

Financial Literacy and Investment Decisions: A Study of Salaried Individuals in Kathmandu

Tenzina Sharma¹ and Ankit Pokharel^{2*}

¹Pokhara University, sharmatenzina@gmail.com; ²Department of Management, Mechi Multiple Campus, ankitpokharel17@gmail.com

Abstract

Financial literacy refers to an individual's capacity to comprehend financial concepts, analyze financial information, and make informed financial decisions to attain financial objectives. This paper explores the relationship of financial literacy with the investment decisions made by salaried individuals in Kathmandu. It examined the effect of financial knowledge, financial attitude, and financial awareness on investment decisions. It explained whether there are any biases in terms of gender, monthly income, employment sector, employment level, and marital status when making investment decisions. A well-structured, close-ended questionnaire was conducted among 200 salaried people of Kathmandu working in different sectors. Analysis has been done using a hierarchical multiple regression model. The results show that financial attitude and financial awareness have a positive and significant impact on investment decisions. Surprisingly, financial knowledge, being positively correlated, does not have a substantial effect on investment decisions. None of the controlled variables were found to influence investment decisions significantly. Hence, financial attitude and awareness play a crucial role in salaried people's investment decisions.

JEL Classification: D₁₄, G₁₁, J₃₁

Keywords: Financial attitude, financial awareness, financial investment, financial knowledge.

Introduction

Financial literacy has gained the interest of different stakeholders. Economic well-being is a goal that every individual wish to achieve. A modern-day investor is faced with a multitude of investment avenues to choose from to invest their funds, each of them providing its own set of opportunities and risks for the investor, thus, often left with a complex and conflicting choice as to which avenue to pursue and with constraints in terms of investment budget, selection becomes an even more challenging task. This increases the importance of improving financial literacy.

Financial literacy is an individual's comprehension of financial concepts, which empowers them to analyze financial information and make informed decisions about personal finance (Bhusan, 2014). The

Citation: Sharma, T. & Pokharel, A. (2025). Financial Literacy and Investment Decisions: A Study of Salaried Individuals in Kathmandu. Adhyayan Journal, 12(1), 21-31.

*Corresponding author: Ankit Pokharel

study explained that because of the development of new financial products, the complexity of the financial market, and changes in economic factors, it is challenging for the average individual to grasp the associated risk and returns in the complexities of new-age financial products. Due to this fact, a minimum level of financial literacy has become a must in today's world. By evaluating the risks and returns associated with different financial products, a financially literate individual can effectively use financial products and services and choose a product that is best suited to them. Highly financially literate can better examine the investment avenues and invest effectively. They will not be deceived by marketers presenting a financial product that is not appropriate for them.

The idea of the positive relationship between financial literacy and investment decisions is also supported by Mahdzan and Tabiani (2013), which stated that when financial literacy and capability are increased, it promotes better financial decisions. Hence, it enables proper organizing and overseeing life events, including retirement, housing, and education. Furthermore, Palanivelu and Chandrakumar (2013) highlight that investments are the most significant item in today's world and that although individuals are making more money these days, they are not sure where and how to invest it. Based on the Organization for Economic Co-operation Development report (2005), highly financially literate people are proficient in their financial knowledge, which is reflected in their financial behavior and attitude. This implies that financial knowledge, financial awareness, and financial attitude are the three main components of financial literacy. Investment is the portion of an asset set aside from an individual's wealth or current earnings, with the expectation of realizing some gains in the future. It is the dedication of an asset to attain an increase in value over time. From ancient Mesopotamia to twenty-first-century hedge funds, humans have sought to grow their wealth by investing wisely. In their study, Sathiyamoorthy and Krishnamurthy (2015) say that investment is the sacrifice of a specific present value of money in anticipation of a reward. Investment is undertaken with the expectation of return, which is proportional to the risk the investors assume.

The investor's decision to invest is subjective and based on the predicted costs, knowledge of improved techniques, and risk perception, all of which are subjective factors. Business people want to know the investment project's pay-off period to decide whether to make the investment expenditure (Harcourt et al., 1967, 2010).

Various other demographic parameters like age, gender, income level, and educational qualifications can impact the investing decision of a financially literate person. A study conducted by Dangol and Shakya (2017) has indicated that illiteracy is concentrated among low-income, low-education minorities and women, and they are less likely to organize their financial operations more successfully.

