

CHAPTER VIII. SUMMARY AND RECOMMENDATIONS

A summary of the justification, problem, design, and findings of this study are presented in this chapter. Conclusions based on the research findings are also discussed. This chapter concludes with the implications and recommendations for future research.

Justification for the Study

This study conceptualized and tested the relationship between personal financial wellness and worker job productivity. Financial matters are one of the most important issues in our daily lives. In 1988, the U.S. Department of Agriculture (USDA) reported that declining employment opportunities, income instability and eroding purchasing power of U.S. households were important issues facing families, policymakers, and educators. In the following years, concerns of households about financial matters increased.

Sporakowski (1979) argued that financial problems cause personal stress and often precipitate marital crisis. He noted the significant relationships between financial problems and stress-related illnesses. Also, he said that financial problems have implications for a person's other daily life functions, such as work and family. More recently, Cash (1996) identified financial problems as the number one source of stress.

Financial matters and financial stress affect not only an individual's personal and family life, but also the person's work life. Research has shown the relationship of reduced workplace productivity and poor financial behavior (Brown, 1979a, 1993a, 1993b; Garman, et al., 1996; Williams, et al., 1996).

Previous studies showed the significant impact of personal financial problems and difficulties on worker job productivity. However, relatively little theoretically based empirical research on the relationship between personal financial problems and productivity concerns has appeared in literature. The conceptual area dealing with the relationships between personal financial problems and employment productivity is not a robust model, and as such, conducting scientific research based on a theoretical model has been difficult. Williams et al. (1996) mentioned this lack of scientific research in the area of

financial concerns and productivity. Therefore, the need for a conceptual model that describes the relationship between personal financial wellness and job productivity is significant.

Statement of the Problem

The problem that was examined in this study was to develop and test a conceptual model that describes the relationship between personal financial wellness and worker job productivity. The model specified the relationship between personal financial wellness and worker job productivity, personal financial wellness and workplace financial education, and workplace financial education and worker job productivity. A part of this model that focuses on the relationship between personal financial wellness and worker job productivity was tested using a sample of clerical workers in a large employer in mid-eastern state. A total of eight research questions were developed. The research questions were (1) what is the personal financial wellness profile of employees?, (2) how does the personal financial wellness profile differ by the demographic characteristics?, (3) what is the relationship between financial stressors and personal financial wellness profile?, (4) what is the relationship between personal financial wellness and financial stress level?, (5) what is the worker job productivity profile?, (6) what is the relationship between personal financial wellness and worker job productivity?, (7) what is the relationship between financial stress and worker job productivity?, and (8) what financial education programs do employees want in the future?

Research Design

In order to test a part of the conceptual model, a survey research design was undertaken. The instrument inquired about personal financial wellness, worker job productivity, financial stressors, financial stress level, desired future workplace education, and demographic characteristics. A questionnaire was developed and pre-tested. The personal financial wellness measures consisted of four different scales: the subjective perception of personal finance, the behavioral assessment of personal finance, objective scales, and overall financial wellness scales. Worker job productivity was examined using five different measures: self report of productivity change, performance

rating, absenteeism, worker's compensation claim, and work time used for personal financial matters. A mail survey (N=474) of white collar clerical workers was conducted during January, February, and March of 1998. From a random sample of 447 (27 out of the original 474 were undeliverable), 288 questionnaires were returned (64.4%). Seventeen questionnaires were determined unusable resulting in a 60.4% usable return rate (271/447).

Summary of the Research Findings

The four scales of personal financial wellness were reliable and valid. The personal financial wellness level of the sample in terms of subjective perception of personal finance was slightly lower than the midpoint (45.9%). As a group, the sample was not satisfied with their ability to save and had some degrees of difficulty living on their income. For the behavioral assessment measures, the sample had above a midpoint score. However, more than two-fifths (43.3%) of the respondents never set money aside for retirement. Seven-tenths of the respondents was solvent (71.3%). About one-third of the respondents (35.4%) did not have any reserve funds. About three-tenths of the respondents (31.0%) had no average monthly savings and over three-quarters of the respondents (77.3%) had no average voluntary supplementary tax-sheltered employer-sponsored retirement contributions per month. Nearly six-tenths of the respondents (59.1%) paid less than \$300 toward their credit cards bills per month; more than half of the respondents (56.2%) paid less than \$500 for monthly installment payments excluding a home mortgage. More than half of the respondents (52.6%) were dissatisfied with their financial situation. More than a third of the respondents (35.1%) reported they have trouble paying bills.

