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Understanding the Impact of Employer-Provided Financial Education on Workplace Satisfaction

The present study examines the linkage between workplace financial education and workplace satisfaction. Data gathered from a national sample of employees of an insurance company favor the hypothesis that employees who participate in workplace financial education more fully understand personal finances and recognize how financial literacy impacts their future financial expectations. In addition, employees who gain considerable literacy in financial matters and confidence in their future financial situation are also more likely to be satisfied with and supportive of their company. Implications of these results for non-work settings and for consumers in general have also been developed.

In recent years, there has been significant growth in the number of U.S. workplaces offering financial education programs to their employees. This phenomenon provides an excellent opportunity to assess the effects of these programs on employees' financial literacy, financial expectations, and satisfaction with the employer. Being able to quantify these effects helps justify continuous promotion and improvement of adult financial education in the workplace.

Already, nearly half (47%) of the workers who responded to a recent Retirement Confidence Survey said they received education materials or attended seminars on retirement planning and saving offered by either their employer or their retirement plan provider. In addition, nearly one-third of the workers reported that an employer provided access to retirement investment advice (Employee Benefit Research Institute 2004). Encouraged by the positive effects of education on retirement saving and investing, the professional literature shows that some employers have widened the scope of financial education in the workplace (Employee Benefits 2004; Pomeroy 2003). These programs are targeted at improving an employee's level of financial literacy and analytic ability, thus preventing or resolving financially stressful situations. Despite acknowledgment that education in the workplace impacts employee financial expectations (Garman, Leech,

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and Grable 1996) and their commitment to their employer (Eisenberger et al. 1986), surprisingly little empirical research has been directed toward examining these effects, especially their causes and consequences. Most studies focus on traditional employee benefits like health care coverage and retirement planning and evaluate outcomes from the employer's perspective (Lengnick-Hall and Bereman 1994; Williams and MacDermid 1994).

Several notable exceptions have recently appeared in the literature from a group of researchers at the former National Institute for Personal Finance Employee Education at Virginia Polytechnic Institute and State University. One study reported specifically on the development and testing of a conceptual model for personal financial health in a workplace environment (Joo 1998). This study suggested that employees are highly interested in comprehensive workplace financial education and concluded that workplace financial education may significantly improve personal financial health. More recently, Kim (2000) found that financial well-being indirectly affected workplace satisfaction. However, Kim (2000) concluded, "a more comprehensive workplace financial education program is needed in future research designs to measure the effectiveness of workplace financial education on personal finances" (p. 301).

The present study improves Kim's experimental model, which was limited to assessing the impact of a one-time, 90-minute session presented to white-collar workers in selected states. The present study, utilizing a national sample, assesses the impact of a 3.5-hour-long educational session preceded by an hour-long informational session. During the informational session, participants were given a preview of and invited to participate in a more intensive, 3.5-hour educational session.

HYPOTHESES

The overall objective of the present study is to identify the effects of employer-provided financial education on employee financial literacy, employee expectations for their future financial situation, and their satisfaction with the employer. Results of this study should help to provide greater understanding of the causal pathway by which educational activities are linked to outcome variables and, therefore, should provide reliable arguments for further promotion of workplace financial education.

This study develops financial literacy as a multiple measure representing four areas of financial knowledge, including knowledge about retirement needs, investing money, providing for the future, and managing credit use.

Furthermore, this study assumes that the information and advice disseminated in an educational session increases financial literacy. While many researchers have positively correlated education with financial literacy (DeVaney et al. 1995, 1996; Fletcher, Beebout, and Mendenhall 1997; Garman et al. 1999; Kim, Bagwell, and Garman 1998), empirical evidence of the linkage of financial education with an individual's expectations of his or her future financial situation is lacking. This is surprising, because previous studies indicated that education increases an individual's financial literacy and improves his or her ability to envision the future consequences of today's actions (Becker and Mulligan 1997; Bernheim 1994). To this end, the relations among participation in an educational session, financial literacy, and expectations for the future financial situation are assessed in the present study. It is expected that the three variables relate to each other as follows:

Hypothesis 1: Participation in the educational session will significantly correlate with four areas of financial literacy, such as knowing retirement needs, investing money, providing for the future, and managing credit use.
Hypothesis 2: The four different areas of financial literacy will significantly correlate with expectations for the future financial situation.

Much is being written about the correlation between affective satisfaction with the work organization and variables hypothesized to be its antecedents (Meyer and Allen 1997; Mowday 1999). Results of these studies suggest strong links between employees' perceptions of employer supportiveness and affective commitment to the company (Baruch 1998). Supportiveness becomes evident in employer-provided benefits, such as the offer of financial education in the workplace. By implication, the learning experience may strengthen employees' perception that the employer cares for them and allows them to look more confidently into the financial future.

In the present study, it is expected that expectations for the future financial situation and workplace satisfaction are significantly related. The variable "workplace satisfaction" summarizes two measures, company rating and company support (Meyer and Allen 1997). While company rating is a single measure in the model, the variable company support is measured through five items, such as pride to work for and satisfaction with the organization, willingness to engage in the workplace beyond normal duties, and a high interest in the company's fate and its efforts to assure the well-being of the employees. Therefore,

Hypothesis 3: The four different areas of financial literacy will significantly correlate with workplace satisfaction.
Hypothesis 4: Expectations for the future financial situation will significantly correlate with workplace satisfaction.

