Empowering Financial Well-being through Financial Literacy: A Comparative Analysis of Welfare recipients and non-recipients in Gaya District, Bihar

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ABSTRACT

This study examines the empowerment of financial well-being by providing valuable insights into the level of financial literacy between the welfare recipients and non-recipients in Gaya district, Bihar. The data was collected by structured interviews from 128 heads of households, including 65 welfare recipients and 63 non-recipients, to assess their financial literacy in areas of money management, emergency preparedness, and retirement planning. Pearson's $\chi 2$ test and logistic regressions were used for data analysis. The results of the logistic model state that years of schooling have significantly affected the different dimensions of financial literacy whereas age, monthly income and homeownership have also shown marginal significance. The analysis also reveals that the financial literacy level of welfare recipients is significantly lower compared to non-recipients. Hence, it suggests the need for financial literacy initiatives for welfare recipients, which shall also empower them to make informed financial decisions and ultimately improve their overall financial well-being. Such measures can contribute to the economic upliftment and better socio-economic conditions in Gaya district, Bihar.

Keywords: Financial Literacy, financial wellbeing, Gaya, welfare recipient

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INTRODUCTION

Financial literacy has garnered significant attention from academicians, policymakers, financial professionals, and consumer advocates as a vital skill set required to effectively manage money and make sound financial decisions (Remund, 2010). Financial literacy encompasses a combination of awareness, knowledge, skills, attitudes, and behaviours that are essential for achieving individual financial well-being (OECD, 2011). While financial literacy goes beyond mere knowledge, incorporating the practical application of financial concepts, financial knowledge remains a crucial component of overall financial literacy (Huston, 2010).

The goal of financial literacy is to empower individuals to attain financial well-being, leading to better socio-economic conditions compared to those with limited financial knowledge. The study has been carried out in one of the backward states of India and in one of the aspirational districts as per NITI Aayog -that is Gaya district of Bihar. According to NITI Aayog (2023), a considerable percentage (35.43%) of households in Gaya live below the poverty threshold. It necessitates a comprehensive understanding of financial literacy and its potential impact on socio-economic well-being of household.

The research aims to shed light on the financial literacy levels of individuals in Gaya district by contrasting two distinct categories of beneficiaries: welfare recipients and non-recipients. Welfare recipients receive benefits through various public provisioning schemes, while non-recipients do not have access to such welfare support. Investigating the financial literacy of these two groups can provide valuable insights into the impact of financial literacy on vulnerable populations.

The review of literature delves into important variables influencing financial literacy, including education, income, gender, age, marital status, work status, home ownership, and household size. Understanding the role of these factors in financial literacy will help to identify potential disparities and areas for intervention to enhance financial literacy in the region.

Through a multidimensional approach, the study examines financial literacy in Gaya district from three distinct personal finance perspectives: money management, emergency preparedness, and goal-oriented investment. These facets provide valuable insights into the financial decision-making capabilities of individuals and offer a comprehensive view of their financial well-being. By analysing financial literacy in the context of welfare recipients and non-recipients, the study aims to explore how financial knowledge can potentially uplift households from poverty margins.

By addressing the research gap in financial literacy in Bihar specifically in the Gaya district, this study aims to contribute valuable insights to the existing literature. The findings are expected to inform tailored strategies and interventions to enhance financial literacy, promote financial inclusion, and ultimately uplift the socio-economic well-being of households in the region. The results could be instrumental in formulating targeted policies and programs that acknowledge the diverse needs of individuals and lead to a more inclusive and sustainable financial ecosystem in Gaya district, Bihar. The paper is divided into four sections. Section I deals with the introduction, literature review, objectives, and hypothesis; Section II deals with methodology; Section III presents the result and findings and Section IV presents the conclusion of the paper.

Literature Review

This section presents a brief review of the literature with regard to financial literacy and its correlates. As presented in Table 1, the different correlates found from the literature are – given below.

Table-1, Important variables derived from literature review on socio-economic factors affecting financial literacy

Socio-economic indicator	**Literature**	**Description**
Education	Markow and Bagnaschi, (2005); The Social Research Centre, (2008); Dvorak and Hanley, (2010); Lusardi et al., (2010)	These studies have observed that education is the most important factor of financial literacy when they examined the literacy of college employees regarding their comprehension of retirement plans and investment options. Moreover, the ratings for financial literacy increase with increased levels of education.
Income	The Social Research Centre, (2008); Dvorak and Hanley, (2010); Lusardi et al., (2010); Monticone, (2010)	These studies have observed that individuals with higher income and wealth are likely to have high financial literacy scores. The study by the Social Research Centre (2008) investigate that financial literacy in Australia serves as an example and the findings were that people with family incomes of less than \$25,000 had lower financial literacy scores, whereas those with household incomes of \$150,000 or more had higher scores. Additionally, individuals receiving benefits or government allowances as well as those with savings and investments of less than \$2,000 (as opposed to those with \$500,000 or more) performed substantially worse.
Gender	Markow and Bagnaschi, (2005); The Social Research Centre, (2008); Dvorak and Hanley, (2010);	According to the studies, there are gender variations in financial literacy scores, women are reported to have generally lower scores compared to men. These findings are concerning, especially for women between the ages of 23 and 28 as well as those who are 70 or older.
Age	Hilgert and Hogarth, (2002); The Social Research Centre, (2008); Dvorak and Hanley, (2010)	If age influences one's financial literacy, the evidence seems to be conflicted. For example, Hilgert and Hogarth, (2002) and The Social Research Centre, 2008 notes the existence of an inverse U-shape, highlighting the middle-aged group as being more financially literate than the relatively young or old. but there is no correlation between age and financial literacy was found by Dvorak and Hanley.
Marital Status	Monticone, (2010);	Marital status also has an impact on

