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Financial Knowledge of the Low-income Population: Effects of a Financial Education Program

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This study examines the effects of one large financial management training program for low-income people. The data are from tests of pre- and post-training financial knowledge of 163 participants. The test was designed to measure basic knowledge of participants in five content areas: predatory lending practices, public and work-related benefits, banking practices, savings and investing strategies, and credit use and interest rates.

The findings demonstrate that substantial pre-training knowledge deficiencies existed on basic financial management issues, especially on public and work-related benefits and savings and investing. Results also indicate that the program was effective in improving the financial knowledge of participants in each of the five content areas. Further analyses suggest that pre-training knowledge and levels varied according to participant characteristics. In addition, participants' education, English proficiency, race / ethnicity, and marital status were associated with their knowledge gains from the program. Policy and practice implications for developing effective financial management training for the low-income population are discussed.

Keywords: financial knowledge, financial management training, low-income audience, welfare reform

Two factors have fostered the development of financial training programs for low-income people in recent years. First, the role of financial literacy in promoting economic well-being has
increasingly been recognized (Bernheim, 1998; Jacob, Hudson & Bush, 2000). As a result, financial management training programs have emerged for diverse audiences such as employees and youth. Some of these programs have been targeted on low-income consumers, who are particularly at risk of financial illiteracy (Jacob, Hudson, & Bush, 2000). Second, the implementation of Temporary Assistance for Needy Families (TANF) programs in 1996 has resulted in large welfare caseload decreases. However, studies have found that many welfare leavers face troubling economic circumstances, and in turn may face increasing pressures to manage limited resources (Anderson & Gryzlak, 2002; Cancian, 2001; Loprest, 2001). This has generated increasing interest in educational and investment approaches designed to enhance long-term self-sufficiency among welfare recipients and the working poor.

Financial management training programs are one such approach. As a specialized form of human capital development strategy, these programs are designed to help the low-income population improve their financial decision-making skills. This is intended to help low-income persons access financial information and opportunities, and to utilize their resources more efficiently.

Despite the growth of financial management training programs, and anecdotal evidence supporting the notion that such programs can improve financial management skills of low-income persons, empirical studies on program effects have not been adequate (Caskey, 2001). Even less is known about how different participant characteristics are related to financial knowledge and to program effectiveness. In order to develop these programs more effectively, it is important to examine whether they are effective, as well as whether program success varies with the characteristics of participants.

In this article, we examine financial knowledge of participants before and after they received training from one financial management program targeted at low-income audiences. We begin by reviewing previous research on financial literacy and the effects of financial management programs, with special attention to the low-income population. Analyses are then conducted to assess initial knowledge and knowledge improvement among participants. We also examine how participant characteristics are related
to pre-training financial knowledge and to program effectiveness. The implications for financial management training targeted on low-income persons are discussed.

Background

Financial Literacy of the Low-income Population

Americans in general are not very educated on financial matters, and financial illiteracy may be particularly acute among the poor (Bernheim, 1998). Previous research has shown that compared to those with high-incomes, low-income persons are much less likely to have bank accounts (Jacob, Hudson, & Bush, 2000), less likely to save or invest (Haveman & Wolff, 2000), and more susceptible to predatory lending practices (Consumer Federation of America and National Consumer Law Center, 2002).

While these financial practices largely result from lack of resources, it has been argued that knowledge deficiencies and the inefficient handling of personal finances also are problematic (Caskey, 2001; Hogarth & Lee, 2000). The limited access many low-income people have to financial and community institutions may, in turn, exacerbate their knowledge deficiencies. In addition, several studies have found that low-income persons lack information about available public benefits, which contribute to the underutilization of such services (Anderson, 2002; Anderson & Gryzlak, 2002; Julnes et al., 2000).