An alternative perspective with which to view the relationships between the variables of interest is that financial literacy and expectations for the future financial situation mediate the relationship between participation in the educational session and outcomes such as workplace satisfaction. To date, most of the research on workplace financial education has focused on its direct effects on financial behavior (Fletcher, Beebout, and Mendenhall 1997; Kim 2000), work outcomes (Joo 1998; Kim 2000), and personal saving (Bernheim and Garrett 2000, 2003). Little light has been shed on intermediate steps, such as the increase in financial literacy. The present study assesses to what extent the four different areas of financial literacy are affected through employer-provided financial education. Therefore,

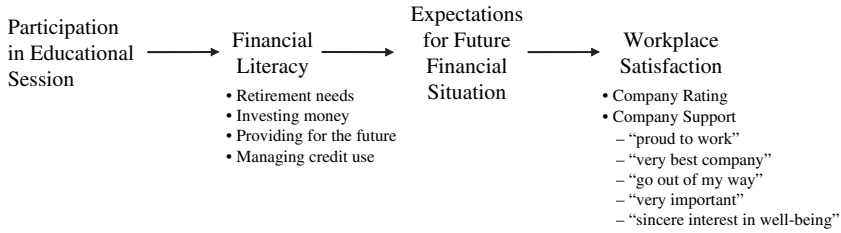
Hypotheses 5a through 5d: Participation in the educational session will result in significantly higher levels of financial literacy, in areas such as knowing retirement needs, investing money, providing for the future, and managing credit use.

Social psychology, and especially the Theory of Reasoned Action, proposes that knowledge and attitude-related variables are linked by an individual's beliefs (Ajzen and Fishbein 1980). Some beliefs are formed using outside information, for example, through the literacy gained through an educational session. Only a few of these beliefs actually influence attitude (Fishbein and Ajzen 1975). The present study assesses whether an individual's beliefs about the future financial situation are affected by a change in financial literacy and whether beliefs about the future financial situation affect workplace-related attitudes, such as company rating and company satisfaction. Therefore,

Hypotheses 6a through 6d: Higher levels of financial literacy will exhibit significantly higher expectations for the future financial situation.
Hypotheses 7a through 7f: Higher expectations for the future financial situation will exhibit significantly stronger workplace satisfaction.

Figure 1 illustrates the proposed study design.

FIGURE 1
Proposed Causal Relationships



METHODS

Procedure

The present study utilizes data gathered from a randomly selected national sample of employees working for one of the largest insurance companies in the United States which operates offices nationwide. The sample was selected in eight different geographic regions of the United States that were defined through the insurance company: west central U.S., Alabama, south central U.S., Michigan, northern Texas, northeastern U.S., Arizona/Nevada/New Mexico, and Oklahoma/Kansas, in 1999. A survey was mailed to a total of 2,361 employees. A total of 1,519 employees returned completed questionnaires producing an overall response rate of 64.3%; a total of 1,486 questionnaires were usable for statistical analysis. In the statistical analyses the total number of cases was often less than 1,486. These missing cases represent unknowns among responses. The information may be overlooked or refused by the participant.

Respondents

The participants represented a variety of white-collar positions. A profile of the sample is presented in Table 1. The typical respondent was female (62%), 37 years old, white (84%), married or living with a partner (75%), and sharing a residence with other household members (87%). Male respondents were more often employed as field staff (94%), whereas the female employees were more often employed at the company's headquarter management (59%). More male employees than female employees were married or living with a partner (82% vs. 70%), living in larger households (37% with four or more household members compared to 29%), and were white (87% compared to 83%).

TABLE 1
Description of Sample by Number and Percentage

Variable	Males[a] (37.9%, $N = 563$)	Females[a] (62.1%, $N = 923$)	All[a] ($N = 1,486$)
Age	% ($N = 549$)	% ($N = 900$)	% ($N = 1,449$)
29 and younger years (=1)	14.6	14.6	14.6
30–39 years (=2)	37.7	38.4	38.2
40–49 years (=3)	23.3	27.1	25.7
50–59 years (=4)	21.7	17.9	19.3
60 years and over (=5)	2.7	2.0	2.3
Mean/median/mode	40.73/39/37	39.94/38/36	40.24/39/37
Standard deviation	10.11	9.71	9.87
Ethnicity	% ($N = 557$)	% ($N = 904$)	% ($N = 1,461$)
Nonwhites[b] (=0)	12.7	17.4	15.6
White (=1)	87.3	82.6	84.4
Marital status	% ($N = 563$)	% ($N = 905$)	% ($N = 1,463$)
Never married/divorced/ widowed/separated (=0)	17.9	29.8	25.3
Married/living as married (=1)	82.1	70.2	74.7
Household size	% ($N = 560$)	% ($N = 911$)	% ($N = 1,471$)
1 (=single)	11.4	14.1	13.1
2	32.1	34.2	33.4
3	19.5	22.6	21.4
4	24.8	21.6	22.8
more than 4	12.1	7.4	9.3
Mean/median/mode	2.97/3/2	2.77/3/2	2.84/3/2
Standard deviation	1.28	1.22	1.25
Job classification	% ($N = 563$)	% ($N = 923$)	% ($N = 1,486$)
Trainees (=0)	.5	.9	.7
Field claim workers, temporary assignment (=1)	7.1	.8	3.2
Field claim workers, lower level (=2)	63.9	33.9	45.3
Field claim workers, upper level (=3)	22.7	6.0	12.3
Headquarter management, lower level (=4)	3.2	43.1	28.0
Headquarter management, medium level (=5)	2.5	15.4	10.5

[a]Valid percent: only cases with nonmissing values are considered; missing values represent unknowns among responses. The information may be overlooked or refused by the respondent.
[b]Includes African Americans, American Indians, Aleuts, Eskimos, Asian or Pacific Islander, and "something else."

