Financial Education and Stages of Behavior Change: Evidence from an IDA Program

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Successful management of one's finances is a key factor in sustainability for most families. This is especially true for families who have limited income and assets. A number of strategies for helping low-income families learn how to manage their resources have been used by educators and discussed by policy makers. One policy strategy that is being touted as a way to achieve greater financial stability for low-income families provides a way for building financial assets through Individual Development Accounts (IDAs). IDA programs have been offered by a variety of non-profit groups since the 1996 law that established the option (Sherraden, Page-Adams, & Johnson, 1999). The purpose of such accounts is to enhance the small savings families set aside by matching those dollars with money from government agencies, foundations, or charities. Thus, an account can be built fairly quickly that could be large enough to become a down payment on a home, a nest egg for starting a business, or a fund to pay for additional schooling.

A key component of the IDA program has been financial education. IDA financial education classes vary in number and length, with variation in curricula as well. This study was designed to find out whether participants' confidence in their money management skills and their use of one money management strategy (regularly recording their spending) were related to their post-test program scores for six financial behaviors. The curriculum used for the financial education classes was Purdue University's "Making Your Money Work" (Owen, Haynes, & Fucik, 1998).

In recent years, financial education has become a topic of interest to educators in classrooms and informal settings. Increasingly, financial education is becoming a required part of

many programs, in the hope that real behavior change will occur as a result of individuals gaining knowledge on financial topics such as budgeting, spending, the costs of credit, the present value of money, and saving for retirement (Braunstein & Welch, 2002; Schreiner, Clancy, & Sherraden, 2002; Sherraden, Page-Adams, & Johnson, 1999). Behavior change is not always an outcome of an educational treatment. There may be barriers to changing behavior that are not linked to one's level of knowledge of financial management. These may include attitudes and behaviors of household members, income levels being too low to pay bills on time and in full, and lack of available mainstream financial services and products (Bell & Lerman, 2005; Lyons, 2005). Also, participants do not always learn skills that would enable them to use the knowledge gained to change their behavior. The "Making Your Money Work" curriculum was designed and taught with financial skill development in mind.

In related research, Shockey and Seiling (2004) compared mean pre-test and post-test results using a stage-of-change model for six financial practices. They found that a four-week financial education program for IDA participants resulted in positive behavior change for all six financial practices. The greatest increase in mean score was found for setting aside money for unplanned expenses (i.e., establishing an emergency fund).

This study focused on the same six financial management practices: using financial goals, using a spending plan, tracking spending, paying bills on time, setting aside money for unplanned expenses, and saving money. The first practice, using financial goals to guide financial decisions, is fundamental to successful money management, because it establishes the unifying principle for success in the IDA program. The next two practices, using a spending plan and tracking spending, are used by the participants to achieve success in managing their finances. Paying bills on time, setting aside money for unplanned expenses, and saving money are general money management practices that participants work to achieve during the IDA program, with saving money as the ultimate goal. Paying bills and setting aside money for

unplanned expenses also help IDA participants stay on track and meet their contribution goals. Additionally, these financial practices contribute to participants' future success in buying a home, starting a business, or obtaining more education.

Conceptual Framework

The conceptual framework upon which this program evaluation was designed is the Transtheoretical Model of Behavior Change (TTM) developed by Prochaska, Norcross, and DiClemente (1994). In their model, Prochaska et al. posit that, because changing behavior is difficult, it is important to understand how people progress from denying there is a problem (*Precontemplation* – Stage 1) to fully implementing changes in their behavior (*Maintenance* – Stage 5) (Prochaska, DiClemente, & Norcross, 1992a; Prochaska, DiClemente, & Norcross, 1992b). *Precontemplation* is the first stage. People in this stage feel that there is no reason to change, even though they sometimes are being pushed by others to do so. They rarely will look for help, seek information, or re-evaluate themselves and their actions. Stage 2 is labeled *Contemplation*. This is the information-gathering stage, where people begin to acknowledge that they need to change. Individuals in this stage will seek information and help, many fearing that they cannot do it alone. *Preparation* is Stage 3, a period during which different strategies are being considered and information is being sought. The fourth stage is *Action*. This is the stage in which most of the behavior change is implemented. People in the *Action* stage need to feel confident that they can succeed. *Maintenance* begins after the changes have been put into practice for at least six months. In this stage, individuals have implemented the change and now are becoming more confident that they can maintain the change, but it is still hard work. Lapses and relapses may be frequent during the *Action* and *Maintenance* stages, but a person who has made it this far should be reminded that relapses are not uncommon and are part of the process for

