

DETERMINANTS OF MONEY-SAVING BEHAVIOUR AMONG TEENAGERS: EVIDENCE FROM HIGH SCHOOL STUDENTS IN UZBEKISTAN

Abdukarimov Kozimjon Komilovich

ORCID: 0009-0008-4682-1839

email: kozimjon537@gmail.com

ABSTRACT

This study examines which factor best predicts saving behavior among high school students in Uzbekistan: financial literacy, financial background, or behavioral factors (self-control). An anonymous online survey was completed by 44 respondents, mostly aged 14–19 from various regions of Uzbekistan. Financial literacy was measured using the standard “Big Three” questions (Lusardi & Mitchell). Financial background included monthly allowance, personal earnings, parental discussion of money, and ownership of a bank account. Self-control was assessed with four Likert-scale items. Saving behavior was measured by saving frequency and the proportion of money saved.

Results show that self-control has a moderate-to-strong positive association with saving behavior ($r = 0.56$), while financial literacy ($r = 0.06$) and financial background ($r = -0.10$) show almost no relationship. In a multiple regression model, only self-control remained a meaningful positive predictor. Students with higher self-control saved more regularly and set aside a larger share of their money. These findings suggest that, in this sample, behavioral self-regulation is more important for teenage saving habits than financial knowledge or access to money alone. The study highlights the potential value of teaching self-control and delayed gratification alongside financial literacy in schools. Limitations include the small and non-random sample and the cross-sectional design, which prevents causal conclusions.

Keywords: Saving behavior, financial literacy, self-control, high school students, Uzbekistan.

INTRODUCTION

Saving money is one of the most important financial habits a young person can develop. For high school students, the ability to save even small amounts can build discipline, prepare them for future expenses such as university or unexpected needs, and reduce financial stress later in life. In Uzbekistan, where many young people are starting to use bank accounts, mobile banking, and digital payments for the first time, understanding what actually helps teenagers save is especially relevant.

Previous research has suggested three main groups of factors that may influence saving behavior. The first is financial literacy — the knowledge of basic concepts such as interest, inflation, and risk. Studies by Lusardi and Mitchell (2008) and others have shown that people with higher financial literacy tend to save more and make better financial decisions. The second factor is financial background or circumstances, which includes how much money a student receives, whether they earn their own money, whether their parents talk about money, and whether they have access to formal financial tools such as a bank account. The third group consists of behavioral factors, especially self-control. Research by Strömbäck et al. (2017) and

Chalimah et al. (2019) found that people who can resist immediate temptations and think about future consequences are more likely to save regularly.

While many studies have examined these factors among university students or adults, fewer have focused specifically on high school students, and very few have done so in the Central Asian context. Most existing research also looks at only one or two of these factors at a time. This leaves an important question unanswered: when financial literacy, financial background, and self-control are all considered together, which one has the strongest link to saving behavior among Uzbek teenagers?

This independent research project aims to answer that question. Using a short online survey completed by 31 high school students and recent graduates from different regions of Uzbekistan, the study measures all three factors and compares their relationship with actual saving behavior. The main goal is to identify which factor best predicts how often and how much students save. The findings may help parents, teachers, and schools decide where to focus their efforts when trying to improve young people's financial habits.

Financial literacy means understanding basic money concepts such as interest, inflation, and risk, and being able to use that knowledge in everyday decisions. Several studies have found a positive link between financial literacy and saving. Lusardi and Mitchell (2008) showed that people who answer basic financial knowledge questions correctly are more likely to plan and save for the future. A large study of 1,243 Russian high school students found a strong positive effect of financial literacy on the willingness to save, even after researchers controlled for other factors (Gilenko & Chernova, 2021). Similar results appear in research from Indonesia and other countries: students with better financial knowledge tend to report better saving and money-management habits (Chalimah et al., 2019; related Indonesian studies). Students who understand interest, inflation, and risk may be better equipped to recognize the long-term benefits of saving and the costs of spending everything immediately.

Financial circumstances include how much money a student has access to, whether they receive a regular allowance, whether they earn their own money, and the family financial environment (for example, whether parents talk about money or the student has a bank account). Research shows that these factors can matter. Studies on parental financial socialization find that when parents discuss money, give pocket money, or help open a savings account, young people often develop better money habits later (Webley & Nyhus and related work; Buccioli & Veronesi, 2014). Having a bank account or earning personal income can also give teenagers practical experience with managing money. However, simply having more money or access to financial tools does not automatically lead to more saving — the way the money is handled at home appears to be important.

Self-control is especially interesting for saving behavior. Saving requires giving up some immediate consumption in exchange for a future benefit. Therefore, students with stronger self-control may be more likely to save.

Strömbäck et al. (2017) found that people with good self-control are more likely to save regularly from their income, feel less worried about money, and report better overall financial behavior. Chalimah et al. (2019) noted that students with strong self-control can resist wasteful spending and think about consequences before acting. Other research on children and adolescents also shows that higher self-control is linked to preferring saving over

immediate spending (Trzcińska et al., 2018). Long-term studies even suggest that childhood self-control predicts better financial outcomes in adulthood (Moffitt et al., 2011).