	Sekar and Gowri, (2015); Pg Md Salleh, (2015)	financial literacy. According to past studies, it was found that married employees have higher financial literacy levels as compared to unmarried employees.
Work Status	Monticone, (2010); Pg Md Salleh, (2015)	Working status affects the level of financial literacy. These studies examine financial literacy with regard to wealth, they also mind the working status of the respondents and find that those respondents who are employed have higher financial literacy than unemployed people. According to Monticone, white and self-employed had higher financial literacy than people who are outside the labor force.
Home Ownership	Lusardi, Cossa, and Krupka, (2001); Lusardi, Mitchell and Curto, (2010); Pg Md Salleh, (2015)	Homeownership also affects the level of financial literacy. According to these studies, families who either had stock or owned homes or had checking accounts were more likely to understand financial aspects.
Household Size	Sekar and Gowri, (2015); Pg Md Salleh, (2015)	Household size matters in financial literacy. According to these studies, the level of financial literacy is associated to the number of members in the household. It was observed that financial literacy is high among respondents who have at least 3 dependents.

Source: Compiled by the authors

Lusardi and Mitchell (2014) have shown that financial literacy is positively associated with financial well-being. Financial literacy is critical for individuals to make informed financial decisions, such as managing their finances, avoiding debt, and investing wisely. In contrast, lack of financial literacy can result in poor financial decisions, such as overspending, taking on high levels of debt, and making poor investment decisions. Welfare recipients are a vulnerable population who are more likely to experience financial insecurity and poverty. Studies have found that financial literacy programs can improve the financial well-being of welfare recipients (Engelbrecht, 2014).

Huston (2010) defines the difference between financial literacy and financial knowledge and also examines how financial literacy reflects individual choice. He found that in some cases financial education does not have a significant effect on improving knowledge but in some cases, it shows the positive relationship between financial education and financial literacy. Financial literacy improves a person’s level of knowledge and ability, and changes in behaviour and outcomes. However, some external circumstances and unusual preferences (lack of knowledge, self-report, internet, by person, telephone) affect poor financial decision-making.

Given the need of the study in the Gaya district, the subsequent section presents the objectives of the paper.

Objectives

- Examine the level of financial literacy in Gaya.
- Compare the financial literacy levels of welfare and non-welfare recipients in Gaya.
- Identify the factors influencing the financial literacy of welfare and non-welfare recipients in Gaya.

Hypothesis

Hypothesis 1
H0: There is no significant difference in financial literacy of the welfare recipients and welfare non-recipients.
H1: There is significant difference in financial literacy between welfare recipients and welfare non-recipients.
Hypothesis 2
H0: Gender, marital status, work status, home ownership, family size, education, age, and earnings do not have statistically significant association with financial literacy.
H1: Gender, marital status, work status, home ownership, family size, education, age, and earnings have statistically significant association with financial literacy.

METHODOLOGY

The sample was selected using non-random sampling technique more specifically convenience and purposive sampling from different localities in Gaya district. As per Census (2011), the population of Gaya is 4,391,418 and literacy rate is 63.67%. 35.43% of households live below poverty line (Niti Aayog, 2023). Knowing how to manage money and plan for emergencies, among other things, could help these households improve their day-to-day financial activities and mitigate problems when financial emergencies arise, lifting them out of the poverty margins. A survey schedule was designed and data were collected by an interview with the individuals from 128 households. The survey consisted of questions related to financial literacy, welfare policy benefits, and socio-economic information. We used descriptive statistics to analyse and compare the level of financial literacy between welfare and non-welfare recipients and chi-square test to check if significant difference in financial literacy between welfare recipients and welfare non-recipients exists. While the logistic regression identifies socioeconomic characteristics affecting the financial literacy. More specifically, the dependent variable are the three facets of financial literacy that is money management, emergency preparedness, and investing for objectives. These three facets were quantified using a proxy question asked to individuals. These three classifications are based on Chieffe and Rakes' integrated model (1999).

- Money Management - The scenario involving money management includes the idea of inflation since knowing about inflation ensures that the purchase power of savings/funds is not diminished.

