



**THE EFFECTS OF PROVERBS-BASED FINANCIAL
EDUCATION ON FINANCIAL LITERACY AND PERCEPTIONS
OF WANTS-NEEDS IN PRIMARY SCHOOL STUDENTS**

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Abstract:

This study aims to investigate the effects of proverb-based financial education on 4th-grade students' financial literacy and perceptions of their wants and needs. At this juncture, the research was conducted using a quasi-experimental design. The study group consists of 82 students attending a primary school located in the northwest of Turkey. We collected the data for the study using financial literacy, want and need perception scales. We utilized the dependent and independent groups t-test to analyze the obtained data. We determined a statistically significant difference between the experimental group that received financial education based on proverbs and the control group that did not. This difference favored the experimental group that received proverb-based financial literacy education. In addition, when the experimental group's pre-test and post-test mean scores were compared, we found a significant difference in favor of the post-test. These results demonstrate the effectiveness of financial education based on proverbs as applied to the experimental group.

Keywords: financial literacy, perception of want and need, proverbs, primary school students

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1. Introduction

In today's world, there is an increase in access to credit and the digitalization of financial markets. The financial crises that accompanied digitalization and the long-term ramifications of these crises necessitated financial literacy. Financial education empowers individuals to control their finances, manage their daily expenses, plan their children's education, and save for post-retirement (Goyal & Kumar, 2021). In addition, financial skills and knowledge improve an individual's quality of life. Consequently, individuals should be knowledgeable about financial matters. Individuals should receive financial literacy instruction to acquire this information. Because S&P's global financial literacy research confirms the existence of a financial information gap in developed and developing economies (Klapper & Lusardi, 2019). In this context, every society should take various measures to provide its members with financial literacy skills.

2. Financial Literacy

Financial literacy is a universal life skill necessary for avoiding financial difficulties and ensuring one's well-being (Bihari & Shukla, 2012). In the literature, financial literacy is defined as the process of money management, knowledge of how financial institutions function, saving, retirement, decision-making, creating future financial plans, and employing these concepts in real life (Bhandare et al., 2021; Mahdzan & Tabiani, 2013; Lusardi & Mitchell, 2014; Huston, 2010). In other words, financial literacy is the process of acquiring knowledge, skills, and dispositions regarding financial matters and putting them into practice (Atkinson & Messy, 2012).

Financially literate individuals know financial concepts and can discuss financial issues, personal finance management, decision-making, and future planning (Remund, 2010). When these definitions are examined, individuals must acquire financial literacy skills. These skills include proficiency with numbers, effective use of information technologies, credit card literacy, comprehension of financial data and recommendations, knowledge of consumer rights and responsibilities, and awareness of financial risks. Examining the definitions of financial literacy reveals that individuals must have knowledge of financial issues, comprehend financial issues, and regulate their behavior based on what they know and understand. In other words, the provided information will only be practical if it is reflected in financial behavior (Atkinson & Messy, 2012). Possessing knowledge of financial issues and putting this knowledge to use can be considered financial skills. As a result of their ability to identify financial problems and provide innovative, effective, and efficient solutions, individuals with superior financial skills are in a position to provide solutions. Low-skilled individuals struggle with issues such as failing to make payments on time and budget management (Ayдын, 2018).

2.1 Financial Literacy in the Context of Proverbs

Proverbs are succinct expressions that facilitate cultural transmission from the past to the present and disclose social value judgments. Since it is unclear who wrote them, they are referred to as anonymous and are frequently conveyed in short sentences. Proverbs can make complex and lengthy expressions easier to comprehend with fewer words. Therefore, the knowledge and experiences gained from the past can be summed up through proverbs in a manner that conveys greater meaning with fewer words. According to Okray (2015), proverbs are informative because they reflect the culture's way of life, values, and accepted and disapproved modes of thought. Proverbs, one of the most influential aspects of Turkish culture, must be able to inform and guide society. These statements, which guide society, are present in nearly every aspect of our daily lives. Numerous proverbs in Turkish culture pertain to financial competence. With these proverbs, situations such as improper financial practices, inability to manage the budget, and the results of correct financial practices have been transmitted from the past to the present in the form of a succinct and pithy saying.

The proverbs that have been passed down from the past to the present also demonstrate that financial literacy is an important and necessary skill. There are numerous financial examples in Turkish proverbs: Such as "Drop by drop becomes a lake", "Hold the straw, it's time", "Big hole, small patch", "Black Akçe is for the dark day", "Those who light a candle during the day cannot find it at night", "The account at home does not match the market" proverbs are some of them. In this context, it can be said that proverbs support financial literacy (Güvenç, 2017). Finance-related proverbs are commonly encountered in daily life. Proverbs contribute to the development of a person's financial literacy in this way.

