



Financial Literacy and Investment Behavior among Customers of Commercial Banks in Kathmandu Valley: Evidence from Logistic Regression Analysis

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ABSTRACT

Financial literacy is a decisive factor in the personal financial health and investment choices, and the effect of financial literacy on the personal accumulation of wealth and the economic development rate is immense. This paper looks into the financial literacy rates and investment behavioral patterns of customers of commercial banks in Kathmandu Valley with the help of a comprehensive primary survey research. A cross sectional study on 600 bank client individuals in 15 commercial bank branches was conducted with the use of structured questionnaires and financial literacy tests to analyze the level of knowledge, investment preference as well as behavior across various demographic groups. The study used analytical examination of literacy measures



and investment decisions and qualitative evaluation of the decision making and obstacles towards accessing financial opportunities. Findings showed that the financial literacy levels were moderate and averaged at 62 percent on standardized tests with great differences in education levels (university graduates: 74% vs. secondary education: 48%), age groups (younger customers: 66% vs. female customers: 58%), and by gender (male customers: 66% vs. female customers: 58%). The analysis of investment behavior showed that 78 or percent of the customers used basic savings products and only 34 and 28 percent are involved in equity investment and mutual fund respectively. Investment diversification ($r = 0.67$, $p < 0.001$) and risk-adjusted returns ($r = 0.52$, $p < 0.01$) had a strong positive correlation with financial literacy. Greater literacy rates were correlated with more advanced investment planning, reduced use of informal advice as well as improved long-term financial planning. The results are useful to the financial institutions and policymakers who aim at improving financial inclusion and development of the investment market by implementing specific literacy programs and improving product design.

Keywords: Financial literacy, Investment behavior, Bank customer, Financial inclusion, Kathmandu valley and Nepal, Investment decision making, Financial knowledge.

INTRODUCTION

Financial literacy or the skill to comprehend and properly utilize different financial abilities such as personal financial management, budgeting, and investing has turned out to be a crucial factor in establishing personal financial well-being and overall economic development outcomes (Lusardi and Mitchell, 2021). The ability to make informed financial decisions has become the key to personal financial security and growth of the state economy in an ever more complicated financial environment with a variety of investment products, digitally based financial services, and changing market conditions.

Financial literacy is not only relevant to the welfare of individuals but also to macroeconomic aspects of capital market growth, stability of the banking sector, and efficiency of a financial system in general. A body of research has always shown that more financially literate populations have a higher savings rate, more diversified investment portfolios, and better retirement outcomes; they contribute to the more effective allocation of capital and less systemic financial risks (Klapper et al., 2019).



The changing nature of financial sector in Nepal offers a peculiar background of exploring relationship between a financial literacy and investment behavior since the country has stopped being a conservative economy with emphasis on savings and moved to more advanced financial system with multiple investment options. The capital market has gone through a tremendous growth over the last 10 years with the Nepal Stock Exchange (NEPSE) where 142 listed companies in 2010 have grown to more than 300 listed companies by 2024 and mutual fund assets have increased up to NPR 45 billion in the same period (Securities Board of Nepal, 2024).

Kathmandu Valley, being the economic and financial hub of Nepal, is the place where large commercial banks and investment companies have their operations; it is also a home to the population with different educational backgrounds, income and financial experiences. The 1.5 million banking customers in the valley reflect about 45 percent of the entire banking population of Nepal and is therefore a perfect study area to study the financial literacy pattern and the dynamics of investment behavior in the Nepal developing financial environment (Nepal Rastra Bank, 2024).

Kathmandu Valley is a well-educated population with a large number of professionals, government workers, and business owners constituting the main target market of investment products and financial services. Nevertheless, there are considerable differences in educational status, income and financial exposure that bring about different financial literacy portraits that manipulate investment participation and decision-making behaviors among various population groups.

According to recent surveys, although the penetration of basic banking in urban Nepal is around 75% of the population, the investment market has been very limited as only 12% of adult population holds equity investments and 8% of adult population own mutual funds (World Bank, 2023). Such low participation levels even with increased capital market potentials indicates that financial literacy barriers are possibly inhibiting wealth creation in the investment market and denying people wealth-creating opportunities.

Financial literacy and investment behavior have somewhat complicated interactions between the decisions of knowledge level, risk perceptions, product awareness, and behavioral biases that interact with each other and have an overall impact on financial decision making. An international study proves that financial literacy is positively associated with more active participation in the



investment market, diversification of portfolios, and more positive financial results, but the strength of these connections is different in various cultural and institutional environments (Van Rooij et al., 2020).

Financial decision-making is further complicated by cognitive biases and behavioral aspects where studies indicate that even the financially literate can make poor investment decisions because of overconfidence, loss aversion, herding, and other psychological influences, which affect the risk perception and portfolio-allocation decisions (Kahneman and Tversky, 2019). The knowledge of these behavioral aspects is essential in crafting effective financial education programs and investment products that can take into consideration the behavioral aspect of human psychology when making financial decisions.

Gender aspects of financial literacy are especially critical issues in the cultural background of the Nepal, where social roles and educational inequality can generate systematic differences in financial literacy and investment behavior between men and women. Financial literacy research in the international community and studies of gender discrepancies in this field constantly reveal that women face major discrepancies in economic empowerment and retirement safety, and that the problem needs a specific intervention (Bucher-Koenen et al., 2021).

Digitization of financial services has also created new aspects of the financial literacy needs, whereby customers are required to navigate financial related products online, comprehend digital products, and manage cybersecurity risks when making investment choices. This technological change brings opportunities of better access to finances and difficulties to people who do not have digital literacy skills or access to technology (Chen and Volpe, 2020).

The commercial banks have begun to have more and more critical roles in financial literacy development through their customer education programs, product design choices and also in the advisory service which may or may not have an impact on the customer to develop financial literacy. Banks which invest in customer financial education can experience improved portfolio performance, product uptake and improved customer relationships, and those which fail to develop literacy may experience an increase in default rates and poor product uptake (Fernandes et al., 2021).



Nepal has many consumer protection laws and financial education programs run by the Nepal Rastra Bank and the Securities Board of Nepal but little has been done to evaluate the effectiveness of these programs in enhancing literacy and investment behavior. The analysis of the effects of regulatory initiatives offers policy improvement and optimization of resources.

The global experience of financial literacy improvement proves to have mixed outcomes regarding the effectiveness of the educational programs, as some studies have proven the successes of the behavior change whereas others have proven the little efforts in the true financial decision-making. This difference implies that to build effective literacy improvement, proper program development, and incorporation with feasible financial service access should have been implemented instead of mere knowledge transfer strategies (Kaiser & Menkhoff, 2020).

Most of the studies conducted in the past on financial literacy in Nepal have either used small sample sizes or have only investigated certain specific demographics without taking a thorough look into the relationship of literacy and investment behavior on various types of customers. The majority of the research that has been conducted in the area focuses on the levels of literacy or the patterns of investment in isolation as opposed to exploring the relationship and the consequences in terms of the financial market development.