> Question: If the profit rate on savings account is 1% per year and inflation is 2% per year, how will the purchasing power of money change after one year?
>
> Answer:
> a. One year from now, I will be able to purchase a greater quantity of goods than I can at present.
> b. One year later, I will be able to buy the same amount of goods as I can currently.
> c. In one year's time, I will be able to purchase lesser quantity of goods compared to

what I can buy today. [Correct answer]
d. I don't know

- Emergency Preparedness- The second scenario has to do with emergency preparedness, more precisely the idea of liquidity.

Question: If Puja had money set aside for emergencies and needed it immediately, which of the following options would be the LEAST helpful for her needs?
Answer:
a. Funds allocated towards the down payment of a house.. [Correct]
b. Stocks
c. Mutual funds.
d. Savings account.
e. I do not know

- Investing for objectives- In the final scenario, investing is done to achieve certain goals, particularly retirement.

Question: Puja, a 25-year-old woman, has completed her retirement planning and decided to retire at the age of 60. Which statement(s) most accurately represent Puja's retirement strategy? (You may answer more than one)
Answer:
a. She plans to save money regularly for her retirement. [Correct]
b. She choose to keep all her savings in her savings account until she reaches the age of 60..
c. At this point, she must be aware of the total amount she needs to have when she turns 60. [Correct]
d. It is recommended to start investing for her retirement at the age of 55 because she has sufficient time ahead.
e. I don't know

The independent variables are the eight socio-economic factors (gender, marital status, work status, home ownership, family size, education, age, and earnings). These variables were chosen because they have been found to be important in research on personal finance and financial literacy. Now, separately each dependent variable would be regressed with the eight independent variables. This would help us to quantify the effect of the socio-economic conditions on the different facets of financial literacy among the welfare and non- welfare recipients. So, that some prescriptive measures can be taken to improve the level of financial literacy.

Econometric Models

The logistics regression models are:

- Money Management = β_0 + β_1 (age) + β_2 (gender) + β_3 (years in formal education) + β_4 (marital status) + β_5 (household size) + β_6 (employment status) + β_7 (monthly income) + β_8 (home ownership)
- Emergency Preparedness = β_0 + β_1 (age) + β_2 (gender) + β_3 (years in formal education) + β_4 (marital status) + β_5 (household size) + β_6 (employment status) + β_7 (monthly income) + β_8 (home ownership)

- Retirement Planning = β_0 + β_1 (age) + β_2 (gender) + β_3 (years in formal education) + β_4 (marital status) + β_5 (household size) + β_6 (employment status) + β_7 (monthly income) + β_8 (home ownership)

Money Management, Emergency Preparedness and Retirement Planning are the dependent variables whose value is either 1 or 0. A proxy question was asked to quantify these three aspects of financial literacy. If the respondent provides correct answer, then the value is 1 if the answer is incorrect the value is 0.

Age, gender, years in formal education, marital status, household size, employment status, monthly income and home ownership are the independent variables. Age, years in formal education, household size and monthly income are quantitative predictor variables whereas gender, marital status, employment status and home ownership are categorical (dichotomous) variables.

These three-logistics regression are carried out separately. So, we quantify how much socio-economics factors affect different dimensions of financial literacy.

FINDINGS

Socio-economic characteristics of respondents

Table -2, presents the socio-economic characteristics of the respondents.

Table 2 Socio-economic characteristics of respondents

Variable		n	Mean	Median
(i) Age	Welfare-recipient	65	38.03	36
	Non-recipient	63	31.57	28
(ii) Years in formal education	Welfare-recipient	65	7.09	8
	Non-recipient	63	14.63	17
(iii) Household size	Welfare-recipient	65	6.03	6
	Non-recipient	63	5.57	5
(iv) Monthly income	Welfare-recipient	65	10784.61	9000
	Non-recipient	63	33142.85	25000

(v) Gender	Male	Female	Total
Welfare-recipient	37(56.9%)	28(43.1%)	65(100%)
Non-recipient	38(60.3%)	25(39.7%)	63(100%)
(vi) Marital Status	Married	Unmarried	Total
Welfare-recipient	57(87.7%)	8(12.3%)	65(100%)
Non-recipient	33(52.4%)	30(47.6%)	63(100%)
(vii) Employment status	Employed	Unemployed	Total
Welfare-recipient	35(53.8%)	30(46.2%)	65(100%)
Non-recipient	22(34.9%)	41(65.1%)	63(100%)
(viii) Home Ownership	Yes	No	Total
Welfare-recipient	61(93.8%)	4(6.2%)	65(100%)
Non-recipient	47(74.6%)	16(25.4%)	63(100%)