Measures

Participation in the Educational Session

The impact of participating in the educational session on financial literacy was assessed by the question "During the last six months, have you participated in any of the following financial planning education

opportunities?" The response alternatives were *yes* = 1 and *no* = 0. The education opportunities included wake-up call (one-hour session), Financial Awareness Workshop (half-day session), and Preretirement Planning Workshop (two-day session). The present study examines only responses from employees who participated in the half-day Financial Awareness Workshop, which was the most widely attended event: 50% ($N = 708$/Total $N = 1{,}420$) of the employees participated in this workshop.

Financial Literacy

Financial literacy was rated using a 5-item Likert scale ranging from *strongly disagree* = 1 to *strongly agree* = 5. Higher scores indicated higher financial literacy. The percentage of "agree" or "strongly agree" responses to one statement is indicated parenthetically; complete results are shown in Table 2. The measure was, "Please indicate whether you agree or disagree with each of the following statements." (1) I have a very clear idea of my financial needs during retirement (44%). (2) I have a better understanding now of how to invest my money than I did six months ago (43%). (3) I feel more informed now about how to provide for my financial future than I did six months ago (47%). (4) I have a better understanding now of how to manage my credit use than I did six months ago (37%).

Expectation for the Future Financial Situation

Employee expectations for the future financial situation were assessed by the question "In the next 5 years, do you expect that your household's financial situation will get worse, stay the same, or get better?" The response alternatives were *get worse* = 1, *stay the same* = 2, or *get better* = 3. The majority of the respondents (73%) expected their financial

TABLE 2
Distribution of the Multiple Measure "Financial Literacy"

Measures	Retirement[a] % ($N = 1{,}388$)	Investment[a] % ($N = 1{,}390$)	Financial Future[a] % ($N = 1{,}390$)	Credit Use[a] % ($N = 1{,}386$)
"Strongly disagree" (=1)	3.6	2.4	2.4	4.1
"Disagree" (=2)	23.8	18.8	17.1	18.5
"Neutral" (=3)	28.5	35.5	33.4	40.1
"Agree" (=4)	37.9	40.0	43.7	33.8
"Strongly agree" (=5)	6.1	3.2	3.4	3.5
Mean (SD)	3.19 (.985)	3.23 (.873)	3.28 (.872)	3.14 (.898)

[a]Valid percent: only cases with nonmissing values are considered; missing values represent unknowns among responses. The information may be overlooked or refused by the respondent.

situation to improve during the next five years, about one-fourth (22%) expected it to remain the same, and a small minority (5%) expected things to get worse ($N = 1{,}380$; Mean = 2.68; SD = .561).

Workplace Satisfaction

Satisfaction with the work organization was measured by two items, company rating and company support. The measure for company rating was, "How would you rate [*name of the company*] as a company to work for compared to other companies?" The item was rated on a 4-item Likert scale ranging from *poor* = 1 to *excellent* = 4. The majority of the respondents rated their company as either "excellent" (29%) or "good" (52%), 17% rated it as "fair," and only 2% rated their company as "poor" ($N = 1{,}465$; Mean = 3.09; SD = .561).

The measure for company support was, "The following statements reflect employee opinions about the [*name of company*]. Please indicate whether you disagree or agree with each statement." The statements were rated using a 5-item Likert scale ranging from *strongly disagree* = 1 to *strongly agree* = 5. Higher scores indicated higher levels of support. The percentage of "agree" or "strongly agree" responses to one statement is indicated parenthetically; complete results are shown in Table 3. It is clear from the result that the majority of the respondents had positive attitudes toward their workplace: (1) I am proud to say, "I work for [*name of company*]" (82%); (2) [*name of company*] is one of the very best companies to work for (68%); (3) I will go out of my way to help make [*name of company*] successful (87%); (4) what happens to [*name of company*] is very

TABLE 3
Distribution of the Multiple Measure "Company Support"

Measures	"Proud"[a] % ($N = 1{,}467$)	"Very Best"[a] % ($N = 1{,}466$)	"Out of My Way"[a] % ($N = 1{,}468$)	"Very Important"[a] % ($N = 1{,}468$)	"Sincere Interest"[a] % ($N = 1{,}465$)
"Strongly disagree" (=1)	1.1	1.2	.6	.6	5.3
"Disagree" (=2)	2.9	7.9	1.6	.8	12.5
"Neutral" (=3)	14.5	22.5	10.4	5.2	25.6
"Agree" (=4)	51.7	43.9	51.6	46.5	40.3
"Strongly agree" (=5)	29.9	24.4	35.8	46.9	16.3
Mean (SD)	4.06 (.808)	3.82 (.931)	4.20 (.734)	4.38 (.680)	3.50 (1.071)

[a]Valid percent: only cases with nonmissing values are considered; missing values represent unknowns among responses. The information may be overlooked or refused by the respondent.

important to me (93%); (5) [*name of company*] has a sincere interest in the well-being of each employee (57%).

