Considerations in Financial Education Programming for Women

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Financial education programs have been developed for a variety of groups, including workers, women, high school students, and broader adult audiences. (For a review of programs, see Braunstein & Welch (2002) and Todd (2002).) Organizations offering financial education need to show that their programs make a difference. Program evaluation, based on the systematic collection and analysis of objective, reliable, and valid program data, is the best way to document program success (Jacobs, 1988). While it is recognized that educational programs must conduct evaluations to show their impact, few organizations have the resources to conduct even the most minimal evaluation, let alone a rigorous, formal evaluation. Consequently, current evaluation efforts by financial education programs have been observed to be somewhat limited (Fox, Bartholomae, & Lee, 2005), leaving much to be learned about the most effective means of program delivery in financial education.

Between 2000 and 2005, evaluation data were systematically collected from a community-based financial education program called the *Ohio Women and Money* program (WMP). Ohio is not among the 14 states that have mandated personal finance instruction for secondary school students.[1] Until the introduction of a financial education program directed exclusively to women by the Ohio State Treasurer's office, citizens have largely been left on their own to learn about personal finance.

It is particularly important that financial education be tailored to meet the financial education needs of women, especially since women are more likely to live longer than men and report lower

[1] For complete details, see the legislation link on the Jump$tart website at: http://www.jumpstart.org/legislation.cfm.

lifetime earnings and lower rates of pension plan coverage and participation. Further, studies provide evidence of gender differences in financial behaviors (Embrey & Fox, 1997). Most notably, women are more likely than men to make more conservative investment decisions (Bajtelsmit & Bernasek, 1996), resulting in less retirement income. Also, women are more likely to report feeling less competent in financial matters (Prince, 1993), further highlighting the need for specific financial education programs that target women.

Learning can be defined as an internal process that occurs when an observable, permanent change takes place (Kaplan & Kies, 1993). Learning and knowledge acquisition in classrooms traditionally have been measured by instructors using term-papers and exams. However, learning also can be measured by asking students about their perceived learning (Johnson, Johnson, & Golden, 1996). Researchers have measured perceived learning using participants' level of agreement with items such as "my knowledge increased from this course." Perceived learning has been endorsed as an important measure of learning because of its association with self-efficacious behaviors (Kraiger, Ford, & Salas, 1993). Additionally, learning theories, such as Kolb's (1976), include perception as a defining dimension of learning. This study analyzes the program and participant characteristics of a community-based financial education program for women and identifies the factors correlated with higher levels of perceived learning.

Program Description

The *Ohio Women and Money* program (WMP) is a free, day-long financial education workshop for women, which has been offered annually throughout the state since 2000. The WMP curriculum, written using a case study approach, focuses on such topics as budgeting, credit and debt management, home ownership, insurance, investments, retirement, and estate planning. Trained financial educators and professionals facilitate

four one-hour sessions and three general sessions delivered throughout the day. For complete information on the program, visit http://www.ohiowomenandmoney.org.

Program Participants

Participants most commonly hear about the program through a friend or co-worker (28.8%), through employer e-mails (15.9%), and newspaper advertisements (15.3%). Employer payroll inserts (7.6%), an organizational newsletter (2.4%), and the Treasurer's home page (5.4%) also have been used to recruit participants. The evaluation results reported in this article are based on surveys obtained from 8,801 women who attended the program in various cities in Ohio between 2002 and 2005. Only evaluations that were complete or had missing data that could be reasonably imputed without significantly impacting the key findings were used in our analysis. While the program officially began in 2000, we only use impact data collected from the last four years, as this information reflects results from a consistent evaluation instrument.

Method

Systematic data collection was integrated with program delivery. WMP participants received an evaluation instrument as part of their program workbook and were instructed to complete the instrument progressively throughout the program. The closed- and open-ended evaluation questions collected information about satisfaction with the program, changes in perceived knowledge, and a variety of program features. The evaluation form was designed so that participants' responses could later be scanned, providing increased reliability in data processing. An incentive was used to increase the response rate, which for each program year was 85% in 2002, 73% in 2003, 82% in 2004 and 65% in 2005.