almost everyone. Maintaining one's confidence that the process of change will be successful is sometimes a challenge, even though a lot of the hard work is over. Feelings of self-efficacy – confidence in one's ability to manage finances – play a strong role in successfully moving into *Action* and *Maintenance* (Prochaska, Norcross, & DiClemente, 1994).

Because people are ready for different information and experiences at different stages, it is important for instructors to know the stage each participant is in for each behavior. This enables the instructor to use the most appropriate teaching strategies and materials. IDA participants are probably not a typical cross-section of low-income/low-wealth adults, because they have self-selected to make changes in order to improve their financial circumstances. Therefore, IDA participants are probably more likely than the average "student" to be "ready to change." Thus, they are more likely to use the information and exercises presented during the financial education class to change their behavior so as to improve their overall financial well-being. If instructors know the stage of change of their program participants (i.e., their willingness to change) they can use this feedback to better tailor their program and provide personal financial guidance that more effectively fosters behavior change.

This study reports participants' post-program stage of behavior change for the six financial management behaviors previously mentioned. The findings are presented according to participants' perceived and actual ability to manage money prior to the program.

Sample and Procedures

The 253 participants in this study came from ten community-based agencies in four states (Hawaii, Indiana, Missouri, and Ohio). They all completed the four financial education sessions and the evaluation forms. Data were collected from November 1999 through May 2001. Most of the participants were unmarried (74%) and African American (58%), with other

ethnic groups comprised of white (32%) and all others (10%). About three-fourths of the participants were female (74%), and the mean age was 34 years.

The "Making Your Money Work" curriculum was designed to be taught in one-hour sessions for a period of six weeks; however, four weekly two-hour sessions were deemed to be a better organizational plan for this project. The reorganized lessons were entitled: Session 1, *Financial Goals and Tracking Spending*; Session 2, *Developing a Spending and Savings Plan*; Session 3, *Credit and Unplanned Expenses Management Plan*; and Session 4, *Developing a Comprehensive Saving Plan*. Pre- and post-tests were administered using instruments designed to measure individuals' readiness to change their financial behavior. The pre-test was administered before the beginning of Session 1, and the post-test was given at the end of Session 4. All lessons involved sharing information and guiding participants in activities to enhance both knowledge and behavior change. (See Shockey and Seiling (2004) for more information on the educational components.)

Results

Participants' responses to pre- and post-tests were scored based on their answers to questions about: (1) whether they were carrying out the behavior currently, and if so, how long they had been doing it; (2) if they were not engaged in the behavior, whether they had tried it and how successful they had been; and (3) whether they had plans to begin it in the future. Participants were assigned a 1 if they were in the stage of *Pre-contemplation*, 2 if in *Contemplation*, 3 if in *Preparation*, 4 if in *Action*, or 5 if in *Maintenance*. Therefore, a score of 4.0 – 4.9 would indicate behavior in the *Action* stage.

Perceived Ability to Manage Money

Table 1 presents the mean post-test scores used to determine the stage of behavior change for the average program participant.

Table 1

Stage of Behavior Change for Six Financial Management Practices By Participants' Perceived Ability to Manage Money (N= 253)

Financial Management Practices	Perceived Ability to Manage Money: Better than Most	About the Same as Most	Less than Most	Don't Know	F Score
Setting a Goal	4.43	4.06	3.90	3.89	4.02**
Using a Spending Plan	4.54	4.15	3.83	3.78	12.34***
Tracking Spending	4.46	4.03	3.48	3.44	8.11***
Paying Bills on Time	4.46	4.46	4.24	4.33	0.76
Setting Aside Money for Unplanned Expenses	3.96	3.62	4.03	3.59	3.03*
Saving Money	4.20	3.92	3.79	3.70	3.22*

Note: The number reported in each cell is the mean post-test score used to determine the stage of behavior change for the average program participant. For example, if the score was between 4.0 and 4.9, participants were on average classified as being in the *Action* stage.