Control Variables

Gender, age, ethnicity, marital status, number of household members, and job classification were available as control variables. They were included in the regression equations because of their potential relationships with the dependent variables. Gender was coded as a dummy variable (0 = *males*; 1 = *females*). Age was reported in actual numbers. The ethnicity measure had five categories. However, because of the small number of minorities, the four categories of African Americans, American Indians/Aleuts/Eskimos, Asian/Pacific Islander, and "something else" were summarized and coded with a "0," whites were coded "1." Marital status was coded as a dummy variable (*divorced, widowed, separated, never married* = 0; *married or living together as married* = 1). The number of household members was reported in actual numbers. Job classification reflects five categories which range from *trainees* = 0, *temporary field claim worker* = 1, *lower-level field claim worker* = 2, *upper-level field claim worker* = 3, *lower-level headquarter management* = 4, *medium-level headquarter management* = 5.

RESULTS

Data were analyzed using SPSS for Windows version 11.5.2.1. Hypotheses 1 through 4 were tested by examining the bivariate correlations among the variables. The correlations are presented in Table 4. As expected, individuals who participated in the educational session had higher scores on financial literacy scales in the four areas studied in the present study (H1). These four areas of financial literacy were, in turn, significantly correlated with expectations for the future financial situation (H2) and, except for retirement, also with company rating and company support (H3). Similarly, expectations for the future financial situation were significantly correlated with company rating and company support (H4), except for the "very important" company support variable. Thus, full support was found for Hypotheses 1 and 2 as well as for company rating of Hypothesis 4. Evidence for strong but not complete support was found for Hypothesis 3 and for company support in Hypothesis 4.

Hypotheses 5a through 7f were tested with multiple ordinal regression analysis. This method is used to estimate ordinal dependent variables. The ordinal dependent variables of the present study have three to five

TABLE 4
Correlations among Study Variables (H1–H4)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1 Participation	1.000											
2 Literacy: retirement	.103**	1.000										
3 Literacy: investment	.270**	.193***	1.000									
4 Literacy: financial future	.306**	.202**	.847**	1.000								
5 Literacy: credit use	.141**	.041	.502**	.523**	1.000							
6 Future financial situation	.039	.094**	.145**	.157**	.159**	1.000						
7 Company rating	.003	.009	.133**	.123**	.101**	.161**	1.000					
8 Support: proud	.004	−.011	.127**	.139**	.106**	.156**	.673**	1.000				
9 Support: very best	−.006	.003	.117*	.131**	.124**	.144**	.746**	.799**	1.000			
10 Support: out of way	.011	.044	.071**	.089**	.057*	.089**	.480**	.654**	.612**	1.000		
11 Support: important	.030	.013	.066*	.087**	.062*	.045	.438**	.608**	.574**	.753**	1.000	
12 Support: interest	.017	.038	.139**	.156**	.124**	.155**	.648**	.693**	.715**	.577**	.514**	1.000

Note: *N*'s range from 1,380 to 1,486; *$p < .05$, two-tailed; **$p < .01$, two-tailed.

categories, for example, expectations for future financial situation (three categories), company rating (four categories), financial literacy and company support (five categories). The location component of the ordinal regression equations consists of the independent variables of interest and the control variables gender, age, ethnicity, marital status, household size, and job classification. The logit link function $\log(\gamma/1-\gamma)$ has been chosen for the ordinal regressions because of the ordered distribution of the dependent variables' categories. The basic form of the utilized generalized linear regression model is

$$\text{link}(\gamma_i) = \theta_j - \left[\beta_1 \text{variable of interest} + \beta_2 \text{ gender} + \beta_3 \text{ age} + \beta_4 \text{ ethnicity} + \beta_5 \text{ marital status} + \beta_6 \text{ household size} + \beta_7 \text{ job classification}\right],$$

where γ_i is the cumulative probability for the *j*th category of the different dependent variables and θ_j is the threshold or constant for the *j*th category that serves as estimate for the cutoff values of this continuous distribution that define the categories. β_1–β_7 are the regression coefficient estimates. As presented in Tables 5, 7, and 9, the chi-square test statistics are significant for the hypotheses, indicating that the values of the location parameters are constant across the categories of the response. The 95% confidence intervals for the regression parameters are available upon request.

Hypotheses 5a through 5d suggested that participation in the educational session is a significant predictor of financial literacy in the four areas studied. The parameter estimates, as presented in Table 5, indicate that financial education in the workplace positively relates to financial literacy. While direct interpretation of the estimates in this model is difficult due to the nature of the logit link function, the related marginal effects were calculated.

