IMPROVING HOUSEHOLD FINANCIAL DECISION-MAKING THROUGH FINANCIAL LITERACY EDUCATION AMONG TERATAI FAMILY WELFARE EMPOWERMENT MEMBERS

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ABSTRACT

Managing household finances was crucial in preserving financial stability at the family level. Unfortunately, many families struggled with needs vs. wants, order of spending, savings, and having an emergency fund. The purpose of this community service program was to identify the issues of poor financial decision-making at the household level, due to a lack of financial literacy among women who managed household finances. The program utilized educational counseling with a pre-test–post-test design to assess the evolution of financial literacy. The total number of program participants was 33, and the analysis was done on the paired data of 17 participants who completed both the pre-test and post-test, as the remaining participants left before the session ended or submitted incomplete questionnaire. The data were obtained using a developed questionnaire that assessed the participants' understanding of priority spending and the management of household finances. The program was assessed using descriptive statistics and a paired sample t-test. Financial literacy scores improved significantly after the program ($p < 0.001$). The participants were better able to distinguish between needs vs. wants and understand the order of spending and the principles of household financial management. The results of the program showed that financial literacy counseling was successful in improving financial knowledge and enhancing the quality of household financial decisions.

Keywords: *financial counseling; financial decision making; financial literacy; household financial management; household financial resilience*

A. INTRODUCTION

Household financial management is crucial to a family's economic stability. In most families, women manage finances, requiring them to organize spending, balance incomes, identify needs, and

ensure finances do not go to waste. They can address financial difficulties and serve the needs of their families through efficient management of their financial resources.

From the preliminary observations and discussions of the members of the Teratai Family Welfare Empowerment (PKK) group, various problems of financial management came to light. Although most participants had engaged in the simple practice of budgeting, many still had difficulties in distinguishing needs from wants, identifying the order of their spending, and allotting their finances. Because of this, spending was decided based on wants rather than on household needs. This negatively affected the amount of income that was set aside for savings and funds to address emergencies, and it increased financial vulnerability.

The Teratai PKK group has several benefits that made them the ideal partner for this program. First, the university's engagement unit has a prior working relationship with this unit of the PKK group. This trust and partnership made implementation and negotiation processes easier. Second, the members of this unit are the most vocal about their struggles with proper financial priority setting, during forums and other social gatherings with the local administration. Third, the members of Teratai group are mostly housewives, who by default are the money managers of the household. With the information and statistics provided, it is reasonable and justified to say the Teratai PKK group fits the requirements of a target beneficiary unit.

From the analysis of the data, it can be seen that the primary problem of participants was not the absence of financial management practices, but the low financial management skills that negatively impacted financial decisions. Financial literacy refers to the ability to make sound financial decisions and manage finances through the possession of knowledge and skills and the appropriate attitude and behavior. Individuals with the right financial literacy are equipped to make sound financial decisions and to plan finances of the household with the right priorities.

Prior studies confirm that the psychological and socio-economic components that shape financial knowledge, behavior, and attitudes influence the financial literacy of individuals. On the

other hand, individuals are not necessarily inclined to adopt good financial habits upon acquiring financial knowledge. People may still exhibit cognitive biases in the evaluation of financial information, which may lead to poor financial decision-making (Abreu et al., 2025; Aoun et al., 2026). In addition, other people may have the self-efficacy to control their finance, and, at the same time, may continue to practice poor financial habits as a result of overconfidence and scant financial judgment (Merter & Balcioglu, 2025a).

Notwithstanding the above, promoting financial literacy is still necessary because it strengthens the financial stability of households. In addition, people with a high degree of financial literacy are better able to adjust to and cope with the effects of fluctuations in the economy and are better able to plan and control their financial resources (Bertola & Prete, 2025). In spite of the above, earlier studies show that financial literacy programs may focus on improving financial knowledge; however, they may not focus on helping individuals develop the financial behavior that is consistent with their knowledge. Although individuals may learn financial concepts, they may not learn how to manage their finances (Napitupulu et al., 2026; Rodriguez-Raga & Martinez-Camelo, 2022). From this, it may be inferred that a critical component of improving financial literacy is actually enabling people to apply the knowledge that they have acquired.