3. Current Study

Only one-third of adults are financially literate worldwide (Klapper et al., 2015). This situation is primarily due to a need for more information and the inability to plan within the budget. To better the financial behavior of individuals in this context, it is necessary to provide financial education in schools and to increase their financial literacy from a young age (Amagir et al., 2018; Bhandari et al., 2021; Lusardi, 2019). A recent meta-analysis of the efficacy of financial education revealed that school-based financial education has a positive and substantial effect (Kaiser & Menkhoff, 2020). In the literature, it has been stated that the primary reason for the low level of financial literacy is that students do not receive adequate financial education throughout their careers (Crain, 2013; DeLaune et al., 2010). In this regard, it is essential to begin teaching financial literacy skills at a young age. Because acquiring financial knowledge as a juvenile facilitates making and implementing financial decisions as an adult (Ünlüer, 2021). How children manage their pocket money, particularly in differentiating between wants and necessities, is one of the financial skills they must develop. Since economic issues arise during infancy, it would be prudent to begin education at this age. Context-based

exercises that engage students in the process should be implemented during this training. Thus, children's interest in the subject will be piqued, and the subject will be internalized. In this sense, one of the context-based activities is the centuries-old practice of social memory proverbs. Because proverbs are illustrative phrases from everyday life, their use in education will result in permanent learning (Mindivanlı et al., 2012).

Examining the relevant literature reveals that numerous studies on financial literacy skills have been conducted. Financial literacy skills of various study groups, such as financial literacy of university students (Barmakı & Şener, 2017), financial literacy of academic staff (Öztürk & Demir, 2015), financial literacy of engineers, financial literacy of students' parents, financial literacy of primary school students (Ünlüer, 2021) were examined. However, it has been determined that experimental studies in the context of proverbs to improve primary school students' financial literacy skills are insufficient. In this context, the purpose of the research is to examine the impact of financial education based on proverbs on the financial literacy skills of fourth-grade students in primary schools. Within the ambit of this objective, the following questions were investigated.

- 1) Do the pre-test scores of fourth-grade students' experimental and control groups differ significantly?
- 2) Do the post-test scores of fourth-grade students' experimental and control groups differ significantly?
- 3) Do the pre and post-test scores of the experimental group's fourth-grade primary school students differ significantly?
- 4) Are there significant differences between the pre- and post-test scores of fourth-grade primary school students in the control group?

4. Material and Methods

4.1. Model of the Research

This study used a quasi-experimental strategy, one of the types of quantitative research, with control and experimental groups. Additionally, the data were gathered in the setting of a pre-test and post-test within the parameters of this design. When actual experimental models cannot be used, quasi-experimental models are used. There is a trial where an independent variable is applied and a control group where an independent variable is not involved in the quasi-experimental design, which includes the experimental and control groups. The experimental and control group students cannot be randomly chosen in the quasi-experimental scheme. Table 1 presents a symbolic representation of the quasi-experimental research strategy employed in the study.

Table 1: Experimental Design Used in the Study

Working Groups	Assignment to Group	Pre-Test	Applied Activities	Post-Test
Experimental Group	R	- Financial Literacy Scale - Wants and Needs Perception Scale	Proverbs-Based Financial Literacy Education	- Financial Literacy Scale - Wants and Needs Perception Scale
Control Group	R		Non-Applied Group	

4.2. Working Group

The research participants are 82 4th-grade primary school students studying in the Esenyurt district of Istanbul. There are 42 students in the control group and 40 in the experimental Group. The research group was selected using a simple sampling technique. It is simple to contact the participants in this form of sampling. Table 1 lists the demographic details of the students in the research group.

Table 1: Demographic Information of Primary School Students Participating in the Study

Variable		Control Group		Experimental Group	
		f	%	f	%
Gender	Girls	22	52.4	19	47.5
	Boy	20	47.6	21	52.5
Total Family Income	0-5500	20	47.6	22	55
	5501-7500	19	45.3	14	35
	7501-9000	2	4.7	4	10
	9001+	1	2.4	0	0
Student's Weekly Allowance	0-50	38	90.5	34	85
	51-100	3	7.1	4	10
	101+	1	2.4	2	5

4.3. Data Collection Tools

a. Financial Literacy Scale

It was developed by Yılmaz et al. (2022). The study group scale is 408 students studying in the fourth grade of primary school. As a result of the analysis, Cronbach's Alpha internal consistency coefficient was calculated as .95, the Guttman coefficient as .91, and the Spearman-Brown coefficient as .92. An exploratory factor analysis was performed on the 30-item draft form. Six items with total item load values below .20 were excluded from the scale. The remaining 24 items are grouped under financial management and conscious consumption. The "Financial Management" dimension (eigenvalue = 11.99) consists of 16 items and explains 49.95% of the total variance. The "Conscious Consumption" dimension (eigenvalue = 1.99) consists of 8 items and explains 8.29% of the total variance. These two factors explain 58.24% of the total variance. The factor load values of the items in the developed scale vary between .422 and .932. The fit indices obtained from confirmatory factor analysis were $\chi^2/sd = 1.82$, RMSEA = .063, SRMR = .049, and CFI = .95.