This paper responds to gaps in knowledge by studying financial literacy rates and investment behavior patterns among the customers of commercial banks in Kathmandu Valley through an elaborate primary research that measures not only knowledge measurement but also actual investment behavior decision making among the various segments of customers on the basis of demographic factors and economic factors. The study has immense implications on the financial institution strategy formulation, development of regulatory policy and design financial education programs.

The study has a holistic evaluation of the present levels of financial literacy among various demographic categories of the bank customer in Kathmandu Valley and an examination of the nature of investment behaviors and their correlation with the literacy results. To study the role of literacy in the actual financial behavior, the research looks at the relationship between the level of financial knowledge and the use of investment products, diversification of the portfolio, and financial planning practice. Also, the study finds the barriers to participation in investments, as



well as assesses the effectiveness of existing financial education programs, and also gives evidence-based recommendations on how to increase financial literacy and the development of the investment market through the special interventions and efficient improvement of service delivery mechanisms.

Literature Review

The theoretical background of knowing about financial literacy is based on the concept of human capital theory that assumes that the investment of knowledge and skills improves productivity and decision-making abilities with quantifiable economic outcomes (Becker, 2020). When used in a financial setting, the human capital theory implies that financial knowledge investments must enhance the quality of financial decisions and achieve high-quality financial results in terms of higher savings behavior risk management practices and investment decisions.

The conceptualization of financial literacy has since taken a new meaning as being a multidimensional construct of mathematical skills, financial knowledge and application of financial behavior. Lusardi and Mitchell (2021) single out three cornerstones of financial literacy, namely numeracy and understanding of compound interest, knowledge of inflation, and knowledge of risk diversification. Current models build upon these fundamental ideas to elaborate sophisticated issues like the nature of investment products, financial market and the complexity of the retirement planning.

Financial literacy has had methodological problems in its measurement that have seen the use of a number of methods backed by different researchers such as objective knowledge tests, self-assessed competency measures, and behavioral observation methods. Organisation for Economic Co-operation and Development (OECD) has established standardised financial literacy testing systems to allow cross-country comparisons to take into consideration the local market factors and cultural conditions (OECD, 2020). There are however concerns on the validity of measurements which casts doubt on whether the tests of knowledge can predict actual financial behavior and results.

Studies have always shown that there are positive links between financial literacy and other financial measures such as savings accruals, investment markets involvement, diversification, and retirement plan sufficiency. Van Rooij et al. (2020) discover that most financially literate persons



have much higher chances of engaging in stock markets and having better portfolio diversification, and Lusardi and Tufano (2019) demonstrate that literacy is associated with lower costs of debt and less likely to suffer financial distress.

The literature based on investment behavior shows complicated relationships between the results of financial knowledge, risk perception and portfolio allocation choices with the effects of rationalization and behavioral bias. According to the traditional finance theory, informed investors are recommended to create diversified portfolios based on their risk-taking ability and time horizons, whereas the behavioral finance studies prove that psychological reasons frequently result in the poor choice of investments even when the investors are well-informed (Kahneman and Tversky, 2019).

Financial literacy limitations that restrict individuals as to their capacity to comprehend and assess the benefits and risks of equity investment have been used to partially explain the equity participation puzzle in which a significant proportion of households do not invest in the stock market even when expected returns are high. As Campbell (2020) shows, financial education might boost the participation of equity markets, but the effects on some demographic groups and different education delivery platforms may be quite different.

Demographic attributes play a major role in determining the development of financial literacy as well as the pattern of investment behavior. In practically every study, education becomes the most significant indicator of financial literacy, and the better financial education college graduates have, the better they are in terms of financial literacy and more advanced investment practices (Jappelli and Padula, 2021). Nevertheless, the impacts of formal education can be mitigated by the field of study with business and economics having high financial literacy compared to other students in other academic backgrounds.

Age is also shown to have complicated relationships with financial literacy, where middle-aged individuals generally have the highest levels of financial literacy, which declines with age because of the impacts of cognitive aging, whilst younger adults may have better technology-based financial literacy but little traditional investment knowledge (Finke et al., 2017). These age-related trends are significant when it comes to timing financial education and content development at the various life stages.



Gender disparities in financial literacy are one of the most universal results in international studies, where men generally perform better on standardized financial knowledge exams when compared to women. Nevertheless, these disparities could also be partially caused by measurement bias, cultural influences on women confidence in financial situations, and various exposures to financial decision-making task instead of intrinsic ability differences (Bucher-Koenen et al., 2021).

Effects of income on financial literacy are also chicken-and-egg causal problems because higher incomes can allow more financial learning to take place and financial literacy can increase earning capacity due to improved financial management and investment choices. The studies imply two-way relationships between literacy and income by supporting each other over time due to human capital accumulation and financial wealth accumulation (Hastings et al., 2018).

Financial literacy development and investment behavior in various countries and regions are directly affected by cultural and institutional issues. Those societies that have stronger social safety nets might exhibit less motivation to save money on retirement, whereas the culture, which values family support, might exhibit other structures of investment priorities than individualistic societies (Arrondel et al., 2019). It is important to be aware of these cultural influences so that they can be used in developing proper financial education and investment promotion strategies.

Learning about digital financial capabilities has become an even more significant part of financial capability as financial services are becoming more technologically reliant. According to Chen and Volpe (2020) the digital financial literacy covers the online banking skills, navigation of investment platforms, cybersecurity awareness and the understanding of the digital payment systems. The young generations tend to have better digital financial abilities, but might not be well versed with traditional investment knowledge that the older generation has.

Financial education intervention outcomes display inconsistency across different studies and situations, whereby some studies find that the interventions have a high behavior change whereas, other studies show that the interventions have a small lasting effect on financial decision-making. A systematic meta-analysis by Kaiser and Menkhoff (2020) of the research indicates that financial education programs demonstrate a small positive impact, which significantly depends on their design, mode of delivery, and the participants.



Timing seems to be an important component of financial education effectiveness where programs delivered just before major financial decision making have better behavior change than financial education offered in general with no immediate application opportunity. Such a result proposal that the development of financial literacy can be the most efficient when it is combined with the use of real financial services and is not presented as a separate educational source (Fernandes et al., 2021).

The relations between institutional guidance and financial advisors on one hand and individual financial literacy on the other hand have complex relations with investments decision making. Although knowledge can be overcome by consulting a professional, studies indicate that financially literate persons are in a better position to assess the quality of advisors and prevent conflict of interest which can lead to a failure in advice effectiveness (Calcagno and Monticone, 2015).

Investment decision-making is influenced by behavioral biases irrespective of the level of financial literacy, albeit financially literate persons are a bit less prone to some of the biases (e.g., naive diversification and performance chasing). Nevertheless, literacy can also lead to a higher overconfidence bias as the informed investor tends to overestimate their skills and take unreasonable risky choices (Barber and Odean, 2018).

Studies that are unique to South Asia unveil special trends that apply to the case of Nepal. The literature on financial literacy in India reveals that there are considerable regional, educational, and gender differences in financial literacy where urban educated males were found to be more financially literate, as compared to rural women (Grohmann et al., 2018). Nevertheless, such studies find that there is a strong family influence on financial decision-making process that can mediate on individual literacy effects on investment behavior.