Personal financial wellness was affected by demographic characteristics and financial stressors. Household income had positive impacts on most of the personal financial wellness measures: the subjective perception index, behavioral assessment index, overall financial wellness scales, solvency measure, reserve funds, monthly credit payments, monthly savings, and monthly retirement contributions. Housing tenure had positive impacts on the subjective perception index, satisfaction with financial situation, and solvency measure. The personal financial wellness level

of homeowners was higher than others. The number of financial dependents negatively influenced the subjective perception index, overall financial wellness scales, and solvency measure. As the number of financial dependents increased, the personal financial wellness level decreased. Age had a positive impact on the amount of reserve funds and a negative impact on the monthly installment loan payments. Ethnicity affected the perceived financial wellness level. Marital status influenced the amount of monthly installment loan payments. Those who were married had more monthly installment payments than unmarried respondents. Financial stressors negatively affected the subjective perception index, behavioral assessment index, overall financial wellness scales, solvency measure, reserve funds, amount of monthly savings, and retirement contributions per month.

More than two-thirds of the respondents (68.3%) reported increased job productivity over the past year, and four-fifths of the respondents (80.1%) reported themselves above average for performance ratings from their bosses. The largest group (30.7%) reported 4 to 6 days of absences. A small number of the respondents (5.9%) filed a claim for worker's compensation during the past three years.

One-third of the respondents (33.0%) never dealt with personal financial matters at work. Over four-tenths of the respondents (44.8%) talked with coworkers about money related matters, and about a quarter of the respondents (23.7%) talked with a lender about a loan.. On average, workers dealt with more than one personal financial matters at work during the past year.

Worker job productivity was related to personal financial wellness. Those who had lower levels of personal financial wellness tended to perform poorly in terms of productivity and performance ratings, be absent more from work, and use more work time for personal financial matters. Those who had more monthly credit payments showed higher levels of performance ratings. Those who had a better behavioral assessment of personal finance and fewer amounts of monthly installment loan payments reported lower absenteeism. Those who had higher levels of subjective perception

of personal finance, behavioral assessment of personal finance, and satisfaction with personal financial wellness tended to deal with fewer personal financial matters at work. Those who were more solvent and had less monthly installment loan payments dealt with less personal financial matters at work. Financial stress was correlated with worker job productivity in terms of work time used for personal financial matters. Those who had higher levels of financial stress used more work time for personal financial matters.

The workers desired workplace financial education. Only 6.6% of the respondents did not want to participate in the workplace financial education if it were offered. Six-tenths of the respondents (60.5%) desired retirement education and about one-half (48.7%) wanted investment education. Over two-fifths of the respondents (42.1%) reported they want financial education on budgeting. More than one-third (36.2%) of the respondents desired a financial program that deals with reducing consumer debt. About one-third of the respondents (33.6%) reported that they would participate in workplace financial education if there were a program that deals with understanding fringe benefits. Over one-quarter (27.7%) of the respondents reported that they want estate planning education. About a quarter (25.8%) wanted tax planning education. Credit management programs were desired by over one-fifth (22.1%) of the respondents. More than two-tenths (22.1%) of workers chose the area of consumer protection laws as their desired future financial education program. More than one-fifth (20.3%) desired education on college planning. Home buying education was selected by 16.2% of the respondents. Over one-tenth (14.4%) answered that they were interested in buying insurance.

Conclusions

The following conclusions were derived from this study.

1. Some workers are not financially well because they have financial problems. If employers can improve personal financial wellness of workers, it appears likely that such effects would increase productivity because personal financial wellness is related to worker job productivity. An examination of the precise effects of financial education on productivity is needed.

2. The personal financial wellness level of the sample was not high. The sample, as a group, was not satisfied with their ability to save, worried about debts, believed that they did not have enough money, did not think that they would have enough money for retirement, and were not knowledgeable consumers.