b. Perceptions of Wants-Needs Scale

It was developed by Bakırtaş and Tonga (2016). 850 students attending the 3rd, 5th and 8th grades were selected as the study group in the development of the scale. As a result of the exploratory factor analysis, it was determined that the scale consisted of two factors. The scale is a five-point Likert-type scale that can be evaluated between I completely agree, and I strongly disagree. The want factor of the scale consists of 12 items and the need dimension consists of 7 items. It was determined that the factor loads of the scale ranged between .042 and .066. As a result of confirmatory factor analysis, it was determined that the determined structure was confirmed. The fit indices of the scale are $\chi^2/df = 1.55$, RMSEA = .05, GFI = .89 and CFI = .95.

4.4. Data Collection and Experimental Process

At the primary school level of the fourth grade, social studies are a required course. Financial literacy skills have a significant position in this course. In the fourth grade "Production, Distribution and Consumption" study area of the 2018 Social Studies Curriculum, financial literacy abilities are provided. The program's successes were integrated with the proverbs within the parameters of the research. These accomplishments are listed below:

“SB.4.5.1. Makes conscious choices between the two by distinguishing between wants and needs.

SB.4.5.2 Recognizes the main economic activities in her/his family and close environment.

SB.4.5.3. Exhibits conscious consumer behavior as a responsible individual.

SB.4.5.4. Creates own budget.

SB.4.5.5 It uses the resources around it without wasting it”. (MEB, 2018 pp. 15-16).

The use of proverbs as instructional material for the transmission of knowledge is meaningful and essential in Social Studies education (Mindivanlı, et al., 2012). We gathered the data for this study from fourth-grade students at an Istanbul primary school. The duration of the data collection procedure was eight weeks. In the first week, pre-tests and fundamental financial concepts are covered. In the previous week, post-tests and an overall evaluation were administered. The activities were structured using the proverbs inscribed next to the weeks as a guide. At the conclusion of the activities for proverbs, the children discussed their meanings and provided examples from daily life. In the context of proverbs, especially newspaper and Internet news, experienced or potential case studies were introduced into the classroom and a discussion environment was created. In this regard, proverbs serve as the study's foundation. Table 2 provides information on the weekly activities in greater detail.

Table 2: Weekly Activities

Week	Activities
<p>1. Week: Scale Pre-Test Application + Theoretical Presentation</p>	<p>We tested students' perceptions of need, want, and financial literacy. The kids had 40 minutes to complete the scales. We questioned the students about the ideas in the prepared presentation, took note of their responses, and then provided the necessary explanations to the students within the context of the information we had gathered. We gave the students papers containing the income-expense table and asked them to bring them the following week. We advised students to complete these forms with their parents. Additionally, we assigned students to conduct research on idioms and proverbs related to terms like economy, budget, and finance. We mentioned during the research process that they could ask the internet, books, library, and elders for information. We made it clear that students would discuss this information with their peers in class the following week as they compared its meanings to how it is used in daily life.</p>
<p>2. Week: Theoretical Presentation</p>	<p>We discussed the fundamentals of the economy, budgeting, and finance in relation to daily life a week ago. We discussed the income-expense statement that was distributed last week, the biggest expenses in our home, and how our expenses compared to our income. We talked about the idioms and proverbs the students learned while conducting research for the activity in this context. The students were asked to list the proverbs they had recently learned about and frequently came across in their daily lives. At this point, we instructed the kids to infer the meanings of idioms and proverbs.</p>
<p>3. Week: Wish Box Event Proverbs of the week • Don't trust existence, you fall into tightness (Güvenme varlığa düşersin darlığa) • Most damage, less decision (Çoğu zarar azı karar) • No mirror is sold to the blind (Köre ayna satılmaz)</p>	<p>Students were asked to write down their needs and wishes and post them in a wish box that we brought to the class. Additionally, we instructed the students to write a proverb and an idiom that accurately reflected their wants and needs while also defining them and placing them in the box. We then unlocked the wish box and talked about whether the items inside were requests or needs with the class. We discussed how the student-written proverbs affected our wants and needs. In this situation, we asked the students to provide real-world examples of their wants and needs. We introduced practical case studies to the classroom and emphasized the significance of proverbs on the topic.</p>
<p>4. Week: Shopping Event Proverbs of the week • Extend your foot according to your quilt (Ayağımı yorganına göre uzat) • Harvest and threshing (Har vurup harman savurma) • It does not increase from work; it increases from tooth (İşten artmaz dişten artar)</p>	<p>Considering the size of the class, we divided the students into groups. We prepared a nominal amount of 300 TL and distributed it to each group. According to the group budget, we asked the students to create a list of their wants and needs. With the money we gave them, we allowed them to make purchases off of the prepared list. The cards with the product names and prices are placed on the table. As each group approached the table, we made them go shopping using the wish list they had created. Then we allowed them to purchase the items on their list of necessities. Following the event, each group responded to the following inquiries regarding the merchandise they had purchased: • After shopping, how much money do you still have?</p>