Salaried people have regular but limited sources of income and a wide range of investment avenues to select. This opens up an option for them to invest and achieve their financial goal. In such cases, identifying proper investment avenues, having awareness about the market, and having the right attitude towards the investment help make those dreams of a financially independent life achievable. There is no denying that there exists a relationship between financial literacy and investment decisions, but a concrete consensus on this agreement is not found in sufficient terms. This article examines the association of financial literacy with the investment decisions of the salaried people in Kathmandu.

This study investigates the connection between financial literacy and the investment choices made by Kathmandu's salary earners population. In addition to explaining if there are any biases in terms of gender, monthly income, employment sector, employment level, and marital status when making investment decisions, it looked at the impact of financial knowledge, financial attitude, and financial awareness on investment decisions.

This study is segmented into six chapters. The remaining chapters of this study are as follows: Segment two includes theoretical and empirical literature related to the topic in each pair of variables. Section three consists of the research methodology, containing research design, source of data, data processing technique, variable and model specification, and data analyzing models. Presentation and analysis are presented in segment four, and results are discussed in chapter five. In the six-segment conclusion, the policy implications and limitations of the study are presented.

Literature Review

Liu et al., (2024) wrote that financial literacy is critical in mitigating and accelerating recovery from financial disturbance. The survey analyzed variations in liquid assets before and after COVID-19. In the other study, Khanal et al., (2022) point out that financial attitude and awareness are the primary factors of financial planning. In contrast, financial knowledge and other demographic variables do not affect personal financial planning. Similarly, Kumari (2020) revealed that financial literacy positively and significantly impacted the level of investment decisions and concluded that financial skill can be considered the primary determinant of financial literacy to enhance undergraduate investment decisions. The knowledge about financial investment options was identified as the second most influential dimension. Furthermore, Alaaraj and Bakri (2020) wrote that investment decision-making is a process affected by different behavioral aspects at various effects degrees, financial literacy, and knowledge background. Higher financial literacy reaches better decisions due to awareness of all or primary elements of the investment sector and the rationality to make the best decision for the investor's ability and need.

In Indonesia, Astiti et al., (2019) conducted research to analyze the impact of financial literacy on the investment decisions of entrepreneurs, which concludes that financial attitude has a beneficial effect on the behavior of investment decisions. In contrast, financial knowledge and financial behavior have no significant impact on the investment decision behavior of an entrepreneur. The study by Ademola et al., (2019) stated a positive and substantial relationship exists between financial knowledge, risk perception, and investment decisions. A positive but insignificant effect was identified between financial literacy and investment decisions. However, the impact of financial literacy and investment knowledge on investment decisions is moderated by risk perception.

According to Assefa and P.V (2018), people have very little financial literacy, and working professional's preference for other investment avenues-aside from government bonds-is unaffected by their level of financial literacy. Participants of both high and low financial literacy groups prefer similar investment avenues, i.e., traditional and safe financial products, and avoid investing in complicated financial instruments that are comparatively riskier and potentially yield more return. Also, Dangol and Shakya (2017) elucidated that there are differences in investment patterns such as investment preference, investment objectives, sources of advice, duration of investment, and the degree of awareness for highly and poorly financially literate persons. Additionally, the study demonstrated that highly financially literate investors take risks, aim for more incredible capital growth, and are more focused on long-term growth. Furthermore, Thapa and Nepal (2015) concluded that college students possess a basic understanding of financial knowledge, which is influenced by their financial attitude, family income, age, type of college, and stream.

Similarly, Sathiyamoorthy and Krishnamurthy (2015), conducted a study amongst salaried class investors to analyze the factors influencing the investor's "perception and awareness regarding different investment patterns shows that the demographic factors such as education level, age of investor, numbers of family members, etc. are highlighted as the factors that make prominent influence while

deciding on the avenues of investment. The study clarified that working professional-class investors are interested in investing for future benefits, and most look after their investment safety rather than return. The survey of Bhusan (2014) examined the relationship between financial literacy and the investment behavior of working professionals in India. It stated that individuals invest their money in traditional financial products due to low levels of financial literacy. The results of the study suggested that the financial literacy level of individuals affected the awareness and investment preferences of working professionals toward financial products. Similarly, Palanivelu and Chandrakumar (2013), in their study, analyzed the investment preferences of salaried people in the state of Tamil Nadu, in the place Namakkul Taluk, in India. They found that certain factors, such as education level, awareness of current financial system, investors' age, etc., influence their choice of investment avenues.

