

# Validating the Financial Literacy Construct- Impressions and Reflections

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## Abstract

Financial literacy (FL) literature has gained momentum in the last one and half decades in the Indian context with the government's active role. FL encompasses knowledge of financial instruments and practices in its scope. The current study aims to measure FL by collecting primary data from the students, salaried class, traders and businessmen of two towns of Tripura, a North Eastern Indian state. For executing the study, it prefers a cross-sectional research design. Data from 160 respondents were collected using a self-administered interview-schedule applying disproportionate stratified random sampling technique. A pre-test with randomly chosen 30 respondents affirms its wording, content validity and ordering. The tool's reliability and validity further support applying inferential statistics. Significant cross tabulation results affirm impacts of demographics on the levels of FL. For assessing the perceptual differences in FL basics between the two groups of respondents, that is, students-salaried class and traders-businessmen, it applies WPG analysis indicating significant perceptual differences about basic FL, and FL awareness levels. For evaluating whether the four types of sample respondents classified based on their occupations have any significantly differential influences on FL awareness, the Pearson Correlation Coefficient results affirm the same. Policy implications, limitations and scope of further research also indicated.

**Keywords:** Financial Literacy, Survey, Disproportionate Stratified Random Sampling, Inferential Statistics

**JEL Classification:** C83, D14.

## Introduction

The term 'Financial Literacy' (hereafter FL) refers to the ability of a person to make informed judgments, effective money management decisions, and the capability to balance a cash book and choose investment avenues (Hung et al., 2012). FL encompasses knowledge of financial instruments and practices in its scope. As literature is unlikely to explicitly define the term FL, and at least eight studies define FL differently (Huston, 2010), raising conflicts. Accordingly, for the current study, the scope of FL is confined to financial knowledge and financial skill. Financial knowledge, identified as the confidence level of an individual in applying the same and is unlikely to define the factual knowledge exclusively, relates to FL. The knowledge and understanding of personal finance, that is, the cognitive portion of FL, are studied in the literature (Förster et al., 2017). The significant associations between financial knowledge and behaviour are documented, as subjective knowledge is likely to treat as a strong predictor of financial behaviour compared to objective knowledge. Literature concurs on the significance of managing personal finance (the financial skill) for an individual's economic well-being and any such intellectual disability likely to attract serious problems (see Goyal & Kumar, 2021), albeit the fact that the timing and areas of applications of such skill differ. FL identifies as a core consumer skill that came into the limelight during challenging financial situations. Extending the scope of the definition of the FL, that is, financial knowledge and skills, a third dimension - the critical dimension, refers to critically analysing the pros

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and cons of any financial decision. Scholarship indicates internationally insignificant levels of FL amongst the financial services accessing consumers, especially those having lower levels of education and incomes among the minorities; and even high-income countries which worsened in developing and under-developed countries (Lusardi & Tufano, 2015). FL has significant positive impacts on financial behaviour and on financial education, which, in turn are likely to yield positive outcomes.

Literature validates the significance of personal financial literacy (PFL) (Xu & Zia, 2012) along with the adverse impact of lack of it, for example, increased debt obligations, high borrowing costs, lopsided retirement planning, inadequate safety net and even poor wealth management practices (Kaiser et al., 2022). Literature paints the importance of PFL like retirement planning (Lusardi & Mitchell, 2017), less debt and debt anxiety (Noviarini et al., 2021), credit card borrowings (Van Rooij et al., 2011), wealth accumulation (Jappelli & Padula, 2013), better financial practices (Clark et al., 2014), stock ownership and stock market returns (Hastings & Mitchell, 2020). FL is a 21st-century skill as individuals apply mathematics (numeracy) in financial decisions (Sawatzki, 2017). Literature suggests knowledge and skills accumulated with higher FL improve human capital (Bialowolski et al., 2020) and leads to improved financial decisions. To become numerate, one should be capable of critical thinking for real-life problems' solutions, that is, to say much more than simply accessing mathematical skills. Lack of numeracy significantly predicts loan defaults and excessive debt-taking attitudes. The importance of conducting financial education programs (FEPs) indicate significant improvements in FL but not financial behaviour (Agarwal et al., 2017), contesting literature indicating positive associations (Hilgert et al., 2003). The positive influence of financial knowledge gathered from multiple sources, such as FEPs, which is likely to lead to individual and household financial behaviour and financial satisfaction and enhances debt-repayment rates. Financial socialisation experiences such as parental influences on money management mechanisms have significantly improved FL, which, in turn, is likely to improve financial behaviours but with a proxy of simultaneous considerations of social and psychological impacts.