Estimated using survey data

The comparison between welfare recipients and non-recipients reveals intriguing insights into their demographics and socioeconomic characteristics. The data showcases both striking similarities and notable differences between the two groups. In terms of age, welfare recipients have a slightly higher mean age of 38.03 years (median 36) compared to non-recipients, who have a lower mean age of 31.57 years (median 28). This suggests a potential age disparity, with welfare recipients tending to be slightly older on average. A significant difference emerges in their years of formal education, with welfare recipients reporting a mean of 7.09 years (median 8), while non-recipients have a considerably higher mean of 14.63 years (median 17). This indicates that non-recipients have better educational attainment on average than welfare recipients. Regarding household size, welfare recipients have a slightly larger mean household size of 6.03 (median 6) compared to non-recipients, who have a mean household size of 5.57 (median 5). While the difference is slight, it suggests that welfare recipients tend to have slightly larger families. The most striking disparity lies in monthly income, where welfare recipients report a mean income of ₹10,784.61 (median ₹9,000), significantly lower than non-recipients, who have a mean income of ₹33,142.85 (median ₹25,000). This substantial income gap highlights the financial challenges faced by welfare recipients compared to non-recipients. Moreover, the gender distribution shows a similar pattern between the two groups, with a higher percentage of males in both welfare recipients (56.9%) and non-recipients (60.3%). Marital status displays a notable difference, as a significant majority of welfare recipients (87.7%) are married, while non-recipients have a more balanced distribution with 52.4% married and 47.6% unmarried. Employment status further diverges, with 53.8% of welfare recipients being employed compared to 34.9% of non-recipients. Lastly, a higher percentage of welfare recipients (93.8%) own homes compared to non-recipients (74.6%). These findings underscore the multifaceted nature of welfare recipients and non-recipients, highlighting areas of potential concern, such as educational attainment and income disparities.

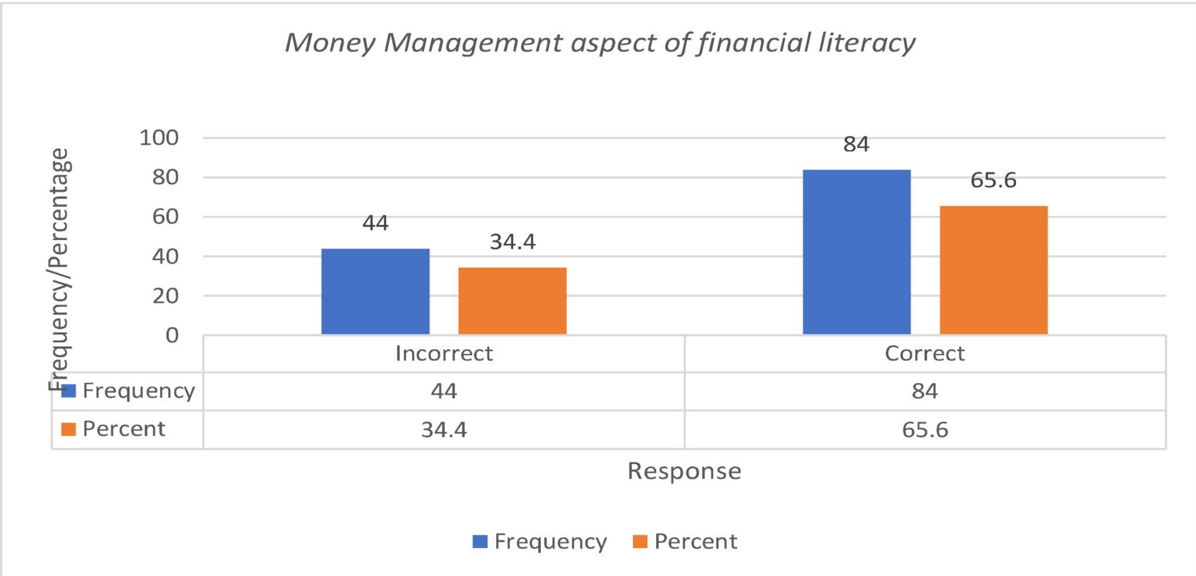
Financial Literacy among the respondents in Gaya

This section examines the financial literacy among the respondents from three aspects of financial literacy namely: money management, emergency preparedness and retirement planning.

Money Management

Out of 128 respondents, 44 respondents gave incorrect response to money management question whereas 84 respondents gave correct response. Hence 65.6% of total respondents were aware of the money management aspect of financial literacy.