Effects of Financial Education

Evidence of programs for general population. For many American adults, employers are an increasingly important source of financial education related to retirement savings. Results from several studies have indicated that employer-based programs can increase both participation rates and levels of contributions (Bayer, Bernheim & Scholz, 1996; Bernheim & Garrett, 1996). Other studies similarly have reported that financial training positively impacted the personal financial practices of employees (Clark & Schreiber, 1998; Garman, Kim, Kratzer, Brunson, & Joo, 1999).

Financial education also has been stressed in many high schools (Bernheim, Garret, & Maki, 2001). Studies have found that
school-based financial training had positive effects on financial knowledge and behaviors of youth (Barrese, Gardner & Thrower, 1998; Boyce et al., 1998). Bernheim, Garrett and Maki (2001) further indicated that participation in financial education during high school raised savings rates when youth reached adulthood.

Evidence of programs targeted on the low-income population. Low-income people, however, have fewer chances to benefit from the programs developed for the general population. For example, low-income persons are less likely to work for employers who offer retirement benefits, and are therefore less likely to receive workplace financial education. In addition, because low-income youth are more likely to drop out of high school, they have fewer chances to access school-based education programs. These concerns have encouraged the development of programs targeted at low-income adults outside of employment and school settings.

Some early evaluations of financial education programs for lower income audiences have indicated that these programs improve financial knowledge and behaviors of their participants (DeVaney, Gorham, Bechman, & Haldeman, 1996; Hirad & Zorn, 2001; Hogarth & Swanson, 1995; Shelton & Hill, 1995). For example, the study by DeVaney et al. (1996) demonstrated that the Women’s Financial Information Program was successful in improving participants’ skills in cash flow management, use of credit cards, and savings. Hirad and Zorn (2001) found that the 90-day delinquency rate among those who participated in a pre-purchase home-ownership counseling for low-income home buyers was lower than that of similar individuals who did not participate.

Some financial programs for low-income people also couple education with asset accumulation incentives. This approach is exemplified by the Individual Development Accounts (IDAs) programs, which provide matched savings to low-income persons who save for home purchases, post-secondary education, or start-up of small businesses (Page-Adams & Sherraden, 1999; Schreiner, Clancy, & Sherraden, 2002; Sherraden, 1991). Evaluations of IDA programs have found that hours of financial education was positively related to savings outcomes (Clancy, Grinstein-Weiss, & Schreiner, 2001).
Purpose of This Study

Although the aforementioned studies have shown that financial management programs may be effective with low-income audiences, this previous research has several limitations. First, measurements to assess the financial knowledge of low-income persons are not well developed in the current literature. Most studies measure the financial knowledge levels of the poor in a subjective manner (e.g., participants' self-reported budget behavior). Seldom have studies employed actual tests of knowledge before and after training was completed. Also, the substantive knowledge areas covered by these training programs are often limited to budgeting behavior and credit use. We therefore know little about the knowledge of participants in other areas important to their economic well-being, such as savings and investment strategies, and availability of public benefits.

A second issue is that studies generally have not examined how participant background characteristics may be related to their financial knowledge levels, nor to examine how such characteristics may affect program outcomes. This is an important shortcoming, because the low-income population is very diverse (Schiller, 2003). The study by DeVaney et al. (1995) found that younger and more educated participants were more likely to change their savings and investing behavior after receiving training. To the best of our knowledge, this is the only study that has employed multivariate methods to explore the association between participant characteristics and financial behavior changes after the training among low-income people.

These gaps in the current research literature have resulted in the growth of financial management programs accompanied by only vague and anecdotal evidence regarding the financial education needs of low-income persons and the potential of training to address these needs. In order to improve financial management program implementation for the low-income population, it is important to gain more detailed perspectives on knowledge levels about a wide range of financial management issues. Research also is needed to more objectively measure whether financial management training leads to knowledge gains with this audience,
as well as whether training effectiveness varies by participant characteristics.

Methods

Data Collection

The data for this study were collected from participants at 10 training sites operated through the Financial Links for Low-Income People (FLLIP) program. FLLIP contracts with nonprofit community-based agencies in Illinois to provide a twelve-hour package of basic financial management training to persons earning less than 200 percent of the poverty level. The program is supported by state and private foundation funding.