In the Indian perspective, empirical and theoretical studies on FL were published and presented in seminars and conferences addressing national and state-specific scenarios. The current study extensively reviews those to trace out the research gap, if any, and to frame the research hypotheses. Scholarship reports studies on status of FL of Indian youths (Mahapatra et al., 2016), financial conditions revealing no savings of women and men, difficulties in sustainability if sources of incomes ceases to exist (Bihari, 2012), India's poor performance in the FL index (MasterCard Worldwide, 2013), FL and personal finance decisions (Deb, 2016a), applying FL as evident from saving for girl child in Sukanya Samriddhi Yojana (Deb, 2016b), Bank account holders perception analysis about Prime Minister Jan Dhan Yojana (Deb & Das, 2016). Related literature further suggests perception studies on multiple facets of personal finance and FL such as investors' perceptions about Kisan Vikas Patra (Deb & Paul, 2015), perceptions regarding cash withdrawals from ATMs (Deb & Datta, 2015), perceptions about credit cards (Deb & Lodh, 2016) and FL campaign for popularising e-banking and mobile banking, future plan for increasing FL, FL awareness levels of college students (e.g., Agarwal et al., 2017) and strategies for financial wellbeing. Related literature indicates studies report the assessment of FL levels of multiple stakeholders with an exception (e.g., Mahapatra et al., 2016), which reports basic FL levels and even only with young respondents of twin cities of Telangana. Further, no such comprehensive study with multiple strata of respondents on assessing the fundamentals of FL was attempted, at least in North Eastern India, where financial inclusions abysmally lie at lower levels (Tamilarasu, 2014). Considering those, the current study motivates to close the identified literature gap with empirical evidence.

The significance of the study towards literature is multiple. First, it reports a new vista of findings on FL basics and FL awareness levels amongst four different types of respondents of Tripura, a North-Eastern Indian state, probably for the first time. Secondly, affirming literature, the results report the significant influence of demographics on FL levels but does not indicate higher levels of FL amongst women, contesting literature (Brown & Graf, 2013) and among married (Hung et al., 2012). Third, it shows significant differences in FL basics among students-salaried class and traders-businessmen.

Furthermore, it documents that students perform better in FL among the strata. Finally, it reports significant perceptual differences in financial literacy awareness amongst all types of respondents.

The research aims to assess the level of basic understanding of the financial literacy of the sample respondents.

The remainder of the study includes settings in Section 2, research methodologies in Section 3, results and a discussion of those findings in Sections 4 and 5 presents the conclusion.

## The Setting

### Demographics and FL

Literature on the impacts of demographics such as education, gender and income on basic FL usually reports a significant influence (Cude et al., 2019; Karakurum-Ozdemir et al., 2019), and recent literature suggests income level and occupation affect confidence in financial knowledge (Ansari et al., 2023). The impacts of selective demographics on FL summarises below.

#### Gender

Literature reports the associations between gender and FL (Erner et al., 2016), which suggests men have higher levels of FL than women and older women (Lusardi & Mitchell, 2014). Again, FL reduces debt anxiety in men and increases the level of risk tolerance of women (Noviarini et al., 2023).