Taking into account the financial management constraints generally exhibited by members of the Teratai PKK group, a community service program was organized, targeting the extensive aspects of financial literacy. In part, this approach included the clear definition of the distinctions between needs and wants, the ranking of spending priorities, and the refinement of overall financial management on the household level. It was anticipated that the participants of this program would not only acquire a better comprehension of the elements of financial literacy, but also enhance the quality of financial decisions at the household level, with the end result of an improvement of overall family financial resilience.

B. IMPLEMENTATION AND METHODS

This community service project offered financial literacy educational counseling to members of the Teratai Family Welfare Empowerment (PKK) group. The efficacy of the project was assessed using the pre-test–counseling–post-test model. The project consisted of three phases: preparatory, intervening, and evaluative. Problem identification was the focus of the preparatory phase and was accomplished through participant observation and focus group discussions. The majority of the target population was found to engage in the basic levels of household budgeting; however, they struggled with the discernment of needs and wants and with the allocation of discretionary spending. The result of the needs assessment guided the development of the counseling framework, which offered the financial literacy continuum, the needs and wants hierarchy, and household budgeting. In the current stage, a sampling method was adopted in which all 33 members of the Teratai PKK group who were employees of the counseling unit and who were invited to take part in the activities of the unit as volunteers, were considered as cases for study.

The intervening phase was comprised of a financial literacy educational counseling session in which 33 participants were in attendance. The counseling model of the session was designed to be participative and focused on the discussion of personal household budgeting and financial management. The facilitators of the counseling session viewed the personal engagement of the participants as fundamental for the improvement of the participants' understanding of the financial literacy counseling session. The discussion/reflective model of the session encouraged the participants to not only receive the information offered, but to make the learning process practical and pertinent to their financial situation (Agasisti et al., 2025; Andreatti et al., 2025).

The evaluation stage involved the administration of a pre-test and a post-test to gauge participants’ comprehension before and after the counseling session (Creswell, 2014, pp. 155-164). A pre-test was given to all 33 participants to complete before their individual counseling session. The post-test was given to 17 participants only. The remaining 16 participants left before the session was

completed due to work and family commitments. In addition, the post-test handed to the participants was completed by only 17 participants as the remaining post-tests returned to the researcher were incomplete. Therefore, those post-tests were disregarded for the study. As a result, the analysis focused on paired data. Field (2018, pp. 414-423) highlights that paired data analysis facilitates the comparison of data collected from the same participants, at two distinct time periods, and is particularly effective in assessing the influence of an intervention, while addressing the variation in participant characteristics.

Financial literacy was assessed through a questionnaire, consisting of four dimensions: the ability to distinguish between needs and wants, financial prioritization and allocation, debt management, and the planning of an emergency fund. Responses were assessed on a four-point Likert scale. The four-point scale was employed to avoid an extreme response and to enhance the sensitivity between the pre-test and post-test (Garland, 1991, pp. 3-5; Krosnick & Presser, 2009, pp. 275-280). To reduce response bias and to maintain consistency of the measurement, negatively phrased items were reverse-scored (İlhan et al., 2024).

The proposed financial literacy indicators were aimed to assess participants' ability to differentiate between needs and wants, and to allocate household finances proportionately, and understand the concepts of debt management, and emergency funds in household financial planning. In order to maintain measurement consistency, a number of items were reverse scored and negatively worded.

