Financial Literacy and Financial Decision Making among University Students: Evidence from Pakistan

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Abstract

The main objective of every educational institution is to create leaders of tomorrow by polishing the students of today. It is crucial for an individual to be able to evaluate opportunities and calculate risks for effective decision making and successful ventures. Thus, the main aim of this study is to analyze the factors that affect the level of financial literacy among university students in Pakistan. The data for this study is collected from 170 university students studying at the University of Management and Technology (UMT).; located in Lahore. This study used non-probability sampling technique to achieve the research objectives. Results have revealed that financial knowledge, financial attitude, family influence, and peer influence impact the level of financial literacy among students of UMT. Findings indicate the need to take initiatives for improving the level of financial literacy among students in Pakistan for the future of the country.

*Keyword*s: Financial literacy, family influence, financial knowledge, financial attitude, peer influence, and financial decision making.

INTRODUCTION

Financial Literacy is a crucial factor that determines the success of an educated individual and their power to evaluate opportunities and nurture entrepreneurial mindset (Narmaditya & Wibowo, 2021). A sufficient level of financial literacy enables an individual to take decisions confidently and take calculated risks as an entrepreneur which eventually contributes to the country's development of economy. Prior literature analyzes the effect of variables Financial Knowledge, Financial Attitude, Family Influence, Peer Influence, and Student Lifestyle on the level of Financial Literacy of a university student. Students of today are the leaders of tomorrow and for this reason it is important that students are trained enough in their degree programs to have financial confidence so they can take calculated risks and opportunities to shape their lives better as well as add value to the country's development.

A low level of financial literacy in a university student not only reduces the value and credibility of their education but also leads them to take wrong financial decisions which result in huge losses. This theory can be interpreted in an example of a business that a student plans on running but fails due to lack of financial literacy and bears huge losses. Prior literature has analyzed the level of financial literacy among university students in some countries, however it had not been conducted in Pakistan. This study aimed to research the variables that affect the level of financial literacy in university students. Financial Literacy can be defined as "one's knowledge in financial concepts and ability to make informed financial decisions" (Abdul Rashid et al., 2020). Many variables that impact the degree of financial literacy have been identified by researchers. The dependent variable of this study is Level of financial literacy, and the independent variables are Financial Knowledge, Financial Attitude, family Influence, Peer Group influence, Student Lifestyle. This research framework shows the link between these variables and their relationship.

Family Influence

Research by (Subhashree, 2020). shows that family influence is positively related to financial literacy. Family Influence is defined as the influence family imposes on an individual. Research sheds light on the fact that parents' way of educating their children about financial matters such as how to save, when to invest, and how to make a budget, has a great impact on the individual's financial literacy. Parents' have known to practice this by giving pocket money. Family influences the financial literacy of young adults directly and indirectly. Indirectly, Parents' own way of spending, budgeting, and investing habits influence young adults and they tend to do the same practices. In some cases, older siblings also tend to influence financial literacy and spending habits. Therefore, parents and other family members influence the level of financial literacy in young adults.

H1: Family influence is positively related to financial literacy.

Financial Knowledge

Financial knowledge refers to the concepts and understanding of finance. It is related to both the theory and practical implementation of financial concepts. It is found that financial knowledge has a positive relationship with financial literacy since an individual is more confident in their finances whether it is purchasing a financial instrument, investing money, or personal finance and budgeting, when their financial knowledge about concepts is strong. Having a weak understanding of financial concepts limits an individual to rightly manage finances with logical reasoning rather emotionally as they will lack financial literacy. Therefore, based on this argument we can say that

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financial knowledge has a positive relationship with financial literacy (Njoroge, 2013).

H2: Financial knowledge has a positive relationship with financial literacy.

Peer Influence

The relationship between peer group and financial literacy is positive. Young adults or undergraduate students spend more time with their peer groups hence they influence most habits of their surroundings. (Mouna, 2017). Similarly, if a student's peer group has strong financial literacy about financial decisions and concepts, this will positively impact student's level of financial literacy. The atmosphere and surroundings of community and peer groups play a crucial role in enhancing the level of financial literacy of a student. Having people with weak or no proper financial literacy will negatively impact the student's level of financial literacy.

