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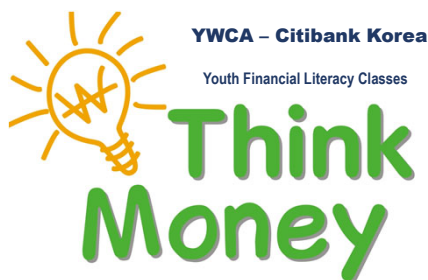
# Middle Schoolers Saving Less than Elementary Students: Implications for Financial Education

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## Background of the Study

- ThinkMoney Youth Financial Literacy Class is a collaboration between Citibank and YWCA Korea since 2006



Category	Contents
Rationalizing Financial Life	Need for money Spending Priorities
Budget	Intentional Spending of Money Writing a Pocket-money entry
Income	Understanding Types of Income Income and jobs
Spending	Knowing what you spend money on The importance of sharing and Donate
Saving	Different ways to save Open a Savings Account
Credit and borrowing	What does credit mean? Pros and cons of using credit

## Purpose of the Study



- In this study, we analyzed...
  - ✓ 3 years of pre- and post-surveys of ThinkMoney financial education(2020, 2021, 2022).
  - ✓ differences in savings, financial management Attitudes, confidence, and behavior of elementary and middle school students, before and after financial education experience.
- We aimed to...
  - ✓ verify the educational effectiveness by analyzing the impact of various variables on the savings behavior
  - ✓ propose improvements to financial education programs for youth

## Savings-Behavioral Research

- Previous researches suggest that there is a link between savings habits in adolescence and savings behavior in adulthood(Mischel, Shoda, & Rodriguez, 1992; Ivan & Dickson, 2008).
    - ✓ This requires ongoing efforts to understand the actual behaviors of young people and the development of educational programs that can help build the right financial attitudes, knowledge, and behaviors from an early age.
  - Studies in Korea have been focused on the savings behavior of college students, pre- and post retirees and the general public. They have few studies interested in the savings behavior of youth.
    - ✓ The existing studies(Hong, 2003; Hahn, 2017) have limitations such as small sample sizes, the use of dichotomous scales, and reliance on secondary data.
- In this study, we compare elementary and middle school students in terms of savings, financial management attitudes, confidence, and behavior.
  - By using pre- and post-financial education program questionnaires over three years(2020, 2021, 2022), this study seeks to identify ways to improve the ongoing financial education programs offered to youth.

## Data Collection and Analysis Methods

### Research questions

1. How effective is the ThinkMoney education program for elementary and middle school students
2. What are the variations in time preference, financial management behavior, and financial manager confidence between elementary and middle school students
3. What is the impact of general characteristics, financial management confidence, attitudes, and behavior on savings among school students

### Research overview

<b>DATA</b>	Pre- and post-surveys of ThinkMoney program in South Korea
<b>Participants</b>	797 elementary and middle school students who participated in the YWCA ThinkMoney program in South Korea
<b>Methods</b>	Frequency analysis, factor and reliability analysis, paired sample t-test, independent sample t-test, hierarchical regression analysis

### Characteristics

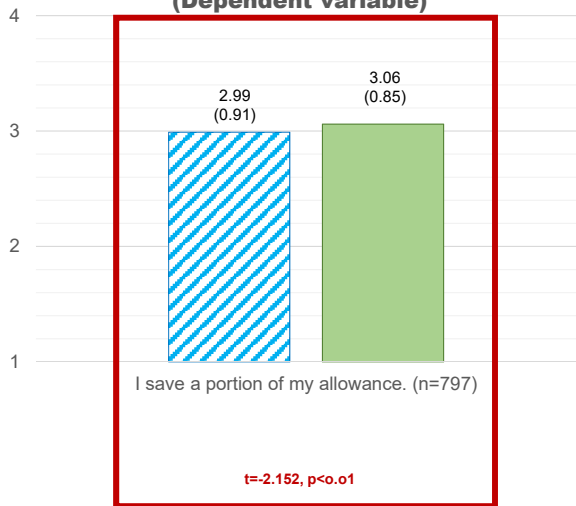
Items	Categories	Frequency(%)	Items	Categories	Frequency(%)
<b>Grade</b>	Elementary (G5-6)	556(69.76)	<b>Gender</b>	Male	314(39.40)
	Middle (G7)	241(30.24)		Female	483(60.60)
<b>Period of education</b>	2020	205(25.7)	<b>Location</b>	Capital Region	293(36.76)
	2021	350(43.9)		Cities	127(15.93)
	2022	242(30.4)		Other regions	377(47.30)