3. Personal financial wellness affected worker job productivity. Those who had lower personal financial wellness levels tended to have lower levels of productivity. This finding supports previous research findings. Workers who showed desirable financial behaviors had lower absenteeism. Workers who had high levels of personal financial wellness in subjective perception, behavioral assessment, and overall satisfaction of personal financial wellness, in other words workers who are financially well, reported they dealt with fewer personal financial matters during work time.

4. Employers and educators need to help workers achieve better financial wellness. Employers and educators could provide information and education on personal finance topics. Better personal finance behaviors and greater personal finance knowledge and information may help workers develop better personal financial wellness, and as a result better job performances at the workplace.

5. The economic situation of the respondents (represented by household income) and the number of financial stress events that they experienced were significant variables in explaining personal financial wellness. Those who had higher levels of household income and fewer financial stress events had higher levels of personal financial wellness than others.

6. Workers wanted to receive comprehensive workplace financial education. More than half of the respondents (60.5%) desired retirement education. Respondents also showed interest in the areas of understanding employer provided benefits, budgeting, investing, planning tax, planning

college, planning estate, buying insurance, managing credit, buying a home, getting out of debt, and consumer protection laws. This findings support offering wokers comprehensive financial education in the following four areas (a) retirement education, (b) employer-sponsored fringe benefits, (c) credit and money management, and (d) consumer protection.

7. The measures of personal financial wellness that were developed in this research were reliable and valid. The three scales of personal financial wellness— subjective perception of personal finance, behavioral assessment of personal finance, and overall scales — showed high levels of reliability and validity. The objective scales also showed significant relationships with other three scales. The four measures can be used in future research.

8. Even though, as a group, the respondents had an optimistic financial future view, they are not ready for retirement. When they think of their financial situation, workers were optimistic about the future, however, they did not believe that they would have enough money to live comfortably throughout retirement. Over forty percent (43.3%) of the respondents reported that they never set money aside for retirement, and three-quarters (77.3%) never put money into a voluntary supplementary tax-sheltered employer-sponsored retirement contribution plan. This finding supports the need for retirement education for workers.

9. Those workers who have money problems show low levels of consumer knowledge. For example those who believed they would had trouble borrowing \$2,000 cash showed low levels of consumer knowledge in consumer protection laws and regulations. This underscores the potential of consumer protection education for the consumers. Workers who need help personal money management also may need education on consumer protection.

10. Workers showed poor financial behaviors in credit management and cash management. These findings suggest the need for financial education. For example, financial education programs on retirement savings, general savings, money management, and credit management may be needed

because the respondents showed poor financial behaviors in those areas. Wise money management may be needed to improve one's personal financial wellness.

11. Monthly credit payments, as one of the objective scales, was not the best measure of personal financial wellness. While some people need to use credit cards due to income shortage, others choose to use credit cards as a convenience and can afford to pay the bills. Therefore, a higher amount of monthly credit payments can be interpreted in two ways as higher amounts of monthly credit payments may represent either a shortage of income or a higher income. Also, credit card uses vary according to the spending styles of people. Some people may not use a credit card very often. Therefore, instead of monthly credit payments, a measure of total debt payments compared to income (i.e., debt-to-income ratio) may be a better measure of the objective personal financial wellness.

12. Personal financial wellness was influenced by demographic characteristics. The personal financial wellness of workers was influenced by several demographic characteristics: household income, number of financial dependents, housing tenure, age, marital status, length of employment, and ethnicity. Household income influenced the subjective perception, behavioral assessment, overall satisfaction, amount of reserve funds, monthly credit payments, installment loan payments, savings, and retirement contributions. Those who had higher levels of household income showed higher levels of personal financial wellness. The number of financial dependents negatively affected personal financial wellness. As the number of financial dependents increases, personal financial wellness decreases. Housing tenure also affected personal financial wellness. The personal financial wellness of the homeowners was higher than the others (renters and those who live with others) in subjective perception, satisfaction with financial situation, perceived financial wellness, and solvency measure. Older respondents had more reserve funds and fewer monthly installment payments than the younger respondents. Those who were married had more monthly installment payments than singles. Those who worked longer years with the current employer showed higher levels of subjective perception of personal finance. The whites showed

higher levels of perceived financial wellness than other ethnic groups. Personal financial wellness was not influenced by education or gender. The significant influences of demographic characteristics on personal financial wellness support the relationship of demographic characteristics and the personal financial wellness in the Joo Model.