Data from the questionnaires were analyzed using descriptive and inferential statistical techniques. Descriptive statistics provided an overview of the participants' financial literacy levels pre- and post- the counseling program. As a precursor to the hypothesis tests, a normality test was done as normal distribution is an important consideration for analyses of this nature (Hair et al., 2019). As the data satisfied the assumptions for normality, a paired sample t-test was utilized to determine the difference between the pre-test and post-test scores. The use of the paired-sample t-test was

justified since the test is more statistically powerful when determining the difference in means in the same participants, when compared to non-parametric test alternatives (Field, 2018).

The service activity comprised the following steps: (1) a needs assessment through participant observation and focus group discussions with Teratai PKK; (2) registration and administering the pre-test questionnaire to 33 participants, who were about to attend the counseling session; (3) providing participatory financial literacy counseling; (4) facilitating discussion for group members to relate the session content to financial management of their households; (5) administering the post-test questionnaire to 17 participants; and (6) data analysis through descriptive statistics, Shapiro-Wilk test, and paired samples t-test. Analysis of the data is presented in the following section.

C. RESULTS AND DISCUSSION

The community service program incorporated a participatory style of teaching for financial literacy. The teaching style incorporated both presentations and interactive segments, providing space for participants to discuss their experiences and views on the management of family finances. This style of teaching, in addition to the presentations, allowed participants to consider their managerial style and the difficulties they faced in the management of family finances. Financial literacy was assessed using a pre-test and post-test, which measured the impact of the counseling session. Activity documentation can be seen in Figure 1.



(a) (b) (c)

Figure 1. The appearance Community Empowerment in Teratai PKK group; (a) financial literacy counseling; (b) completing the pre-test and post-test as part of the program and group assessment; (c) interactive discussion on understanding needs and wants in household financial management

The documentation shows that participants were not only listening to the presenters, but were also active participants who shared their experiences concerning family financial management. This type of participation also helped to draw many personal financial management concerns and helped to illustrate the level of financial literacy of the participants. It also helped to deal with the level of participants' financial literacy in a practical way. Thus, the focus of the analysis was the comparison of pre-test and post-test.

The main challenge observed among the Teratai PKK group was not the lack of financial management, but the low financial literacy which resulted in poor financial decisions. Although participants said they practiced budgeting, many of them still struggled with separating needs and wants, sequencing expenditures, and planning household finances.

Table 1 shows the pre and post counseling financial literacy scores. On average, participants' scores improved from 28.47 (pre-test) to 33.12 (post-test), which suggests that participants understood the concepts better after receiving the counseling.

Table 1. Descriptive Statistic

Variable	N	Minimum	Maximum	Average	Deviation Standards
Pre-test	17	22	35	28.47	3.25
Post-test	17	27	38	33.12	2.85

Source: Processed data

The pre-test showed that financial literacy had been poorly developed in the area of household finance. Many participants classified secondary needs and desires for consumption as primary needs. Among household financial allocations, savings and emergency funds were given low priority. There were also poor expenditures, as many participants felt that as long as they had some needs that were not fulfilled, it would be fine to borrow more.

After the counseling activity, participants recognized the value of savings and emergency funds. During the group discussions, several participants said that they had considered discretionary spending as essential needs. This indicates that the counseling activity prompted participants to think

about the spending patterns of their households and the priorities of their household finances. These responses have provided evidence that the program has increased the participants' conceptual understanding and awareness of household financing.

Reflections from the group discussion also showed changes in participants' perceptions. One stated, "I used to consider wearing cute clothes or going to nice restaurants as rewards for working hard. I even thought it was okay if I sold out my merchandise because I would then treat myself to a nice meal or buy a new outfit. I've also learned that self-rewarding is bad. Just because I sold my merch or made a profit, doesn't mean I'm entitled to treating myself. I know it sounds small to some people, but I've realized I need to set a limit on rewarding and treating myself."

It becomes a habit to reward myself with a purchase. But now that I can tell myself that I don't need to reward myself, I can see that wearing the clothes I already have or eating normal meals is a lot better than going clothes shopping or eating at more expensive places. I have since realized that buying new clothes and eating at nicer places is not absolutely necessary, it is more of a want. "I used to save any extra money I had, but not any more. I want to save money for an emergency and then spend the money I want for other things." This shows participants gained a better understanding of their financial situation and spending. They were empowered to state their financial situation in their own terms. This activity shifted the narratives in participants' financial journeys.