## EFA of Saving Behavior among South Korean Students

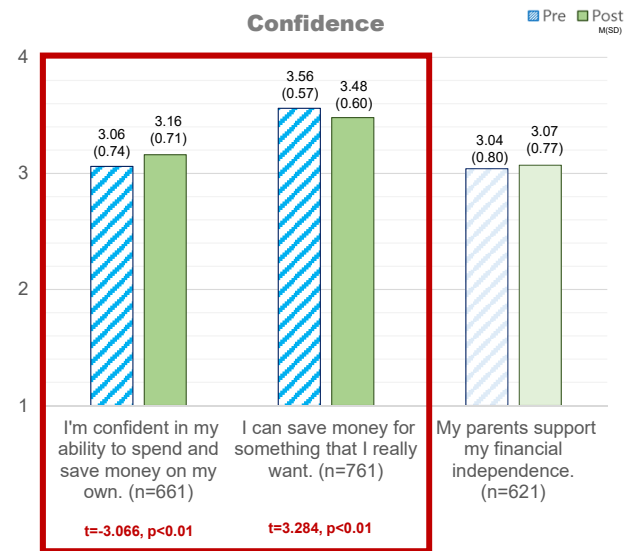
Items		Factor loading	Eigen value	Variance (%)	Cronbach's $\alpha$	KMO
<b>Financial Management Confidence</b> (Lown, 2011)	I can save money for something that I really want.	.751	1.722	24.6	.619	.688
	I'm confident in my ability to spend and save money on my own.	.724				
	My parents support my financial independence	.710				
<b>Financial Management Behavior</b> (Cha, 2023)	Keeping a consistent record of money spent.	.850	1.399	20.0	.559	
	I plan before I spend money.	.755				
<b>Financial Management Attitude</b>	<b>Time Preference</b> Instead of saving money for the future, it is better to spend it now(R).	.809	1.340	19.1	<u>.426</u>	
	<b>Attitudes toward Borrowing</b> If I've exhausted my allowance, I can either request an advance or borrow money from a friend(R).	.757				

Results ① Paired samples t-test of ThinkMoney Education in Korea

Savings  
(Dependent variable)