The program sites have considerable discretion with respect to how participants are recruited. However, sites commonly draw a large pool of recruits from local Temporary Assistance for Needy Families (TANF) offices, because TANF recipients meet employment and training requirements by participating in FLLIP. The decentralized FLLIP recruitment process results in variation of participant characteristics that may affect financial management knowledge within the low-income population.

The following analyses are based on data from two sources collected at FLLIP training sites. First, data on demographic and socioeconomic characteristics were obtained from the program applications completed by participants as they entered the program. Second, we administered a pre- and post-training test designed to measure the financial knowledge of participants. The authors developed this test based on a review of the financial management training curriculum used in the program (Chan, et al., 1997; 2001).

The test contained 48 true-false and multiple choice questions in five major content areas emphasized in the curriculum and previously indicated by the literature as important to the financial well-being of low-income persons. These include predatory lending practices; public and work-related benefits; banking practices; savings and investing strategies; and credit use and interest rates. A brief description of the major content and samples of questions in each of the five areas are presented in Appendix A.

The pre- and post-training tests were administered by the program trainers between January 2002 and May 2003, and gen-
generally took 20–30 minutes to complete. A total of 163 participants finished pre- and post-training tests, and had no missing data on participant characteristics. Because of concerns about the reading skills of program participants, the questions were designed to be very basic and to be comprehensible for persons with limited reading ability. Some of the sites offered the training in Spanish, so a Spanish translation of the test was administered at these sites.

Data Analysis

Both pre- and post-training knowledge tests were coded according to whether a correct response was given to each question. This allows for the calculation of total correct answers for each participant, as well as the number of correct answers within each of the five substantive knowledge areas. These knowledge test responses were entered into an SPSS file with information from the application forms on participant characteristics.

In order to examine whether pre-training knowledge and knowledge gains vary with participant characteristics, repeated measures of analysis of variance were first conducted; two regression analyses were then employed, in which the number of correct answers on the pre- and post-training test was regressed on participant characteristics.

Variables

The dependent variables are the overall number of correct answers on the pre- and post-training knowledge test. The independent variables include demographic, educational, and economic characteristics of participants. These independent variables were selected if they were included in the application form, had sufficient variation, and were expected to influence the financial knowledge of participants and program outcomes.

The demographic variables include participant’s gender (female=1, male=0), age, race/ethnicity, marital status, and number of children under 18 living in households. Age and number of children are measured as continuous variables. Race was dummy-coded as White, African American, Hispanic, and others; White is the reference group. Marital status was dummy coded as married, never married, and previously married (divorced, separated or widowed), with being previously married the reference group.

Educational variables include participants’ educational sta-
tus and English proficiency. English proficiency of participants is measured according to the primary language spoken in their households (English=1; other languages=0). We consider English proficiency as an educational factor because it influences a person's reading ability. Educational status of participants was recoded as three categories: less than high school degree (reference group in regression analysis), high school degree or GED, and some postsecondary education.

Economic characteristics of participants include their monthly household income, employment status, TANF recipiency status, assets, and debts. Household income is measured as the sum of income from different sources of all household members the month prior to applying for the FLLIP program. The employment status of participants is measured as whether a participant had a paid job at the time of applying for FLLIP (yes=1, no=0), and the welfare status is whether he or she was receiving TANF or not (yes=1, no=0). Because limited asset information was available, asset variables include only whether the participant was a home owner or had a bank account (yes=1, no=0). The debt variable is whether participants reported having any of the following six sources of debts (yes=1, no=0): past due household bills, credit card balances, student loans, past due medical bills, owed money for taxes, and owed money to friends or family. Finally, whether participants filed a federal tax return last year (yes=1, no=0) is also included.