H3: Peer influence is positively related to financial literacy.

Financial Attitude

Financial attitude refers to an individual's psychological behavior and perception towards money. If a student has high future goals and perceives money as an important asset to acquire in life to grow and achieve personal goals, then this attitude towards money positively impacts the level of financial literacy of the student. This is because the student will then tend to make financial decisions based on personal goals to acquire money and will to increase level of financial literacy. (Dewiana Novitasari, 2021). Contrarily, when a person perceives money as a by-product of success and less significant compared to other goals, their level of financial literacy tends to be weak and negatively impacted. A student's passion towards self-development also plays a major role. (Dam, 2018). Based on this theory it can be proposed that positive financial attitude has a positive relationship with financial literacy.

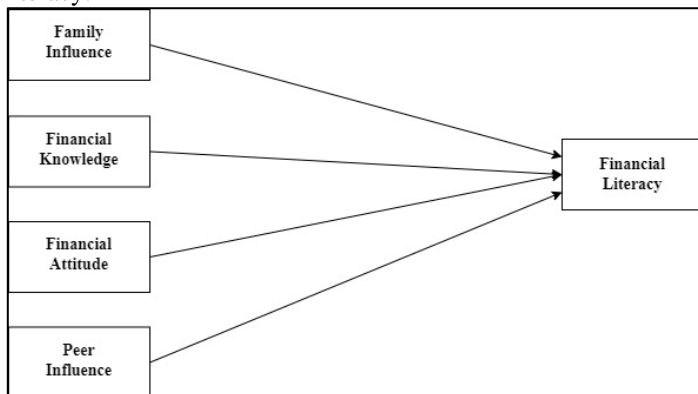**H4:** Financial attitude is positively and directly to financial literacy.

Figure 2.1: *Conceptual Framework*

RESEARCH METHODOLOGY

The research philosophy that this study follows is positivism as the data found by conducting surveys among undergraduate students at University of Management and Technology will generalize a theory. Theory will be proposed based on the measurement of statistics based on questionnaires. This research follows an inductive research approach. Data is collected through primary sources in the form of questionnaires filled by undergraduate students and analyzed using Smart PLS 3.0 to determine a pattern between the factors that effect financial literacy and financial decision-making power of students and formulate a hypothesis which leads to building or generalizing a theory.

The data collection strategy used for this study is primary data collection by conducting qualitative surveys among university students to identify their level of financial literacy. Some secondary data of previous academic research are also used to support the proposed theory and highlight the relationship between variables of the study such as the factors that affect financial decision making and financial literacy. This research follows a non-probability sampling technique of the students from business management and finance department from the programs at University of Management and Technology. The sample size consists of around 384 respondents. Financial Knowledge (FK), Financial Attitude (FA), Family Influence (FI), and Peer Influence (PI) are the independent variables for this study. Whereas Financial Literacy (FL) is the dependent variable.

Measurement of Variables

Financial literacy is the dependent variable in this study and is defined as "having the knowledge, skills and confidence to manage one personal finance and enterprise finance" (Subhashree, 2020). Research questions that measure the level of financial literacy include topics like income tax, interest rates, and inflation. Financial Knowledge can be defined as an individual's understanding of personal finance, financial terms and how to make the right financial decisions. Young youth must know how to evaluate opportunities in terms of finances, so they make the right decisions in life and head in the right direction towards success.

Financial attitude refers to an individual's psychological behavior and perception towards money. How a young individual perceives the concept of money and the level of dedication they have, to acquire money directly affects their level of financial literacy. This variable was measured using 8 items which examine the respondent's relationship with money. Parents educate their children on finances like household budgeting, expense management and more which enhances the child's ability to make financial decisions and therefore builds financial literacy overtime. Family Influence is measured using 5 items which examine the respondent's family's contribution in influencing financial literacy or financial decision making on the respondent. People learn most from their surroundings and mostly their friend circle. Certain individuals tend to make financial decisions under peer pressure under the influence of friends. Peer Influence was examined on Likert scale (1= Strongly Disagree; 5= Strongly Agree). using 4 items. Questions measure the level of influence, either good or bad, and its impact on financial literacy. The present study adapted the questionnaire from prior literature (Ibrahim, Harun, & Isa, 2009).