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

Scores are presented for the six financial management practices according to participants' confidence in their ability to manage their money (i.e., better than most, about the same as most, or less than most). The sample mean scores were compared using ANOVA. The results showed that participants' stage of change for five of the six behaviors significantly differed, on average, by perceived ability to manage money. The exception was for "Paying Bills on Time," which had little variation and was not significant. The strongest differences, according to the F-statistics, were for "Using a Spending Plan" and "Tracking Spending."

Those who felt they could manage money "better than most" had a mean score that placed them in the *Action* stage (between 4.0 and 5.0) for all but one of the behaviors. The exception was for "Setting Aside Money for Unplanned Expenses," for which

the mean score was 3.96 – very close to the *Action* stage. "Setting Aside Money for Unplanned Expenses" had the highest, significant mean score for those who reported having "less ability than most" to manage money – an unexpected outcome.

Recorded Spending Regularly

Table 2 presents the mean post-test scores for the six financial management practices according to participants' experiences with recording their spending on a regular basis. For each financial practice, the authors compare the mean scores of those who reported that they regularly recorded their spending to those who reported that they did not. As expected, the two measures of spending behavior differed between participants who recorded expenses and those who did not. "Using a Spending Plan" had a

Table 2

Stage of Behavior Change for Six Financial Management Practices According to Whether Participants Regularly Recorded Expenses (N= 253)

Financial Management Practices	Regularly Record Expenses: Yes	No	F
Setting a Goal	4.36	3.79	22.68***
Using a Spending Plan	4.29	3.64	27.74***
Tracking Spending	4.36	3.89	16.61***
Paying Bills on Time	4.56	4.16	15.97***
Setting Aside Money for Unplanned Expenses	3.93	3.53	10.12**
Saving Money	4.11	3.73	12.13**

Note: The number reported in each cell is the mean post-test score used to determine the stage of behavior change for the average program participant. For example, if the score was between 4.0 and 4.9, participants were on average classified as being in the *Action* stage.

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

mean score of 4.29 for those who regularly recorded their spending and 3.64 for those who did not. Likewise, mean scores for "Tracking Spending" were 4.36 and 3.89 for those who recorded and did not record their spending, respectively. For those who recorded their spending, participants' mean scores placed them in the *Action* stage for all categories except "Setting Aside Money for Unplanned Expenses," which placed participants in the *Preparation* stage. For those who did not record their spending, all categories except "Paying Bills on Time," had scores that placed participants in the *Preparation* stage. Interestingly, both mean scores for "Paying Bills on Time" were in the *Action* stage, and both scores for "Setting Aside Money for Unplanned Expenses" were in the *Preparation* stage.

Discussion

The findings from this sample of IDA participants suggests that financial education students who have more confidence in their ability to manage money may be better able to move into the *Action* and *Maintenance* stages, especially for those behaviors related to setting goals, using a spending plan, tracking spending, and saving money. These results are in line with the work of Prochaska, DiClemente and Norcross (1994, 1992b), who found self-efficacy to be a key factor in moving participants into the *Action* stage. It is less clear whether this finding holds true for the financial practices related to paying bills on time and setting aside money for unplanned expenses.

Participants who record their spending on a regular basis also appear to be better able to move into the stages of *Action* and *Maintenance*. Those who have already been recording their spending have been using a key tool that makes them aware of their own spending patterns. For this reason, these individuals are more likely to be able to take charge of their financial decisions and accomplish behavior change.

In addition to these findings, it is important to note that the financial literacy classes in this study included two to four learning activities that were focused on developing skills for each financial management practice. The instructors also included an exercise in which the participants committed to changing behavior. Teaching financial management concepts alone, including warnings about the consequences of not using good management practices, may not necessarily induce participants to make positive behavior changes. Increasing their skills and confidence by emphasizing behavior change can bring them to action. Including an assessment that provides information on a participant's stage of behavior change can provide vital information to instructors. They can use this information to tailor their programs and teaching techniques so as to better meet the financial needs of the participants and more effectively foster behavior change.

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