Results

Sample Characteristics

Considerable demographic diversity exists within the sample. Over half of the participants (52%) were African American, 26 percent were White and 19 percent were Hispanic. The vast majority of the participants (about 90%) were women, and the average age was 33.6. About 75 percent of the sample had at least one child in households, with an average of 1.8 children. Over half of the participants (54%) were never married, while 22 percent were divorced, separated or widowed, and 24 percent were married.
The participants also varied in their educational attainment and primary language characteristics. Although 37 percent had less than a high school degree, 26 percent had a high school diploma, and 37 percent had completed some postsecondary education. About 77 percent of participants’ primary language was English, while 23 percent spoke either Spanish (17%), Russian (3%), or other non-English languages (3%).

In terms of the economic status of FLLIP participants, the mean household total income was $873 the month before entrance into the FLLIP program, and only 25 percent of the sample were employed. Twenty-nine percent were receiving TANF at the time of enrollment. About 39 percent of the sample had a bank account, and only 9 percent were home owners. About 72 percent had at least one source of debt. More than half of participants (55%) filed federal tax returns the year before the training program.

Initial Knowledge and Knowledge Changes

The results in Table 1 reveal that participants had low basic financial knowledge levels before the training; on average, they answered only about 54 percent of the questions correctly. The average percentages of correct answers were especially low in the areas of “savings and investing” (47%) and “public and work related benefits” (50%). Financial knowledge of participants improved significantly after the training, both overall (74% of correct answers after the training) and in each of the knowledge content areas.

Factors Related to Pre-training Knowledge and Knowledge Gains

Bivariate analyses. In order to assess if knowledge levels and knowledge gains differ by participant characteristics, repeated measures ANOVAs were conducted (Table 2). These analyses estimate the main effects of the program and participant characteristics on knowledge levels, and their interaction effects on knowledge gains (Girden, 1992).

First, the results show that the program was effective in improving financial knowledge across all participant groups in our analyses, which is indicated by the F values of program effects in the table.

Second, knowledge differences were revealed among a va-
Table 1

Percentages of Correct Responses on FLLIP Knowledge Test (N=163)

<table>
<thead>
<tr>
<th>Knowledge Area</th>
<th>Number of Items</th>
<th>Pre-Training</th>
<th>Post-Training</th>
<th>Knowledge Improvementa</th>
</tr>
</thead>
<tbody>
<tr>
<td>All knowledge items</td>
<td>48</td>
<td>54%</td>
<td>74%</td>
<td>37%***</td>
</tr>
<tr>
<td>Predator lending practices</td>
<td>8</td>
<td>58%</td>
<td>82%</td>
<td>41%***</td>
</tr>
<tr>
<td>Public and work related benefits</td>
<td>9</td>
<td>50%</td>
<td>74%</td>
<td>48%***</td>
</tr>
<tr>
<td>Savings and investing</td>
<td>10</td>
<td>47%</td>
<td>68%</td>
<td>45%***</td>
</tr>
<tr>
<td>Banking practices</td>
<td>7</td>
<td>68%</td>
<td>82%</td>
<td>21%***</td>
</tr>
<tr>
<td>Credit use and interest rates</td>
<td>8</td>
<td>61%</td>
<td>75%</td>
<td>23%***</td>
</tr>
</tbody>
</table>

a Measured as percentage improvement from pretest to posttest scores.

***p < .05; **p < .01; ***p < .001.

variety of participant characteristics. Participants who were not married had higher scores at both tests. Hispanic participants had lower scores compared to those from other race/ethnicity groups. Education, English proficiency, and bank account and home ownership of participants were positively related to their financial knowledge. In addition, participants who filed tax returns and had debt(s) obtained higher test scores at both the pretest and posttest tests.

Third, the interaction effects between training and several participant characteristics were significant, indicating that knowledge gains varied by these characteristics when not controlling for pretest scores and other participant characteristics. For example, Hispanic participants showed greater knowledge gains than other racial groups, and those with a primary language other than English also had higher knowledge gains. In addition, the participants without bank accounts and those who had not filed tax returns improved their knowledge more than their counterparts who had experiences in these areas.

