

## **Your Credit Counts Challenge: A Model Program for Financial Education for Low and Moderate Income Adults**

**Mark C. Schug**

University of Wisconsin-Milwaukee

**M. Scott Niederjohn**

Lakeland College

**William C. Wood**

James Madison University

Financial literacy has been gaining widespread interest from a variety of groups. Reasons for this expanded interest have to do with the increasing complexity of financial instruments and services as well as concerns about widespread financial behavior resulting in increasing number of bankruptcies, large credit debt, low rates of saving, and so forth. The Federal Reserve, for example, has been an important voice calling for increased financial and economic education. Alan Greenspan (2003) recently stated, "For this evermore complex financial system to function effectively, widespread dissemination of timely financial and other relevant information among education market participants is essential. Informed judgments by consumer are required to foster the most efficient allocation of capital."

This paper reports on the impact on attitudes of a program designed to improve the financial literacy of low- and moderate-income adults. The program involves three national partners—Household International, National Center for Neighborhood Enterprise, and National Council on Economic Education.

### **Studies of Financial Education**

Braunstein and Welch (2002) provide a useful survey of several

financial education studies. They conclude that financial literacy training generally yields positive results. Nonetheless, findings of studies on the effectiveness and the status of financial education programs is somewhat mixed. One line of research has to do with programs that link a financial opportunity (such as obtaining a home mortgage at a favorable interest rate) with participation in an educational program. An ambitious study in this area was conducted by Hira and Zorn (2001) for Freddie Mac. Their study used data on almost 40 thousand mortgages originated under the Freddie Mac's Affordable Gold program. They found that borrowers who participated in pre-purchase home ownership counseling as part of the Affordable Gold program were, on average, 19 percent less likely to become 90-day delinquent on their mortgages than were similar borrowers who did not participate in counseling.

The Center for Social Development at Washington University in St. Louis has published several papers focused on different aspects of the effectiveness of Individual Development Accounts (IDEAS). IDEAS are a matched savings programs designed to increase savings incentives for low income households. Savings in IDEAS are matched if the funds are used for home ownership, post-secondary education, starting a very small business, and so forth. Participants also receive financial education. On average IDA programs around the country involve the participants in about 10 hours of financial education. Common topics include how to make a budget and how to manage money. Other topics include credit and debt management, credit repair, borrowing, and personal financial planning. Schreiner, Clancy, and Sherraden (2002) report that a few hours of general financial education increase savings. They note further that the effects of additional hours have diminishing returns.

A second line of research is focused on the influence of general financial education of the sort provided in high school or in workshops or seminars. Bernheim, Garrett and Maki (1997) found that financial education may be an important influence for encouraging saving. They

used data from a telephone survey of over 2,000 respondents, between the ages of 30 and 49. The respondents were asked, among other things, in which state they attended high school, and what they remembered about financial education. As adults, those who attended high school in states with mandates in place saved significantly more than those who attended high school in states without mandated courses. They also found that taking high school finance courses tends to boost the net worth (or wealth) of those individuals as adults.

### **Your Credit Counts Challenge**

The National Council on Economic Education (NCEE), Household International, and National Center for Neighborhood Enterprise (NCNE) worked together to develop a program to improve the quantity and quality of the financial education for low- and moderate-income adults. The idea was to design a financial education program that could be used with neighborhood groups, often with business volunteers. A design team, comprised of representatives from each participating organization identified the key content deemed necessary in such program. A pilot curriculum was developed. Two trial financial education workshops were conducted—one in rural Alabama and another in Washington, DC. Based on data gathered from these two workshops and from numerous other reviews, participant manual, training manual, and model workshop syllabus were developed. The program was called *Your Credit Counts Challenge (YCCC)*. A train-the-trainers program was held to train individuals in all three organizations in how to plan and conduct financial education workshops for low and moderate income adults. The individuals who attended the train-the-trainer workshop conducted 21, four-hour, workshops in many different cities across the nation.

### **Methodology**

Can a four-hour workshop, based on carefully developed materials targeted for low- and moderate-income adults, influence the

attitudes and knowledge toward financial matters? The *Attitudes Toward Money Management* (ATMM) attitude survey was developed for this program to help measure its effectiveness. Consisting of 14 items, this survey was designed to measure the changes in attitudes toward saving, spending, and financial services—key topics addressed in the *YCCC Participant's Manual* and the *Trainer's Guide*. The ATMM statements are scored on a Likert Scale with “1” equal to “strong disagreement” and “5” equal to “strong agreement.” The ATMM survey was completed by the participants as a pre- and post-test.

