Financial Stress, Pay Satisfaction and Workplace Performance

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Financial stress can reduce employee performance.

Most people experience financial difficulty at some point in their lives, and many have financial troubles on a consistent basis. With a sagging economy, millions of Americans are financially insecure. Twenty-seven percent of those responding to a recent survey conducted by the *Los Angeles Times* characterized their personal finances as shaky. Forty percent reported difficulty paying installment loans, car payments or insurance premiums.[1] Many employees experience financial difficulty and seek ways to get the help they need.

Financial concerns spill over into workers' responsibility at the workplace. Researchers estimate that 15% to 20% of workers in the United States are experiencing financial stress that impacts their productivity. Research shows that financial stress is associated with employees' health and sometimes absenteeism.

Job performance, worker productivity, tardiness, absenteeism, retention, turnover, work commitment, job satisfaction, morale and loyalty are human satisfaction indicators of employee outcomes at workplaces.[2] There is limited research on financial stress and work outcome variables, although financial stress could be a more valid measure than income in predicting these work outcome variables. This study focuses on the relationships between financial stress and work outcome variables, which include pay satisfaction, work time use and absenteeism.

Keywords: *financial stress; financial education and advice; pay satisfaction; productivity; absenteeism*

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EXHIBIT 1
Satisfaction with Personal Finances

Statement	A & TA (*n*)	%	*M*	*SD*
I am satisfied with my present financial situation	138	53.5	2.50	.82
My income is enough for me to meet my monthly living expenses	207	79.6	3.12	.83
I worry about how much money I owe (reverse coded)	101	39.0	2.72	1.06
I am satisfied with the amount of money that I am saving and investing for retirement	110	42.3	2.32	.90

Note: A (*agree*) = 4; TA (*tend to agree*) = 3; TD (*tend to disagree*) = 2; D (*disagree*) = 1.

The data for this study were collected from white-collar workers of an insurance company with work sites located in three Midwestern states. A self-report questionnaire was mailed to all 476 employees in February and March 1999. A total of 262 usable questionnaires were returned for a response rate of 55%. About three fifths (59.5%) of the respondents in this study were female. Almost all of the respondents (97.7%) were self-identified as white. About three fifths (60.5%) of the respondents were married, and 16.5% were never married. In regard to education, the largest group (36.3%) had a bachelor's degree, 22.1% were high school graduates, 14.1% had an associate's degree, and 13.4% had completed some college. The average age was 38.86 years. Household income ranged from less than $20,000 to more than $100,000. The median category for annual household income was $60,001 to $70,000.

Method

Financial stress is conceptualized as the subjective perception of one's personal finances. The scales included satisfaction with present financial situation, income adequacy, debt, savings and investment. Half of the respondents were likely to be satisfied with their present financial situation. One fifth of the respondents indicated that their incomes were not enough to meet monthly living expenses. About two thirds (61%) of the respondents worried about how much money they owed. More than half of the respondents (58%) were not satisfied with the amount of their savings and investing for retirement. (See Exhibit 1.)

The financial stress index was obtained by summing the responses of four statements. A higher score indicates a higher level of financial stress. The index was used in the regression analysis. The mean of the index was 9.33, and the standard deviation was 2.80 (range from 4 to 16). Respondents were grouped into three financial stress groups, low (4-8; 43%), moderate (9-11; 36%), and high (12-16; 21%) for one-way ANOVA.

Pay satisfaction was measured with a four-item pay satisfaction scale from the Job Satisfaction Survey.[3] A summated rating scale was used with a 4-point scale (from *agree* = 4 to *disagree* = 1). A sample item was, "I feel I am being paid a fair amount for the work I do," "Raises from my employer are too few and far between (reverse coding)," "I feel unappreciated by my employer when I think about what I am paid (reverse coding)," and "I feel satisfied with my chances for salary increases." (See Exhibit 2.)