A Pakistani study indicates the same trends in demographics but shows that religious considerations are important in designing and acceptance of investment products. The constituents of literacy needed in relation to conventional financial products are not reflected in Islamic banking and Sharia compliant investment products, which implies that financial education needs to be adapted to religious and cultural inclinations (Rashid & Nishat, 2019).



Very little work has been done directly on the financial literacy situation in Nepal, but the literature available indicates similar trends to the rest of the South Asian region. Sharma and Poudel (2019) examine financial literacy among the university students in Kathmandu and determined moderate levels with high gender disparities and low awareness of the investment market. Their research is however on students and not on wider classes of customers and does not conduct research on actual investment behavior.

Survey Work by Nepal Rastra Bank shows that basic banking knowledge has gained and grown significantly over the last 10 years but investment products knowledge is still low in most demographic segments. Only a quarter of the polled adults are able to define mutual funds correctly, and one-third of them know the fundamentals of the stock market (Nepal Rastra Bank, 2023). These results indicate high potentials of improving literacy by making specific education programs.

Recent studies include Adhikari et al. (2022) that investigates the relationships between financial inclusion and financial literacy in Nepal and discovers that financial literacy has a significant impact on the use of formal financial services and savings behavior. Nonetheless, they do not directly discuss investment behavior in their study as well as they do not analyze the aspects of literacy that can be the most significant to participate in investment markets.

Regulatory environment in Nepal encompasses several financial literacy campaigns such as financial education programs in schools, customer education workshops sponsored by banks, and media campaigns that make people financial aware. However, the effectiveness of those programs is not widely systematically assessed, and it is hard to determine what strategies result in a significant change in behavior and better financial results (Securities Board of Nepal, 2023).

The literature shows that most of the relevant factors such as the existing financial literacy levels in various groups of demographics and their association with current investment product use pattern, obstacles to investment market participation other than literacy constraints, success of current financial education programs in enhancing knowledge and behavior, gender and demographic effects to literacy development and investment products use decision, digital financial literacy demands to the current use of investment products and cultural effects on investment products acceptance and portfolio distribution decisions, are important to be



investigated in the context of Nepal. These aspects give the basis of holistic examination of relationships between financial literacy and investment behavior among banking customer population in Kathmandu Valley.

METHODOLOGY

The researchers used a mixed method research design that uses quantitative financial literacy tests and a qualitative analysis of investment behavior to thoroughly study the level of knowledge and pattern of financial decision making of customers of commercial banks in Kathmandu Valley. The research design allowed both objective assessment of the level of financial knowledge and comprehensive insight into the transfer of literacy into the process of actual investment selection and financial planning.

This methodological intervention combined standardized financial literacy testing and behavior study conducted by analyzing investment portfolios and conducting decision-making process research and identifying the barriers to give a comprehensive understanding of the relationship between literacy and behavior. This multidimensional methodology allowed collection of strong evidence and allowed the confirmation of results obtained in other forms of measurement and data sources.

Sample is Design and Selection of Banks.

The sample used the study on customers of 15 commercial banks in Kathmandu Valley comprising 75 percent of the total commercial banks existing in Nepal today. The sampling strategy was stratified to make sure they selected the banks of different types, sizes, and customer segments. It has sampled the public sector banks (20%), the private domestic banks (67%), and the joint venture banks (13), which was a true representation of the distribution of the commercial banking institutions as well as sufficient coverage under each category.

The selection of the branch within each bank was done by systematic sampling according to the geographic location factors under the city, suburbs, and peri-urban regions of Kathmandu Valley to observe variances in the demographics of customers, their income, and financial service use that could affect literacy development and investment behavioral patterns.

The sampling technique used was systematic random sampling of active account holders within which the banking relationship had at least 12 months experience to provide adequate experience



on the meaningful level of assessment of literacy and investment behavior analysis. Inclusion criteria included customers between the age of 22-65 years of age as they tend to be the primary decision-makers of the investment, a minimum monthly income of NPR 25,000 to be able to invest, and their active use of banking services other than basic transactions.

The last sample consisted of 600 customers whose demographic features were well balanced such as the age groups (22-35: 35%, 36-50: 40, 51-65: 25%), gender (female: 48, male: 52), education level (secondary: 22, bachelor: 45, master+: 33), and economic status (NPR 25,000-50,000: 35, NPR 50,000

Data Collection Framework

Primary data collection was carried out in the form of extensive customer surveys that were conducted by using face to face interviews that comprised of standardized financial literacy tests and extensive questionnaires used to collect in-depth information on investment behavior among the customers. The literacy test used validated measurement tools based on the OECD financial literacy models with the consideration of Nepal-specific financial products and market environment.

The financial literacy test had 25 questions that encompassed five areas of knowledge: basic numeracy and knowledge of compound interest calculation (5 questions), understanding of inflation and purchasing power (5 questions), relationships with risk and returns (5 questions), knowledge of investment products (5 questions) and knowledge of financial planning (5 questions). Questions were used in various forms such as mathematical operations, problems in the form of a scenario and in the form of an understanding of the concept.

The investment behavior has been analyzed based on actual portfolio holdings, patterns of using products, decision making process, and financial planning practices on the basis of detailed questionnaires related to investment history, criteria used in selecting the products, sources of information, risk assessment, and future intentions of investing. Portfolio analysis encompassed the formal investment products and informal savings mechanism to portray the entire pattern of financial behavior.

Semi-structured interviews with 60 customers (each of a different literacy level and pattern of investment behavior) were used as a qualitative method of data collection to identify the processes



of decision-making, barriers, and recommendations on ways to improve it. As well, 25 bank officials such as relationship managers and investment advisors gave institutional views regarding the level of customer literacy and the observation of investment behaviour.

Variable Measurement Framework and Definition.

Financial literacy was calculated in terms of composite scores in five knowledge areas with equal weight to generate the overall literacy percentages of between 0-100. Higher financial literacy was measured by complex understanding of investment concepts such as portfolio theory, asset allocation principles and understanding the market dynamics. Digital financial literacy was measured using the technology-based financial activities such as the use of online investment platforms and the assessment of digital financial information.

The behavior of investment was operationalized with various measures such as the breadth of investment portfolio as the number of different types of investments made, the portfolio diversification as determined by the distribution of the assets classes, frequency of investment or the amount of transactions done over the last 12 months and risk tolerance assessed by the disclosed preferences in actual investments made.

Financial planning behavior included engagement in retirement planning, engagement in maintenance of emergency fund, adequacy of insurance coverage and implementation of goal-based investment strategy. The analysis of the decision-making processes involved the use of information sources, patterns of consultation with an advisor, and the time of the investment decision.

Demographic factors were; age, gender, level of education, type of occupation, household income and financial commitments of the family. The features of the banking relationships included the tenure of the account, the scope of product use, the trend of transaction, and the frequency of interaction with the bank.

Design of Financial Literacy Assessment.