Figure 1 Money management aspect of financial literacy

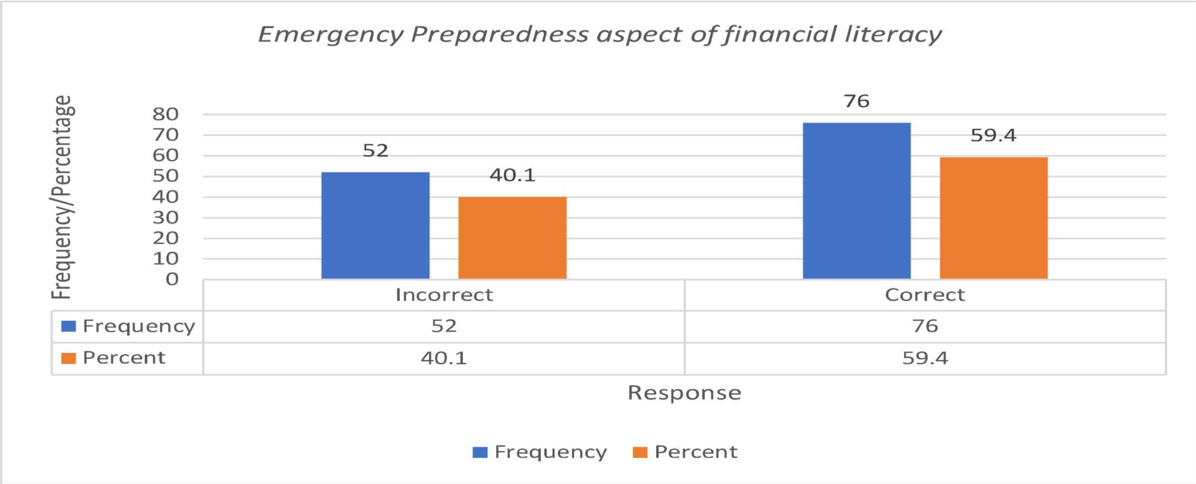


Estimated using survey data

Emergency Preparedness

If we analyse the emergency preparedness responses, the results shows- 52 respondents gave incorrect response to this question whereas 76 respondents gave correct response. Hence 59.4% of total respondents were aware of the emergency preparedness aspect of financial literacy.

Figure 2 Emergency preparedness aspect of financial literacy

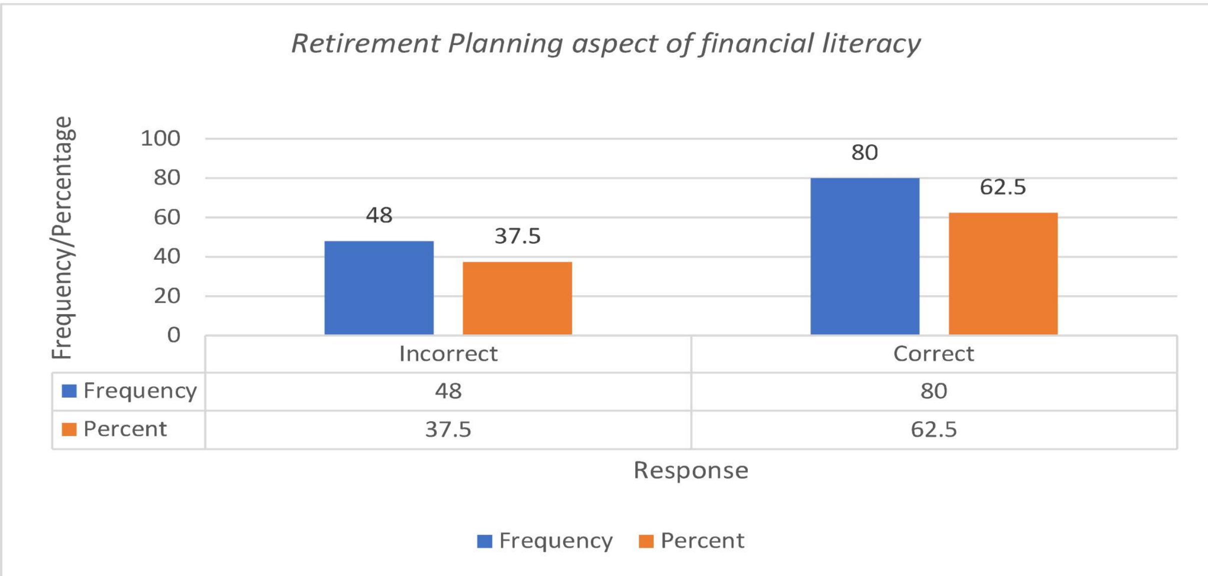


Estimated using survey data

Retirement Planning

For retirement planning, 48 respondents gave incorrect responses, whereas 80 respondents gave correct responses. Hence, 62.5% of total respondents were aware of the retirement planning aspect of financial literacy.

Figure 3 Retirement planning aspect of financial literacy

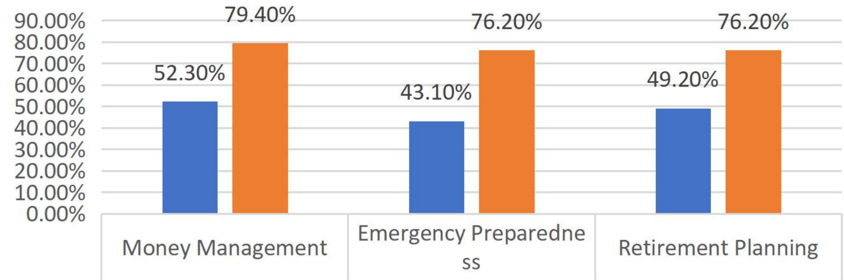


Estimated using survey data

This was the level of financial literacy in Gaya district of Bihar as measured by all the three aspects. This shows that more than half of the population is aware of the basic aspects of financial literacy. Now we compare the financial literacy among the welfare recipients and non-recipients to get a more targeted approach.