#### Age

Literature paints young and old people lack FL vis-à-vis middle-aged people (Lusardi & Mitchell, 2014) but contests literature which concludes old population has higher FL, say in New Zealand (Noviarini et al., 2023) and in Germany (Stolper & Walter, 2017). Youngs' excessive debt-assuming tendency leads to debt traps. In contrast, few scholars indicate people who oscillate between 25 and 65 years perform better in FL assessment tests (Agarwal et al., 2017). Empirical evidence suggests that FL has a positive impact on retirement planning among the older population (Hoffmann & Plotkina, 2020).

### Marital Status

Literature documents that married women are less financially literate than their spouses (Hung et al., 2012) and face difficulties in managing finance as their attitudes towards financial needs are unique. Moreover, singles have lower levels of FL than married (Brown & Graf, 2013; Xue et al., 2019).

### Education Levels

Literature indicates education significantly influences FL, for example, college students outperform others in FL awareness surveys (Peng et al., 2007) and financial illiteracy is prominent among with poorest educational background (Noviarini et al., 2021).

### Income Levels

Literature suggests exposure to FL results in enhanced incomes for some jobs (Calamato, 2010), while its absence is likely to minimise income levels and performances (Kim & Garman, 2004).

Based on the above, the relevant hypothesis is as follows:

*H<sub>1</sub>: Selective demographics significantly influence financial literacy.*

### Financial Literacy

The literature documents the influence of numeracy in different PF decisions, such as stock market investments, and such skill is treated as a strong predictor of household wealth accumulation when the respondents can reply correctly to some basic FL-related questions (McArdle et al., 2009). Empirical research suggests the pitfalls of inadequate levels of FL, for example, households' confinements into debt traps. Research documents the importance of managing monies by students for earning, saving and wealth accumulation (Berry et al., 2015). The importance of FL for multiple household financial decisions such as savings, wealth accumulation and retirement planning reports significant outcomes. The FL awareness motivates households for financial decisions, for example, retirement planning, designing and managing portfolios, refraining from stock market

speculations and selection of credit and debt choices (see Lusardi & Tufano, 2015). Established links between FL and financial well-being and the capability to manage stresses concluded that FL positively correlates with financial well-being (Shusha, 2016). Furthermore, literature validates the differentiated attitudes towards money and its positive association with FL. Based on these, the hypotheses set as:

*H<sub>2</sub>: Significant perceptual differences exist about financial literacy basics.*

*H<sub>3</sub>: Significant perceptual differences exist about financial literacy awareness.*

## Methodology

### Research Design

Global literature concurs respondents poorly response to FL questions (Potrich et al., 2015) and that overconfidence in financial knowledge or inflated self-rated financial awareness have significant adverse impacts on one's financial behaviour (Boora & Agarwal, 2018). Literature suggests most of the prior studies preferred objective financial knowledge to measure FL and used a set of fundamental questions about FL. Another strand of research used subjective financial knowledge and preferred a self-rated assessment of one's understanding of financial knowledge. Albeit both measures have their uniqueness, the latter is likely to measure only the psychological factors of financial decisions (Hastings et al., 2013), which motivate most of the research to prefer the former (Ansari et al., 2023). Albeit the former has been extensively used worldwide, in the last couple of years, research attempts to assess perceived financial awareness (e.g., Cude et al., 2019). A third group of research argues the combination of objective and subjective FL as the most appropriate measure as the former refers to the actual financial knowledge, and the latter reflects one's application willingness of FL. Again, the willingness to acquire financial knowledge instead of the mere acquisition of such knowledge could lead to improved financial behaviour (Karakurum-Ozdemir et al., 2019). Against those backdrops, the current study prefers the objective financial knowledge to measure FL. The study adopts a cross-sectional study design for accessing multiple advantages with a survey strategy conducted during January–June 2023.

## Method

### Structuring Interview Schedule

Since respondents generally are reluctant to share their financial details, personal interviews are likely to be an effective tool for unearthing the truth. It primarily reviews overseas research papers on FL to assimilate the primary facets of the subject for its replica in the Indian context. Accordingly, applying a few keywords, around 189 research articles were downloaded. After that, 33 thematic questions prepared oscillated in multiple parameters of FL. A pilot study with 30 randomly chosen respondents was conducted to assess the correctness of words, order, and sentence construction. The reliability test result indicates retaining 30 items scored .5 and above for the final survey.