The marginal effects, for instance, underscore that those who participated in the educational session had a probability of agreeing with the statement on investment literacy that was 23 percentage points higher than for those who did not participate. The probability of agreeing with the statement on literacy about the financial future was for participants even 27 points higher than for nonparticipants. Likewise, the negative signs in Table 6 indicate a decline in perceived literacy gaps among the participants in the educational session. Thus, Hypotheses 5a through 5d were fully supported.

Hypotheses 6a through 6d suggested that the four areas of financial literacy that are assessed in the present study are significant predictors of expectations for the future financial situation. As presented in Table 7, the ordinal regression results indicate significant relationships between

TABLE 5
Parameter Estimates of Ordinal Regression Coefficients for "Participation in the Educational Session" on "Financial Literacy" (H5a through H5d)

Variables	Retirement	Investment	Financial Future	Credit Use
		Parameter estimates		
Threshold				
"Strongly disagree" (=1)	−2.292***	−3.868***	−3.942***	−3.935***
"Disagree" (=2)	.231	−1.384***	−1.599***	−1.933***
"Neutral" (=3)	1.562***	.313	.088	−.100
"Agree" (=4)	4.244***	3.539***	3.514***	2.767***
"Strongly agree" (=5)	0[a]	0[a]	0[a]	0[a]
Location				
Participation in educational session (=1)	.338**	1.054***	1.266***	.628***
Control variables				
Gender (female=1)	−.434**	.063	.034	.285*
Age (continuous)	.027***	−.002	−.001	−.004
Ethnicity (white=1)	.385*	−.177	−.263	−.448**
Marital status (married=1)	.150	.052	−.078	−.188
Household size (continuous)	−.044	−.078	−.057	−.025
Trainees (=0)	−1.135	.063	.844	−.536
Field claim workers, temporary assignment (=1)	−.574	.259	.225	.054
Field claim workers, lower level (=2)	.184	−.104	−.174	−.432*
Field claim workers, upper level (=3)	.647**	−.071	−.255	−.782**
Headquarter management, lower level (=4)	−.473*	−.293	−.325	−.317
Headquarter management, medium level (=5)	0[a]	0[a]	0[a]	0[a]
R^2 Cox & Snell	.108	.083	.111	.060
R^2 Nagelkerke	.116	.090	.121	.065
R^2 McFadden	.043	.035	.048	.024
Chi-square	144.365***	109.208***	148.437***	77.964***

*$p < .05$; **$p < .01$; ***$p < .001$.
[a]This parameter is set to zero because it is redundant.

the four variables of financial literacy and the variable "expectations for the future financial situation."

The marginal effects underscore that respondents with higher levels of financial literacy had, in general, a higher probability of belonging to the "get better" group. For instance, regarding the knowledge about how to provide for the financial future, the probability of belonging to the "get better" group was 8 percentage points higher for those who agreed that they have a better understanding now than six months ago compared to those with "neutral" answers. In summary, evidence for support was found

TABLE 6
Estimated Marginal Effects of Ordinal Regression Coefficients for "Participation in the Educational Session" (Changes 0 to 1) on "Financial Literacy" (H5a through H5d)

	Marginal Effects[a]				
Variables	"Strongly disagree" (=1)	"Disagree" (=2)	"Neutral" (=3)	"Agree" (=4)	"Strongly agree" (=5)
Retirement	−.01	−.05	−.02	.07	.01**
Investment	−.02	−.14	−.09	.23	.03***
Financial future	−.03	−.15	−.12	.27	.04***
Credit use	−.02	−.09	−.04	.12	.02***

[a]Holding all other variables constant at their mean (continuous variable) or mode (categorical variables): gender (=1, female); age (=40.24 years); ethnicity (=1, white); marital status (=1, married); household size (=2.84); job classification (=2, field claim workers, lower level).
*Marginal effects across all categories are significant at the $p < .05$ level; ** marginal effects across all categories are significant at the $p < .01$ level; *** marginal effects across all categories are significant at the $p < .001$ level.

for Hypothesis 6, although the marginal effects are relatively small (see Table 8).

Hypotheses 7a through 7f suggested that expectations for the future financial situation are significant predictors of workplace satisfaction. The regression results, presented in Table 9, show that employees with expectations for a prospering financial future were also more likely to rate their company higher as a company to work for compared to other companies. The regression coefficients indicate also that employees expecting their future financial situation to improve were also more likely to be supportive of the work organization.

The marginal effects illustrate, for instance, that the probability of rating the company as "excellent" was 12 percentage points higher for those who had more confidence in their financial future. Likewise the probability of strongly agreeing with the statement "proud to say, 'I work for [*name of company*]'" was 12 percentage points higher for those who expected their financial future to get better than those who expected it to stay the same (for details see Table 10). Overall, full support was found for Hypotheses 7a, 7b, 7c, 7d, and 7f.