In a study conducted by Mahdzan and Tabiani (2013), it was stated that when financial literacy and capability are increased, it promotes better financial decisions. Hence, it helps to properly plan and manage life events such as education, housing, and retirement. This study, however, was more relevant to the students. Furthermore, in their research, Wincher (1985) highlights that it is suitable for a person with a significant income and a substantial bank account to use their financial resources efficiently. Still, they must make every dollar count if they have little income and a meager bank account.

It can be observed in studies conducted by national and international researchers that there lies a deep-rooted connection between financial literacy and investment decisions. Furthermore, it suggests that demographic factors should not be sidelined while studying financial literacy and investment decisions. However, in the context of Nepal, insights are still lacking in understanding the factors affecting the practice of financial literacy and investment decision-making of salaried people. The three dimensions-financial knowledge, financial awareness, and financial attitude- mentioned in OECD's 2005 approach are thus used in the study to examine how they relate to investment decisions made by salaried individuals in Kathmandu. The research also explains whether there would be any biases in terms of gender, marital status, monthly income, employment level, and employment sector when making investment decisions.

Conceptual Framework

The conceptual framework illustrated below has been adopted from the study of (Khanal et al., 2022):

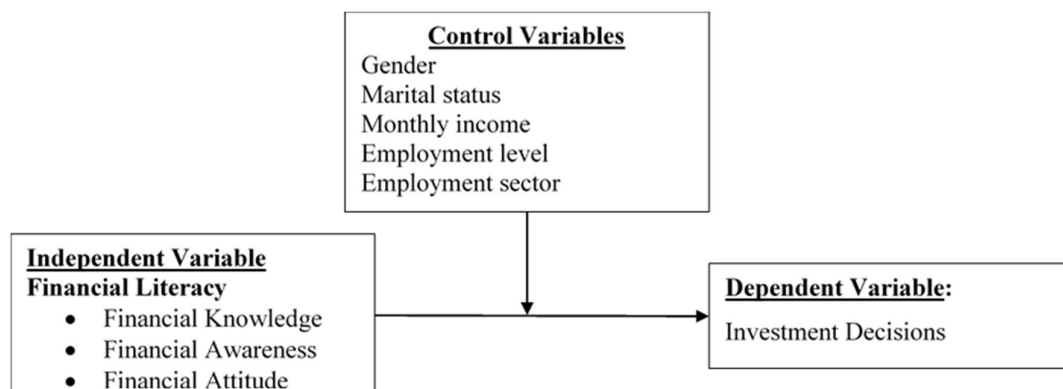


Figure 1
Conceptual Framework

The hypotheses for the study were developed from the study's objectives, which were formed after reviewing numerous pieces of literature. The following hypotheses have been framed to test the statistical significance.

H01: There is a significant relationship between financial knowledge and investment decisions.

H02: There is a significant relationship between financial attitude and investment decisions.

H03: There is a significant relationship between financial awareness and investment decisions.

H04: There is a significant relationship between demographic factors and investment decisions.

Research Methodology

The research studies the impact of financial literacy and investment decisions of salaried people in Kathmandu. This study delves into the respondent's financial attitude, financial knowledge, and financial behavior and its impact on their investment decision-making. The study comprises demographic factors such as monthly income, employment level, and employment sector as the control variables. The research population comprised salary-earning people from different sectors, such as banks and financial institutions, government employees, educational institutions, the IT sector, and others within Kathmandu. Primary data was collected through a well-structured, close-ended questionnaire formed as Khanal et al. (2022) suggested, circulated amongst Kathmandu salaried people. Pilot testing was done with ten respondents. Then, purposive sampling was used to collect data from 200 respondents from Kathmandu. The data collected are entered in SPSS for appropriate analysis. The analyses used on the collected data are descriptive statistics, Cronbach's alpha test, correlation analysis, regression analysis, and ANOVA test for testing proposed hypotheses.

Descriptive statistics such as mean, median, and standard deviation were performed to describe the results obtained. The composition of the data collected was determined based on gender, marital status, monthly income level, employment sector, and employment position. Cronbach's Alpha coefficient was calculated to assess the internal consistency of the scale items in the study. Financial attitude, financial awareness, and investment decision all have Cronbach's Alpha values above 0.60, at 0.843, 0.916, and 0.812, respectively. Correlation analysis was done to determine the effect of every independent variable on the dependent variable. Using regression analysis, the total impact of an independent variable on the dependent variable was explained. T-test and ANOVA determined the effect of demographic variables on investment decisions.