13. The number of financial dependents was one of the most significant variables in explaining personal financial wellness. Financial dependents are not just limited to having young children in the household. The number of children in any age levels may be a significant variable. In addition to the number of children, the adult financial dependents (e.g. retired parents, grandparents, or relatives) need to be included.

14. Workers experienced various financial stressors. Financial stress events included personal financial stressors, family related financial stressors, and financially unfavorable situations. Personal financial stressors included job-related stress events and other personal financial stressors. Workers experienced job-related stress events, such as job change (12.9%), and income decrease (7.7%). Other personal financial stressors that were experienced by the respondents were illness (8.1%) and investment loss (3.7%). Among those family related financial stressors, family member(s) went to college, death, and marriage were experienced by more than one-tenth of the respondents (17.0%, 16.6%, and 11.1% respectively). The sample confronted financially unfavorable situations. About three-tenths of the respondents (30.3%) had a major vehicle repair and over one-quarter of the respondents (28.4%) received an overdue notice from a creditor.

15. Personal financial wellness was influenced by financial stressors. If the number of personal financial stressors increased, the level of personal financial wellness decreased. This supports the relationship of financial stressors and personal financial wellness in the Joo Model.

16. Financial stressors had significant explanatory power in predicting personal financial wellness. The findings suggest the importance of financial stressors in explaining personal financial wellness. With the financial stressors, the R squares of regression equations of personal financial wellness measures were increased. Financial stressors should be included in future financial wellness research.

17. Personal financial wellness and financial stress levels were related. Personal financial wellness and financial stress levels had a negative correlation. As personal financial wellness increases, the financial stress level decreases. More than one-third of the respondents reported high levels of financial stress. This is consistent with the low level of overall satisfaction of the workers with their personal financial wellness.

18. Financial education may be important in helping people manage limited incomes and handling financial stressors. Financial education may also be a stress management strategy. The financial stress level and the financial stress events that each worker experiences reveal the need for financial education in stress management. By providing financial education, employers may help workers improve their personal financial wellness.

19. Personal financial wellness influenced worker job productivity through the financial stress level. The financial stress level had a negative relationship with work time used for personal financial matters. Those who had higher levels of financial stress dealt with more personal financial matters at work.

20. Personal finance employee education has potential to decrease absenteeism and work time used for personal financial matters. The return on investment for employers who offer workers comprehensive financial education may occur in terms of reduced absenteeism and less work time used for personal financial matters. The return may outweigh the cost for workplace financial

education. Personal finance employee education may be a cost-effective, desirable, and necessary for workers.

21. Nearly two-thirds of workers use work hours to deal with personal financial matters. This work time loss due to dealing with personal financial matters is a measure of productivity. The work time measure used in this study provides significant potential to develop and expand current productivity measures. The work time measure can be included in work time efficiency measures.

22. The health condition of workers is related to job productivity. A worker's health condition had positive relationships with self-reported productivity change and performance ratings from boss. Those who had better health conditions reported increased productivity and higher performance ratings than the others. The health condition of workers had negative relationships with absenteeism and work time used for personal financial matters. Those who reported that they had better health were absent less from work and used less work time for personal financial matters. Because health conditions are unlikely to be changed by workplace financial education, it could be dealt with other wellness information and education programs.

Implications

This study has major implications for (a) family and consumer sciences professionals, (b) financial counselors and planners, (c) employers, (d) workers, (e) financial education providers, (f) researchers in other areas, and (g) policymakers. The information derived from this study can help family and consumer science professionals in future research efforts. Conceptualization of the meaning of personal financial wellness and the measures of personal financial wellness in this research provide information and knowledge about personal financial wellness. These conceptualizations and measures can be utilized in other areas of family and consumer sciences, such as marriage and family therapy and nutrition and health. This research provides a conceptual model for future research designs in personal financial wellness, financial well-being, and economic well-being.

The sample of this research showed a low level of financial wellness and some poor financial behaviors. This finding reveals the potential effects of workplace financial education. Workers who receive financial education may well achieve higher levels of personal financial wellness. Also, workers desire comprehensive financial education on retirement, employee benefits, money management, credit management, and consumer protection. Family and consumer sciences professionals may wish to develop financial education programs on these topics for delivery at worksites.