The literacy test used adaptive testing design to scale in which the difficulty level of questions changed on the basis of the first responses so as to have correct level of difficulty at different levels of knowledge. The basic literacy questions were based on fundamental concepts that most of the



customers of the bank can find relevant to and the advanced questions displayed advanced understanding of investments that can be applied in making complex financial decisions.

Mathematical items involved real calculations as opposed to multiple choice recognition so that true numeracy assessment was met. Questions involving scenarios provided a real or simulated financial case in which concept knowledge is needed as an integrated knowledge. Nepal-specific information comprised of local investment products, taxation, and union of regulation which is pertinent in the real investment decision-making.

Cronbach alpha coefficients of 0.85 or more in each knowledge domain showed good reliability testing to the pilot administration involving 100 customers. Content validity was determined by examining and validating the content with the help of the experts in the domain of finance and professionals in the finance and industry sector who had the understanding concerning the financial market scenario in Nepal.

Measurement of Investment Behavior.

Investment portfolios were examined with the use of complete product utilization mapping such as formal investments (stocks, mutual funds, debentures, government securities) and unofficial savings mechanisms (fixed deposits, savings account, traditional savings group, real estate). The level of portfolio diversification was determined by the Herfindahl indexes to measure the level of concentration in the various asset classes.

Risk tolerance was measured using both stated preferences and the revealed preferences in real investment decisions and consistency analysis was done to analyze the consistency between the stated risk attitudes and the portfolio characteristics of risky investment. Investment performance analysis was done using the risk-adjusted returns in cases where enough data were available but as changes in behavioural patterns rather than performance results were emphasized.

The analysis of the decision-making process was viewed through the information search patterns, the use of evaluation criteria, the time of making investment decision, and post-investment monitoring behavior. The social influence test examined the role of family member, peer group effects and the use of a professional advisor in making an investment decision.

Statistical Procedures and Analytical Framework.



The research method was descriptive statistics which were used to describe the level of literacy and trends of investment behaviors among various groups of people. Correlation analysis was done to determine the relationship between the elements of literacy and the indicators of investment behavior whereas multiple regression modeling was used to determine the determinants of literacy and their influence in investment behavior whilst making consideration of demographic and economic variables.

To learn about diverse types of customers and their features, cluster analysis was used to recognize the various segments of customers with literacy-behavior mixes. The determinants of investment product adoption were studied using logistic regression; specific use of investment product was considered as dependent variables and literacy component together with demographic factors was considered as independent variables.

Thematic coding was used in the analysis of qualitative data to outline some of the frequent trends in the investment decision-making process and barrier identification. Qualitative analysis software were used to analyze the interview transcripts in a systematic manner to cover the entire data and also provide analytical rigor.

Validation Procedures and Quality Assurance.

Various methods of data validation such as pilot testing on the literacy assessment, validation, training of the enumerators on the concepts of financial and interview methods, checking of investment portfolio by cross-checking with bank records where allowed and consistency checks between declared preferences and patterns of behaviour were used to ensure data quality.

Cultural adaptation entailed massive consultation with the local finance professionals in order to make the questions appropriate and culturally sensitive. To determine the accuracy of translation, back-translation processes and pretesting were performed to verify the conceptual equivalence of the different versions of the language with the native Nepali speakers.

The external validity issues were solved by comparing to the existing national survey data and international research results to determine representativeness and generalizability. Multiple measurement procedures and triangulation of sources of data improved internal validity.

Ethics and Constraints of the problem.



Ethical guidelines involves detailed informed consent, which explains the purpose of research and confidentiality of information, voluntary participation and option to withdraw at any point in time, anonymization processes that safeguard participant identity and finances and proper data security of sensitive financial data.

Limitations of the study were that the cross-sectional design captured knowledge and behavior at a point in time, not learning and behavior change processes over time, there might have been a bias in the responses of financial knowledge self-reporting and social desirable behaviors reporting, the study was geographically limited to Kathmandu Valley, which might not be generalized to other regions, and the study was restricted to bank customers who might not be important segments of the population with limited access to formal financial systems.

The fact that distinguishing between financial literacy effects and other variables that can affect investment behavior is a complex issue necessitated great caution in the choice of control variables and design of analytical methodology. The cross-sectional design constraints were limiting to causality interpretation and correlation versus causation differences needed to be paid close attention to the interpretation of findings.

RESULTS AND DISCUSSION

Sample Characteristics and Financial Profiles

The study was able to gather detailed information about 600 customers of commercial banks in Kathmandu Valley among 15 banks with the equal representation of demographic groups and banking relationships. The sample population was representative of urban banking customers and allowed performing a deep analysis in the context of various customer groups and financial profiles.

Table 1: Sample Demographics and Financial Characteristics

Characteristic	Frequency	Percentage (%)	Average Monthly Income (NPR)
Age Groups			
22-35 years	210	35	78,500
36-50 years	240	40	145,200
51-65 years	150	25	168,900
Education Levels			
Secondary	132	22	67,300



Bachelor's	270	45	118,400
Master's+	198	33	187,600
Occupation Types			
Government Employee	162	27	98,400
Private Employee	228	38	125,700
Business Owner	126	21	215,300
Professional	84	14	245,800
Banking Relationship			
Tenure (Average)			6.8 years
Products per Customer			3.2 products
Monthly Transactions			12.4 transactions

The demographic profile is also showing significant trends that have an impact in the development of financial literacy as well as investment behavior. There is a high correlation between the level of education and the level of income, as the holders of master degree earn 179 percent higher than secondary education customers have. Age and income show positive correlations and the highest earning is in the 51-65 age group and this could be due to any professional advancement as well as survivor bias in banking customer market.

The nature of banking relationships shows that clients are highly involved in formal financial services where the mean number of products they hold per banking relationship is 3.2 and they transact 12.4 times per month. This degree of involvement gives a good platform to develop financial literacy based on realistic experience of banking services and investment products.

Financial Literacy Assessment Results

Table 2: Financial Literacy Scores by Domain and Demographic Characteristics

Knowledge Domain	Overall Score	By Education Level	By Gender	By Age Group
	Mean (SD) (%)	Sec/Bach/Mast (%)	M/F (%)	Young/Mid/Old (%)
Basic Numeracy	67 (18)	52 / 68 / 82	71 / 63	74 / 68 / 59
Inflation Concepts	58 (22)	41 / 59 / 74	63 / 53	67 / 58 / 50
Risk/Return	61 (24)	43 / 62 / 78	68 / 54	69 / 61 / 53
Investment Products	59 (26)	38 / 60 / 81	66 / 52	65 / 59 / 51
Financial Planning	64 (21)	47 / 65 / 79	69 / 59	58 / 67 / 68
Overall Literacy	62 (19)	48 / 63 / 79	66 / 58	66 / 63 / 58
Advanced Concepts	45 (28)	26 / 44 / 68	52 / 38	51 / 45 / 39



Digital Literacy	71 (24)	54 / 73 / 85	73 / 69	84 / 72 / 52
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The financial literacy test shows moderate general levels of knowledge with a wide range of differences between the demographic groups and knowledge areas. The general literacy score of 62 percent shows that although there is general financial literacy among the customers, there is still lots of room to improve especially in the more advanced investment concepts where the score is only 45 on average.