Model Specification

To analyze the relationship between financial knowledge, financial awareness, financial attitude, and dependent variables, i.e., investment decision, hierarchical multiple regression analysis was chosen because of its efficiency and simplicity. The conceptual framework presented in this paper was tested following the hierarchical multiple regression models:

Model I

This model illustrates the impact of control variables on investment decisions.

$$Y = a_1 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + e_i$$

Model II

This model depicts the effect of independent and control variables on investment decisions.

$$Y = a_1 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 + e_i$$

Where,

Y = Investment decision; b1 = Coefficient of gender; X1= gender; b2 = Coefficient of monthly income X2 = monthly income; b3= Coefficient of employment sector; X3= employment sector; b4= Coefficient of employment level; X4= employment level; b5= Coefficient of marital status; X5= marital status; b6 = Coefficient of financial knowledge; X6 = financial knowledge; b7 = Coefficient of financial awareness; X7 = financial awareness; b8 = Coefficient financial attitude; X8 = financial attitude.

Results

Demographic profile of respondents

The research was conducted amongst 200 respondents, among which 83 were female and 117 were male salaried 93 respondents of the total respondents fall under the income group of 25000 to 50000. Respondents' demography of the employment sector has been divided into six major sections: Bank and financial institutions, e-commerce Businesses, Educational Institutions, IT and software development, Public Services, and others. Fifty-nine respondents are involved in other income sectors. One hundred seven respondents were mid-level managers. 66.5 percent of the respondents are unmarried, and the remaining 33.5 percent are married. Therefore, the sample can be considered representative of the Kathmandu, Nepal, salaried population based on the demographics of the respondents.

The respondents' financial attitude, awareness, and investment decisions were measured using a five-point Likert Scale with relevant questions. This result showed that respondents have a high financial attitude and financial awareness above average. It was also found that the respondents believed that financial literacy positively affects the investment decision. For the measurement of the economic knowledge of the respondents, ten questions of numeracy, compound interest rate, time value of money, inflation, money illusion, net worth, tax and credit, banking, insurance, and share market were asked of the respondents. The result shows that most respondents know numeracy and regulatory bodies and have the least knowledge of time value.

Correlation Analysis

The relationship between the variables was ascertained using Pearson's Coefficient of correlation. Table 1 shows a strong positive correlation and a high degree of the relation of financial attitude to investment decision, which is reflected by a correlation coefficient of 0.703 and between financial awareness and investment decision with a coefficient of 0.667. The correlation coefficient of 0.186 denotes the moderately positive relationship between financial knowledge and investment decisions. This infers that a strong financial attitude and high financial knowledge increase investment decisions.

Table 1
Correlation Analysis of Variables

Variables		Financial Attitude	Financial Awareness	Investment Decision	Financial Knowledge
Financial Attitude	Pearson Correlation	1	0.729	0.703	0.264
	Sig. (2-tailed)		0	0	0
	N	200	200	200	200
	Pearson Correlation	0.729	1	0.667	0.329

Financial Awareness	Sig. (2-tailed)	0		0	0
	N	200	200	200	200
Investment Decision	Pearson Correlation	0.703	0.667	1	0.186
	Sig. (2-tailed)	0	0		0.008
	N	200	200	200	200
Financial Knowledge	Pearson Correlation	0.264	0.329	0.186	1
	Sig. (2-tailed)	0	0	0.008	
	N	200	200	200	200

Regression Analysis

Table 2
Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
I	0.244	0.60	0.036	0.034
II	0.749	0.561	0.542	0.000

Table 2, Model I demonstrate a correlation coefficient of 0.244, which portrays a reasonably strong relationship between the investment decisions of salaried people and controlled variables. Model, I indicate that the sum of controlled variables explains 60 percent of the change in the investment decisions of salaried people.

When a controlling variable is present, Model II shows that the relationship between all independent and dependent variables is 0.749, representing a fairly strong relationship between independent and dependent variables in the presence of a controlling variable. The R2 in Model II indicates that 56.1 percent of the change in the dependent variable is explained by the independent variable in the presence of the controlling variable.