DISCUSSION

The results of the present study contribute to the literature on workplace financial education. They demonstrate that employees who participate in workplace financial education are more likely to show higher levels of financial literacy. Participants with increased financial literacy, in turn,

TABLE 7
Parameter Estimates of Ordinal Regression Coefficients for "Financial Literacy" (H6a through H6d) on "Expectations for the Future Financial Situation"

Variables	Retirement	Investment	Financial Future	Credit Use
		Parameter estimates		
Threshold				
"Get worse" (=1)	−6.113***	−6.207***	−6.207***	−5.812***
"Stay the same" (=2)	−4.059***	−4.144***	−4.142***	−3.714***
"Get better" (=3)	0[a]	0[a]	0[a]	0[a]
		Location		
"Strongly disagree" (=1)	−.925*	−.930	−1.458*	−1.141*
"Disagree" (=2)	−.640	−1.186*	−1.127*	−.875*
"Neutral" (=3)	−.577	−.832	−.917*	−.568
"Agree" (=4)	−.197	−.469	−.500	.079
"Strongly agree" (=5)	0[a]	0[a]	0[a]	0[a]
Control variables				
Gender (female=1)	−.055	−.110	−.115	−.110
Age (continuous)	−.057***	−.053***	−.053***	−.054***
Ethnicity (white=1)	−.231	−.155	−.138	−.105
Marital status (married=1)	.247	.239	.257	.300
Household size (continuous)	−.069	−.063	−.062	−.064
Trainees (=0)	.677	.468	.481	.705
Field claim workers, temporary assignment (=1)	.861	.706	.738	.834
Field claim workers, lower level (=2)	.033	.060	.074	.145
Field claim workers, upper level (=3)	.277	.347	.384	.598*
Headquarter management, lower level (=4)	−.207	−.236	−.227	−.235
Headquarter management, medium level (=5)	0[a]	0[a]	0[a]	0[a]
R^2 Cox & Snell	.071	.077	.077	.088
R^2 Nagelkerke	.095	.102	.102	.117
R^2 McFadden	.053	.057	.057	.066
Chi-square	96.336***	104.020***	104.603***	119.506***

*$p < .05$; **$p < .01$; ***$p < .001$.
[a]This parameter is set to zero because it is redundant.

are more likely to have confidence in their future financial situation and, in turn, to be satisfied with and supportive of their workplace.

The correlation results show a significant and positive relationship between participation in an educational session, financial literacy, expectations for the future financial situation, and satisfaction with the workplace. The analyses of direct and indirect effects of employer-provided financial education indicate support for the other hypotheses as well. It is clear that financial education has an impact and that it significantly improved the

TABLE 8
Estimated Marginal Effects of Ordinal Regression Coefficients for "Financial Literacy" (H6a through H6d) on "Expectations for the Future Financial Situation"

	Marginal Effects[a]		
Variables	"Get worse" (=1)	"Stay the same" (=2)	"Get better" (=3)
Retirement			
"Strongly disagree" (=1) to "disagree" (=2)	−.02	−.06	.08*
"Disagree" (=2) to "neutral" (=3)	0	−.01	.01
"Neutral" (=3) to "agree" (=4)	−.02	−.05	.07
"Agree" (=4) to "strongly agree" (=5)	0	−.02	.02
Investment			
"Strongly disagree" (=1) to "disagree" (=2)	.01	.02	−.03
"Disagree" (=2) to "neutral" (=3)	−.02	−.06	.07*
"Neutral" (=3) to "agree" (=4)	−.01	−.05	.07
"Agree" (=4) to "strongly agree" (=5)	−.01	−.04	.04
Financial future			
"Strongly disagree" (=1) to "disagree" (=2)	−.02	−.06	.10*
"Disagree" (=2) to "neutral" (=3)	−.01	−.04	.04*
"Neutral" (=3) to "agree" (=4)	−.02	−.06	.08*
"Agree" (=4) to "strongly agree" (=5)	−.01	−.04	.05
Credit use			
"Strongly disagree" (=1) to "disagree" (=2)	−.02	−.05	.07*
"Disagree" (=2) to "neutral" (=3)	−.02	−.05	.06*
"Neutral" (=3) to "agree" (=4)	−.02	−.09	.11
"Agree" (=4) to "strongly agree" (=5)	.01	.02	−.03

[a]Holding all other variables constant at their mean (continuous variable) or mode (categorical variables): gender (=1, female); age (=40.24 years); ethnicity (=1, white); marital status (=1, married); household size (=2.84); job classification (=2, field claim workers, lower level).
*Marginal effects across all categories are significant at the $p < .05$ level; ** marginal effects across all categories are significant at the $p < .01$ level; *** marginal effects across all categories are significant at the $p < .001$ level.

levels of financial literacy in the areas of assessing financial retirement needs, investing money, providing for the future, and managing credit use. In turn, improved financial literacy generally furthered the confidence in the future financial situation. The mediating role that financial literacy plays in enhancing financial well-being has been underscored in previous studies (DeVaney et al. 1995, 1996; Fletcher, Beebout, and Mendenhall 1997; Kim 2000). The present study adds to this knowledge in pointing out the important role financial literacy plays in providing confidence for a better financial future.