Prior to hypothesis testing, a normality test was conducted. To investigate the data's suitability for parametric analysis, the results of the normality test are shown in Table 2. The significance values of the Shapiro–Wilk test for the pre-test and post-test were both greater than 0.05, with significance of 0.731 and 0.412, respectively. Hence, it was determined that the data were normally distributed and were suitable to be analyzed through parametric statistics.

Table 2. Normality Test Results

Variable	Shapiro-Wilk Statistic	Significance
Pre-test	0.962	0.731
Post-test	0.948	0.412

Source: Processed data

Post-test and pre-test perceptions of the participants were analyzed to determine the extent to which the counseling activity was successful. The results are shown in Table 3.

Table 3. Results of Paired sample t-test

Variable	Mean Difference	Standard Deviation	t-value	Significance
Pre-test post-test	4.65	2.1	8.245	0.000

Source: Processed data

Paired sample t-test results show a significance value of 0.000; hence, a statistically significant difference exists in the financial literacy of the participants, pre-test and post-test. This confirms that the participants' understanding of household financial management concepts, after the receipt of the financial literacy counseling program, was markedly improved.

The ability of participants to differentiate between needs and wants and their understanding of prioritizing expenditures improved. After the counseling session, participants became more aware and exhibited more rational behaviors regarding expenditures and savings. This suggests that the program resolved some critical conceptual issues that affected participants' financial decision-making.

The improvements should be interpreted with caution. Although there was some improvement in financial literacy of the participants, most of this was at the level of the cognition. Participants were able to respond to the questionnaire better, and while this is an improvement in understanding financial concepts, this does not translate to a change in financial behavior. Participants still struggled to understand and apply concepts related to the more advanced levels of financial management, such as planning and managing finances, and setting and maintaining financial goals.

These findings are consistent with other studies that show financial literacy education results in greater financial knowledge as compared to improvement in financial behavior (Agasisti et al., 2025; Andreatti et al., 2025). Improvements in financial confidence, attitudes, and overall financial awareness that stem from financial literacy also take time and do not cause an instantaneous change to financial behaviors (Abreu et al., 2025; Aoun et al., 2026). For this reason, we consider the financial

and economic knowledge attained from this counseling program to be an improvement in addressing the financial management issues of households, rather than a solution.

Psychological factors may also contribute to the persistence of certain financial misconceptions. For example, an individual could suffer from the illusion that they possess the ability to control finances if they are, in fact, financially incompetent (Merter & Balcioglu, 2025b). This was indeed the case for several of our participants. Even though they demonstrated the knowledge of the fundamentals of finance, they showed tendencies that may lead to a lack of financial discipline or the irresponsible use of debt.

That said, the increase in financial literacy observed in our study is a positive development. The individuals that possess higher levels of financial literacy are more capable of effectively exercising control over the use of financial resources and less susceptible to financial insecurity (Bertola & Prete, 2025). While we understand that changes in financial discipline may take a longer period to occur, we believe the increased level of financial literacy that our program has helped to achieve is a necessary and first step to enhance the financial resilience of the families in our community.

The program was very successful at helping individuals to differentiate between needs and wants, as well as the fundamentals of financial discipline. For sustained and more extensive changes in financial discipline of the participants, future community service programs should employ a variety of practical, financial exercises and ongoing mentoring in the areas of financial planning, management of debt, and personal budgeting.