Table 3
Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
I	Regression	5.800	5	1.160	2.467	.034
	Residual	91.232	194	0.470		
	Total	97.031	199			
II	Regression	54.931	8	6.799	30.454	.000
	Residual	42.641	191	.223		
	Total	97.031	199			

Table 3, Model I show the p-value of the regression model in the absence of an independent variable, which is 0.034, making the result significant. Similarly, Model II highlights that in the presence of control variables, independent variables, i.e., financial knowledge, financial attitude, and financial awareness, are predictors of dependent variables, i.e., investment decisions of salaried people in Kathmandu, and the results were significant.

Coefficient of Regression Model

Multi-collinearity amongst controlled variables in Model I and multi-collinearity among the independent and controlled variables in Model II were checked using the VIF test. The result shows values of VIF less than 2, clarifying that the variables of both models used in the study have no multi-collinearity. Hence, the model used in the study is sound.

Table 4 shows demographic variables are found to be insignificant in both models. In Model II, the p-value of 0.000 of financial attitude and financial awareness shows a significant relationship between financial attitude and financial awareness and investment decision; a p-value of 0.296 implies that the relationship between financial knowledge and investment decision is insignificant.

Financial attitude and financial awareness positively correlate with investment decisions of salaried people, implying that an individual takes rational or good investment decisions when the individual has good financial awareness and financial attitude. Despite the positive correlation with financial knowledge, monthly gender, and employment sector, their relationship with investment decisions is insignificant. Monthly income, employment level, and marital status have a negative correlation and negligible relationship with investment decisions. Hence, it helps us conclude that financial knowledge, employment level, marital status, and monthly income do not have any significant relationship with the investment decisions of salaried people.

Table 4
Coefficient of Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
I	(Constant)	3.203	0.25		12.84	0		
	Gender	0.135	0.1	0.096	1.325	0.19	0.933	1.07
	Monthly Income (NPR)	0.141	0.08	0.17	1.878	0.06	0.589	1.7
	Employment Sector	0.001	0.03	0.001	0.015	0.99	0.897	1.12
	Employment Level / Position	0.085	0.1	0.079	0.893	0.37	0.624	1.6
	Marital Status	-0.08	0.11	-0.055	-0.748	0.46	0.888	1.13
	II	(Constant)	1.131	0.24		4.783	0	
Gender:		-0.02	0.07	-0.01	-0.203	0.84	0.871	1.15
Monthly Income (NPR)		-0.06	0.05	-0.069	-1.062	0.29	0.538	1.86
Employment Sector		0.024	0.02	0.051	1.002	0.32	0.885	1.13
Employment Level / Position		0.086	0.07	0.08	1.304	0.19	0.619	1.62
Marital Status		-0.1	0.08	-0.07	-1.37	0.17	0.887	1.13
Financial Attitude		0.424	0.07	0.475	6.487	0	0.429	2.33

Financial Awareness	0.272	0.06	0.346	4.739	0	0.433	2.31
Financial Knowledge	-0.02	0.02	-0.055	-1.048	0.3	0.842	1.19

Discussions

The study was conducted among a diverse population of salaried employees of Kathmandu to identify if their investment decisions change when the financial literacy of the status of the individual differs, keeping gender, monthly income level, employment sector, employment level, and marital status as controlled variables. The study established a positive and significant relationship between two pillars of financial literacy (financial awareness and financial attitude) and investment decisions. However, financial knowledge, one of the prominent pillars of financial literacy, does not play an essential role in the decision-making of salaried people.

Our study's findings align with the study of Kumari (2020), where she concludes that financial literacy positively and significantly impacts the level of investment decisions. In contrast, financial knowledge about financial investment options was not a primary dimension. A study conducted by Astiti et al., (2019) concluded that financial attitude has a positive impact on the behavior of investment decisions, while financial knowledge and financial behavior have no significant effect on the investment decision behavior of an entrepreneur. This study agrees with the findings of our research conducted amongst salaried people.

In line with the findings, Normalasari et al., (2022) in their study revealed that simultaneously, the variables financial literacy, financial behavior, and demographic factors significantly affect students' investment decision-making and partial financial behavior and financial literacy has significant and positive effect on student's decision making but partially demographic factor has no significant impact on students' investment decision making.

Conclusion, Policy Implications and Limitations

Through the study conducted amongst 200 salaried people of diverse employment backgrounds, we concluded that financial attitude and awareness have a significant relationship with investment decisions. On the contrary, financial knowledge has a positive and insignificant relationship with investment decisions. Also, gender, monthly income, employment sector, employment level, and marital status do not significantly relate to investment decisions. Findings imply that two components of financial literacy- financial attitude and financial awareness-play a crucial role in salaried people's investment decisions.