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Two thirds of the respondents were likely to agree with the statement "I feel I am being paid a fair amount for the work I do." Half of the respondents were likely to feel that the raises from their employer were too few and far between. Combining the categories *agree* and *tend to agree*, 62.1% of the respondents were likely to agree with the statement "I feel unappreciated by my employer when I think about what I am paid." About three fifths (58%) were satisfied with their chances for salary increases. The pay-satisfaction index was created by summing responses to the four statements. Higher scores mean higher levels of pay

EXHIBIT 2
Pay Satisfaction

Statement	A & TA (*n*)	%	*M*	*SD*
I feel I am being paid a fair amount for the work I do	173	66.1	2.75	.85
Raises from my employer are too few and far between (reverse coded)	129	50.2	2.42	.93
I feel unappreciated by my employer when I think about what I am paid (reverse coded)	162	62.1	2.64	.91
I feel satisfied with my chances for salary increases	150	57.7	2.60	.85

Note: A (*agree*) = 4; TA (*tend to agree*) = 3; TD (*tend to disagree*) = 2; D (*disagree*) = 1.

satisfaction. The index ranged from 4 to 16 with a mean of 10.39 and a standard deviation of 2.96.

Work time use was measured by the responses to 11 behaviors related to financial stress that employees exhibited at work. (See Exhibit 3.) The responses to 11 behaviors were summed to make an index. The 11 behaviors include "took time to handle personal financial matters," "spent time worrying about personal finances," "talked about money problems," "talked about consolidating debts," "made calls to family or friends to discuss financial problems," "received calls from creditors," "asked about borrowing money from 401(k) plan," "consulted with a credit counselor," "talked to a collection agency about past due payments," "asked about obtaining a payroll advance," and "consulted with a lawyer." The satisfaction with work time use was obtained by summing the responses of the 11 statements. The index score ranged from 0 to 11 with a mean of 0.98 and a standard deviation of 1.28. More than a half (53.9%) of the respondents spent some work time dealing with matters resulting from financial stress.

Absenteeism was measured by self-report of the frequency of absences. The question was phrased, "Over the past year, how many days were you absent (excluding vacation and holidays) from work for personal reasons?" Responses were none (0), 1-2 days (1), 3-4 days (2), 5-6 days (3), 7-8 days (4), 9-10 days (5), 11-12 days (6), and 13 or more days (7). One third of the respondents (34%) reported no absences over the past year excluding vacation and holidays. The largest group of the respondents (41%) reported 1 to 2 days absences. About one seventh of the respondents (15.3%) were absent for 3 to 4 days. Only 1.1% of the respondents were absent for 13 or more days. Mean was 1.88 and standard deviation was 2.36. (See Exhibit 4.)

Health was measured by the self-report of personal health. The respondents were asked, "Compared to people your age, how would you say your health is?" Responses ranged from *better than others* to *worse than others* on a 5-point scale. Slightly more than half of the respondents (53.3%) reported above average, whereas 46.7% reported average or below average (M = 3.68; SD = .83).

Results

Correlation, ANOVA and regression analysis with SPSS statistical program were conducted to determine whether there exist any relationships between financial stress and work outcome variables. Significant statistical relationships were found between workers' financial stress and three variables: pay satisfaction, work time use and absenteeism.

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ANOVA results show that there were differences in pay satisfaction, work time use and ab-

EXHIBIT 3
Work Time Use Statements

Statement	Yes *n*	Yes %
Took time to handle personal financial matters	73	30.3
Spent time worrying about personal finances	54	22.4
Talked with a coworker(s) about money problems	40	16.6
Talked with a lender about consolidating debts	20	8.3
Made calls to family or friends to discuss financial problems	18	7.5
Received telephone calls from creditors regarding overdue debts	12	5.0
Asked about borrowing from my 401(k) retirement plan	12	5.0
Consulted with a credit counselor	3	1.2
Talked to a collection agency about past due payments	3	1.2
Asked about obtaining a payroll advance	2	0.8
Consulted with a lawyer regarding money problems	0	0.0

EXHIBIT 4
Absenteeism and Work Time Use Index

Absenteeism			Work time use index		
0	89	34.0%	0	111	46.1%
1-2 days	107	41.0%	1 behavior	76	31.5%
3-4 days	40	15.3%	2 behaviors	22	9.1%
5-6 days	12	4.6%	3 behaviors	20	8.3%
7-8 days	5	1.9%	4 behaviors	6	2.5%
9-10 days	4	1.5%	5 behaviors	4	1.7%
11-12 days	1	0.4%	6 behaviors	1	0.4%
13 days and more	3	1.1%	7 behaviors	1	0.4%
$M = 1.88$, $SD = 2.35$			$M = .98$, $SD = 1.28$		

senteeism by the levels of workers' financial stress (shown in Exhibit 5). Regarding pay satisfaction, those who were in the high financial stress group had significantly lower levels of pay satisfaction than did moderate and low financial stress groups. There was no significant difference between moderate and low financial stress groups. In terms of work time use, those who were in the high financial stress group spent more time handling financial matters at work than did low and moderate financial stress groups.