<ul style="list-style-type: none"> • The account at home does not match the market (Evdeki hesap çarşıya uymaz) • Everyone's dough is according to their bread (Herkesin hamuru ekmeğine göredir) 	<ul style="list-style-type: none"> • Why did you decide to purchase the goods you did? • What was the price of the things on your wish list? • What was the cost of the items on your list of needs? <p>Proverbs chosen for this situation are related to this activity. Case studies are discussed in relation to everyday life. In class, we talked about the potential outcomes for the group who couldn't afford it or who spent more money getting what they wanted. We told the students that we would discuss the proverb "Stretch your foot according to the quilt" next week and asked them to write an essay on it.</p>
<p>5. Week: Brand Event Proverbs of the week</p> <ul style="list-style-type: none"> • Who eats a lot, looks from waist to waist (Bol bol yiyen bel bel bakar) • Those who light a candle during the day cannot find it at night (Gündüzün mum yakan geceleyin bulamaz) • It is cheap, there is a disease, it is expensive, there is wisdom (Ucuzdur vardır illeti, pahalıdır vardır hikmeti) 	<p>The lesson began with a discussion of what we did the previous week and the class's response to the homework we assigned. By asking the kids if they had any guesses as to what we would be doing this week, we attempted to pique their curiosity. Then we developed three shops that offer the same goods. (3 rows are drawn on the board, the products are put there). One sells products without a logo for a medium price, the other sells products with a logo for a high price, and the third sells ripped products for a very low price. The degree of consumer awareness among students is investigated.</p> <p>Children are exposed to proverbs about ethical consumers. Research assignments and proverbs' definitions are given to kids. The student-collected data is discussed in class.</p>
<p>6. Week: Original Poster Work Proverbs of the week</p> <ul style="list-style-type: none"> • Drop by drop becomes a lake (Damlaya damlaya göl olur) • Hold the straw, it's time (Sakla samanı gelir zamanı) • Big hole, small patch (Delik büyük, yama küçük) • Black akçe is for the dark day (Ak akçe kara gün içindir) 	<p>We asked the students to bring scissors, glue, crayons, and other materials for decorating after the activity a week ago. We asked the students to select proverbs relating to the ideas of waste, conscious consumption, budget, want-needs, and savings as well as to come up with their own banner and poster designs and slogans. The designed posters were hung in the classroom so that everyone could see them. First, in the context of the classroom, we asked students to introduce their posters to their peers. The students were then asked to analyze and critique the posters that their friends had created. Finally, we discussed with the students how advertisements can deceive viewers and how not all products that are advertised are worthwhile. Additionally, we asked the kids to research the proverbs for the proverbs—such as, "Black akçe is for the dark day," which is for the time to hide as homework—and to interview the adults about them.</p>
<p>7. Week: Conscious Consumer Activity Proverbs and idioms of the week</p> <ul style="list-style-type: none"> • Take the best, worry about attracting (Al malın iyisini, çekme kaygısını) • The one whose account is pure will be white (Hesabı pak olanın, yüzü ak olur) 	<p>We brought some food items into the classroom and chose a few of them to be expired items. We informed the students that they could purchase any goods they want. Products that were out of date typically had the potential to catch students' attention (Chocolate, candy, etc.). We advised them to buy the products instead and wait rather than using them. We advised them to check the product expiration dates at the conclusion of their shopping. After that, we discussed the appropriate course of action for people who purchase expired goods. We asked a few students to act as grocery store employees on the whiteboard and engage in conversation with students who had purchased items that had expired. We presented a newspaper article to the class as part of this activity. An individual</p>

<ul style="list-style-type: none"> • The buyer is not deceived, the seller is deceived (Alan aldanmaz, satan aldanır) 	<p>who purchased an expired product was described in this newspaper article as having a tragicomic experience. We probed why students made purchases without considering the expiration date. Following that, we advised the students on what to do while comparing it to the news in the newspaper.</p>
<p>8. Week: Scale Post-Test Application + General Evaluation</p>	<p>Up until this week, we had a general discussion about what had been accomplished. We revisited the topic of the significance of the proverbs and idioms the students had learned. We discussed how each activity related to day-to-day life. We then applied the financial literacy, want, and need perception scale to the students to obtain the post-test data.</p>

4.5. Analysis of Data

For the research's data analysis, a six-step procedure was implemented. 1) We ranked the pre- and post-test data obtained from the students and transferred them to the SPSS program; 2) We determined the descriptive statistics of the study group; and 3) We determined the total scores of the measures in the context of the pre- and post-test data. 4) We examined whether other normality assumptions were met by the obtained data, 5) We decided to employ parametric analyses (t-tests for related and unrelated samples), and 6) We reported the results of the research within the context of the obtained data.

