given as 0.001 which is less than 0.01 establishing a significant relationship. Thus, the literacy level of students positively influences their participation in the stock market.

To meet the study's objective, an independent variable: financial literacy was further classified as basic and advance financial literacy. The moderating effect of gender was observed for basic financial literacy level, advance financial literacy level, and stock market participation. From the data analysis of basic and advance financial literacy levels, no significant difference in both financial literacy levels across male and female was found. Therefore, gender has no significant role in influencing students' financial literacy levels in the case of ward 16 of KMC. The results are consistent with Thapa and Nepal (2015), which observed an insignificant effect of gender on students' financial knowledge. But it contradicts with Danes and Hira (1987), which confirmed the significant effect of students' sex on their level of financial knowledge.

This study observed significant differences on stock market participation level across gender which is consistent with the notion of Ibrahim, Harun, and Isa (2009) which states that there is a difference in participation in financial decisions across male and female degree students in Malaysia. This result also aligns with the findings of Barasinska and Schafer (2017), which concluded that men are more likely to invest in stocks than women. Therefore, we can conclude female undergraduate students of ward 16 of KMC comparatively participate less in the stock market than male students.

There is a positive and significant relationship between literacy level and students' stock market participation. The result concludes that financial literacy level has a great role in

influencing students to participate in the stock market. This result is harmonious with most of the findings from previous studies. Rooji, Lusardi, and Alseeie (2007) found a positive relationship between financial literacy level and stock market participation. Likewise, Almenberg and Dreber (2011) identified a significant association between investment knowledge and stock market participation. The results of this study support both notions. The overall result of the study supports the theory of FSE. Male and female students have the same level of financial literacy. However, male students participate more in the stock market, showing a high self-efficacy level.

## **7. Conclusion and implication**

Results from the analysis show that both basic and advance financial literacy level across gender is the same. Further, it concludes that male and female students have the same level of knowledge regarding various financial concepts like interest compounding, inflation, time value of money, money illusion, functioning of the stock market, risk and return of stocks, and so on. However, stock market participation level is different across gender. Female students are found participating less in the stock market than that of male students. Similarly, the analysis of rank correlation, shows that there is a positive and significant relationship between students' financial literacy level and their participation in the stock market. Therefore, a change in financial literacy level will positively change students' stock market participation.

The findings from this study will help the share market regulatory body to formulate policies that will aid to increase students' participation in the stock market, especially of female students. It came to light that the financial literacy level of female students is the same as compared to male students, but they participate less in the market.

Stock market participation is the strongest means of attaining financial empowerment for the overall empowerment of women. So, the outcome of this study is the reference of lacking in gender equality and women empowerment. Therefore, the policies can be developed and implemented accordingly. Knowing the result of this study will help brokerage firms and banks in ward 16 of KMC to design various banking and investment products and services targeting female students. Financial institutions should realize the difference in customers' financial needs according to their gender. Therefore, they should bring customized products and services to meet the needs of both male and female.

## **8. Delimitations of the study**

Due to the selection of a small sample from only one ward of Kathmandu Metropolitan City, the result from the study may not be generalized to students residing in other wards. Furthermore, the study was carried out at a single point in time using only one independent variable, so the scope of result may be limited. The independent variable i.e. financial literacy, is an objective measurement of students' financial knowledge. Therefore, the study should be done in a controlled setting which might not have been fully attained in the study.

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## Appendices

### Appendix 1

#### *Gender and practice of investing in IPOs*

Gender		Investment in IPOs		Total
		Yes	No	
Male	Count	28	7	35
	% within Gender	80.00%	20.00%	100.00%
Female	Count	55	44	99
	% within Gender	55.60%	44.40%	100.00%
Total	Count	83	51	134
	% within Gender	61.90%	38.10%	100.00%

### Appendix 2

#### *Gender and practice of investing in secondary market*

Gender		Investment in secondary market		Total
		Yes	No	
Male	Count	12	23	35
	% within Gender	34.30%	65.70%	100.00%
Female	Count	10	89	99
	% within Gender	10.10%	89.90%	100.00%
Total	Count	22	112	134
	% within Gender	16.40%	83.60%	100.00%