For the absences from work, high financial stress group workers were more frequently absent from their work than were moderate and low financial stress group workers. There was no significant difference between moderate and low financial stress groups. In summary, those who experienced high levels of financial stress were less likely to be satisfied with their pay, used more work time handling financial matters, and were more frequently absent from their work.

Regression analyses were conducted if any significant relationships existed between financial stress and work outcome variables (pay satisfac-

EXHIBIT 5
Results of ANOVA

	n	*M*	*SD*	*F* Value	Significance
Pay satisfaction					
High financial stress group	53	9.09	3.13		
Moderate financial stress group	88	10.76	2.57	6.86	.001
Low financial stress group	110	10.74	3.22		
Total	251	10.40	2.96		
Work time use					
High financial stress group	51	2.01	1.68		
Moderate financial stress group	87	1.03	1.13	33.04	.000
Low financial stress group	100	0.40	0.53		
Total	238	0.99	1.28		
Absence					
High financial stress group	55	3.06	3.12		
Moderate financial stress group	92	1.63	1.88	9.57	.000
Low financial stress group	110	1.44	2.22		
Total	257	1.88	2.37		

tion, work time use and absenteeism), controlling for the effects of individual variables such as family size, age, work years with the current employer, education, gender, household annual income and health. Exhibit 6 shows the regression results.

For the pay satisfaction, 6.1% variance of pay satisfaction was explained by these variables. Financial stress and work years were significant factors in predicting pay satisfaction. Those who had longer work tenures with the current employer showed lower levels of pay satisfaction. Workers who were highly stressed with their personal finances were less satisfied with payment controlling for their household income and other variables. These results support previous studies that determined that pay satisfaction is determined not only by actual salary but also by workers' characteristics.

Financial stress is also an important factor to understand employees' work time use, while all individual variables explained 25.5% of variance. Holding other individual variables constant, those who had higher levels of financial stress were more likely to spend work time handling financial matters. To understand workers' absenteeism, financial stress and education were significant variables. Education was negatively related to absenteeism. Those who had higher levels of financial stress were more frequently absent from their work, controlling for other variables.

These regression results support the ANOVA findings. Those who were more financially stressed showed lower levels of pay satisfaction, spent more work time on financial concerns, and were more frequently absent from their work, with other variables such as family size, age, work years, education, household income and health being equal.

Conclusions

This study shows that some employees are financially stressed and this negatively affects their attitudes and behaviors at work. Some employees feel that they do not have enough money for living expenses. They also are worried about the amount of their debts and are dissatisfied with their savings for retirement and overall general financial situation. About one fifth of employees in this study were highly financially stressed.

All employers should realize that there is a group of employees in their workplaces who are

EXHIBIT 6
Regression Results

	Pay Satisfaction		Work Time Use		Absenteeism	
Variable	***b***	***T***	***b***	***T***	***b***	***T***
Constant	8.312	6.669***	3.456	7.130***	6.350	6.635***
Family size	0.125	0.919	0.003	0.625	–0.004	–0.407
Age	–0.004	–0.219	0.008	1.032	–0.336	–2.109
Work years	–0.142	–2.210*	–0.002	–0.947	–0.006	–1.343
Education	–0.119	–0.943	0.006	1.350	–0.254	–2.611*
Household income	0.001	0.180	–0.002	–0.605	0.120	1.694
Health	0.137	0.580	–0.167	–1.794	–0.172	–0.946
Financial stress	–0.231	–3.078**	0.215	7.176***	0.163	2.796**
R^2	6.1%		25.5%		10.9%	

*$p < .05$. **$p < .01$. ***$p < .001$.

stressed about their personal financial matters. The number may be 10% or 30% or even higher.[4] The actual number of financially distressed employees in a particular workplace depends primarily on the makeup of the workforce, the educational level of the employees, their incomes and other variables. There is no reason to believe that the white-collar employees in the present study are substantially different than employees in many other workplaces in the United States.

The results of this study show that those who are financially stressed are more likely to have lower levels of pay satisfaction, spend work time handling financial matters, and be absent from work. Financial stress is one of the key factors in pay satisfaction, work time use dealing with financial concerns, and absenteeism.