Table 3: Normality Analysis

Scales	Kurtosis	Skewness
Financial Literacy Total Score	.262	-.672
Financial management	.178	-.761
Conscious consumers	-.315	.135
Wants and Perception Scale Total Score	.365	-.750
Request Sub-Dimension	.067	-.845
Need Sub-Dimension	.255	-.503

According to Tabachnick and Fidell (2013), the values of kurtosis and skewness should be between +1.5 and -1.5 for the normal distribution of the data. The data in Table 3 show that the kurtosis and skewness values are in the desired range. In this context, we decided to perform parametric tests such as the t-test.

4.6. Ethical Considerations

An ethics committee report (Ethics Committee Meeting No: 2022.11) was received from the Yildiz Technical University Social and Human Sciences Ethics Committee, indicating that the study was ethical, and it was stated that there was no unethical finding in the data collection tools and purpose of the study. In addition, a child consent form was obtained from the primary school fourth graders who participated in the study, as well as written consent from the children's instructors and families. Parents, instructors, and students were informed in depth of the research's purpose and anticipated findings. Parents, students, and teachers were informed that the research would not be used for

any other purpose and that they may disengage from the study at any time if they observe such a situation.

5. Results and Discussion

This section presents research on the effects of financial education based on proverbs on financial literacy and primary school students' views of their wants and needs. We administered the scales to the experimental and control groups as a pre-test prior to the activities and checked for any notable differences between the groups. Table 4 compares pre-test scores with the information we gleaned from the measures.

Table 4: T-test results of unrelated measures according to pre-test measures of financial literacy and perception of want and need scales between experimental and control groups

Measurement		Groups	N	\bar{x}	ss	Sh $_{\bar{x}}$	t_{Test}		
							t	Sd	p
Financial Literacy	Total Score	Experimental Group	40	72.8500	8.89699	1.40674	-1.014	80	.313
		Control Group	42	74.9762	10.01581	1.54547			
	Financial Management Sub-Dimension	Experimental Group	40	47.9750	6.57691	1.03990	-1.077	80	.285
		Control Group	42	49.7143	7.94888	1.22654			
	Budget Creation Sub-Dimension	Experimental Group	40	24.8750	5.29241	.83680	-.321	80	.749
		Control Group	42	25.2619	5.60513	.86489			
Wants and Needs Perception	Total Score	Experimental Group	40	55.4250	7.85734	1.24235	.714	80	.478
		Control Group	42	54.2143	7.50784	1.15848			
	Wants Sub-Dimension	Experimental Group	40	38.1500	6.22052	.98355	1.758	80	.083
		Control Group	42	35.6429	6.66926	1.02909			
	Need Sub-Dimension	Experimental Group	40	17.2750	4.27268	.67557	-1.506	80	.136
		Control Group	42	18.5714	3.50012	.54008			

Note: $p > .05$

When Table 4 is examined, it is seen that there is no statistically significant difference between the pre-test ($\bar{x}_{(Control\ Group)} = 74.9762$; $\bar{x}_{(Experimental\ Group)} = 72.8500$) measurements of the total scores of the control and experimental groups from the financial literacy scale ($t_{(80)} = -1.014$; $p > .05$). In addition, groups according to the comparison of total scores of financial management ($\bar{x}_{(Control\ Group)} = 49.7143$; $\bar{x}_{(Experimental\ Group)} = 47.9750$) and budgeting ($\bar{x}_{(Control\ Group)} = 25.2619$; $\bar{x}_{(Experimental\ Group)} = 24.8750$) sub-dimensions of financial literacy scale There are no statistically significant differences between the two ($t_{(80)} = -1.077$; $p > .05$, $t_{(80)} = -.321$; $p > .05$). According to the table, there is no significant difference between the experimental ($\bar{x}_{(Experimental\ Group)} = 55.4250$) and control ($\bar{x}_{(Control\ Group)} = 49.7143$) groups according to the total scores of the scale of want and need perception. Statistically significant differences were also found between the want ($\bar{x}_{(Control\ Group)} = 35.6429$; $\bar{x}_{(Experimental\ Group)} = 54.2143$) and need ($\bar{x}_{(Control\ Group)} = 18.5714$; $\bar{x}_{(Experimental\ Group)} = 17.2750$) sub-dimensions of the want and need perception scale ($t_{(80)} = 1.758$; $p > .05$, $t_{(80)} = -1.506$; $p > .05$). The fact that there is no significant difference between the groups according to the comparison of the pre-test data can be interpreted as the groups are equivalent to each other. The t-test results regarding the

historical consciousness post-test scores of the experimental and control group students are presented in Table 5.