The program's success can be attributed to numerous factors. First, a great portion of the participants showed a high level of engagement in the counseling sessions. This allowed the participants to be literally involved in the process by providing personal accounts based on the way in which they managed their household finances. Second, the format of the counseling sessions was primarily focused on discussions. This allowed the participants to relate financial concepts to actual financial situations. Third, the inclusion of personal stories enabled the participants to trace the same

financial choices made in their households, namely differentiating between (a) needs versus wants, (b) which expenses are most important, and (c) what savings should be set aside for regular savings versus savings for unanticipated expenses. Factors/workings mentioned above contributed to the success of the counseling program and the improvement of the participants' financial literacy. Three main things helped the improvement of financial literacy of the participants. The first was counselors' engagement with the participants, and the use of example of participants' household in other to illustrate financial concepts. The second was the use of discussions, and the third was the active participation of the counselors.

Although there were many successful interactions with various stakeholders, challenges were also faced in the execution of the program. One limitation was the short duration of the intervention that spawned a lack of opportunities for practicing and polishing new financial management skills. Another limitation for this program was that participants who completed the pre-test (100% of participants) and the post-test (only 17 of the participants) did not all have a paired observation differential to assess the learning outcome of the intervention program. A significant issue was related to creating sustainable behavior change through the development of financial literacy. The counseling program enhanced participants' understanding of financial management, but financial behavior change is a process that requires a significant period, coupled with sustained engagement and reinforcement of desired change. It is, therefore, important to note that the changes referred to in this program have only addressed the cognitive aspect of financial management. Subsequent community engagement programs should definitely have field activities and sustained mentoring to help participants convert the financial management skills they have learned into sustainable financial management practices.

D. CONCLUSION

This financial literacy community service program has demonstrated that offering financial literacy counseling services helps people manage their finances. The Teratai PKK group was able to

identify financial needs and wants and discern financial priorities. They were able to distinguish between various financial demands and decide on the proper financial category to which a particular financial demand belongs. The group was also able to identify expenditure patterns and devise strategies to align their expenditure with their priorities and available resources. Based on the results, the financial needs of the study participants were addressed due to the absence of financial literacy. The program accomplished its objectives; participants were competent and confident in their ability to integrate strategies into their financial plans to meet their goals.

Most of the advancements recorded were cognitive, meaning that participants were able to comprehend and recognize the significance of different financial management strategies, but did not change their financial habits as a result. This was expected as the goal of the program is to empower the participants to adjust their financial practices, habits and actions. The creation of this knowledge is but the first step in the process. To actualize this know-how, participants must undergo practice, coaching and reinforcement, which was not within the scope of the program. The program achieved its goal of enabling critical reflection and behavioral change of participants. Despite the constraints mentioned above, the majority of the participants demonstrated the potential to assess and challenge their financial habits and practices in a more systematic manner.

Given these constraints, future programs need to integrate other types of learning activities, including practices such as financial planning and budgeting, mentorships, and others, to help program participants advance their financial capability and integrating what they learned into their everyday behavior. Using local community and village officials is always advisable. The use of activities, practices and learning materials in financial literacy focused on behavioral change is advisable. It is important that future studies consider whether participants in the financial literacy programs experienced positive changes in their financial behavior and resilience. Furthermore, this program enhanced the financial literacy and the decision-making skills of the participants from the Teratai PKK group. This program also improved the financial capabilities of the participants and

contributed to the goal of improving the quality of education and achieving other related Sustainable Development Goals.

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Data Availability Statement.

The data supporting the findings of this study are openly available in Zenodo at https://doi.org/10.5281/zenodo.20733480

Author Contributions.

Conceptualization, Retno Ika Sundari (R.I.S.) and Dian Retnaningdiah (D.R); methodology, R.I.S and D.R; formal analysis, R.I.S and D.R.; investigation, R.I.S and D.R; resources, R.I.S and D.R; writing, original draft, R.I.S and D.R; writing, review and editing, R.I.S.; visualization, R.I.S and D.R.; supervision, R.I.S and D.R.; project administration, R.I.S and D.R.; validation, R.I.S and D.R.; overall guidance, R,I.S.. All authors have read and approved the final version of the manuscript and agree to be fully responsible for its content.

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