### Sampling Technique

Literature suggests in social science studies such as FL, participants are from different strata of society, for example, students (Marton & Pang, 2008; Ergun, 2018), salaried class (Bhushan & Medury, 2013) and entrepreneurs (Oseifuah, 2010). Again, for prioritising internationally acclaimed FL education (Atkinson & Messy, 2011) survey is preferable for assessing the perceptions of the sample respondents. Accordingly, in line with the literature, the study hypothesises that university students, salaried class, traders and businessmen of Agartala and Kailasahar, two towns of the North Eastern Indian state Tripura as the study population. It gathers data from 160 sample respondents, that is, 40 each from the four-stratum resembling homogeneous characteristics applying a disproportionate stratified random sampling technique. The finalisation of the sample size was in line with the advice of the social scientists (Isreal, 2013). As far as the sample size is concerned, the results of any inferential statistics carried out with any sample size  $(n) > 100$  when  $N > 1,00,000$ , that is, infinite study population generally provides the same results even taking more samples (Israel, 2013). Furthermore, the current study considers the guidelines of Roscoe (1975) advocated that an adequate sample size of 30-500 is ideal for conducting social science studies, supporting by others (e.g., Tabachnick & Fidell, 2013). The enumerator(s) has/have tried to strike a balance

among the men and women respondents albeit in a male-dominated culture (i.e., in study areas), the results indicate higher numbers of male respondents (70.62%).

### Data Collection

#### Primary Data

Literature concurs with the importance of conducting surveys for detecting financial knowledge deficits and chalking out FL training programs for a specific population (Perotti et al., 2013). Accordingly, simple, relevant, short, easily differentiable, selective and items addressing basic personal finance were exclusively incorporated into the schedule, following literature (see Lusardi & Mitchell, 2011). Furthermore, considering the critical assessment of the widely used FL survey questionnaires (OECD, 2016), the current study prefers to design a self-administered interview-schedule instead of adoptions and adaptations of those questionnaires. In Section I, ten preliminary questions on a nominal scale; in Section II, 20 items of FL on the ordinal scale for capturing human capital; and in Section III, 10 items on a 5-point Likert scale (interval scale) designed for assessing the FL awareness. After due consideration of the debate in the literature, it assumes the Likert scale as an interval scale as the study desires to know the summated scores.

#### Secondary Data

The study accesses three sources of secondary data, for example, as a primary source, it reviews original research article of global publishers; as secondary sources, it

reviews selective review papers, monographs and policy papers and finally, as tertiary sources, it considers a few related websites, Google Scholar, Research Gate, Web of Science JSTOR and SSRN database.

### Data Analysis Strategy

Statistical Package for Social Science of IBM-version 20 preferred by the study.

### Variables

Variables of the study have been summarised as under:

**Table 1: Study Variables\***

Predictors	Outcomes	Extraneous
Demographics	Financial Literacy	Peer-Group Influences
Respondents perceptions	Financial Literacy and Financial Awareness	

\*Author’s compilation.

The variables categorise as predictors, which could significantly influence the outcomes under the control of confounding variables as the interviews took place separately, which, in turn, probably curbs internal validity threats.

### Significance Level

For carrying out the statistical test the significance level ( $\alpha$ ) assumes as 5%.