Finally, participants who reported more optimistic expectations in their future financial situation were shown to be more likely to be satisfied with their workplace. In so doing, the present study contributes one explanatory mechanism of how workplace financial education is linked with company

TABLE 9
Parameter Estimates of Ordinal Regression Coefficients for "Expectations for the Future Financial Situation" on "Company Rating" and "Company Support" (H7a through H7f)

	Workplace Satisfaction					
		Company support				
Variables	Company rating	"Proud"	"Very best"	"Out of my way"	"Very important"	"Sincere interest"
			Parameter estimates			
Threshold						
"Poor"/"strongly disagree" (=1)	−3.654***	−3.889***	−4.108***	−3.480***	−3.996***	−3.027***
"Fair"/"disagree" (=2)	−1.090**	−2.627***	−2.072***	−2.286***	−3.177***	−1.589***
"Good"/"neutral" (=3)	1.306**	−.876*	−.467	−.320	−1.564***	−.308
"Excellent"/"agree" (=4)	0[a]	1.588***	1.521***	2.348***	1.285**	1.646***
"—"/"strongly agree" (=5)	—	0[a]	0[a]	0[a]	0[a]	0[a]
			Location			
Expectations for future financial situation						
"Get worse" (=1)	−1.183***	−.955***	−.999***	−.740**	−.390	−.924***
"Stay the same" (=2)	−.576***	−.669***	−.586***	−.524***	−.379**	−.592***
"Get better" (=3)	0[a]	0[a]	0[a]	0[a]	0[a]	0[a]
Control variables						
Gender (female=1)	.202	.147	.181	−.105	−.037	.058
Age (continuous)	.011	.011	.011	.028***	.021***	.005
Ethnicity (white=1)	.198	.062	−.097	.490**	.171	−.087
Marital status (married=1)	−.095	−.135	−.062	−.180	−.065	−.050
Household size (continuous)	.027	.136**	.080	.130**	.107*	.051
Trainees (=0)	−.063	.890	−.168	.923	.370	−.292
Field claim workers, temporary assignment (=1)	−.337	.119	.054	.142	.026	−.189
Field claim workers, lower level (=2)	−.235	−.090	−.306	.092	−.019	−.256
Field claim workers, upper level (=3)	.105	.563*	.491*	.866***	.681**	.296
Headquarter management, lower level (=4)	−.046	−.016	−.103	.002	−.150**	−.028
Headquarter management, medium level (=5)	0[a]	0[a]	0[a]	0[a]	0[a]	0[a]
R^2 Cox & Snell	.035	.044	.046	.065	.037	.035
R^2 Nagelkerke	.040	.049	.050	.074	.044	.037
R^2 McFadden	.017	.020	.018	.032	.020	.012
Chi-square	46.468***	58.787***	61.692***	86.767***	49.255***	46.034***

*$p < .05$; **$p < .01$; ***$p < .001$.
[a]This parameter is set to zero because it is redundant.

rating and company support. Results also provide support for the mediating role that expectations for the financial future play in linking financial literacy and workplace satisfaction. The linkage between employee confidence in their future financial situation and the development of a positive emotional bond with the employer is in line with organizational support literature (Eisenberger et al. 1986). The findings are also consistent

TABLE 10

Estimated Marginal Effects of Ordinal Regression Coefficients for "Expectations for the Future Financial Situation" on "Company Rating" and "Company Support" (H7a through H7f)

Variables	Marginal Effects[a]				
Expectations for future financial situation	Company rating				
	"Poor" (=1)	"Fair" (=2)	"Good" (=3)	"Excellent" (=4)	
"Get worse" (=1) to "stay the same" (=2)	−.01	−.10	.05	.08***	
"Stay the same" (=2) to "get better" (=3)	−.02	−.09	−.02	.12***	
Expectations for future financial situation	Company support				
	"Strongly disagree"(=1)	"Disagree" (=2)	"Neutral" (=3)	"Agree" (=4)	"Strongly agree" (=5)
		"Proud"			
"Get worse" (=1) to "stay the same" (=2)	0	−.02	−.05	.02	.05***
"Stay the same" (=2) to "get better" (=3)	−.01	−.02	−.08	−.01	.12***
		"Very best"			
"Get worse" (=1) to "stay the same" (=2)	−.01	−.05	−.05	.06	.05***
"Stay the same" (=2) to "get better" (=3)	−.01	−.05	−.08	.05	.09***
		"Out of my way"			
"Get worse" (=1) to "stay the same" (=2)	0	0	−.04	0	.04**
"Stay the same" (=2) to "get better" (=3)	0	−.01	−.05	−.05	.11***
		"Very important"			
"Get worse" (=1) to "stay the same" (=2)	0	0	0	−.01	.01
"Stay the same" (=2) to "get better" (=3)	0	0	−.02	.13	.09**
		"Sincere interest"			
"Get worse" (=1) to "stay the same" (=2)	−.03	−.04	−.01	.05	.03***
"Stay the same" (=2) to "get better" (=3)	−.03	−.07	−.04	.08	.06***

[a]Holding all other variables constant at their mean (continuous variable) or mode (categorical variables): gender (=1, female); age (=40.24 years); ethnicity (=1, white); marital status (=1, married); household size (=2.84); job classification (=2, field claim workers, lower level).

*Marginal effects across all categories are significant at the $p < .05$ level; ** marginal effects across all categories are significant at the $p < .01$ level; *** marginal effects across all categories are significant at the $p < .001$ level

with those of Garman, Leech, and Grable (1996), who found that workplace satisfaction decreases in situations where employees become stressed by handling financial mistakes and by dealing with their own or family members' financially careless behaviors. Employer-provided assistance in this stressful situation through financial education programs helps employees to cope. The present results tentatively suggest that these "psychological rewarding experiences" (Meyer and Allen 1997) are valuable for employees. Employers should be encouraged to offer financial education at the workplace and to communicate this benefit to employees.