### **Statistical Analysis**

Table 1 shows descriptive statistics on the mean, standard deviation and sample size for each of the statement responses before and after the training was administered.<sup>1</sup> It can be seen that the means vary between a minimum of 1.59 to a maximum of 4.33. This large range is explained by the structure of the survey statements. For example, the low mean of 1.60 was obtained on statement 6 which reads, “A smart strategy for financial success is for families to have five credit cards,” while the high mean of 4.33 was observed on statement 10 which reads, “A smart strategy for financial success is to pay off your monthly credit card balance.” It is also interesting to note that the change in the mean value between the pre- and post-test surveys was in the intended direction on 13 of the 14 questions.

The results in Table 1 provide clear evidence that economic education can make a significant difference in people’s financial literacy and attitudes toward market economics. While a number of the statement means showed only minor changes in the predicted direction

---

<sup>1</sup>The mean of the ordinal data collected from a survey using the likert scale cannot be easily interpreted; however, these data allow us to study the changes in the responses between the pre and post surveys.

after the training was administered, others showed a substantial change. For example, on statement 2 which reads, "I'd like to start saving money today but my current bills prevent it," a significant change was detected. The percentage of respondents agreeing or strongly agreeing with this statement fell from 63.2% to 41.8%, while the percentage disagreeing or strongly disagreeing rose from 25.9% to 33.1%. Statement 5, "People with more education earn more money than people with less education," showed a similar change. In this case, only 49.3 of respondents agreed or strongly agreed with this statement before the training; however, 71% fell into this category after undertaking the program. In addition, it is clear from the results that economic education programs can impact respondent's attitudes toward market institutions. For example, statement 14 reads, "Private ownership of homes and businesses is better for community development than public ownership." In this statement the percentage of strongly agreeing with the statement rose almost 3% after the training while the percentage disagreeing fell by about 3%.

### **Pre- and Post-Test Differences**

While the previous descriptive analysis presented clear evidence that the program administered had a profound impact on the literacy and attitudes of the participants, a Wilcoxon signed rank test was used to investigate the differences between the statement responses before and after the seminar.<sup>2</sup>

The results from these tests are displayed in Table 2. The

---

<sup>2</sup>The Wilcoxon signed-ranks method tests the null hypothesis that two related medians are the same. This nonparametric test for two related samples allows us to test for differences between paired scores in a situation, like the one we are investigating, where a normal distribution cannot be assumed and the collected data is ordinal in nature. Standard t-tests were also used to investigate the changes in the mean between the pre- and post-test questions with nearly identical results.

**Table 1: Descriptive Statistics for ATTM Data**  
 (Likert scale ranging from 1 = Strong Disagreement, to 5 = Strong Agreement)

<u>Survey Statement</u>	<u>Mean Response Before Training (Std. Deviation)</u>	<u>Mean Response After Training (Std. Deviation)</u>	<u>Change in Predicted Direction?</u>
1. "I believe it is important to buy the things I want when I want them."	2.57 (1.315) N=353	2.12 (1.220) N=353	YES
2. "I'd like to start saving money today but my current bills prevent it."	3.67 (1.328) N=352	3.15 (1.402) N=352	YES
3. "The things I enjoy most about making money is spending money."	2.96 (1.278) N=347	2.55 (1.233) N=347	YES
4. "It is simple and easy to open a checking account."	3.63 (1.241) N=347	3.66 (1.219) N=347	YES

5. "People with more education earn more money than people with less education."	3.25 (1.437) N=351	3.78 (1.326) N=351	YES
6. "A smart strategy for financial success is for families to have five credit cards."	1.60 (0.886) N=350	1.59 (0.910) N=350	YES
7. "Business owners overall do more good than harm."	3.01 (1.046) N=348	3.11 (1.123) N=348	YES
8. "There are times when borrowing money is the smartest thing a person could do."	2.83 (1.244) N=347	3.04 (1.277) N=347	YES
9. "A family has to have a very high income in order to have a million dollars by retirement age."	2.39 (1.178) N=351	2.20 (1.221) N=351	YES
10. "A smart strategy for financial success is to pay off your monthly credit card balance."	4.03 (1.075) N=347	4.33 (0.865) N=347	YES

11. "For most families, paying rent for housing is a poor financial choice."	3.20 (1.202) N=352	3.17 (1.237) N=352	NO
12. "It is possible for a low-income family to save enough to buy a home."	3.81 (1.095) N=347	3.89 (1.079) N=347	YES
13. "Owning stocks is a riskier form of investment than owning a government bond."	3.35 (0.971) N=345	3.47 (0.991) N=345	YES
14. "Private ownership of homes and businesses is better for community development than public ownership."	3.53 (0.980) N=347	3.72 (1.042) N=347	YES

**Table 2: Pre-and Post-Workshop Statement Wilcoxon Signed Ranks Test for Differences**

<u>Survey Statement</u>	<u>z-statistic</u>	<u>p-value (2-tailed test)</u>
1. "I believe it is important to buy the things I want when I want them."	6.472	.000
2. "I'd like to start saving money today but my current bills prevent it."	7.358	.000
3. "The things I enjoy most about making money is spending money."	6.209	.000
4. "It is simple and easy to open a checking account."	-.484	.629
5. "People with more education earn more money than people with less education."	-6.701	.000
6. "A smart strategy for financial success is for families to have five credit cards."	.452	.651
7. "Business owners overall do more good than harm."	-1.581	.114