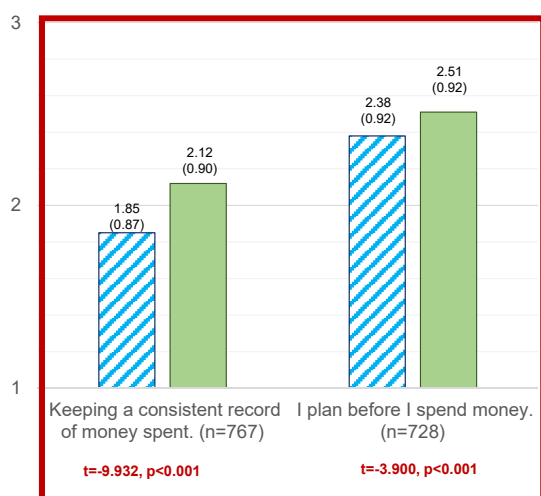


Confidence

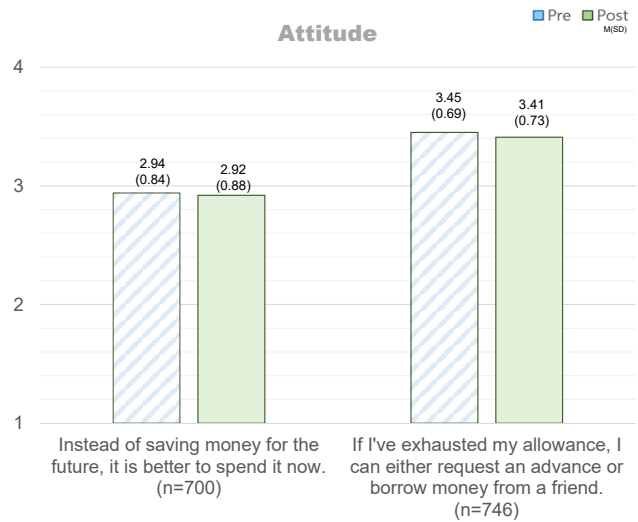


Results ① Paired samples t-test of ThinkMoney Education in Korea

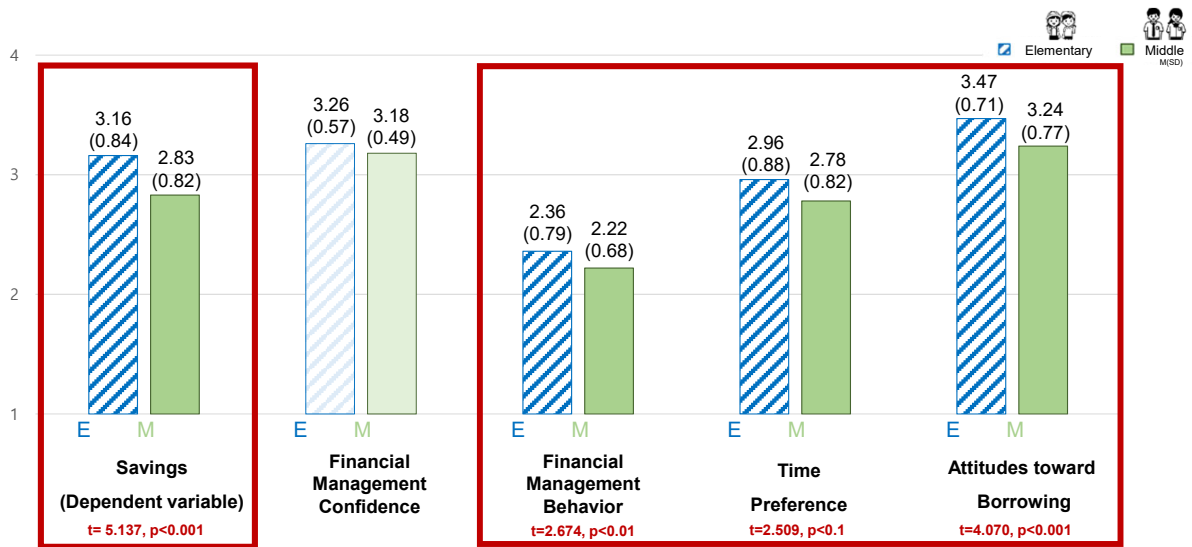
Behavior



Attitude

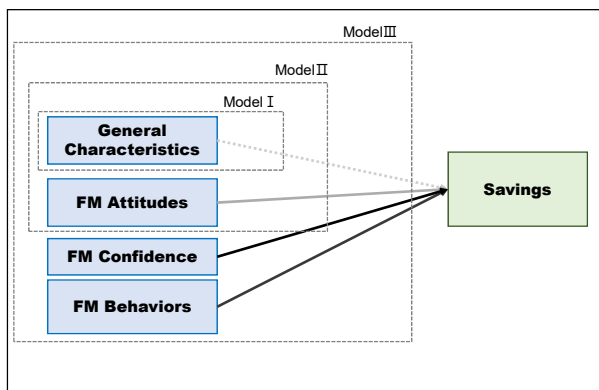


### Results ② independent samples t-test of Saving Behavior among Students



- Significant differences ( $p < 0.05$ ) were found in Savings, Financial management behavior, Time preference, and Attitude toward borrowing, except for Financial manager confidence.

### Results ③ Analyzing the relative influence of factors on saving among elementary and middle school students



Items	Model I		Model II		Model III		
	B	$\beta$	B	$\beta$	B	$\beta$	
Intercept	3.052***		3.632***		1.327***		
Period of education	0.004	0.004	0.032	0.028	0.081	0.071	
Gender (Female=0)	-0.062	-0.036	-0.07	-0.04	-0.045	-0.026	
Curriculum (Elementary=0)	-0.200*	-0.106	-0.114	-0.06	-0.033	-0.017	
Location (Other regions=0)	0.207**	0.117	Capital Region	0.206**	0.116	0.196*	0.111
			Cities	0.199*	0.086	0.187*	0.081
Time Preference (R)			0.199***	0.203	0.163***	-0.166	
Attitudes toward Borrowing (R)			0.154***	0.133	0.105**	-0.091	
Financial Management Behavior					0.314***	0.277	
Financial Management Confidence					0.395***	0.253	
F	5.111***		11.993***		30.566***		
R	0.187		0.327		0.531		
R <sup>2</sup>	0.035		0.107		0.282		
Adj R <sup>2</sup>	0.028		0.098		0.273		

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

- By adding variables from Model I  $\rightarrow$  II  $\rightarrow$  III, R<sup>2</sup> increased (0.035  $\rightarrow$  0.107  $\rightarrow$  0.282)
- According to 'Model III', Behavior ( $\beta = .277$ ), Confidence ( $\beta = .253$ ), Time Preference ( $\beta = -.166$ ), Attitude toward Borrowing ( $\beta = .091$ ), and Location have significant effects.

## Conclusion and Implications for Financial Education

- This study examined the effectiveness of a financial education program for building healthy financial management attitudes, confidence, and behaviors across the lifespan from youth.
- First, both elementary and Middle school students showed significant effects on financial management behaviors, attitudes, and confidence as a result of participating in financial education.

## Conclusion and Implications for Financial Education

- Second, there was a significant difference in savings, financial management attitudes and behavior between elementary and middle school students.
  - ✓ Hahn(2017) attributes this result to a shift in parental expectations of their children. It is necessary to explore the causes of this phenomenon, in further researches.
  - ✓ Factors to consider include the consumption tendencies of elementary and middle school students(such as impulsive consumption and ostentatious consumption), the relationship with parents(financial support or emotional support), and the influence of peers on consumption(Hong, 2003).

## Conclusion and Implications for Financial Education

- Third, we identified variables that affect the savings behavior of elementary and middle school students. We entered variables, financial behavior, attitude, and confidence, and all had significant effects.
- ✓ Based on previous research that adolescent savings habits can influence adult savings habits, it is necessary to continue to provide financial education that aims to improve Financial Management Attitude, Behavior, Confidence.

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