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## Financial Management Education: Its Role in Changing Behavior

Sissy Osteen

*Oklahoma State University*, [sissy.osteen@okstate.edu](mailto:sissy.osteen@okstate.edu)

Glenn Muske

*Oklahoma State University*, [glenn.muske@okstate.edu](mailto:glenn.muske@okstate.edu)

Joyce Jones

*Oklahoma State University*, [joyce.jones3@cox.edu](mailto:joyce.jones3@cox.edu)



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## Financial Management Education: Its Role in Changing Behavior

### Abstract

Managing personal finances is a crucial but difficult issue. Many writers are concerned about whether or not Americans are prepared to handle their finances as personal debt and bankruptcies grow. While some educators believe that financial education can improve a family's financial security, others question the effectiveness of such programs. The study reported here examined the results of Money 2000™ and its ability to influence behavior and financial preparedness. Participants made greater use of banks and less use of loan and check cashing services, increased savings, and decreased debt. The data supports financial literacy training as enhancing financial well-being.

### Sissy Osteen

Assistant Prof./OCES Resource Management Specialist  
[sissy.osteen@okstate.edu](mailto:sissy.osteen@okstate.edu)

### Glenn Muske

Prof./OCES Home-Based and Micro Business Specialist  
[glenn.muske@okstate.edu](mailto:glenn.muske@okstate.edu)

### Joyce Jones

Assoc. Prof./OCES Personal Finance Specialist  
[joyce.jones3@cox.net](mailto:joyce.jones3@cox.net)

Oklahoma State University  
Stillwater, Oklahoma

## Introduction

Managing personal finances is a crucial and often difficult issue. Personal debt continues to rise (Bennett, 2006), bankruptcy rates are uncertain due to recent changes in bankruptcy legislation, while the personal savings rate remains in the red at negative 1.5% in June 2006 (U.S. Department of Commerce, 2006). The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 requires consumers who file bankruptcy to complete a personal financial management class before the bankruptcy can be discharged, suggesting that more knowledge will help avoid future financial difficulties (White, 2005). The creation of the Financial Literacy and Education Commission facilitated by the Fair and Accurate Credit Transactions Act (FACTA) (U.S. Department of the Treasury, 2005) is another example that there is far-reaching recognition that education is useful and necessary.

Educators believe that financial education leads to improved financial literacy and financial security for families (Garman, 1999). There has been an increase in interest in how financial education can equip individuals with the skills needed to avoid financial problems and recover from the consequences of extreme debt such as bankruptcy. Researching the effectiveness of financial education programs can guide program development and refinement (Hilgert, Hogarth, & Beverly, 2003) and help educators find a method for dealing with community needs related to family financial management.

Research on successful financial education methods is scarce (Financial Literacy and Education Commission, 2006), and even though some research suggests that use of sound financial practices can provide families with greater wealth accumulation (Beutler & Mason, 1987; Hira, 1987; Titus, Fanslow, & Hira, 1989), it is unclear whether there is a direct relationship between education and improved economic well-being (Braunstein & Welch, 2002). Financial literacy programs are

designed with the goal of helping individuals adopt sound financial practices that promote economic health and improved quality of life. It is important to know if that goal is being met. The purpose of the study reported here was to explore one state's experience in helping adults improve their financial management practices through financial education programs.

## Methodology

The Oklahoma Cooperative Extension Service chose to evaluate positive behavioral changes by participants in the statewide Money 2000™ program, a financial education program designed to help consumers reduce debt and increase savings. Specifically the researchers were interested in the relationships between 1) demographics; 2) financial services used; 3) behaviors started since taking a class; 4) current financial practices; and 5) the financial situation of the household. Of particular interest were behaviors changed, current financial behaviors and feelings towards financial situation, and achievement of debt reduction and savings-increase goals.

For a 3-year period, courses were offered in communities throughout the state and demographic information was gathered on participants. They were asked to provide a specific monetary amount for debt reduction and increased savings goals. At the end of the program cycle, 500 surveys were mailed to a random sample of program participants from the previous 3 years. Fifty-nine surveys were undeliverable, and seven more had missing or incomplete data. Forty-four surveys had complete data and were useable, a 10% response rate. Due to limited resources, only one copy of the survey was mailed. The instrument was constructed as a post/pre survey to determine behavior changes since attending a financial education class.