Table 5: T-test results of unrelated measures according to post-test measures of financial literacy and perception of want and need scales between experimental and control groups

Measurement		Groups	N	\bar{x}	ss	Sh \bar{x}	t Test		
							t	Sd	p
Financial Literacy	Total Score	Experimental Group	40	100.2250	6.77661	1.07148	10.997	80	.000
		Control Group	42	78.1667	10.82436	1.67023			
	Financial Management Sub-Dimension	Experimental Group	40	67.2750	4.45483	.70437	12.760	80	.000
		Control Group	42	50.1905	7.26582	1.12114			
	Budget Creation Sub-Dimension	Experimental Group	40	32.9500	4.19371	.66308	4.267	80	.000
		Control Group	42	27.9762	6.13064	.94598			
Wants and Needs Perception	Total Score	Experimental Group	40	80.3250	5.04029	.79694	13.119	80	.000
		Control Group	42	60.6667	8.09898	1.24970			
	Wants Sub-Dimension	Experimental Group	40	52.8500	3.82669	.60505	11.046	80	.000
		Control Group	42	39.6905	6.54250	1.00953			
	Need Sub-Dimension	Experimental Group	40	27.4750	3.38918	.53588	7.505	80	.000
		Control Group	42	20.9762	4.36442	.67345			

Note: $p < .05$

When Table 5 is examined, it is seen that the students in the experimental ($\bar{x}_{\text{Experimental Group}} = 100.2250$) group got higher scores than the students in the control ($\bar{x}_{\text{Control Group}} = 78.1667$) group in the total scores of financial literacy scale post-test measurements. When the measurements of the experimental and control groups were compared, it was determined that there was a statistically significant difference in favor of the experimental group ($t_{(80)} = 10.997$; $p < .05$). In addition, among the sub-dimensions of the scale, financial management ($\bar{x}_{\text{Control Group}} = 50.1905$; $\bar{x}_{\text{Experimental Group}} = 67.2750$) and budgeting ($\bar{x}_{\text{Control Group}} = 27.9762$; $\bar{x}_{\text{Experimental Group}} = 32.9500$) total scores in favor of the experimental group. significant differences were determined ($t_{(80)} = 12,760$; $p < .05$, $t_{(80)} = 4.267$; $p < .05$). According to the table, there is a significant difference between the experimental ($\bar{x}_{\text{Experimental Group}} = 55.4250$) and control ($\bar{x}_{\text{Control Group}} = 49.7143$) groups in favor of the experimental group according to the post-test total scores of the scale of want and need perception ($t_{(80)} = 13.119$; $p < .05$). It was also statistically significant between the sub-dimensions of want ($\bar{x}_{\text{Control Group}} = 39.6905$; $\bar{x}_{\text{Experimental Group}} = 52.8500$) and need ($\bar{x}_{\text{Control Group}} = 20.9762$; $\bar{x}_{\text{Experimental Group}} = 27.4750$) of the want and need perception scale. It is seen that there is a significant difference in favor of ($t_{(80)} = 11.046$; $p < .05$, $t_{(80)} = 7.505$; $p < .05$). When these results are evaluated, it can be said that the proverb-based financial education applied to the experimental group affects the children more positively than the control group who receives education within the scope of the national education curriculum. The t-test results of the students in the experimental group regarding financial literacy and the pre- and post-test scores of want and need perception are presented in Table 6.

Table 6: Related samples t-test results according to the experimental group pre-test and post-test measurement

Measurement		Groups	\bar{x}	N	ss	Sh $_{\bar{x}}$	t Test		
							t	Sd	p
Financial Literacy	Total Score	Pre-Test	72.8500	40	8.89699	1.40674	-	39	.000
		Post-Test	100.2250	40	6.77661	1.07148	17.710		
	Financial Management Sub-Dimension	Pre-Test	47.9750	40	6.57691	1.03990	-8.571	39	.000
		Post-Test	67.2750	40	4.45483	.70437			
	Budget Creation Sub-Dimension	Pre-Test	24.8750	40	5.29241	.83680	-	39	.000
		Post-Test	32.9500	40	4.19371	.66308	13.541		
Wants and Needs Perception	Total Score	Pre-Test	55.4250	40	7.85734	1.24235	-	39	.000
		Post-Test	80.3250	40	5.04029	.79694	17.710		
	Wants Sub-Dimension	Pre-Test	38.1500	40	6.22052	.98355	-8.571	39	.000
		Post-Test	52.8500	40	3.82669	.60505			
	Need Sub-Dimension	Pre-Test	17.2750	40	4.27268	.67557	-	39	.000
		Post-Test	27.4750	40	3.38918	.53588	13.541		