Regression analyses. In order to further examine how participants’ characteristics are related to their pre-training financial knowledge and knowledge gains while controlling for other factors, regression analyses were conducted in which pre-training knowledge and post-training knowledge were regressed on
### Table 2

**Repeated Measures ANOVA: Knowledge Test Scores and Knowledge Improvement by Participant Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Mean Pre-Test Score</th>
<th>Mean Post-Test Score</th>
<th>Knowledge Change</th>
<th>Source</th>
<th>F values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23.3</td>
<td>33.2</td>
<td>9.9</td>
<td>Gender</td>
<td>1.4</td>
</tr>
<tr>
<td>Female</td>
<td>26.2</td>
<td>35.6</td>
<td>9.4</td>
<td>Program</td>
<td>120.2***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gender x Program</td>
<td>.1</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>27.4</td>
<td>35.6</td>
<td>8.2</td>
<td>Race</td>
<td>4.2**</td>
</tr>
<tr>
<td>Latino or Hispanic</td>
<td>19.3</td>
<td>32.2</td>
<td>12.9</td>
<td>Program</td>
<td>132.1***</td>
</tr>
<tr>
<td>White</td>
<td>27.6</td>
<td>36.8</td>
<td>9.2</td>
<td>Race x Program</td>
<td>3.8*</td>
</tr>
<tr>
<td>Others</td>
<td>27.8</td>
<td>37.0</td>
<td>9.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never Married</td>
<td>27.6</td>
<td>36.4</td>
<td>8.8</td>
<td>Marital Status</td>
<td>11.0***</td>
</tr>
<tr>
<td>Ever Married</td>
<td>28.3</td>
<td>37.8</td>
<td>9.5</td>
<td>Program</td>
<td>277.4***</td>
</tr>
<tr>
<td>Married</td>
<td>20.0</td>
<td>30.5</td>
<td>10.5</td>
<td>Marriage x Program</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than HS</td>
<td>23.1</td>
<td>32.2</td>
<td>9.1</td>
<td>Education</td>
<td>6.0**</td>
</tr>
<tr>
<td>High school /GED</td>
<td>26.6</td>
<td>37.0</td>
<td>10.4</td>
<td>Program</td>
<td>305.3***</td>
</tr>
<tr>
<td>Postsecondary Ed.</td>
<td>28.3</td>
<td>37.4</td>
<td>9.1</td>
<td>Education x Program</td>
<td>.7</td>
</tr>
<tr>
<td><strong>English as primary language</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>28.7</td>
<td>37.3</td>
<td>8.6</td>
<td>Eng. as Prim. Lang.</td>
<td>51.7***</td>
</tr>
<tr>
<td>No</td>
<td>16.7</td>
<td>28.5</td>
<td>11.8</td>
<td>Program</td>
<td>265.8***</td>
</tr>
<tr>
<td><strong>Employed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>27.1</td>
<td>36.1</td>
<td>9.0</td>
<td>Employed</td>
<td>.7</td>
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<tr>
<td>No</td>
<td>25.6</td>
<td>35.1</td>
<td>9.5</td>
<td>Program</td>
<td>220.9***</td>
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<tr>
<td><strong>Receiving TANF</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>26.6</td>
<td>35.0</td>
<td>8.4</td>
<td>Receiving TANF</td>
<td>.0</td>
</tr>
<tr>
<td>No</td>
<td>25.7</td>
<td>35.5</td>
<td>9.8</td>
<td>Program</td>
<td>241.9***</td>
</tr>
<tr>
<td><strong>Home owner</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>31.4</td>
<td>39.1</td>
<td>7.7</td>
<td>Home owner</td>
<td>4.3*</td>
</tr>
<tr>
<td>No</td>
<td>25.4</td>
<td>35.0</td>
<td>9.6</td>
<td>Program</td>
<td>81.3***</td>
</tr>
<tr>
<td><strong>Having a bank account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>30.3</td>
<td>37.4</td>
<td>7.1</td>
<td>Bank account owner</td>
<td>15.0***</td>
</tr>
<tr>
<td>No</td>
<td>23.1</td>
<td>34.0</td>
<td>10.9</td>
<td>Program</td>
<td>289.2***</td>
</tr>
<tr>
<td><strong>Filed federal tax return</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29.6</td>
<td>38.0</td>
<td>8.4</td>
<td>Filed tax return</td>
<td>30.2***</td>
</tr>
<tr>
<td>No</td>
<td>21.4</td>
<td>32.1</td>
<td>10.7</td>
<td>Program</td>
<td>321.9***</td>
</tr>
<tr>
<td><strong>Having debt(s)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>28.0</td>
<td>37.0</td>
<td>9.0</td>
<td>Having debt(s)</td>
<td>19.5***</td>
</tr>
<tr>
<td>No</td>
<td>20.8</td>
<td>31.2</td>
<td>10.4</td>
<td>Program</td>
<td>269.3***</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001
independent variables (Table 3). We included pretest knowledge scores as a control variable for the regression model that estimated factors associated with posttest scores (Cohen & Cohen, 1983).