Comparison of Financial Literacy among the Welfare Recipients and Non-Recipients

Figure 4 Comparison of Financial Literacy among the Welfare Recipients and Non-Recipients



	Money Management	Emergency Preparedness	Retirement Planning
Awareness among Welfare Recipient	52.30%	43.10%	49.20%
Awareness among Non-Recipient	79.40%	76.20%	76.20%

Estimated using survey data

Both welfare recipients and non-recipients show some level of awareness in money management, with 52.3% of welfare recipients and 79.4% of non-recipients being aware. However, there is still room for improvement for both groups. The awareness of emergency preparedness is relatively lower among welfare recipients, with only 43.1% showing awareness compared to 76.2% of non-recipients. This suggests the need for targeted efforts to enhance emergency preparedness knowledge and skills among welfare recipients. Similarly, awareness of retirement planning is relatively low among both welfare recipients (49.2%) and non-recipients (76.2%). This indicates that there is a need for increased focus on promoting retirement planning awareness among the general population, including welfare recipients. Overall, the data highlights the importance of financial education and preparedness programs, especially for individuals receiving welfare benefits. Enhancing awareness in money management, emergency preparedness, and retirement planning can empower welfare recipients to make informed financial decisions and improve their overall financial well-being.

Chi Square results

The table below shows the chi square test of independence for money management aspect of financial literacy among welfare recipients and non- recipients. It checks whether there exists a significant difference between welfare respondents and non-welfare respondents in money management aspect of financial literacy.

Table:- 3, Chi-square results comparing welfare recipients and non-recipients

	Welfare recipients (N=65)	*Non-recipients (N=63)*	
Aspects	*n (%)*	*n (%)*	*Pearson χ² statistics*
Money Management			
Correct	34 (52.3)	50 (79.4)	8.217***
Incorrect	31 (47.7)	13 (79.4)	
Emergency Preparedness			
Correct	28 (43.1)	48 (76.2)	1.732
Incorrect	37 (55.9)	15 (23.8)	
Retirement Planning			
Correct	32 (43.1)	48 (76.2)	1.611
Incorrect	33 (55.9)	15 (23.8)	

*** 1% level of significance. Estimated using survey data

Table -3, presents the results of the Chi-square analysis comparing welfare recipients and non-recipients in three key aspects: Money Management, Emergency Preparedness, and Retirement Planning. The data was collected from a sample of 65 welfare recipients and 63 non-recipients. The analysis reveals that 52.3% of welfare recipients provided correct responses in terms of money management, while a higher proportion of non-recipients (79.4%) answered correctly. On the other hand, 47.7% of welfare recipients and a smaller percentage of non-recipients (20.6%) provided incorrect responses. The Pearson χ^2 statistics for this aspect is 8.217, indicating a significant difference at 1% level of significance. This suggests that welfare recipients may face challenges in managing their finances compared to non-recipients. Among welfare recipients, 43.1% provided correct responses regarding emergency preparedness, whereas a larger proportion of non-recipients (76.2%) answered correctly. Conversely, 55.9% of welfare recipients and 23.8% of non-recipients provided incorrect responses. The Pearson χ^2 statistics for this aspect is 1.732, indicating no significant difference at the tested significance level. While there is a disparity, it is not statistically significant. Similarly, 43.1% of welfare recipients and 76.2% of non-recipients provided correct responses in retirement planning. In contrast, 55.9% of welfare recipients and 23.8% of non-recipients provided incorrect responses. The Pearson χ^2 statistics for this aspect is 1.611, indicating no significant difference at the tested significance level. As with emergency preparedness, there is a disparity, but it is not statistically significant. In conclusion, the Chi-square analysis highlights significant differences in money management awareness between welfare recipients and non-recipients, with non-recipients displaying a higher percentage of correct responses. However, no significant differences were found in emergency preparedness and retirement planning awareness. This suggests that while welfare recipients may face challenges in money management, there are no statistically significant differences in their awareness of emergency preparedness and retirement planning when compared to non-recipients.

Determinants of Financial Literacy among the Welfare recipients and Non-recipients

This section determines the socio-economic factors affecting financial literacy among respondents. Logistic regression is undertaken to determine the socio-economic factors that affect the level of financial literacy.