Measures

The outcome of interest in this study was the level of perceived learning and was based on participants' responses to the following statement: "As a direct result of participating in this program, my knowledge increased." Responses were based on a 7-point scale and ranged from 1 = 'very little' to 7 = 'very much.' Information also was collected about participants' previous experience with financial education, including whether they attended a previous WMP, a program similar to WMP, an employee-sponsored program, or another type of formal financial education (e.g., a course in high school or college, or some other formal financial training).

Additional information was collected on: (1) responsibility for financial decision-making (i.e., whom the woman relied on when she made financial decisions); (2) financial satisfaction (i.e., whether she was satisfied with her current financial situation); and (3) whether the participant planned to use the program workbook and the program information. Participants rated instructors as follows: "[c]ompared with other educators, I would rate this facilitator as...." Responses ranged from 1 = 'much worse' to 7 = 'much better.'

Additional information was collected to determine how important it was to participants that the program targeted women and addressed their financial needs; scores ranged from 1 = 'not at all important' to 7 = 'extremely important.' In addition, information was collected using the same 7-point scale to determine how important it was to the participants that the WMP program used a case study approach to learning financial concepts. Participants also rated the degree to which they identified with the case study used in each session. Demographic information was collected as part of the evaluation and included age, race, education, marital status, and family income.

Analytic Procedure

An ordinary least squares (OLS) regression was estimated to examine the independent impact of program and participant

characteristics on perceived learning. The empirical model represents perceived learning regressed on year of program delivery, previous financial education, financial decision-making and satisfaction, anticipated use of the program workbook and information, instructor ratings, importance of the program emphasis on women, use of a case study approach, and degree of identification with the case study. The following participant characteristics also were included in the model: age (older than 50), being a parent, marital status (single, divorced, widowed, with married as the reference group), race (black, other, with white as the reference group), education (less than a college education, with a college education or higher as the reference group), and family income (less than $50,000, with greater than or equal to $50,000 as the reference group).

Results

Table 1 presents summary statistics for the program participants. Over one-third of the women were older than 50 (35.0%); women between the ages of 41 to 50 (29.1%) and 51 to 60 (26.8%) also made up a sizable proportion (not shown in Table 1). WMP participants were mostly white (73.0%), married (56.0%), and had children (76.0%). Most participants also had at least a college degree (74.0%) and a family income of $50,000 or less (49.0%). Based on the 7-point scale, the average perceived learning was 6.01, which indicated that the vast majority of participants believed that their knowledge had increased as a result of the program. Less than half of the WMP participants (44.0%) had attended a program similar to a WMP or an employer-sponsored financial education program, and very few had taken a personal finance course in high school (4.0%) or college (8.0%). Less than a quarter (23.0%) attended one of the earlier WMPs. Over three-quarters of participants (78.0%) reported that they relied solely on themselves when making financial decisions.

Table 1

Description of Variables Used in the Analysis Women (n=8,801)

Variables	Mean or Percent	Std. Deviation	Range
Perceived Knowledge Increase	6.01	1.00	1 - 7
2002, Year Attended Program	0.30	0.46	
2003, Year Attended Program	0.24	0.43	
2004, Year Attended Program	0.30	0.46	
Had a High School Personal Finance Class	0.04	0.19	
Had a College Personal Finance Class	0.08	0.28	
Attended other financial education programs	0.44	0.50	
Attended previous women and Money	0.23	0.42	
Financial Decision Maker	0.78	0.41	
Financial Satisfaction	3.46	1.78	1 - 7
Plans to Use Program Workbook	6.03	1.06	1 - 7
Plans to Use Program Information	6.31	0.87	1 - 7
Program Instructors Rating	5.55	0.76	1 - 7
Importance of Program Emphasis on Women	5.34	1.69	1 - 7
Importance of Case Study Approach	5.19	1.44	1 - 7
Identification with Case Study	3.55	1.23	1 - 7
Women Older than 50	0.35	0.48	
Women with Children	0.76	0.43	
Single	0.22	0.41	
Divorced or separated	0.18	0.39	
Widowed	0.03	0.18	
Black	0.23	0.42	
Other	0.04	0.19	
Less than a college education	0.26	0.44	
Household income less than $50,000	0.49	0.50	

Table 2 presents the results for the OLS model, where the dependent variable is the participant's level of perceived learning that resulted from the WMP education sessions. Recall that the dependent variable is based on a 7-point scale, where higher values indicate higher levels of perceived learning. The independent variables explained half of the variance observed in perceived learning (adjusted $R^2 = .53$).