Frequencies and means were tabulated for the descriptive data, and a chi square analysis was performed to analyze significant relationships between behaviors and the established goals of decreased debt or increased savings. As the study was somewhat exploratory in nature, the level of significance was set at .1. The sample characteristics are in Tables 1 and 2.

**Table 1.**  
Financial Behaviors and Characteristics

	Mean	#	%		Mean	#	%
Annual household income	\$30,486			Overdraft protection	.5		
\$10,000 or less		8	19.5	Reason for saving - Top 3			
\$10,001 - \$25,000		14	34.2	Future, retirement		16	
\$25,001 - \$50,000		12	29.2	Emergencies		15	
\$50,001 or more		7	17.1	Car, house		11	
Household debt	\$26,283			3 mos. emergency savings(# yes)	.27	11	26.8
\$5000 or less		16	42.1	Have seen credit report	.64		
\$5001 - \$25,000		11	29.0	Within past 6 months		11	45.8
\$25,001 or more		11	28.9	7-12 months		8	33.4
Amount in a savings account	\$3094			13-24 months		2	8.3
Amount in a checking account	\$3379			25 months or more		3	12.6
Debt accumulated in last year	\$3501			Money in reserve account (# yes)	.39	17	38.6
Debt paid in last year	\$2631			Denied credit in last year (# yes)	.41	18	40.9

## Results

### Sample Characteristics

Since attending their first class, 21 had written or rewritten a budget, 16 had started a filing system, and 15 had ordered a credit report. Respondents indicated they paid bills on time (4.43 on a 5-point scale, with 5 being "always"); felt positive about knowing how much money they were spending (4.18); and balancing their checkbooks (4.07). The mean for completely paying monthly credit card balances was 2.67, while the mean score for carrying a credit card balance was 3.17 (reverse coded).

**Table 2.**  
Current Financial Practices (5=always, 1=never)

Feel in control	3.61	Comparison shop	3.26
Live for today - reverse	3.61	Immediately record deposits & withdrawals	3.91
Set financial goals	3.66	Pay more than minimum	3.46
Save money for long term goals	3.36	Able to make positive financial changes	3.60
Have money to meet expenses	3.89	Pay credit cards in full	2.67
Know amounts spend on expenses	4.18	Carry over a credit card balance - reverse	3.17
Follow a spending plan	3.51	Pay bills on time	4.43
Balance my checkbook	4.07	Buy on impulse - reverse	3.66
Satisfied with record keeping system	3.89	Have too many events/emergencies-reverse	3.47

Chi-square analyses found several variables significantly related to decreased debt (Table 3) and increased savings (Table 4). Using a credit counseling service; having a financial plan and long-term goals; knowing expenses; having above-average household income; accumulating new debt; and having a reserve account for intermittent expenses were all significantly related to reduced debt. Comparison-shopping had a significant negative relationship with reduced debt.

**Table 3.**  
Debt Paid

Significant Variables	$\chi^2$	DF	Probability	Direction
Use of credit counseling service	3.792	1	.052	+
Having a financial plan	5.372	1	.020	+
Having long term goals	8.108	4	.088	+
Knowing your expenses	6.567	3	.087	+
Comparison shopping	14.272	4	.006	-
Household income above the mean	6.060	1	.014	+
Debt accumulated in last year	5.158	1	.023	+
Having a reserve account	2.917	1	.088	+

Self-reports of feeling more in control; being able to meet expenses; paying more than the minimum on credit card bills; paying bills on time, and having an emergency savings account were significantly related to increased savings. Having a checking account and being denied credit, were negatively related to increased savings.