RESULTS

Reliability and Validity Analysis

Convergent Validity is assessed based on the outer loadings, composite reliability and AVE. The outer loadings and composite reliability of each item/ variable were reported as: FA (0.694,

0.571, 0.758, 0.758, and **0.791***), FI (0.803, 0.708, 0.596, and **0.747***), FK (0.839, 0.798, 0.589, and **0.791***), FL (0.884, 0.587, 0.570, and **0.729***), and PI (0.641, 0.778, 0.722, and **0.771***). The values in bold with asterisk indicate that composite reliability. The values for the constructs AVE reported as follows 0.589 (FA), 0.519 (FI), 0.563 (FK), 0.684 (FL), and 0.507 (PI). AVE demonstrates the variance between the items and the standard for the validity and reliability of data is not less than 50% which is 0.50 and above.

Table 1: Reliability and Validity Analysis

	Loadings	CR	AVE
FA1	0.694		
FA2	0.571	0.791	0.589
FA3	0.758		
FA4	0.758		
FI1	0.803		
FI2	0.708	0.747	0.519
FI3	0.596		
FK1	0.839		
FK2	0.798	0.791	0.563
FK3	0.589		
FL1	0.884		
FL2	0.587	0.729	0.684
FL3	0.571		
PI1	0.641		
PI2	0.778	0.771	0.507
PI3	0.722		

Discriminant Validity

Discriminant validity was verified through Hetrotrait Monotrait Model (HTMT) which shows the variance between the variables of study. It measures the correlation between the variables and similarity which ideally should not be more than 0.85 or 0.90. The similarity between the items of FA (Financial Attitude) and FI (Family Influence) is 0.536 which is 53.6%. This value falls within the criteria and proves the items are valid for further analysis. The similarity between items of variables FI and FK is 49.4% (0.494), FI and FL are 62.4% (0.624), FI and PI is 223.5% which indicates that the items of these variables are highly similar that the respondent considers them of the same meaning. The similarity between the variables FA and FK (0.482)., FA and FL (0.684), and FK and FL (0.81). fall within the criteria and are not very similar. Furthermore, the variable PI is highly similar to all other variables; FI (0.235), FA (0.286), FK (0.724), and FL (0.186).

Table 2: Discriminant Validity

		1	2	3	4	5
1	Family Influence					
2	Financial Attitude	0.536				
3	Financial Knowledge	0.494	0.482			
4	Financial Literacy	0.624	0.684	0.81		
5	Peer Influence	0.235	0.286	0.724	0.186	

Hypothesis Testing

According to Table 5, the statistical analysis shows the R Square value of 0.361 and the R Square Adjusted value of 0.346. The analysis reveals that 36.1% is the impact on financial literacy explained by the family influence, financial attitude, financial knowledge, and peer influence. Path coefficient, T-statistics, and

P-values will be used to test the hypothesis for each of the constructs and their significance. The findings indicate that Family Influence ($\beta = 0.105$, $t = 1.981$, $p = 0.048$), Financial Attitude ($\beta = 0.226$, $t = 3.262$, $p = 0.001$), and Financial Knowledge ($\beta = 0.353$, $t = 4.492$, $p = 0.000$), and are significantly and positively related to Financial Literacy. Therefore, Hypotheses 2 and 4 are acceptable. Financial Attitude and Financial Knowledge have a significantly positive relationship with Financial Literacy at 5% level of confidence, 22.6% (FA). and 35.3% (FK). impact on Financial Literacy. In contrast, Family Influence and Peer Influence indicate a positive yet insignificant relationship with Financial Literacy at 13% and 10% significance level.

Table 3: Path Coefficient, T Statistics, P values

	Coeff.	SD	T-Values	P-Values
FI -> Financial Literacy	0.105	0.053	1.981	0.048
FA -> Financial Literacy	0.226	0.069	3.262	0.001
FK -> Financial Literacy	0.353	0.079	4.492	0.000
PI -> Financial Literacy	0.137	0.045	3.044	0.002
	R Square		**R Square Adjusted**	
Financial Literacy	**0.361**		**0.346**	

Note: **FI**= Family influence, **FL**= Financial literacy, **FA**= Financial attitude, **FK**= Financial knowledge, **PI**= Peer influence.