Existing research provides evidence that financial literacy, financial circumstances, and self-control may all influence financial behavior. However, their relative importance among high school students in Uzbekistan remains less clear. Most studies focus on university students or adults, or examine only one factor at a time. Very few look at all three factors together in a Central Asian high-school context. This study aims to address that gap.

Based on the literature, the following hypotheses are proposed:

Based on the literature reviewed above, the following hypotheses are proposed:

- Higher financial literacy is positively associated with better saving behavior among Uzbek high school students.
- Stronger financial background (higher allowance, earning own money, parental discussion of money, and having a bank account) is positively associated with better saving behavior.
- Higher self-control is positively associated with better saving behavior.
- Among the three factors, self-control is the strongest predictor of saving behavior.

Financial Literacy was measured using the well-known “Big Three” questions developed by Lusardi and Mitchell. These questions test understanding of compound interest, inflation, and risk diversification. Each correct answer received 1 point, so the total score ranged from 0 to 3.

$$FL_i = I_{\text{interest}} + I_{\text{inflation}} + I_{\text{diversification}}$$

each I equals 1 for a correct answer and 0 otherwise.

Financial Background included four items:

Monthly allowance (categorized by amount)

Whether the student earns any money themselves

How often parents discuss money, budgeting, or saving

Whether the student has a personal bank account

These answers were converted into points and added together to create a single background score.

Table 1. Component Scoring

Component Scoring		
Component	What It Measures	Points
Monthly allowance	Tracks how much money the participant receives from parents (or other sources) on a monthly basis.	0 – 4 (0, 1, 2, 3, or 4)
Earns own money	Indicates whether the participant has an independent source of income (e.g., part-time job, freelance work, etc.).	0 or 2 (no = 0, yes = 2)
Parents discuss money	Measures the extent to which the participant's parents talk with them about money matters (e.g., budgeting, saving, spending).	0 – 3 (0, 1, 2, or 3)
Has bank account	Shows whether the participant has a personal bank account (e.g., checking or savings account).	0 or 1 (no = 0, yes = 1)
Total possible score: 10 points		

The financial background score was calculated by summing the points assigned to allowance, personal income, parental discussion of money, and bank-account ownership. A higher score represented greater financial exposure and resources.

Self-Control was measured with four statements on a 5-point scale (Strongly Agree to Strongly Disagree). One item was reverse-scored. The four answers were averaged to create a self-control score ranging from 1 to 5, where higher scores mean stronger self-control.

Saving Behavior (the dependent variable) was measured with two questions:

How often the student saves part of their allowance or earnings

What proportion of their monthly money they usually save

After collecting the responses, scores were calculated for each variable. Descriptive statistics were computed first. Then correlations between each independent variable and saving behavior were examined. Finally, a simple multiple regression was run to see which of the three factors remained the strongest predictor when all were considered together.

This method allowed a clear comparison of the relative importance of financial literacy, financial background, and self-control.

Pearson's correlation coefficient was used to examine the strength and direction of the linear relationship between each independent variable and saving behavior.

$$r = \frac{\sum(X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum(X_i - \bar{X})^2 \sum(Y_i - \bar{Y})^2}}$$

Picture 1. Pearson's correlation coefficient

The coefficient ranges from -1 to $+1$. Positive values indicate that higher values of one variable tend to be associated with higher values of the other, while negative values indicate an inverse relationship. Values close to zero indicate a weak linear relationship.

Table 2. Demographic Characteristics of Respondents

Characteristic	Category	n	%
Gender	Male	31	71
	Female	12	27
	Prefer not to say	1	2
Age	14–19	43	98
	20+	1	2
School grade / status	Graduated	28	64
	11th	8	18
	9th	6	14
	10th	2	5
Type of education	Public school	25	57
	University	8	18
	Private school	7	16
	Lyceum	4	9

Created with Datawrapper

Table 2 shows the demographic characteristics of the sample. Most respondents were male (70.5%) and aged 14–19. A large proportion had already graduated from high school (63.6%), and more than half attended public schools.

Table 3. Descriptive Statistics of the Main Study Variables

Variable	N	Mean	SD	Min	Max
Financial Literacy	44	2	1	0	3
Financial Background	44	6	2	1	9
Self-Control	44	4	1	1	5
Saving Behavior	44	3	1	1	5

Created with Datawrapper

Table 3 presents the descriptive statistics of the main variables. On average, students scored 2.30 out of 3 on financial literacy, 5.66 on the financial background index, 3.72 on self-control, and 2.99 on saving behavior. These scores show that the sample had a moderate level of financial literacy and self-control, while saving behavior was only average.