Financial literacy and investment decisions are prominent research areas with policy implications. Not only individuals whose source of income is salary but also banks, government, and other policymaking stakeholders benefit from this study. The employer may introduce programs to improve their employees' financial awareness and attitude to meet their financial goals. Banks and financial institutions could use this research to develop products that would benefit salary-earning individuals and understand their customers better to provide improved service. Policymakers could use this study to preserve the financial safety of the salaried people as a cumulative investment in any misleading opportunities of this large group of people that can adversely affect the economy.

Only the Kathmandu region is included in the study. For this reason, the results are not as broadly applicable as they may be. The responding investors' preferences and opinions are entirely subjective and thus susceptible to personal prejudice. The study is limited to people with salaries as an income source. Hence, the other variables and determinants of investment decision-making are not incorporated. Therefore, further study is necessary by using more variables, data points, methods, tools, and techniques for more reliable and comprehensive results.

References

- Ademol, S. A., Musa, A. S., & Innocent, I. O. (2019). Moderating effect of Risk Perception on Financial Knowledge, Literacy and Investment Decision. *American International Journal of Economics and Finance Research, 1*.
- Alaaraj, H., & Bakri, A. (2020). The Effect of Financial Literacy on Investment decision making in Southern Lebanon. *International Business and Accounting Research Journal, 4*(1), 37-43.
- Assefa, M., & P.V, D. R. (2018). Financial Literacy and Investment Behaviour of Salaried Individuals: A case study of Woloita Sodo Town, Ethiopia. *International Journal of Business and Management Invention*.
- Palanivelu, V., & Chandrakumar, k. (2013). *A study on preferred investment avenues among salaried people with reference to Nammakal Taluk, Tamil Nadu, India*. Bangkok - Thailand: International Conference on Business, Economics, and Accounting, March 20 – 23, 2013.
- Sathiyamoorthy, C., & Krishnamurthy, K. (2015). Investment Pattern and Awareness of Salaried Class investors in Truvannamalai District of Tamil Nadu. *Asia Pacific Journal of Research, 1*.
- Thapa, B. S., & Nepal, S. R. (2015). Financial Literacy In Nepal: A Survey Analysis from College Students. *Nepal Rastra Bank Economic Review*.
- Astiti, N. Y., Wormana, G., & Hidayah, M. (2019). Financial Literation and Investment Decision of entrepreneur in Bali. *International Journal of Applied Business and International Management*.
- Bhusan, P. (2014). Relationship between Financial Literacy and Investment Behaviour of Salaried Individuals. *Journal of Business Management and Social Science (JBM & SSR)*.
- Dangol, J., & Shakya, R. (2017). Investment pattern of financially literate person in Nepal. II.
- Harcourt, & G.C. et al. (1967). (2010). *Gilboa, Itzhak Rational choice The MIT Press Massachusetts Institute of Technology, USA*, 35-48.
- Khan, K. (2015). Financial Awareness and Investment Preference of working women in Kaapala Uganda. *International Business, Science and Technology university*.
- Khanal, S., Thapa, B. S., & Nepal, S. R. (2022). Determinants of Personal Financial Planning: A survey among Business Graduates in Nepal. *THE BATUK: A Peer Reviewed Journal of Interdisciplinary Studies, 8*(1), 31-47. <https://doi.org/10.3126/batuk.v8i1.43503>
- Koti, K. (2019). Financial literacy and its impact on the investment decision of working women. *Humanities and Social Science Reviews*.
- Kumari, D.A.T. (2020). The impact of financial literacy on investment decisions: with special reference to undergraduate in western province, Srilanka. *Asian Journal of Contemporary Education*.
- Liu, T., Fan, M., Li, Y., & Yue, P. (2024). Financial literacy and household financial resilience. *Finance Research Letters, 63*.

Mahdzan, N. S., & S. Tabiani. (2013). The Impact of Financial Literacy on Individual Saving: An Exploratory Study in the Malaysian Context. *Transformations in Business & Economics*.

Normalasari, Maslichah, & Sudaryanti, D. (2022). The Effect of Financial Behaviour, Financial Literacy and Demographic Factor on Student's Investment Decision. *E-JRA*.

OECD (2005). Improving Financial Literacy: Analysis of Issues and Policies. *OECD Publishing*.

Palanivelu, V., & Chandrakumar, K. (2013). *International Conference on Business, Economics and Accounting*.