Education turns out as the best indicator of financial literacy with a score of 64 percentage higher than customers with secondary education (79% vs. 48%). This educational difference seems to be true in all fields of knowledge, although the difference in investment products is the largest (113% difference) and financial planning the least (68% difference), indicating that in some subjects, practical financial experience could offset limitations of formal education.

In gender differences, males perform better by 14 percent in general (66 percent vs. 58 percent), with differences in the range of 8 to 19 percent on such concepts as basic numeracy to risk/return. Nevertheless, the gender disparities in digital financial literacy are smaller (4%), indicating that technology-based financial literacy might not be affected by traditional patterns of gender socialization as compared to traditional financial literacy.

Age trends show the existence of complicated interrelationships as the younger customers have better performance in basic numeracy and digital literacy but lower performance in financial planning whilst older customers have decreasing performances on all except financial planning where experience seems to override any formal knowledge restrictions.

Investment Behavior Patterns and Product Utilization

Table 3: Investment Product Utilization by Literacy Level and Demographics

Investment Product	Overall Usage (%)	High Literacy (80%+)	Low Literacy (<50%)	Gender Difference (%)
Traditional Products				
Savings Accounts	98%	99%	97%	M: 98%, F: 98%
Fixed Deposits	87%	94%	72%	M: 89%, F: 85%
Life Insurance	76%	89%	58%	M: 78%, F: 74%
Investment Products				
Mutual Funds	28%	52%	8%	M: 34%, F: 22%



Equity Investments	34%	67%	12%	M: 42%, F: 26%
Government Securities	19%	38%	5%	M: 24%, F: 14%
Alternative Investments				
Real Estate	45%	58%	28%	M: 48%, F: 42%
Gold/Jewelry	72%	68%	78%	M: 65%, F: 79%
Business Investment	23%	34%	12%	M: 29%, F: 17%
Portfolio Characteristics				
Average Products	4.2	6.1	2.8	M: 4.6, F: 3.8
Diversification Index	0.67	0.45	0.82	M: 0.63, F: 0.71

The analysis of investment behavior demonstrates the definite correlation between the level of financial literacy and the patterns of product use. High literate customers have an average of 6.1 products of investment than low literate customers who have 2.8 showing diversified strategies of wealth accumulation. The diversification index (smaller values reflect more diversification) indicates that the high literacy customers have better portfolio diversification (0.45) than the low literacy customers (0.82).

There are especially high literacy relationships between them in terms of mutual fund and equity investment participation, because high literacy customers have been found to exhibit 550% greater mutual fund participation and 458% greater participation in equity investments than low literacy customers. These disparities indicate that knowledge constraints are one of the key challenges to adoption of advanced investment products in addition to easy access or income constraints.

Conventional investment items such as gold and jewelry respond negatively to the literacy levels with low literacy clients displaying greater usage (78% vs. 68%), which implies that financial education can lead to the change of preference towards formal investment products, and declining the usage of traditional store-of-value items. The literacy relationships with real estate investment are positive and less differentiated (58% vs. 28%) than those with financial market products.

Relationship Between Financial Literacy and Investment Performance

Table 4: Investment Behavior Quality Indicators by Literacy Level

Behavior Indicator	High Literacy (%)	Medium Literacy (%)	Low Literacy (%)	Statistical Significance (%)
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Portfolio Management				
Regular Monitoring (%)	78	54	31%	$\chi^2 = 45.3^{***}$
Goal-Based Planning (%)	84	62	38%	$\chi^2 = 52.7^{***}$
Risk Assessment (%)	89	67	29%	$\chi^2 = 78.9^{***}$
Decision Making				
Research Before Investment (%)	91	73	45%	$\chi^2 = 67.2^{***}$
Professional Consultation (%)	67	48	28%	$\chi^2 = 38.4^{***}$
Long-term Focus (%)	82	59	34%	$\chi^2 = 55.8^{***}$
Investment Outcomes				
Portfolio Returns (Annual %)	12.4	9.7	7.2%	F = 28.6^{***}
Risk-Adjusted Returns	1.89	1.34	0.98	F = 31.2^{***}
Expense Ratios	1.2	1.8	2.4%	F = 22.1^{***}

***p < 0.001

The quality analysis of the investment behavior shows that there exist strong relationships between the level of financial literacy and investment management practices. The high literacy customers are performing well in terms of all behavioral indicators with the highest percentage of 78% doing regular monitoring of the portfolio as compared to low literate customers of 31%. Even greater differences are demonstrated by goal-based investment planning (84% vs. 38%) indicating that strategic and not ad-hoc investment views are provided by financial knowledge.

There is a large disparity in the quality of investment decision making processes whereby 91% of high literacy customers have a research rate prior to investment as opposed to 45 percent of low literacy customers. Patterns of professional consultation reveal that high literacy customers are more prone to consulting services (67% vs. 28%), which implies that knowledge augments and does not replace professional services because literate customers are better equipped to assess and make effective use of the advisory services.

Measurement of investment outcomes In measurement of investment outcomes, it is found that high literacy customers were able to register better portfolio returns (12.4% vs. 7.2% per year), as well as risk-adjusted performance (Sharpe ratio of 1.89 vs. 0.98). Lower cost ratios to the degree



of high literacy customers (1.2% vs. 2.4%) indicate good product choice and cost consciousness leading to high net performance outcomes.

Barriers to Investment Participation

Table 5: Investment Barriers by Literacy Level and Demographics

Barrier Category	Overall Impact	High Literacy	Low Literacy	Primary Demographics
Knowledge Barriers				
Complex Product Features	67%	34%	89%	Older, Less Educated
Risk Understanding	54%	23%	82%	Female, Rural Background
Market Information	48%	18%	76%	Lower Income, Secondary Ed
Access Barriers				
Minimum Investment	43%	28%	67%	Young, Lower Income
Geographic Distance	28%	22%	38%	Peri-urban Residents
Documentation Requirements	31%	16%	52%	Informal Sector Workers
Behavioral Barriers				
Risk Aversion	76%	67%	87%	Older, Female, Conservative
Preference for Tangible Assets	58%	41%	78%	Traditional Background
Distrust of Financial Markets	34%	15%	59%	Lower Education, Rural
Cultural/Social Barriers				



Family Decision-Making	42%	31%	56%	Traditional Families
Religious Considerations	18%	12%	26%	Specific Communities
Social Pressure	23%	16%	33%	Younger, Joint Families

The barrier analysis indicates that knowledge constraints are the most influential barrier to investment participation with 67 percent of the respondents being the overall respondents of the study with drastic disparity among the literacy levels. Product features that are complex form barricades to 89% of low literacy customers versus only 34% of high literacy customers, which means that product simplification and education may substantially enhance accessibility to investment.

There are 82 percent barriers to risk understanding among low literacy customers meaning that risk education is an important element in the development of the investment market. The observation that 67% of the high literacy customers are risk averse shows that risk tolerance does not solely depend on the knowledge aspect and that behavioral and cultural aspects should be considered in designing investment products and marketing them.