### Statistical Tests

**Table 2: Statistical Tests\***

Test	Variables						Objectives	Null Hypotheses
	Predictors			Outcomes				
	Name	Measurement	No.	Name	Measurement	No.		
Weighted Perception Gap Analysis	Occupations	Nominal (4 types of Categorical)	4	FL Basics	Nominal (2 types of Categorical)	2	To determine any statistically significant differences between the weighted means of the perceptions of the two independent saver groups (single and married).	H <sub>02</sub>

Test	Variables						Objectives	Null Hypotheses
	Predictors			Outcomes				
	Name	Measurement	No.	Name	Measurement	No.		
Pearson's Correlation	Occupations	(4 types of Categorical)	2	FL Awareness	Interval	5	To assess the degree and direction of the relationship between two variables that are at least assessed on an interval scale.	H <sub>03</sub>

\*Author's compilation.

## Results and Discussion

### Descriptive Statistics

Results report that the lion's share of the participants are men (70.62%), in the age group of 35–44 years (41.7%), Hindus (38.9%), Scheduled Caste (43.75%), married (70.62%), graduates (31.87%), monthly income in the tune of INR .02–.03 million (34.38%), monthly savings of INR .02–.03 million (36.87%) and most of the savings are with General Provident Fund/National Pension System (42%).

The responses to the questions on basic financial literacy indicate mixed results. The replies to a good number of questions show a lack of fundamentals of FL, for example, the majority of the respondents are reluctant on the fact of the time value of money (52.5%), savings in diversified assets could reduce overall risks (75.6%) and lacking fundamental numeracy skill (66.9%); in conformity with global literature (Lusardi & Tufano, 2015). Payment of equated monthly interest (EMI) under a flat rate reduces the interest burden, which remains unknown for most

respondents (74.4%). Furthermore, most of them lack social security insurance schemes (55.62% & 51.25 %) and have no idea of the rule of depositing of amount in public provident fund accounts within 5th of a month to earn the interest of that month (72.5%) and surprisingly, the benefits of online transfer using Google app (79.38%) albeit most of them affirm knowing the presence of Bharat Interface for Money app (83.12%) -probably due to widespread publicity. The respondents replied about the tax savings on savings bank interest up to INR .01 million (63.75%), levying tax on fixed deposit interest (73.12%) and tax exemption on life insurance maturity proceeds (63.75%). Moreover, they rightly identified cash as the most liquid asset (38.13%) but did not access information about scopes of earning discounts on digital payments at petrol pump outlets (51.25%).

### Inferential Statistics

#### Cross Tabulations

To assess the impacts of demographics on the FL (H<sub>01</sub>) it runs Cross Tabulations and Table 3 presents the results.

**Table 3: Summary Results of Cross Tabulations\***

Variables		Results			
Demographics (Predictors)	Financial Literacy (Outcome)	Pearson's Chi-Square Value	Likelihood Ratio	Linear-by-Linear Asso.	Significance Value**
Gender	Financial Literacy	34.345	36.187	6.10	.001
Age	Financial Literacy	32.145	34.753	5.77	.000
Marital Status	Financial Literacy	31.957	32.795	5.54	.004
Education Levels	Financial Literacy	32.101	33.753	5.20	.002
Income Levels	Financial Literacy	31.973	32.551	5.13	.003

\*Primary data, \*\*p<.05.

Pearson's Chi-square values show the associated null hypothesis indicating the independence of rows and

columns as supported by lower significance values reflected in the 4<sup>th</sup> column. The lower significant values

indicate the presence of ‘no relationship.’ The 2<sup>nd</sup> column presents Likelihood ratios indicating the minimum effect of a smaller sample size like the 1<sup>st</sup> column, supporting literature (Hays, 1963). Linear-by-Linear Association test results suggest the nature of the data set. The Pearson

correlation coefficient results at 1 d.f. with an approximate chi-squared distribution likely to yield significant outcomes ( $p < .05$ ) supporting to nullify  $H_{01}$ . Results provide empirical evidence for the likely conclusion that demographics significantly impact the FL.