With respect to specific variables, the regression results showed that the year in which the program was offered was significantly related to perceived learning. Those who attended the program in 2002 and 2003 reported lower levels of perceived learning than those who attended in 2005. These values suggest that, relative to 2005, instruction was less effective in 2002 and 2003. Two of the four financial education variables were significant predictors of perceived learning. Participants who had taken a personal finance class in college ($p < 0.01$) or who had attended another financial education program ($p<0.001$) had lower perceived learning scores than those without this type of educational experience. Having attended a previous WMP was not found to be a significant predictor of perceived learning.

Women who were responsible for financial decisions and who were more satisfied with their financial situation tended to have lower perceived learning than those who relied on others to make their financial decisions and were less satisfied with their financial situation. Also, women who planned to use the program workbook or program information had greater perceived learning than those who did not plan on using these resources. More favorable ratings of program educators also contributed to greater perceived learning.

Furthermore, participants who indicated that it was important to them that the program targeted women and emphasized their financial education needs experienced higher levels of perceived learning. The importance of a case study approach to learning financial concepts and the degree of identification with the case study also were positively related to perceived learning.

Table 2
Ordinary Least Square Standardized Regression Results of Perceived Learning

Variable	B (SE)
(Constant)	0.28 (0.08)
Year of Program: 2002	-0.08 (0.02) ***
Year of Program: 2003	-0.07 (0.02) **
Year of Program: 2004	-0.01 (0.02)
Had a High School Personal Finance Class	-0.02 (0.04)
Had a College Personal Finance Class	-0.07 (0.03) **
Attended other financial education programs	-0.07 (0.02) ***
Attended previous Women and Money	0.01 (0.02)
Financial Decision Maker	-0.09 (0.00) ***
Financial Satisfaction	-0.01 (0.01) **
Plans to Use Program Workbook	0.10 (0.01) ***
Plans to Use Program Information	0.61 (0.01) ***
Instructor Rating	0.17 (0.01) ***
Importance of Program Emphasis on Women	0.02 (0.01) ***
Importance of Case Study Approach	0.07 (0.01) ***
Identification with Case Study	0.02 (0.01) ***
Older than 50	0.02 (0.02)
Children	0.00 (0.02)
Single	-0.02 (0.02)
Divorced	-0.03 (0.02)
Widowed	-0.01 (0.04)
Black	0.08 (0.02) ***
Other	0.01 (0.04)
Less than a college education	0.04 (0.02) **
Household Income Less than $50,000	0.03 (0.02) *
R^2	.53
Adjusted R^2	.53

Notes. Standard errors in parentheses.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Participant characteristics appeared to play a minimal role in explaining perceived learning. Women who had lower levels of income and education experienced higher levels of perceived

learning. Relative to whites, black women also had greater perceived learning. However, the participant's age and parental and marital status were not significant predictors of perceived learning.

Discussion and Implications

The current study attempts to identify the program attributes and participant characteristics that contribute to improvements in perceived learning from a community-based financial education program targeting women. Financial education programs that are offered on a regular basis and over a longer period of time (i.e., several years) appear to be more effective than newer programs. The WMPs offered in 2004-2005 appear to have been more effective in teaching women than the earlier programs offered in 2002-2003. This perhaps is not surprising since programs that rely on comprehensive evaluation information should show consistent improvement in desired outcomes.