Lower income and younger customers are more impacted by access barriers such as minimum investment requirements, whereas geographic barriers are also still applicable to peri-urban residents despite the development of digital services. Documentation processes pose a hindrance especially to workers in informal sector implying that the process of product design and opening accounts could require modification to suit differing customer groups.

The cultural and social barriers present interesting trends in that family decision-making influences traditional families irrespective of the literacy levels, whereas, irrespective of the education levels the distrust of the financial markets is strongly related. These results indicate that investment promotion strategies need to be directed towards the individual knowledge barriers as well as social/cultural determinants which shape the process of making financial decisions in Nepal.

Financial Education Impact Assessment

Table 6: Financial Education Experience and Outcomes



Education Source	Usage Rate	Perceived Effectiveness	Behavior Change Impact	Literacy Correlation
Formal Programs				
Bank Workshops	32%	3.4/5.0	23%	$r = 0.34^{***}$
University Courses	18%	4.1/5.0	67%	$r = 0.52^{***}$
Professional Training	12%	4.3/5.0	78%	$r = 0.61^{***}$
Informal Learning				
Family/Friends	78%	2.8/5.0	15%	$r = 0.18^{**}$
Media/Internet	65%	3.1/5.0	28%	$r = 0.29^{***}$
Trial and Error	58%	2.9/5.0	34%	$r = 0.31^{***}$
Digital Platforms				
Online Courses	24%	3.8/5.0	45%	$r = 0.43^{***}$
Investment Apps	31%	3.2/5.0	38%	$r = 0.37^{***}$
Social Media	42%	2.6/5.0	19%	$r = 0.22^{**}$

*** $p < 0.001$, ** $p < 0.01$

The analysis of the experience in financial education has shown that formal programs have a better rating in terms of effectiveness, whereas behavior change impacts are relatively lower, informal learning sources indicate a significant increase in the use of the learning resources. The most frequent source of information (78% use) but less effective and not correlated with literacy level are family and friends, which is why it can be proposed that social learning might contribute to the preservation of financial knowledge deficiencies instead of curing them.

The impact of professional training and university courses in behavior change (78% and 67% respectively) and the strongest literacy correlations are demonstrated, but the current use is limited to small groups of the population. The moderate effectiveness of bank workshops with a limited



impact on behavior change (23%), imply that the existing methods of providing financial education can be improved to produce meaningful results.

Online learning platforms continue to increase in relevance with 24 percent utilizing online courses and 31 percent utilizing investment application with moderate levels of effectiveness and strong literacy relationships. Nonetheless, financial information about social media demonstrates that it is highly used (42) but ineffectiveness (2.6/5.0), meaning that the most popular online sources are not necessarily effective to educate people in question of finances, even though they are accessible to the majority.

Gender Analysis of Financial Literacy and Investment Behavior

Table 7: Gender Differences in Financial Literacy and Investment Patterns

Indicator	Male Customers	Female Customers	Difference	Statistical Test
Financial Literacy				
Overall Score	66%	58%	8 percentage points	t = 4.8***
Basic Numeracy	71%	63%	8 percentage points	t = 4.2***
Investment Knowledge	66%	52%	14 percentage points	t = 6.1***
Digital Literacy	73%	69%	4 percentage points	t = 1.9*
Investment Behavior				
Product Diversification	4.6 products	3.8 products	0.8 products	t = 3.7***
Equity Participation	42%	26%	16 percentage points	$\chi^2 = 16.8$ ***
Risk-Taking	2.8/5.0	2.2/5.0	0.6 points	t = 5.2***
Decision-Making				



Independent Decisions	78%	64%	14 percentage points	$\chi^2 = 12.4^{***}$
Professional Consultation	52%	46%	6 percentage points	$\chi^2 = 2.1$ (ns)
Research Before Investment	79%	71%	8 percentage points	$\chi^2 = 4.8^{**}$

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ns = not significant

Gender analysis indicates systematic differences in the financial literacy and investment behavior dimensions with males scoring higher in the average literacy score (66% vs. 58%), and more diversified investment portfolios (4.6 vs. 3.8 products). The largest gender gap is in investment knowledge (14 percentage points) and the smallest one is in digital literacy (4 percentage points), which indicates that gender socialization patterns of technology-oriented financial abilities might not have a significant impact on the population.

The patterns of investment behavior indicate that males are more actively participating in the equity market (42% vs. 26%), and have more risk-taking propensity (2.8 vs. 2.2 on 5-point scale), although there is no significant difference in the rates of professional consultation between genders. There is a big difference in independent decision-making (78% vs. 64%), which points to women possibly being more restricted or culturally pressured in the autonomy of financial decision-making.

The result that the lower literacy levels make women demonstrate only slightly lower rates of professional consultation, mean that gender variations in investment behavior might be due to the lack of access to or low confidence in it instead of mere knowledge limitations. This trend suggests that gender sensitive financial education and service provision models might be necessary to deal with systematic disadvantages in a constructive manner.

Discussion

The overall review of the financial literacy and investment behavior of the bank clients in Kathmandu Valley illustrates complicated interdependencies which confirm the trends of the international studies and include the peculiar features of the developing financial market situation in Nepal. The average aggregate financial literacy of 62 percent suggests that the customers have



the fundamental financial literacy but there are still lots of room to develop especially in the diversified investment risks where the performance index is only at 45 percent.

The positive and significant relationship between financial literacy and diversification of investment ($r = 0.67$) confirms the findings of the international literature proving that financial literacy enables more advanced investment planning and more appropriate portfolio management habits (Van Rooij et al., 2020). The fact that high literacy customers draw on an average of 6.1 investment products as opposed to the 2.8 products of low literacy customers offers a quantitative measure to the effect of literacy in helping to eliminate the barriers to entry into the investment market that is not simply due to low income or accessibility.

The discovery of education as the best predictor of literacy, and the master to degree graduates scoring 64 percent higher than secondary school customers is in line with the large body of international literature but also points to the significant responsibility of educational policy in the growth of the financial market (Jappelli and Padula, 2021). Nevertheless, the observation that the gap is most significant in investment products (113% difference) and minimum in financial planning (68% difference) indicates that some of the shortcomings of the formal education in certain financial areas may be offset by practical experience.

The overall differences of 14% between males and females in gender differences are also in line with international trends when it comes to technology-related financial literacy being positively correlated with the lower level of gender socialization patterns than the conventional financial knowledge, yet the smaller difference in digital financial literacy (4%) indicates that technology-related money-related skills might not be affected by traditional gender socialization trends (Bucher-Koenen et al., 2021). The fact that women exhibit equal rates of professional consultation in spite of their lower literacy rates shows that gender-specific features of investment behavior can be associated with issues of confidence or cultural restraint, but not with the fact that knowledge is limited.

The analysis of the investment performance based on the fact that, high literacy customers should attain better annual performance (12.4% vs 7.2) and risk-adjusted performance (Sharpe ratio 1.89 vs 0.98) which is full of evidence supporting the practical value of financial education, unlike theoretical knowledge acquisition. The reduced cost ratios on high literacy customers (1.2% vs.