**Table 4.**  
Amount in Savings

Significant Variables	$\chi^2$	DF	Probability	Direction
Having a checking account	3.643	1	.056	-
Feeling in control	7.082	3	.069	+
Meeting expenses	8.608	4	.072	+
Paying more than the minimum	12.082	4	.017	+
Paying bills on time	6.252	2	.044	+
Having an emergency savings account	7.204	1	.007	+
Being denied credit	4.968	1	.026	-

Paying debt is only one facet of debt management. Data show the amount accumulated actually exceeded the amount paid by \$870. The variables significant to this finding may offer some insight in this study (Table 5). Individuals exhibiting positive financial behaviors formed the majority of the group who added debt during the 3-year period. Having a savings account, doing a budget,

keeping records, and paying credit debt in full all increased the likelihood of adding debt. One negative behavior, impulse buying, was significantly related to increased debt. Conversely, respondents who felt they were already living for today and had above average debt loads were less likely to have added debt.

**Table 5.**  
Debt Increased

Significant Variables	x <sup>2</sup>	DF	Probability	Direction
Having a savings account	4.369	1	.037	+
Having a budget	3.050	1	.081	+
Live for today	3.473	1	.062	-
Keeping records	3.473	1	.062	+
Immediately record account transactions	4.848	1	.028	+
Pay credit card balance in full	5.855	1	.016	+
Carrying a credit card balance	5.578	1	.018	+
Buying on impulse	3.473	1	.062	+
Above average household income	4.208	1	.040	+
Above average household debt	2.703	1	.096	-
Debt paid above average	2.737	1	.098	+

## Discussion

It was encouraging that respondents were making positive behavior changes after taking part in an educational program. Respondents reported both incremental and major steps. They were unlikely to have used a home equity loan to solve debt problems, although, if the debt issues were severe, this may not have been an option. The reason why the respondents chose to make changes is unclear and certainly worthy of further study.

The respondents' feelings of financial preparedness and use of financial tools was slightly above the midpoint (3) of the scale. Some unreported frequencies may offer some insight into these issues. Comparison-shopping is one example. Comparison-shopping can indeed save money for the family, thus helping increase savings. The mean score of 3.26 suggests that participants do comparison shop, but 10 respondents indicated that they never comparison shop. Similarly, carrying credit card balances over longer periods will significantly increase the cost of consumer goods and services charged on these accounts. Nine respondents reported that they pay only the minimum on credit card balances, and 13 never pay balances in full.

Overall, the data suggest that financial management educational efforts can make a difference. The fact that the average income for the group was only \$30,000 may indicate that education can and does work for moderate and lower income individuals. When the respondents were grouped by income levels, above average income respondents were more likely to have negotiated with a creditor ( $\chi^2 (41, 1) = 4.513, p = .032$ ). When comparing those with \$10,000 of debt or less (50% of the respondents) to those with more debt, the only difference was that higher debt individuals were more likely to negotiate with a creditor ( $\chi^2 (38, 1) = 3.64, p = .056$ ).

Although the analysis of the data for this sample provides support for providing educational programs in financial management, the low response rate is a limitation in generalizing these findings to other groups. The decision to research changes in behavior was made after the program cycle began, and it was too late to gather information on current practices from the beginning. The inability to cross-reference the data with that which could have been gathered earlier, information about gender, race, educational levels, etc., makes some comparisons impossible. These common demographic variables may hold a key to a more complete explanation. Additionally, longitudinal research could reflect changes from year to year and determine if changes in behavior are long term.

Financial education programs can encourage behavior change, at least in the short term. It is encouraging that seven households reported seeking the advice of a financial planner or advisor. It is discouraging that there was no net debt-load reduction for this sample. Knowing the type and kind of debt added could provide insight. Forty-three percent of the sample made an overall debt reduction of \$500 to \$18,000. Yet 37.8% of respondents increased debt by \$300 to \$49,700. It may be that the largest debt increase was because of a home purchase, making this a rational decision by the respondents. Again, this idea suggests possible future study.

In summary, the data lend support for the efficacy of financial literacy training in promoting improved financial behaviors. This is an important first step in discovering how these programs can address the needs that have been identified for improving personal economic conditions and

feelings of well-being and preventing problems that can be costly to consumers and stakeholders.

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