8. "There are times when borrowing money is the smartest thing a person could do."	-3.371	.001
9. "A family has to have a very high income in order to have a million dollars by retirement age."	3.231	.001
10. "A smart strategy for financial success is to pay off your monthly credit card balance."	-4.895	.000
11. "For most families, paying rent for housing is a poor financial choice."	.674	.518
12. "It is possible for a low-income family to save enough to buy a home."	-1.375	.169
13. "Owning stocks is a riskier form of investment than owning a government bond."	-1.846	.065
14. "Private ownership of homes and businesses is better for community development than public ownership."	-3.224	.001

findings from this analysis show a statistically significant difference in responses for eight of the fourteen statement sets at the 5% level or lower (95% confidence level or greater that the medians are different between the pre- and post-test survey). These statement numbers are 1, 2, 3, 5, 8, 9, 10 and 14.

Note that the medians for each of the ATMM statements changed in the expected direction as based on the instruction and materials received at the workshop. The most significant difference between pre- and post-test responses was computed for statement 2, as shown by the highly significant test statistic. This survey statement reads, "I would like to start saving money today but my current bills prevent it." As discussed earlier, this finding presents clear evidence that economic education is useful and important.

The next most significant difference was found for statement 5 which reads, "People with more education earn more money than people with less education." The mean on this statement response rose from 3.25 to 3.78 between pre- and post-seminar surveys. Statement 1 also had a statistically significant change in median between the two surveys. This statement reads, "I believe it is important to buy the things I want when I want them." The mean on this statement fell from 2.57 in the pre-test to 2.12 in the post-test.

Statistically significant decreases in median scores were also found for statement 3 and statement 9, suggesting that, after the workshop, attendees were less likely to agree with these statements. These statements read, "The thing I enjoy most about making money is spending money;" and, "A family has to have a very high income in order to have a million dollars by retirement age." Significant increases in median scores were calculated for statements 8, 10, and 14. These statements read, "There are times when borrowing money is the smartest thing a person could do;" "A smart strategy for financial success is to pay off your monthly credit card balance;" and, "Private ownership of homes and businesses is better for community development than public ownership." These results suggest that

attendees were more likely to agree with these statements after the seminar.

Statements that do not show a significant change after the seminar include 4, 6, 7, 11, 12 and 13. These statements read as follows: "It is simple and easy to open a checking account;" "A smart strategy for financial success is for families to have five credit cards;" "Business owners overall do more good than harm;" "For most families, paying rent for housing is a poor financial choice;" "It is possible for a low-income family to save enough to buy a home;" and, "Owning stocks is a riskier form of investment than owning a government bond."

### **Anecdotal Observations Regarding the Program**

This program is one of a handful of national efforts to improve the financial understanding of low and moderate income, largely minority adults. The participants brought a wealth of stories from their own experience: falling into credit card trouble, operating on cash because of reluctance to open bank accounts, and the general uncertainty of life at low-income levels. The participants came to the seminars aware of the difficulties in budgeting and managing credit cards. They were generally aware from experience that, "there ain't no such thing as a free lunch," and were interested in strategies for avoiding credit deals that had aspects of a free lunch.

### **Conclusion**

While studies on the effectiveness of financial education are somewhat mixed, there appears to be sufficient evidence to conclude that financial education can be an important way to improve financial behavior. This study evaluated the effects of a financial education program targeted to influence the attitudes of low- and moderate-income adults. The results of the pre- and post-test survey provide compelling evidence that the carefully designed financial education workshops for adults had a significant effect on their understanding and

attitudes toward basic finance and money management. In eight of the fourteen survey statements, a statistically significant difference was found between the pre- and post-test responses. In nearly every case, the change was in the direction expected according to the material presented in the workshop.

### References

Bernheim, B. Douglas, Daniel M. Garrett, and Dean Garrett Maki. 1997. "Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates." Washington, DC: Working Paper 6085, National Bureau of Economic Research.

Braunstein, Sandra, and Carolyn Welch. 2002. "Financial Literacy: An Overview of Practice, Research, and Policy." *Federal Reserve Bulletin*. 445-45.

Crampton, E. 2002. "You Get What You Vote For: Voter Preferences and Economic Freedom." *Journal of Private Enterprise*, 18, Fall No. 1: 32-56.

Greenspan, A. 2003. "The Importance of Financial and Economic Education and Literacy." *Social Education*, 76, 2: 70-71.

Schreiner, Mark, Margaret Clancy, and Michael Sherraden. 2002. "Final Report: Saving Performance in the American Dream Demonstration." St. Louis: Center for Social Development, Washington University at St. Louis.