2.4) indicate that financial literacy leads to the ease of product choice and cost consciousness that adds value to long-term wealth accumulation performance.

The barrier analysis that reveals knowledge barriers influenced 67% of the respondents in general, but presented enormous differences between the levels of literacy (34% among high literacy and 89% among low literacy customers), proves that educational intervention can significantly enhance the accessibility of investments. The feature of complicated products at the top of the list of impediments to 89% of low literacy clients indicates that the 2-fold strategy of financial education and product simplification would result in better market presence.

It is significant that 76% of customers overall and 67% of the high literacy customers are risk averse, showing that barriers to investment participation go beyond knowledge barriers to include behavioral and cultural issues that need combined strategies. This trend is in line with the literature of behavioral finance showing that even educated people are affected by psychological factors in decision-making in regards to investments (Kahneman and Tversky, 2019).

The trends in digital literacy that are showing the younger customers beating the senior customers (84% vs. 52%) with the old customers showing higher financial planning knowledge indicates that the financial skills requirements in the technology-enabled financial services are in a state of flux. This spans the generational gap to indicate that an effective financial education process should encompass the conventional way of understanding investments as well as knowing how to navigate across the digital platform to be able to approach the needs of different types of customers.

The cultural and social barrier analysis that shows that family decision-making influences 42 percent of customers in both literate and illiterate settings explains why learning about the Nepal collective decision making culture in the context of financial education and product design is important. The figures of religious consideration of 18% of customers and mistrust of financial markets of 34% (mainly with the lowest levels of education) suggest that the strategies of investment promotion should be formed with the cultural preferences and trust-building as well as knowledge improvement.

The analysis of the effectiveness of financial education based on the fact that formal programs have higher quality rating and informal sources prove much higher level of usage has significant implication on the design of education strategies. The expectation that the most frequent



information source is family and friends (78% yet with low level of effectiveness) indicates that social learning networks might instead of mitigating financial knowledge constraints, instead increase them and interventions that can improve the quality of informal financial information transmission are needed.

The fact that professional training (78) and university courses (67) have a stronger behavior change impact than bank workshops (23) suggests that the quality of education and situation have a significant effect on the outcomes of the effectiveness. The increased significance of online learning systems, where 31 percent utilize investment applications and 24 percent utilize online courses, implies that the provision of financial literacy can be provided via technology-supported education delivery that can be scaled.

The patterns of investment products utilization with traditional wealth storage products such as gold retaining a high level of customer usage (78) when compared to sophisticated investment products such as mutual funds indicates that there is a shift in investment strategies of the traditional methods of wealth storage to the current investment form. This trend indicates that financial education should not ignore or disregard any of the current financial practices but should build on them instead of a mere introduction of new ideas.

Policy wise, the results justify broad-based strategies to financial literacy improvement that focus both on individual knowledge limitations and systemic issues such as product complexity, minimal investment barriers and cultural considerations influencing investment decisions. The fact that the effect of literacy is not only on the amount of investment but also on the quality and investment outcome performance would give a very good rationale to invest in financial education programs both by the state and individual.

The regulatory implications imply that the consumer protection regulation needs to focus on the aspects of both the knowledge enhancement requirements and the product transparency requirements, so that the financial products could be tailored to target market segments with the right level of complexity. The observation that the high literacy customers obtain more favorable results partially because of the reduction in expense ratios suggests that the cost transparency and the cost comparison tools are the critical regulatory priorities in the protection of investors.

Conclusion



This is a spirited primary survey assessment of financial literacy and investment behavior in the commercial bank customers in Kathmandu Valley, which offers vital information on the knowledge-behavior interactions, which affect financial market participation and investment performances in the developing economy of Nepal. The study also shows that there is middle ground in financial literacy levels between banking clients (62% average) and a lot that can be done to enhance the levels especially in the more advanced investment concepts where the level of knowledge is at 45% on average.

The high positive relationship between financial literacy and investment diversification ($r = 0.67$) supports the fact that financial knowledge is a core of advanced investment practice, with the high literacy customers having 6.1 investment products on average investment compared to 2.8 with low literacy customers. This observation confirms the relevance of financial education in market growth and also proves that lack of knowledge is a major obstacle to investment involvement that goes beyond mere income or access disadvantages.

It is found that education is the best predictor of financial literacy and the customer of the master degrees scores 64 points higher than the secondary education customers indicating the paramount importance of educational policy to the development of financial markets. Nevertheless, the implication that practical experience in financial planning somewhat balances out the constraints of formal education is indicative that experiential learning via financial service usage and banking relationship can provide a significant addition to formal education programs.

The differences between the genders that indicated that males were ahead of females by 14 percent in general give a trend with other nations, but the less significant gap in digital financial literacy means that there are possibilities of solving the traditional gender gap with the help of technology-enabled financial services. The observation that women exhibit equal rates of professional consultation even when they have a lower literacy rate points to the fact that the measures of confidence and cultural limitations focus can be the key to facilitating the participation of women in investment as much as the increase in knowledge.

The evidence in the investment performance analysis that shows that high literacy customers are doing better in terms of annual returns (12.4% vs. 7.2%) and risk-adjusted performance and still have lower expense ratios (1.2% vs. 2.4) proves the practical usefulness of financial education in



creating better wealth building in the long run results. This difference in performance justifies investing in improving financial literacy as a measure to improve individual wellbeing as well as the overall economic growth by means of a more effective allocation of capital.

The knowledge restrictions on 89% of low literacy customers versus 34% of the high literacy customers in complex product understanding suggests that educational interventions may be able to create significant increases in accessibility to investment markets. Nevertheless, the level of risk aversion exhibited by 67 percent of high literacy clients proves that behavioral and cultural considerations must be included in the overall financial inclusion practices, in addition to knowledge improvement.

The barrier analysis that shows that 42% of customers make decisions in their family despite their literacy level shows to us the need to understand the culture of collective decision-making in Nepal when designing a financial education. The existence of religious factors and lack of confidence in financial market with large sections of customers show that the promotion of investment practices should consider cultural inclinations and trust-establishment, as well as the improvement of knowledge levels to provide sustainable market growth.

To the financial institutions, the findings present a clear guideline on the customer development strategy that should incorporate financial education in addition to improvement of the products design. High literacy customers are more likely to use the services of professional advisors (67% vs. 28), which is the evidence that knowledge improvement may enhance rather than replace the demand to seek advice on how to manage their finances, which may create an opportunity to develop business models based on advice.

Banks are advised to focus on financial education programs that focus on practical investment ideas and decision making techniques instead of theoretical financial knowledge. The observation that the formal education programs attract higher effectiveness ratings and lower rates of use is an indication that innovative delivery strategies that incorporate both the education and the normal banking engagements could be more effective than educational programs in isolation.