Money Management

Money Management = β_0 + β_1 (age) + β_2 (gender) + β_3 (years in formal education) + β_4 (marital status) + β_5 (household size) + β_6 (employment status) + β_7 (monthly income) + β_8 (home ownership)

Table 4 Logistic regression predicting the likelihood of respondents giving a correct response to money management scenario

Socio-economic variables	β	Robust SE (β)	dy/dx	df	p	Odds ratio	95% CI for odds ratio	
							Lower	Upper
Gender	.8514473	.6173664	.1717194	1	0.168	2.343036	-.3585685	2.061463
Age	-.022717	.0204534	-.0044633	1	0.267	.9775391	-.062805	.0173709
Years in formal education	.1421578	.0384281	.0279304	1	0.000	1.152759	.0668401	.2174756
Marital status	-.3336424	.7275261	-.0634301	1	0.647	.7163099	-1.759567	1.092283
Household size	-.0417316	.0558286	-.0081992	1	0.455	.9591271	-.1511538	.0676905
Employment	-.1858237	.6451508	-.0366713	1	0.773	.83042	-1.450296	1.078649
Monthly income	.000021	.0000173	4.13e-06	1	0.223	1.000021	-.0000128	.0000549
Homeownership	.1682959	.5416778	.033932	1	0.756	1.183287	-.893373	1.229965
Constant	-.2824274	1.102171		1	0.798	.7539514	-2.442643	1.877788
n=128. Pseudo R^2 = 0.2814. Wald χ^2 = 27.71. p = 0.0005. mfx = .7313552								

Table 4 presents the logistic regression results aimed to predict the likelihood of respondents giving a correct response to a money management scenario based on various socio-economic variables. The results revealed interesting insights into the relationships between these variables and the probability of demonstrating effective money management skills. Among the socio-economic factors examined, "Years in formal education" emerged as a significant predictor ($p < 0.001$) of providing the correct response. The positive coefficient ($\beta = 0.142$) indicates that for each additional year of formal education, the odds of giving the correct response increase by approximately 14.2%. However, other socio-economic variables, such as gender, age, marital status, household size, employment status, monthly income, and homeownership, did not show statistically significant associations with the likelihood of providing the correct response. The overall model is significant ($p = 0.0005$) and performed reasonably well, explaining about 28.14% (Pseudo $R^2 = 0.2814$) of the variability in predicting correct money management responses.

Emergency Preparedness

Emergency Preparedness = β_0 + β_1 (age) + β_2 (gender) + β_3 (years in formal education) + β_4 (marital status) + β_5 (household size) + β_6 (employment status) + β_7 (monthly income) + β_8 (home ownership)

Table 5 Logistic regression predicting the likelihood of respondents giving a correct response to emergency preparedness scenario

Socio-economic variables	β	Robust SE (β)	dy/dx	df	p	Odds ratio	95% CI for odds ratio	
							Lower	Upper
Gender	.0884707	.6115791	.0198649	1	0.885	1.092502	.3294923	3.622425
Age	-.0359517	.0210639	-.0080537	1	0.088	.9646869	.9256712	1.005347
Years in formal education	.136791	.0403307	.0306433	1	0.001	1.146589	1.059444	1.240901
Marital status	.4047685	.7848626	.0927285	1	0.606	1.498955	.3218937	6.980153
Household size	-.0008731	.0524289	-.0001956	1	0.987	.9991273	.9015571	1.107257
Employment	-.0707298	.6188681	-.0158631	1	0.909	.9317136	.2770135	3.133747
Monthly income	.0000415	.0000247	9.31e-06	1	0.093	1.000042	.9999931	1.00009
Homeownership	-.0718259	.5703838	-.0159592	1	0.900	.9306929	.304295	2.846545
Constant	-.7008744	1.247744		1	0.574	.4961513	.0430064	5.723945
n=128. Pseudo R^2 = 0.2680. Wald χ^2 = 27.59. p = 0.0006. mfx = .66119736								

Table 5 presents the logistic regression results aimed to predict the likelihood of respondents giving a correct response to an emergency preparedness scenario based on various socio-economic variables. Among the socio-economic factors examined, "Years in formal education" emerged as a statistically significant predictor ($p = 0.001$) of providing the correct response. The positive coefficient ($\beta = 0.1368$) indicates that for each additional year of formal education, the odds of giving the correct response increase by approximately 14.66%. The variable "Age" ($p = 0.088$) and “Monthly income” ($p = 0.093$) showed a marginally significant association ($p = 0.088$) with the likelihood of providing the correct response. The negative coefficient ($\beta = -0.0359$) implies that with each one-unit increase in age, the odds of giving the correct response decrease by approximately 3.53%. This might have happened as the mean age is around 36 years and hence they might not have adequate financial knowledge or might have due to less number of sample size. However, in every one unit increase in monthly income the odds of giving the correct response increases by 0.00415% ($\beta = 0.0000415$). On the other hand, the remaining socio-economic variables, including gender, marital status, household size, employment status, and homeownership, did not exhibit statistically significant associations with the likelihood of providing the correct response to the emergency preparedness scenario. The overall model is significant ($p = 0.0006$) and the performance of the model indicated by the Pseudo R^2 (0.2680), suggests that approximately 26.8% of the variability in predicting correct emergency preparedness responses can be explained by the included socio-economic variables.