The regression results on the pre-training knowledge test scores indicate that the model is statistically significant, and that the variables in the model explained 49 percent of the variance in the dependent variable. Among participants' demographic characteristics, participants with more children had higher scores, and married participants had lower scores than those who were previously married.

Both of the education-related variables were significant predictors on the pre-training knowledge scores. Participants with a high school diploma and postsecondary education obtained higher scores than those with less than a high school degree. The participants whose primary language was English had much higher knowledge scores. Among economic factors, participants having a bank account were more knowledgeable about financial matters before the training, as were people who filed tax returns.

Turning to the regression results on the post-training test scores, the model is statistically significant, and that the independent variables explained about 66 percent of the variance in the dependent variable. The results indicate that, after controlling for the pretest scores, participants' educational levels, English proficiency, race/ethnicity, and marital status significantly affected program outcomes. Hispanic participants made greater knowledge gains than white participants, and previously married persons had greater changes than their married counterparts. Compared to those without a high school degree, participants who had graduated from high school and had some postsecondary education benefited more from the training. Contrary to the bivariate findings, knowledge improvement of the participants whose primary language was English was greater than that of non-primary English speaker when other factors were controlled.

Discussion

Information Needs of Low-income Consumers

As financial management training programs for low-income audiences proliferate, our findings are instructive in considering
both the need for and potential benefits of such programs. With regard to financial information needs, the findings extend earlier research by measuring knowledge across a wider set of substantive domains. This provides a clearer delineation of important content areas in which low-income persons lack knowledge.

The finding of knowledge deficiencies on public benefits such as transitional Medicaid, subsidized child care, and the Earned
Income Tax Credit (EITC) is particularly important in this respect. However, knowledge about public benefits often has not been emphasized in financial training programs for low-income audiences, which may result from the fact that these programs often adapt curricula from programs designed for broader cross-sections of the population.

The study findings concerning lack of knowledge about savings and investing is supportive of the recent emphasis on asset development strategies. While lack of knowledge in this area probably results partially from low incomes of participants, previous research has shown that even those with very modest resources are capable of saving if offered incentives and training (Schreiner, Clancy, & Sherraden, 2002). Therefore, it is important to provide low-income persons with knowledge and basic skills on savings strategies. It is also necessary to educate them about the effect of savings and asset accumulation on eligibility for public benefits (Hogarth & Lee, 2000).

**Factors Related to Pre-training Knowledge**

The regression results on factors affecting pre-training knowledge levels suggest targeting strategies that may be useful when developing financial training programs. In particular, low educational attainment and limited English proficiency were both negatively related to pre-training knowledge. This may be due to general deficiencies in reading and learning skills among these groups, or may result from lack of exposure to financial information in school and work settings. In addition, it is possible that those with limited education or English skills are more likely to be intimidated by the prospect of approaching financial institutions or public bureaucracies to obtain benefits and services.