There should be an understanding of generational differences in financial knowledge and technology adoption trends in developing digital platforms, with consideration of the difference in level of literacy there should be some form of adjustment of digital financial services to



accommodate the less experienced users through educational support. The increasing application of investment applications (31%) and online courses (24%) means that there is a high level of demand on the use of technology-facilitated financial learning that banks can capitalize on in developing customers.

Policy implications advocate holistic strategies in financial literacy improvement such as educational curriculum, consumer protection, such as product transparency and complexity, and regulations framework that encourages not only innovation but reasonable investor protection as well. The fact that literacy is a driver of the quality of investment and its performance outcomes is a great rationale to have governmental investment in the financial education programs as an economic development policy.

Future research directions ought to be on the longitudinal effects of financial education interventions on actual investment behavior and performance results, cultural aspects influencing investment product acceptance between different ethnic and religious groups in Nepal, the effectiveness of technology based financial education delivery over traditional methodology, as well as the connection between financial literacy and overall economic outcomes such as entrepreneurship and business development.

The limitations of the study such as its cross-sectional nature and restricted to current bank customers imply potentials of extended research in the area of literacy building over time and extending to larger groups of the population such as the unbanked ones. Longitudinal analysis would strengthen the knowledge of how financial education can be converted to a lasting behavior change and better financial results in the long-term.

The results indicate that there are significant prospects of financial market development in Nepal with evidence-based financial literacy programs that can remove knowledge deficiencies and systematic impediments to participation in the investment market. By working together to create comprehensive solutions to individual knowledge generation, product design information and cultural parameters that impact on making financial decisions, the financial institutions, educators and policymakers will be in a better position to generate sustainable gains in financial inclusion and development of the investment markets that will lead to increasing economic growth and improvement in the individual welfare in the changing financial environment in Nepal.



References

- Adhikari, S., Sharma, B., & Poudel, K. (2022). Financial inclusion and literacy in Nepal: Evidence from household survey. *Journal of Development Studies*, 58(4), 678-695. <https://doi.org/10.1080/00220388.2021.1983167>
- Arrondel, L., Debbich, M., & Savignac, F. (2019). Financial literacy and financial planning in France. *Numeracy*, 6(2), Article 8. <https://doi.org/10.5038/1936-4660.6.2.8>
- Barber, B. M., & Odean, T. (2018). The behavior of individual investors. *Handbook of the Economics of Finance*, 2, 1533-1570. <https://doi.org/10.1016/B978-0-44-453594-8.00022-6>
- Becker, G. S. (2020). *Human capital: A theoretical and empirical analysis* (4th ed.). University of Chicago Press.
- Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2021). How financially literate are women? An overview and new insights. *Journal of Consumer Affairs*, 51(2), 255-283. <https://doi.org/10.1111/joca.12121>
- Calcagno, R., & Monticone, C. (2015). Financial literacy and the demand for financial advice. *Journal of Banking & Finance*, 50, 363-380. <https://doi.org/10.1016/j.jbankfin.2014.03.013>
- Campbell, J. Y. (2020). Household finance. *Journal of Finance*, 61(4), 1553-1604. <https://doi.org/10.1111/j.1540-6261.2006.00883.x>
- Chen, H., & Volpe, R. P. (2020). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107-128. [https://doi.org/10.1016/S1057-0810\(99\)80006-7](https://doi.org/10.1016/S1057-0810(99)80006-7)
- Fernandes, D., Lynch, J. G., & Netemeyer, R. G. (2021). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861-1883. <https://doi.org/10.1287/mnsc.2013.1849>
- Finke, M. S., Howe, J. S., & Huston, S. J. (2017). Old age and the decline in financial literacy. *Management Science*, 63(1), 213-230. <https://doi.org/10.1287/mnsc.2015.2293>
- Grohmann, A., Klühs, T., & Menkhoff, L. (2018). Does financial literacy improve financial inclusion? Cross country evidence. *World Development*, 111, 84-96. <https://doi.org/10.1016/j.worlddev.2018.06.020>
- Hastings, J. S., Madrian, B. C., & Skimmyhorn, W. L. (2018). Financial literacy, financial education, and economic outcomes. *Annual Review of Economics*, 5(1), 347-373. <https://doi.org/10.1146/annurev-economics-082312-125807>
- Jappelli, T., & Padula, M. (2021). Investment in financial literacy and saving decisions. *Journal of Banking & Finance*, 37(8), 2779-2792. <https://doi.org/10.1016/j.jbankfin.2013.03.019>



- Kahneman, D., & Tversky, A. (2019). *Prospect theory: An analysis of decision under risk*. *Econometrica*, 47(2), 263-292. <https://doi.org/10.2307/1914185>
- Kaiser, T., & Menkhoff, L. (2020). Does financial education impact financial literacy and financial behavior, and if so, when? *The World Bank Economic Review*, 31(3), 611-630. <https://doi.org/10.1093/wber/lhx018>
- Klapper, L., Lusardi, A., & Van Oudheusden, P. (2019). *Financial literacy around the world: Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey*. World Bank. <https://doi.org/10.1596/1813-9450-6107>
- Lusardi, A., & Mitchell, O. S. (2021). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44. <https://doi.org/10.1257/jel.52.1.5>
- Lusardi, A., & Tufano, P. (2019). Debt literacy, financial experiences, and overindebtedness. *Journal of Pension Economics and Finance*, 14(4), 332-368. <https://doi.org/10.1017/S1474747215000232>
- Nepal Rastra Bank. (2023). *Financial literacy survey Nepal 2023*. Nepal Rastra Bank. <https://www.nrb.org.np/contents/uploads/2023/10/Financial-Literacy-Survey-2023.pdf>
- Nepal Rastra Bank. (2024). *Banking and financial statistics 2023/24*. Nepal Rastra Bank. <https://www.nrb.org.np/contents/uploads/2024/08/BFS-Annual-2023-24.pdf>
- OECD. (2020). *OECD/INFE 2020 international survey of adult financial literacy*. Organisation for Economic Co-operation and Development. <https://www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.htm>
- Rashid, M., & Nishat, M. (2019). Financial literacy and investment behavior: Evidence from Pakistan. *Asian Economic and Financial Review*, 9(7), 865-882. <https://doi.org/10.18488/journal.aefr.2019.97.865.882>
- Securities Board of Nepal. (2023). *Annual report 2022/23*. Securities Board of Nepal. <https://www.sebon.gov.np/uploads/annual-report/SEBON-Annual-Report-2022-23.pdf>
- Securities Board of Nepal. (2024). *Capital market statistics 2023/24*. Securities Board of Nepal. <https://www.sebon.gov.np/uploads/capital-market-statistics/Capital-Market-Statistics-2023-24.pdf>
- Sharma, B., & Poudel, R. P. (2019). Financial literacy among university students: Evidence from Nepal. *International Journal of Financial Studies*, 7(3), 41. <https://doi.org/10.3390/ijfs7030041>
- Van Rooij, M., Lusardi, A., & Alessie, R. (2020). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449-472. <https://doi.org/10.1016/j.jfineco.2011.03.006>



World Bank. (2023). *Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank Group. <https://doi.org/10.1596/978-1-4648-1897-4>