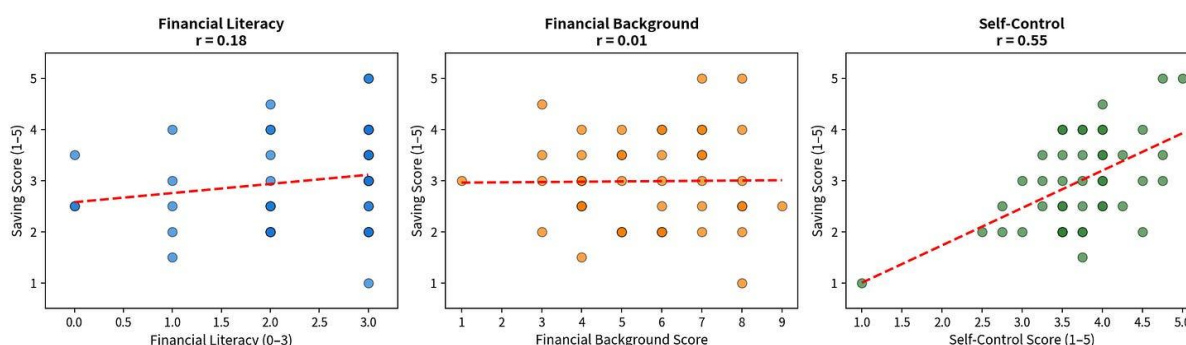
Table 4. Table - Saving Behavior

Response	n	%
None	3	7
1–10%	17	39
11–25%	12	27
26–50%	8	18
>50%	4	9

Created with Datawrapper

Table 4 describes the saving behavior of the participants. Only a small number of students reported never saving (6.8%). The most common answers were “Occasionally” (29.5%) and “Sometimes” or “Often” (25% each). Regarding the proportion of money saved, the majority of students (38.6%) said they usually save only 1–10% of their monthly money. Only 9.1% reported saving more than half of their money.

Figure 4. Relationships between Predictors and Saving Behavior



Picture 2. Correlations (Scatterplots)

Correlations with Saving Behavior:

The correlation analysis (**Picture 2**) revealed important differences between the three predictors. Self-control had a moderate-to-strong positive correlation with saving behavior ($r = 0.55$). This means that students with higher self-control tended to save more often and a larger proportion of their money. Financial literacy showed only a weak positive correlation ($r = 0.18$), and financial background showed almost no relationship with saving ($r = 0.01$).

Table 5. Multiple Regression Predicting Saving Behavior (N = 44)

Predictor	β	SE	t	p
Financial Literacy	0	0	0	0.644
Financial Background	0	0	0	0.782
Self-Control	1	0	4	< 0.001

Created with Datawrapper

To test which factor best predicts saving behavior when all three are considered together, a multiple regression analysis was conducted (**Table 5**).

Model summary:

$$R^2 = 0.31$$

$$\text{Adjusted } R^2 = 0.26$$

$$F(3, 40) = 6.11, p = 0.002$$

The overall model was statistically significant, $F(3, 40) = 6.11, p = 0.002$, and explained 31% of the variance in saving behavior ($R^2 = 0.31$).

Looking at the individual predictors:

- Self-control was a significant positive predictor of saving behavior ($\beta = 0.72, p < 0.001$).
- Financial literacy was not a significant predictor ($\beta = 0.06, p = 0.644$).
- Financial background was also not a significant predictor ($\beta = 0.02, p = 0.782$).

These results indicate that **self-control is a stronger and only significant predictor** of saving behavior among the three factors examined in this study. Students who reported higher self-control tended to save more, while higher financial knowledge or a stronger financial background alone did not significantly improve saving behavior once self-control was taken into account.

Overall, the findings highlight that behavioral factors, especially self-control, may be more important than knowledge or access to money when it comes to actual saving behavior in this age group. This independent research examined the relationship between financial literacy, financial background, self-control, and saving behavior among 44 high school students and recent graduates in Uzbekistan. The results showed that self-control had a moderate-to-strong positive relationship with saving behavior and was the only significant predictor in the multiple regression analysis. Financial literacy and financial background did not significantly predict saving once self-control was taken into account.

These findings suggest that programs aimed at improving young people's financial habits should not focus only on teaching financial knowledge or increasing access to money. Developing self-control and the ability to delay gratification may be equally (or even more) important.

Future research with larger and more representative samples is needed to confirm these results.

REFERENCES

1. Chalimah, S. N., Martono, S., & Khafid, M. (2019). The saving behavior of public vocational high school students. *Journal of Economic Education*.
2. Gilenko, E., & Chernova, A. (2021). Saving behavior and financial literacy of Russian high school students. *Children and Youth Services Review*, 127, 106122.
3. Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? *American Economic Review*, 98(2), 413–417.
4. Moreno-Herrero, D., Salas-Velasco, M., & Sánchez-Campillo, J. (2018). Factors that influence the level of financial literacy among young people. *Journal of Consumer Affairs*.
5. Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D., & Tinghög, G. (2017). Does self-control predict financial behavior and financial well-being? *Journal of Behavioral and Experimental Finance*, 14, 30–38.