Having previously filed a federal tax return and having a bank account were the two economic characteristics associated with pre-training knowledge levels. Although the causes of these relationships are not clear, it is likely that persons with these characteristics have experiences leading to the acquisition of specialized financial knowledge (i.e., knowledge about banking and interest rates, or about public benefits available through the tax system). Persons with bank accounts also may have more oppor-
tunities to have access to financial education provided by financial institutions.

Marital status was the most intriguing demographic characteristic related to pre-training knowledge, with married participants having significantly lower financial knowledge than their previously married and never married counterparts. While we only can speculate about the causes of this relationship, it is possible that married participants simply relied more on their spouses on financial matters.

Knowledge Gains from Training

Knowledge changes after training completion indicate that such programs have promise for improving basic financial knowledge among low-income groups. Despite the fact that training included high percentages of public assistance recipients and persons with educational limitations, financial knowledge increased substantially overall and in each of the five content areas after the training, across all participant sub-groups.

Several participant factors significantly affected the extent of knowledge gains from the training. In particular, results indicated that those who were primary English speakers and those with more education experienced higher knowledge gains. This again maybe due to stronger reading and learning skills among more educated participants, as well as greater ease in assimilating instructional messages because of English proficiency.

Interestingly, after controlling for primary English-speaking and other factors, Hispanics experienced significantly higher knowledge gains from the training than white or African American participants. Further analyses indicated that two training sites consisted primarily of Hispanic participants (95% and 88% respectively), and these sites together provided training to about 80% of all Hispanic participants in FLLIP. It is possible that the trainers in these sites may have used cultural metaphors and ethnic-specific examples that facilitated learning. The more homogeneous ethnic composition in these sites may also have produced stronger group cohesion and more active interactions. Thus, this result may imply the importance of training that is sensitive to multicultural audiences.
Limitations and Future Research

Several limitations of the study should be noted when interpreting the above results. First, participants in the FLLIP program are self-selected and they are from only one state. Therefore, the findings pertain to a particular subset of the low-income population, which suggests caution in generalizing too broadly. However, many training programs are voluntary in nature, so the problem of self-selection should not be overstated.

Second, due to the lack of a control group, we do not know exactly how the financial knowledge of the participants would have changed over the same period if the training had not been provided. Further studies that include control groups would be useful in validating these findings. Nonetheless, given that the pre-test and post-test generally occurred within a one-month period, there is little reason to expect that common internal validity threats such as history or maturation were important in the current study.

Finally, while measuring knowledge gains from financial training programs is an important first step, the ultimate goal of such programs is to positively influence financial behavior. It therefore would be useful to conduct follow-up surveys with persons who complete financial training to establish both whether knowledge gains persist and whether financial behaviors change as a result.

Implications for Social Work

Several implications for social work practice and policy development may be drawn from this study. The findings demonstrate basic financial knowledge deficiencies that should be of concern to social workers, and the positive knowledge gains achieved through training are consistent with a social work philosophy of empowering low-income persons to improve financial decision-making. We therefore conclude by elaborating upon selected of these implications.

Implications for Practice

Social workers in practice can play important roles in improving the financial knowledge of low-income persons, both through the development and provision of financially related materials.
and by referring clients to community financial education programs. For example, much of the FLLIP training was provided through community social service agencies, and caseworkers in TANF offices also played a vital role by referring clients to the program. Collaborations with adult educators and university extension programs seem particularly promising in this respect, in that social workers can contribute their specialized expertise in working with low-income persons while drawing on the knowledge of consumer educators and others about financial matters.

Our study findings indicate the importance of developing curricula on public benefits for financial training programs targeted at low-income audiences, as well as the more general need for continued development of information dissemination and outreach efforts designed to inform potential beneficiaries about available benefits. Social work perspectives and expertise are vital to such endeavors, because social workers often have a depth of understanding about public programs that consumer education specialists or adult education teachers do not. In addition, as social service provision has devolved, public benefits for low-income persons increasingly vary by state and local jurisdictions. Social workers can bring a unique understanding of these varying and often confusing benefit rules to community efforts to increase the awareness of low-income consumers.