Participants with previous financial education experience, whether formal or informal, seemed to show less improvement in perceived learning than those with no prior experience. This finding suggests that short programs aimed at those who are less educated in personal finance may result in greater perceived learning. Likewise, participants who were less accustomed to making their own financial decisions were more likely to report higher levels of perceived learning from the program. Interestingly, a personal finance course in high school made no difference in the level of perceived learning, but those who had a college course appeared not to gain as much knowledge from the program. The recentness of the information could explain this finding, along with potential differences in the rigor and relevance of the information presented in the college versus the high school course.

Participants who attended the program with previous experience in financial decision-making appear to have fewer gains from the program. This finding suggests that program audiences

have different educational needs (i.e., fundamental information for those with little financial experience versus more advanced programming for those with more experience). The WMP curriculum targets these distinct audiences by offering advanced tracks in the investment course, with portfolio management following investment basics. Women who had greater satisfaction with their financial situation also reported lower levels of perceived learning from the program. Further information about the root causes of financial satisfaction among women in the program would be necessary to understand and explain these findings.

The strongest predictor of perceived learning was the relevance of the information provided in the program curriculum. The women who planned to use the information from the program reported significant increases in perceived learning (B=0.61). The second largest contributor to perceived learning was the effectiveness of the instructors. Based on the current findings, learning appears to be only as good as the program instructors and the message delivered. Thus, it is critical that programs select and train effective educators. The third largest contributing factor to participant learning was related to the program workbook. Women who planned to use the workbook reported higher levels of perceived learning.

The WMP provides a free, take-home workbook with information and terminology on each of the topics. Each topic includes a case study and exercises to help the participant solve the case study and apply what they have learned to their own financial situation. It appears as though providing a workbook is likely to be helpful to participants who prefer experiential learning. The workbook provides an action plan for financial concepts. Rather than just providing core information, the workbook attempts to provide a roadmap outlining the next steps in the financial planning process. This "personal relevance" seems to significantly and positively relate to increases in perceived learning during the program. The implication is that providing participants with useful information and action plans that have

direct relevance to their financial situation can be critical to improving participants' perceptions about their financial knowledge and abilities following the program.

The pedagogical approach of community-based financial education programs deserves further consideration. The current findings illustrate the importance of providing a program tailored to the financial needs of the participants and not necessarily to the participants' characteristics. Most notably, the provision of relevant supplemental learning materials appears to be worth the investment. The safe atmosphere of the program also appeared to be important to women. For example, the strengths noted by participants in open-ended comments consistently highlighted the importance of being treated with dignity, the solidarity between women, as well as the empowerment of women and the emphasis on their financial needs. In summary, the current study presents concrete recommendations for organizations that are planning to develop and deliver financial education programs to women. Many of the findings are likely applicable to broader audiences as well.

References

Bajtelsmit, V. L., & Bernasek, A. (1996). Why do women invest differently than men? *Financial Counseling and Planning*, 7, 1-10.

Braunstein, S., & Welch, C. (2002). Financial literacy: An overview of practice, research, and policy. *Federal Reserve Bulletin*, 88, 445-458.

Embrey, L. C., & Fox, J. J. (1997). Gender differences in the investment decision-making process. *Financial Counseling and Planning*, 8(2), 33-40.

Fox, J. J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *Journal of Consumer Affairs*, 39(1), 195-214.

Jacobs, F. H. (1988). The five-tiered approach to evaluation: Context and implementation. In Heather B. Weiss &

Francine H. Jacobs (Eds.), *Evaluating Family Programs* (pp. 37-68). New York: Aldine DeGruyter.

Kaplan, E. J. & Kies, D. A. (1993). Together: Teaching styles and learning styles improving college instruction. *College Student Journal, 27*(4), 509–513.

Kolb, D. A. (1976). *Learning style inventory*. Boston: McBer Publishing.

Kraiger, K., Ford, K. J., & Salas, E. (1993). Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training evaluation. *Journal of Applied Psychology, 78*(2), 311-328.

Prince, M. (1993). Women, men, and money styles. *Journal of Economic Psychology, 14*(1), 175-183.

Todd, R. M. (2002, December). Financial literacy education: A potential tool for reducing predatory lending? *The Region* (Federal Reserve Bank of Minneapolis), pp. 6-13.

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