Due to the limitations discussed in the following section, caution must be exercised when generalizing results to other groups. First, as a cross-sectional study, this research is limited in its evaluation of cause–effect relationships. Thus, future researchers may want to focus on more longitudinal-type designs, perhaps tracing a cohort of employees through multisession workplace financial education programs and assessing the effects on employee expectations. Second, since a self-report measure of the variables was used to collect information at a single point in time, issues such as respondent consistency motifs or response styles, transient mood states, and spurious results due to common method bias are of concern (Allen 2001). Reliance on self-report measures is a difficult issue to address in this type of research, as employee cognitions are the central focus of interest (Allen 2001). Longitudinal research that examines the short- and long-term effects of workplace financial education and the dependent variable of interest after a series of educational sessions is needed to address these concerns. In addition, the limitations of cross-sectional data, which make it impossible to confirm a causal ordering between variables, would be eliminated. Third, the study is limited to a single educational program. Different types of workplace financial education programs varying in frequency, content, and medium may produce different insights. Lastly, the study was limited to a single company. Although workers in seven different job classifications and in offices nationwide were assessed, variation in workplace financial education programs, especially in cross-sectional designs, can be obtained best by using employees with different levels of financial literacy who work in various industries (Williams and MacDermid 1994).

Future research in the area of workplace education on future financial situation might include several constructs missing from this study. First, the question concerning the appropriate level of analysis could be raised. The present study was interested in the beliefs that individuals form about their future financial situation and their commitment on the basis of workplace education on personal finance. Given the focus of this study, the

effects of support from coworkers and supervisors were not deemed appropriate or necessary. A useful topic for future research might be an examination of the effects of both workplace financial education and a supportive work environment.

Second, other researchers may also examine how workplace financial education relates to other commitment constructs, such as occupational/professional commitment (Blau 2001). It would be interesting to analyze whether workplace financial education affects the bond that develops between employees and employer or between employees and the occupation. Specifically, insight could be gained on how organizationally sponsored continuing education activities could enhance an employee's affective occupational commitment (Blau 2001). Workplace satisfaction may well be both organizational and occupational as soon as this new kind of workplace educational activity becomes more popular in companies.

Third, future research should also assess the role communication strategies play in analyzing the effects of workplace financial education. For example, the educational format may influence how individuals respond. The workshop format is very popular in comparable empirical studies (DeVaney et al. 1995; Fletcher, Beebout, and Mendenhall 1997; Kim 2000). However, it would be valuable to determine the extent to which the format accounts for variance in financial literacy. Alternative formats, such as Web-based educational tools, which are accessible via the World Wide Web at home as well as in the office, could enhance individual learning more than traditional instructing methods. A number of possible advantages include a high level of interactivity, a greater learner enthusiasm, a higher rate of retention with the program, and a high level of satisfaction (Lu, Yu, and Liu 2003). Admittedly, a certain level of mental maturity, learning experience, and reading level are needed to pursue learning in an impersonal environment created by these types of study tools. By implication, employees with higher education and more computer experience may benefit more than less experienced and educated employees. Future research is needed to examine the efficiency of these study tools for different groups of employees.

Finally, findings of this study also have implications for future research concerning the different types of emotional bonds that develop between employees and employer and for examining the extent to which satisfaction with the work organization depends on participation in employer-provided learning opportunities. A number of studies within the organizational commitment literature (Rhoades, Eisenberger, and Armeli 2001) suggest that different types of benefits correlate differently with dependent variables. Therefore, it may be useful to investigate the impact of specific types

of benefits vs. benefit packages (Harris and Fink 1994; Lengnick-Hall and Bereman 1994) on workplace satisfaction.

Assessing the impact of employer-provided financial education on employee beliefs can serve several practical purposes. First, the results suggest a significant positive relationship between employer-provided benefits and several dimensions of employee well-being, which include financial health and perception of the organization (Harris and Fink 1994). One important implication for employers is that a people-centered strategy is an important source of competitive advantage because, unlike technology, cost, or new product development, it is difficult to imitate (Pfeffer 1998).

Second, assessing new employee benefits, such as financial education, should have considerable utility for family and consumer economics researchers. Current research investigating the state of literacy concerning financial variables that are relevant to personal saving and financial planning is limited (Bernheim 1994). Additional research examining the effects of different aspects of the work environment on financial behavior should be helpful in improving the understanding of how people manage financial issues.

CONCLUSION

The results of this study provide support for the hypothesis that employer-provided education significantly stimulates financial literacy and, in turn, leads to expectations for a better future financial situation as well as a greater satisfaction with the workplace. The results also offer an explanatory mechanism for how and why employee participation in educational sessions benefits the workplace. These findings have potentially important implications concerning the efficacy of strategies to build financially stronger and satisfied employees. Perhaps the most important implication of all is that workplace financial education works. Financially savvy employees know how to achieve financial success and how to advance within the work organization. Merits of these findings do not have to be limited to employees in a workplace setting. Professionals working with consumers in a variety of environments can also use these results to provide evidence for the value of financial education. Self-motivated consumers may also find encouragement from these results for their own efforts to educate themselves in the area of personal finance.

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