More generally, social work skills in assessment and in empowerment practice are helpful in adapting training to the specific needs of low-income audiences. One useful approach to assessment emanating from this study would be to administer knowledge tests as pre-training needs assessment tools, and then to emphasize content areas that the test results indicate are most needed. Involving participants in negotiating the training content that they view as most useful is another classroom technique consistent with a social work emphasis on empowering clients. The current study also implies that it is critical to attend to within-group differences when delivering training to low-income audiences.

Implications for Policy

Although financial training programs need not be limited to low-income persons receiving public assistance, implemen-
tation of TANF programs has placed increasing pressures for self-sufficiency on this group. An important role for social workers therefore is to promote programs that improve the financial knowledge and skills necessary to most effectively manage the limited resources that recipients generally have as they exit welfare and transition into employment.

Incorporating financial education and training into welfare-to-work programs is one promising approach to assisting these persons. For example, the TANF recipients participating in FLLIP met their work and training requirements through FLLIP participation. Because TANF devolved most welfare decision-making to the states, advocacy efforts to allow financial training as an allowable TANF work activity could most usefully occur at this level of government.

Further development of funding streams needed to support the provision of financial management training also is needed. Using TANF funding is one possibility for this subset of the low-income population. For example, the Illinois Department of Human Services used unspent TANF "maintenance of effort" funds to support the FLLIP training. Developing linkages with adult education programs may be another promising funding strategy to provide training to a broader range of the low-income population. Likewise, university cooperative extension offices often have service missions that are consistent with the provision of financial training. Finally, both private foundations and financial institutions have increasingly supported financial training programs as a technique of community development and service, so pursuing funding through such organizations is a viable option for program development.

Conclusion

This study has found that a sample of low-income training participants had low knowledge levels about financial matters, and that financial training improved knowledge levels across diverse low-income subgroups. Both pre-training knowledge and knowledge gains were found to differ significantly according to selected participant characteristics, suggesting the need to carefully tailor training delivery to meet the needs of varying low-
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income audiences. The findings support the engagement of social workers in the provision of such training, as well as in advocating for programs and related funding for this purpose.

References


Schreiner, M., Clancy, M., & Sherraden, M. (2002). *Saving performance in the


Appendix A:

*Major Content and Examples of Questions from FLLIP Knowledge Test*

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<thead>
<tr>
<th>Knowledge Category</th>
<th>Major Knowledge Content Covered</th>
<th>Sample Questions</th>
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</table>
| Predatory Lending Practices            | Knowledge about payday loans, currency exchanges, pawning, and other predatory lending practices and their hidden high interest rates. | 1. Buying an item through rent-to-own plans usually costs less overall than buying the same item with a bank loan.  
2. Currency exchanges usually charge less than banks for cashing checks and other financial services. |
| Public and Work-related Benefits       | Knowledge about employment-based insurance and retirement benefits, transitional Medicaid, subsidized child care, and Earned Income Tax Credit. | 1. In Illinois, there is a program to help low-income parents pay for child care.  
2. The Earned Income Tax Credit (EITC) is a government payment that rewards people for working. |
| Savings and Investing                  | Knowledge about strategies to save, and possible risks and returns of investment.                | 1. The rate of return on your money is the amount that you earn on your savings and investments.  
2. Investments usually are less risky than savings accounts. |
| Banking Practices                      | Knowledge about how to open a bank account, services and fees available to account holders, and interest rates of savings account. | 1. All banks provide the same interest rates on their savings accounts.  
2. A debit card is used to take money from your bank account electronically. |
| Credit Use and Interest Rates          | Knowledge about strategies to keep a good credit history, and on how to calculate APRs.         | 1. Knowing the annual percentage rate (APR) for a loan is a good way to compare loans with different repayment periods.  
2. Credit bureaus keep track of how people pay their bills. |