Note: *p<.01

When Table 6 is examined, it is seen that there is a statistically significant difference in favor of the post-test scores between the experimental group students' financial literacy scale total scores according to the pre ($\bar{x}_{(pre-test)} = 72.8500$) and post ($\bar{x}_{(post-test)} = 100.2250$) test measurements ($t_{(39)} = -17.710$; $p < .05$). Also, from the sub-dimensions of the scale, financial management ($\bar{x}_{(pre-test)} = 47.9750$; $\bar{x}_{(post-test)} = 67.2750$) and budgeting ($\bar{x}_{(pre-test)} = 24.8750$; $\bar{x}_{(post-test)} = 32.9500$) scores in favor of post-test scores ($t_{(39)} = -8.571$; $p < .05$, $t_{(39)} = -13.541$; $p < .05$). There is a statistically significant difference in favor of post-test scores according to pre ($\bar{x}_{(pre-test)} = 55.4250$) and post ($\bar{x}_{(post-test)} = 80.3250$) test measurements between total scores of want and need perception scale ($t_{(39)} = -17.710$; $p < .05$). Want ($\bar{x}_{(pre-test)} = 38.1500$; $\bar{x}_{(post-test)} = 52.8500$) and need ($\bar{x}_{(pre-test)} = 17.2750$; $\bar{x}_{(post-test)} = 27.4750$) sub-dimensions of the perception of want and need scale. It is seen that there is a statistically significant difference in favor of the post-test scores between appears to be higher than the average. From this result, it can be said that proverb-based finance education has a positive effect on students' financial literacy and perceptions of want and need.

When Table 7 is examined, it is seen that there is no significant difference between the pre ($\bar{x}_{(pre-test)} = 74.9762$) and post ($\bar{x}_{(post-test)} = 78.1667$) test scores among the control group students' total financial literacy scale scores ($t_{(41)} = -1.253$; $p > .05$). Moreover, there was no significant difference between the scores of the scale's financial management ($\bar{x}_{(pre-test)} = 49.7143$; $\bar{x}_{(post-test)} = 50.1905$) ($t_{(41)} = -.253$; $p > .05$), It was determined that there were significant differences in favor of post-test scores among the sub-dimension of budget creation ($\bar{x}_{(pre-test)} = 54.2143$; $\bar{x}_{(post-test)} = 60.6667$) ($t_{(41)} = -2.195$; $p < .05$). Want and need There is a statistically significant difference in favor of post-test scores between pre ($\bar{x}_{(pre-test)} = 55.4250$) and post ($\bar{x}_{(post-test)} = 80.3250$) test measurements ($t_{(41)} = -3.115$; $p < .05$). There is also a statistical difference between the sub-dimensions of want ($\bar{x}_{(pre-test)} = 35.6429$; $\bar{x}_{(post-test)} = 39.6905$) and need ($\bar{x}_{(pre-test)} = 18.5714$; $\bar{x}_{(post-test)} = 20.9762$) of the perception of want and need scale. As a result, it is seen that there is a significant difference in favor of post-test scores ($t_{(41)} = -2.299$; $p < .05$, $t_{(41)} = -2.763$; $p < .05$). According to this result, it can be said that

the post-test scores of the control group students' perceptions of budgeting and want and need are higher than the pre-test scores, and the difference is significant.

Table 7: Related samples t test results according to pre-test and post-test measurement of control group

Measurement		Groups	N	\bar{x}	SS	Sh \bar{x}	t Test		
							t	Sd	p
Financial Literacy	Total Score	Pre-Test	74.9762	42	10.01581	1.54547	-1.253	41	.217
		Post-Test	78.1667	42	10.82436	1.67023			
	Financial Management Sub-Dimension	Pre-Test	49.7143	42	7.94888	1.22654	-.253	41	.801
		Post-Test	50.1905	42	7.26582	1.12114			
	Budget Creation Sub-Dimension	Pre-Test	25.2619	42	5.60513	.86489	-2.195	41	.034
		Post-Test	27.9762	42	6.13064	.94598			
Wants and Needs Perception	Total Score	Pre-Test	54.2143	42	7.50784	1.15848	-3.115	41	.003
		Post-Test	60.6667	42	8.09898	1.24970			
	Wants Sub-Dimension	Pre-Test	35.6429	42	6.66926	1.02909	-2.299	41	.027
		Post-Test	39.6905	42	6.54250	1.00953			
	Need Sub-Dimension	Pre-Test	18.5714	42	3.50012	.54008	-2.763	41	.009
		Post-Test	20.9762	42	4.36442	.67345			

Note: *p>.05

5. Recommendations

The benefits of proverb-based education for financial literacy were demonstrated. Proverbs can be employed to raise students' levels of financial literacy. Additionally, financial education promotes the growth of students' perceptions of needs and wants. Learning from proverbs can help students distinguish between their wants and needs. Students can be given a chance to learn about the budget, develop financial management skills, and differentiate between wants and needs through proverb-based financial education.

6. Conclusion

This study investigated the effects of financial education based on proverbs on primary school students' financial literacy and want-need perception. To this end, we discussed the findings we obtained by citing the literature. This section is organized regarding financial literacy, perception of want and need.