These findings are consistent with other research. Some research found that financial stress is a significant variable in understanding organizational commitment and absenteeism.[5]

The findings of this study also support the idea that workplace financial education can help workers handle their personal finances better and reduce their financial stress. Employers can increase workers' pay satisfaction and improve productivity if they can reduce employees' financial stress.

Researchers suggest that workplace financial education programs could improve workers' productivity by reducing financial stress.[6] Workplace financial education programs have been found to increase the participants' confidence in their investment decisions, change their attitudes in positive directions,[7] and improve their personal financial management behaviors, such as saving more money.[8] Employees who attended workplace financial education seminars and workshops report less financial stress and higher financial well-being than those who did not.[9] Moreover, employers are advised that they might reduce absenteeism and improve productivity if they can help employees reduce their financial stress by offering access to effective workplace financial education and advice programs that improve personal financial well-being.

Recommendations

Based on the results, a number of recommendations are offered for researchers, employers and policymakers. Future research could include additional variables such as the employee's salary or health problems that may be related to pay satisfaction, work time use and absenteeism. Also, studies with different populations such as blue-collar and diverse ethnicities are recommended.

Employers need to consider providing employees access to financial education and/or advice and counseling at the workplace so that workers better deal with any financial problems or challenges. These opportunities give employees chances to improve their personal financial well-being. Increases in employee financial well-

ness also are likely to translate into improvements in the employer's profitability through greater pay satisfaction and less absenteeism.

Workplace financial education, as retirement education, does fulfill ERISA guidelines for plan sponsors. The U.S. Department of Labor regulations require that plan sponsors be certain "the participant or beneficiary is provided or has the opportunity to obtain sufficient information to make informed decisions with regard to investment alternatives under plan" (29 CFR §2550.404c-1(b)(2)(i)(B)).

The term *workplace financial education* implies more than simply offering employees retirement education seminars, workshops, written materials and software. Traditional 401(k) educational programs are quite valuable to employees because they help improve employee financial well-being. Although workplace financial education is effective at increasing participation rates in 401(k) plans, some employees need access to additional services. However, employees have different needs. Some experience difficulty meeting basic needs, some have debt problems, and many feel uncomfortable managing their retirement plan and require professional help. Employees may need more support than workshops and written materials from employers. Many employees also need more than retirement-planning education. Financial counseling or financial advice should be an option for many employees who need professional help to manage their personal finances.

Fiduciary Liability

Although concerns about fiduciary liability stop many plan sponsors from giving workers financial advice,[10] pending legislation such as the Pension Security Act, H.R. 1000 could provide some safety to employers in the future. The Economic Growth and Tax Relief Reconciliation Act of 2001 made employer-provided retirement planning advice a de minimis fringe benefit for employees so long as such services are available on substantially the same terms to all employees.

Qualified retirement-planning services are defined as any retirement-planning advice or information that an employer who maintains a qualified retirement plan provides to an employee or the employee's spouse. This exclusion is expected to motivate more employers to provide retirement-planning services to their employees.

However, the law does not cover general financial planning or advice for employees or retirement-planning services provided by independent outside providers. Employees have a full range of financial situations and needs. Qualified retirement-planning services should be more comprehensive than retirement-planning advice or information. A comprehensive financial checkup followed by appropriate advice could benefit more employees. A recent study by Nationwide Financial found that one in three 401(k) participants surveyed (32%) report that they would use a financial advisor to make their 401(k) investment choices if such an option were available.[11]

Policy makers also need to consider creating additional tax incentives to both employers and employees regarding workplace financial planning and advice. Perhaps a dollar-for-dollar federal income tax credit for employers and/or employees for such services could provide that motivation. This same discussion is going on in the United Kingdom as the Association of British Insurers is calling for government to provide incentives to provide retirement-plan-related advice.

Notes

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10. In 2003, "If approved by plan sponsor, participants in plans serviced by Schwab Retirement Plan Services will now have access to [free] customized advice [from GuidedChoice's GuidedSavings] either online, by phone, or in person—including specific recommendations among the core investment fund choices available in the retirement plan," according to PLANSPONSOR.COM (http://www.plansponsor.com/pi_type11/?RECORD_ID =22206).
11. http://nationwidefinancial.com/nwf/CDA/NWFFinancialNewsView/1,2404,1263,00.html.

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