### Weighted Perception Gap (WPG) Analysis

#### Students & Service Holders

**Table 4: WPG of Influence of TVM\***

Options	Students				Service Holders				WPG
	1	2	3	4(3/2)	5	6	7	8(7/6)	9
	Frequency ( $X_1$ )	Weight ( $W_1$ )	$W_1 X_1$	WAM	Frequency ( $X_2$ )	Weight ( $W_2$ )	$W_2 X_2$	WAM	(8-4)
Yes (1)	30	1	30	-	8	1	8	-	-
No (2)	10	2	20	-	32	2	64	-	-
<b>Total</b>	40	3	50	<b>16.67</b>	40	3	72	<b>24</b>	<b>7.33</b>

\*Primary data.

Table 4 reports the Weighted Perception Gap (WPG) of the 1st question about the importance of the time value of money (TVM) between the students and salaried class respondents. The result indicates the presence of WPG measured as 7.33. The result suggests that salaried respondents lack basic knowledge of TVM, resulting in a WPG of 7.33. Similarly, computation of the WPG for the rest of the 19 questions about the fundamental FL are 1.34, 1.67, 1.34, (.33), 2.67, 2.34, 2.33, (2), 3.33, 4, 4.67, 0.33, 0.34, 5.34, 5.67, 4.66, 3, 5 and 5 respectively. Amongst the 20 questions, results show that for two questions (numeracy test in semi-annual compounding

and life insurance proceeds are tax exempted), there are negative WPG, for the remaining 18 questions, the WPG exist. Moreover, the highest WPG exists for a discount on digital payments in petrol pumps at 5.34. The positive WPG indicates substantial differences amongst the students and salaried class respondents regarding their knowledge of FL fundamentals. Results document students have more knowledge about the fundamental FL than the salaried employees. Albeit the WPG report more than one for most of the questions but about the most liquid asset identification, such WPG computes marginally at 0.33.

#### Traders and Businessmen

**Table 5: WPG of Influence of TVM\***

Options	Traders				Businessmen				WPG
	1	2	3	4(3/2)	5	6	7	8(7/6)	9
	Frequency ( $X_1$ )	Weight ( $W_1$ )	$W_1 X_1$	WAM	Frequency ( $X_2$ )	Weight ( $W_2$ )	$W_2 X_2$	WAM	(8-4)
Yes (1)	24	1	24	-	14	1	14	-	-
No (2)	16	2	32	-	26	2	64	-	-
<b>Total</b>	40	3	56	<b>18.67</b>	40	3	78	26	7.33

\*Primary data.

Table 5 reports the WPG about the basic knowledge of FL about the TVM between traders and businessmen computed as 7.33. Adopting the same procedure, the WPG for the remaining 19 questions report as 5.33, 1.34, 2, 2.67, 0.33, (1), 4, 1.33, 8.34, (0.33), 0.66, 1.93, (1.33), (1.33), (0.67), 1.33, (1), 0.66 and 2.33, respectively. Out of

20 questions, results show negative WPG for 6 questions and positive for 14 respectively. Results document the highest WPG as 7.33 for the TVM while the lowest as (1.33) for knowledge about the Bharat Interface for Money app and availability of discount on petrol pump outlets. Accordingly, significant WPG results for both

group, students and salaried respondents, and traders and businessmen document likely rejection of the  $H_{02}$ ,

### Pearson's Correlation Analysis

**Table 6: Correlations between Occupations and Financial Literacy Awareness\***

Predictor	Outcome	Significance Value (p)	Correlation Value (r)
Occupation- Student	FL Awareness	.000**	.729
Occupation-Salaried class	FL Awareness	.004**	.655
Occupation-Traders	FL Awareness	.003**	.611
Occupation-Businessmen	FL Awareness	.001**	.618

\*Primary data, \*\* $p < .05$ .

It runs Pearson's correlation coefficient for assessing the associations between respondents' occupations and their FL awareness levels. The significant results presented in Table 6 [( $r = .729$ ,  $n = 40$ ,  $p = .000$ ), ( $r = .655$ ,  $n = 40$ ,  $p = .004$ ), ( $r = .655$ ,  $n = 40$ ,  $p = .004$ ), ( $r = .611$ ,  $n = 40$ ,  $p = .003$ ) and ( $r = .618$ ,  $n = 40$ ,  $p = .001$ )] support likely to reject  $H_{03}$  since a strong positive association were established. In other words, it is probably to accept the corresponding research hypothesis that significant perceptual differences exist in FL awareness, supporting scholarship (Lusardi & Tufano, 2015).