6.1. Financial Literacy Conclusion

According to the study, there is no discernible difference between the pre-test scores on the financial literacy scale of the experimental group of students who receive proverbs-based financial education activities and the control group of students who receive instruction by the national education curriculum. This result indicates that before the application, the mean scores of the experimental and control groups were comparable. However, there is a significant difference in favor of the experimental group when the post-test mean scores of the students in the experimental and control groups are

compared. This outcome is important because it demonstrates the effectiveness of the experimental group's proverbs-based financial education program. When the pertinent literature is examined in light of these findings, it is clear that the financial education provided within a particular plan has a beneficial impact on people's financial knowledge. (Batty et al., 2015; Berry et al., 2015; Borden et al., 2008; Carlin & Robinson, 2012; Fox, Bartholomae & Lee 2005; Go et al., 2012; Shim et al., 2009; Varcoe et al., 2005). Additionally, in his study with primary school students, Çelikten (2020) discovered a statistically significant difference in favor of post-test scores in the financial literacy, attitude, and academic accomplishments of the students in the experimental group. These findings confirm the findings of the study. Financial literacy has a positive impact on financial well-being in addition to having a positive effect on financial literacy education. (Kim, Lee & Lee, 2019). Grohmann et al. (2018) state that greater financial literacy strengthens financial inclusion (Bajo & Barbi, 2018). In a different study, success was attained because of teaching fourth-grade primary school students to recognize financial concepts (Çarıkçı, 2019). Financial literacy must now be increased, and the next generation of citizens, workers, and consumers must be informed (Lusardi, 2019).

Another study finding states that there is a statistically significant difference between the experimental group students' total financial literacy scale scores according to the pre- and post-test measurements in favor of the post-test results. Additionally, there is a significant difference in favor of post-test scores between the sub-dimensions of the scale, financial management and budget creation. Another study finding states that there is no statistically significant difference between the total scores of the control group students on the financial literacy scale and the pre- and post-test measurements of the scale's financial management sub-dimension. However, there is a sizable difference between the post-test scores from the sub-dimensions of the scale in favor of budget creation. This outcome demonstrates that, in comparison to the pre-test data, the budget creation scores of the control group students who did not receive financial education increased. The primary cause of this circumstance can be attributed to the fact that students recognize the accomplishments of developing a budget as falling within the purview of the curriculum. The financial training was conducted concurrently with the social studies curriculum objectives. As a result, children learned to make a budget, and their grades rose. The increase in the control group, however, is less than in the experimental group when compared to that group. In this instance, the provided proverbs demonstrate the value of based education. Examining the pertinent literature reveals studies that show a significant difference between the pre-test and post-test scores for the group receiving financial literacy education (Barua, Koh & Mitchell, 2018; Beck & Brown, 2014; Martin, 2007; Braunstein & Welch, 2002; McCormick, 2009; Walstad et al., 2010; Zulaihati et al., 2020). There is evidence in the literature that financial education also develops different skills. For instance, Kim, Garman, and Quach (2005) discovered a positive correlation between employee contributions to retirement savings plans and attendance at financial education workshops. Financial behavior and financial literacy

also have a positive relationship (Hastings et al., 2013; Hilgert et al., 2003). In other words, financially literate individuals positively regulate their behaviors.

6.2. Perception of Wants and Needs Conclusion

According to the study, there is no discernible difference between the pre-test results of the experimental group of students, who participate in proverbs-based financial education activities, and the control group of students who follow the national education curriculum. This finding indicates that the experimental and control groups' mean scores were equivalent before the application. However, there was a significant difference in favor of the experimental group when the post-test mean scores of the 4th-grade students in the experimental and control groups were compared. This finding is significant because it demonstrates how the experimental group's exposure to proverb-based financial education improved their perception of wants and needs. When the pertinent literature is examined in the context of this finding, it supports the study's findings that the financial education provided within a specific plan has a positive impact on students' perceptions of their needs and wants (Çarıkcı, 2019; Otto et al., 2006).

According to our analysis, the experimental group students' scores on the pre-and post-tests for want and need perception differed significantly, favoring the post-test results. Additionally, there are significant differences in favor of post-test scores between the scale's need and want subdimensions. The results of the want and need perception pre-and post-tests for the control group students are also statistically significant in favor of the post-test results. The want and need sub-dimensions of the scale's difference between the pre-and post-test scores are also statistically significant in favor of the post-test results. This finding demonstrates that students in the control group who did not receive financial education also experienced growth in their want and need perceptions. The curriculum's successes positively impact the children's perceptions of need and want. The difference is significant in favor of the experimental group when the post-test results of the experimental and control groups are compared. This outcome demonstrates that the group that received financial education based on proverbs outperformed the group that received curriculum-based education in terms of test scores. This finding is consistent with studies in the literature showing that financial education influences students' perceptions of wants and needs in a good way. For example, Yiğitbaş et al. (2020) stated in their study that financial literacy education increases the perception levels of the concepts of want and need. Again, in the study of Çelikten (2020), it has been seen that students who receive financial education can distinguish between the concepts of want and need. In this direction, it can be said that the level of want and need perception can also increase with financial training given to individuals. In the study carried out by Ünlüer (2021), there was a positive development in students' perceptions of wants and needs because of financial education activities.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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