DISCUSSION AND CONCLUSIONS

The main objective of measuring the level of financial literacy in young youth is to assess their financial decision-making power and implementation of financial education in practical life. This study measured the effect of Financial Knowledge, Financial Attitude, Family Influence, and Peer Influence on Financial Literacy. Analyzing the results, it is found that Financial Attitude has a positive and significant relationship with Financial Literacy. The way a student perceives money has a direct and significant impact on the level of their financial literacy. Perceiving money as an important asset indicates that the individual has a sufficient level of financial literacy.

Financial Knowledge has a positive and significant relationship with Financial Literacy. This indicates that the more a student possesses knowledge related to financial topics, the higher their level of financial literacy. Contrarily, Family Influence has a positive but insignificant relationship with financial literacy. This shows that family has an influence on individual's financial literacy however it is insignificant. Peer Influence has a positive but insignificant relationship with Financial Literacy. Friend groups influence how a student takes financial decisions and their level of financial literacy however it is of little significance and impact. The results reveal that Hypotheses 1, 2, 3 and 4 are accepted.

This study reveals that university students in Pakistan have a low level of financial literacy. According to previous literature, students lack proper financial literacy (Ibrahim, Harun, & Isa, 2009). This study contributes to literature in Pakistan where no such study has been conducted especially on students who study business or finance. The current study focuses on updating methods of learning and practically implementing theoretical knowledge. Therefore, educational institutions and board members may reflect on the need to focus on financial education and its implementation by arranging training workshops to help students implement their theoretical financial education in real life

situations. This study aims to help policy makers in redesigning the course curriculum from basic knowledge to a more practical focused course outline as well as real life case studies and situations. Practical workshops can be arranged where students will get to implement their theoretical knowledge to real time situations.

The present study collected data using surveys from students studying in University of Management and Technology (UMT)., Lahore. Future researchers can conduct expansive research in universities in other cities of Pakistan and other universities in Lahore such as LUMS, NUST, BNU, FAST, COMSATS, IBA, SZABIST, IBM, UOL, UET, PU, GCU, FCC and more. Moreover, future researchers can focus on determining the most effective methods to increase financial literacy among students. The study reveals that the level of financial literacy is low among university students in Pakistan and financial knowledge, financial attitude, family influence, and peer influence have a direct relation with the level of financial literacy. The financial literacy of an individual impacts their financial confidence and determines their success rate. The findings of this study thereby conclude that the financial literacy of university students in Pakistan is weak and effective methods to improve this can be discovered.

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Questionnaire
Measurement of Scale
Financial Knowledge

	Items
1	I read to increase my financial knowledge
2	I compare prices when shopping for purchases
3	I budget spending
4	I track spending

Source: *(Ibrahim, Harun, & Isa, 2009).*

1.1.1. Financial Attitude

	Items
1	You feel sure feel about your ability to manage your own finances
2	You ask family members for money
3	Money is a symbol of success
4	You often withdraw cash using your ATM card

Source: *(Ibrahim, Harun, & Isa).*

1.1.2. Family Influence

	Items
1	I would describe my parents as strict
2	My parents do not think I should help with financial decisions in our family
3	Your parents often discuss money matters with u or in front of u
4	Your parents have monthly budgeting plan
5	Family most influenced you on finances

Source: *(Ibrahim, Harun, & Isa).*

1.1.3. Peer Group Influence

	Items
1	I would like to have an iPod because my friends expect me to have one.
2	I have to get along with my friend's decisions, whatsoever it may be.
3	I take important decisions without being influenced by my friends' suggestions.

Source: *(Ibrahim, Harun, & Isa).*

1.1.4. Financial Literacy

	Items
1	High inflation means that cost of living is increasing rapidly.
2	Income tax may be charged on the interest you earn on your saving account, if your income is high enough.
3	You file your income tax return every year
4	All banks offer similar rate of interest on Fixed Deposits
5	If you inherit Rs. 10,000 today and your sibling inherits Rs. 10,000 3 years from now, you are richer because of the inheritance.

Source: *(Ibrahim, Harun, & Isa).*