### Conclusion

The study attempts to influence the basics of FL and its awareness comparatively among the sample respondents of two towns of Tripura. Accessing the digital library, an extensive review of downloaded research articles and study reports guide the study to design the research hypotheses and questions/items of the interview-schedule. Survey data gathered from 160 respondents oscillated in four groups. A pre-test with randomly chosen 30 respondents affirms its wording, content validity and ordering. The tool's reliability (a good measure) and validity (a right measure) further suggest applying inferential statistics. Significant Cross tabulation results support demographic influences on FL's likely rejection of  $H_{01}$ . For assessing the perceptual differences in FL basics between the two groups of respondents, that is, students-salaried class and traders-businessmen, it applies WPG analysis producing a significant outcome for likely rejection of the  $H_{02}$ . For evaluating whether the four types of sample respondents classified based on their occupations have any significantly differential

indicating significant perceptual differences about FL fundamentals.

influences on FL awareness, the Pearson Correlation Coefficient results indicate likely rejection of  $H_{03}$ .

The study acknowledges a few limitations. At first, it exclusively considers related literature on FL published in English, specific variables, hypotheses, a relatively confined study area, and a smaller sample size. Furthermore, as it motivates to assess FL, it has duly acknowledged no consensus on the exact definition of FL. Second, it designs and administers an interview schedule in preference to the adoption/adaptation of any widely used questionnaire. Third, questionnaires with a 5-point Likert scale might have a central tendency bias problem, as the literature concedes (Losby & Wetmore, 2012). Fourth, it is likely to have been partially suffering from 'social desirability bias,' that is, a few participants could have responded in tune with the enumerator, affirming literature (Crowne & Marlow, 1960). Finally, it duly considers the limitations of the statistical tools having at least partial impacts on the results.

It offers multiple practical implications for the stakeholder. First, the results could be significant for policymakers in designing financial inclusion plans and strategies. Further, FL education programs could frame in light of the findings. Second, the results likely could shed light on the existing and potential savers for revisiting their saving portfolios by incorporating term plans. Third, the report could be used for preparing monthly household budgets, short-term and long-term saving plans, choosing the EMI calculation technique for home and car loans, refilling fuels, and depositing in PPFs. Fourth, uncovered households could enrol under PMJJBY and PMJSBY in light of the current study findings. Again, the taxpayers could consider taxation aspects on

interests and donations. Fifth, policymakers may use the report to redesign the school and college curriculum by incorporating fundamental financial education topics such as saving, investments, household budgets and credit. Finally, stakeholders may use the study report to assess the benefits of digital payments with exposure to different apps such as the Bharat Interface for Money and Google Pay as indicated in the study report.

The study sketches a roadmap for future research. First, comparative FL awareness studies could attempt district, city and state-wise assessment of the current status, areas of deficits, and even policy formulations for improving the same. Second, the research could assess risk, insurance, budget and savings literacy in state-level comparative studies. Third, in tune with the literature, research endeavours could study the feasibility of incorporating financial education programs in schools. Fourth, the study could assess a significant direct effect of FL on anxiety in the Indian context, considering the socio-economic variables, corollary with foreign studies. Finally, the excluded variables such as self-efficacy, cognitive level and financial socialisation and their impacts on FL could be in the future research agenda.

## Conflict of Interest (COI) and Funding Statement

The 1<sup>st</sup> and corresponding author, on behalf of all authors, declares no conflict of interest related to the present manuscript with others and between other authors. Moreover, no funders provided funds for executing the study; the contents are plagiarism-free, and all disclaimers are applicable. The authors are grateful to the respondents and assure strict adherence to data collection and data analysis ethicality.

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