Retirement Planning

Retirement Planning = β_0 + β_1 (age) + β_2 (gender) + β_3 (years in formal education) + β_4 (marital status) + β_5 (household size) + β_6 (employment status) + β_7 (monthly income) + β_8 (home ownership)

Table 6 presents the logistic regression analysis aimed to predict the likelihood of respondents giving a correct response to a retirement planning scenario based on various socio-economic variables. The results provide insights into the associations between these variables and the probability of demonstrating effective retirement planning skills. Among the socio-economic factors examined, "Years in formal education" emerged as a statistically significant predictor ($p = 0.001$) of providing the correct response. The positive coefficient ($\beta = 0.1334$) indicates that for each additional year of formal education, the odds of giving the correct response increase by approximately 14.27%. The variable "Age" also showed a significant association ($p = 0.038$) with the likelihood of providing the correct response. The negative coefficient ($\beta = -0.0478$) implies that with each one-unit increase in age, the odds of giving the correct response decrease by approximately 4.78%. The variable "Monthly income" ($p = 0.067$) and “Homeownership” ($p = 0.069$) showed a marginally significant association with the likelihood of providing the correct response. The positive coefficient (β = 0.0000397) implies that with each one-unit increase in monthly income, the odds of giving the correct response increase by approximately 0.004%. And, odds of providing correct response to retirement planning scenario by an individual with homeownership is approximately 2.469 times higher than an individual without homeownership. On the other hand, the remaining socio-economic variables, including gender, marital status, household size and employment status did not exhibit statistically significant associations with the likelihood of providing the correct response to the retirement planning scenario. The overall model is statistically significant (p = 0.0009) and model's performance, indicated by the Pseudo R^2 (0.2982), suggests that approximately 29.82% of the variability in predicting correct retirement planning responses can be explained by the included socio-economic variables.

Table 6 Logistic regression predicting the likelihood of respondents giving a correct response to retirement planning scenario

Socio-economic variables	β	Robust SE (β)	dy/dx	df	p	Odds ratio	95% CI for odds ratio	
							Lower	Upper
Gender	.139551	.6542351	.0286184	1	0.831	1.149757	.3189483	4.144691
Age	-.0478073	.0230197	-.0097559	1	0.038	.9533175	.9112618	.9973141
Years in formal education	.1334081	.039418	.0272243	1	0.001	1.142716	1.057757	1.2345
Marital status	.2051192	.7497164	.0425789	1	0.784	1.227671	.2824375	5.33632
Household size	-.0427474	.0549948	-.0087234	1	0.437	.9581534	.8602475	1.067202
Employment	-.1495424	.6679051	-.030617	1	0.823	.8611019	.2325588	3.188427
Monthly income	.0000397	.0000217	8.09e-06	1	0.067	1.00004	.9999972	1.000082
Homeownership	.9040143	.4967277	.2039046	1	0.069	2.469497	.9328097	6.537682
Constant	-.3971696	1.185212		1	0.738	.67222	.0658654	6.860657
n=128. Pseudo R^2 = 0. 2982. Wald χ^2 = 26.31. p = 0.0009. mfx = .71431853								

CONCLUSION

The results of this study show that financial literacy programmes specific to the needs of welfare beneficiaries should be taken into consideration by policy makers, academics, and educators. It is evident from the findings that the welfare recipients were more likely to provide wrong answers or uncertain about correct answer compared to non-recipients. In order to improve welfare beneficiary households' financial literacy, their ability to make decisions, and ultimately their financial well-being, it is necessary to figure out the most effective ways to do so. To prevent a "one-size-fits-all" approach to financial literacy, policymakers and educators must take this into account.

It is important to realise that even among welfare recipients, there may be subgroups of people who would benefit more from a particular degree or component of financial literacy than from another level or component. For instance, a subset of welfare recipients—the poorest of the poor, for example—might need knowledge and abilities in money management that are relevant to their day-to-day financial activities since their top financial priority are probably to take care of their most pressing daily requirements. A different group of welfare recipients, such as those who are on the edge of poverty or who experience some level of financial stability on a daily basis, may profit from financial literacy programmes related to emergency planning in addition to learning money management skills. At this point, it may not be wise to overwhelm the poorest of households with less important aspects of financial literacy such as retirement planning, as their pressing needs may lie with daily/living expenses and other more immediate issues. Therefore, it is important to make this distinction or understanding of the "audience" or target group, particularly their financial needs. This thought on the timing of a particular financial literacy programme is consistent with the concept of "teachable moments" mentioned by Lusardi (2008), who argued that people are more inclined to make financial decisions at certain periods than others. For instance, while discussing programmes for retirement planning, the author says that people are more likely to consider savings at the beginning of a new career, and therefore any retirement planning or any kind of saving programme should be targeted to the people at the beginning of their career as later their career people are less inclined to think about saving or it may be too late for the savings to be as successful as when they first started working.

The same principle applies when it comes to welfare recipients: Stakeholders must determine the effective moment which necessitates not only determining the timing of financial literacy but also understanding the specific "target audience" and their needs, in order to make such financial literacy programmes effective, generally, and for the target group to be responsive to learning, on the particular aspect of personal finance, be it money management, emergent financial issues, or any other. Therefore, in addition to studying welfare recipients, research on non-welfare recipients' financial literacy should also be done, and efforts should be made to further improve it.

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