Financial counselors and planners can acquire useful information through this research. The research findings of this study reveals some of the financial problems of workers. Workers have financial problems in budgeting, financial planning, retirement planning, savings, cash management, and credit management. The financial stressors that workers experience also may provide useful information to financial counselors and planners. Financial counselors and planners can realize what kind of stressful life events their clients experience. Financial counselors and planners may wish to develop educational programs and/or counseling strategies in financial stress management.

Many workers are not financially ready for retirement. Many workers do not have enough money saved for retirement, and they are not informed about retirement programs that their employers sponsor. More employers may wish to provide more effective retirement programs to their workers. Employers also may need to explain their employee benefits programs more effectively.

The findings of this research supported the need for financial education at the workplace. Through this research, employers may learn about the needs of workers. Workers desire comprehensive financial education. Employers may retain their valuable workers by providing comprehensive financial education. Workplace financial education may be more cost effective than other types of employer-provide fringe benefits. This research presents some aspects of the

potential savings from personal finance employee education that might be achieved through reduced absenteeism and reduced work time used for personal financial matters.

This research has implications for workers. Workers may compare their relative personal financial wellness status and their financial stress levels with others. The level of the subjective perception and the behavioral assessment of the five domains of personal finance in this research —cash management, credit management, income adequacy, personal financial management, and consumer shopping skills — may provide useful information to workers regarding which areas of their personal finance may need to be changed. Based on the relationship between personal financial wellness and worker job productivity, as well as the potential positive effects of workplace financial education, workers may ask that employers provide them with workplace financial education.

Financial education providers also can acquire useful information through this research. Workers are interested in comprehensive financial education rather than narrowly focused retirement education. Financial education providers may acquire some ideas of what to include and how to develop of their education curricula through this research. The relationship between personal financial wellness and worker job productivity may provide a rationale to provide financial education for the providers.

Researchers in other areas may obtain useful information from this research. This research provides valuable information in the areas of stressors and employee assistance programs. The financial stressors in this research underscore the need for additional research to examine financial stress and its impact on personal life, as well as work life. This research also illustrates the potential of personal finance employee education as part of an employee assistance program. Therefore, the effects of workplace financial education as one element of an employee assistance program should be examined.

The Department of Labor currently recommends education on investment basics and retirement savings. This research reveals that more comprehensive workplace financial education is needed. Workers are interested not only in investment and retirement but also in budgeting, employee benefits, credit management, and consumer protection laws. Policymakers should be aware of the importance and significance of comprehensive workplace financial education.

Also, policymakers need to be aware of the importance of consumer protection to financial wellness. Workers who have money problems were not knowledgeable consumers in the marketplace. Protecting those disadvantaged consumers from the aggressive marketplace is important.

Recommendations

Based on the delimitations, limitations, and research findings, recommendations for future research and further recommendations are suggested.

Recommendations for Future Research

1. Replications of the study to include other samples are recommended. A weakness of this study was the delimitation to a sample of white-collar clerical workers. The characteristics and behaviors of other types of workers could be different from this sample. Therefore, replications of the study with diverse groups of workers is needed. Due to the job and geographic characteristics, the majority of this sample were white females. There remains a need for research that includes various ethnic groups and a broader distribution of gender.
2. Additional research is needed that focuses on the relationship between personal financial problems and worker job productivity. Literature mentions the impact of poor financial behaviors on job productivity. Researchers need to focus on those groups of workers with financial problems as a research population and examine in more detail relationships between financial problems, financial wellness, and job productivity.

3. Replications of the study to include more financial ratios are needed. Due to the nature of the survey method, gathering accurate financial information is difficult. This research delimited the data collection on objective financial measures to a categorical amount of each measure.

According to the conceptual model of this study, as objective measures, financial ratios were assumed to measure a person's personal financial wellness level. Therefore, future research that includes financial ratios is needed. For example, the income-to-debt ratio instead of monthly credit payments may be included in future research.

4. Replications of the research to include quantified productivity measures is recommended. One of the weaknesses of this research was that productivity was self-reported. The reliability of such sensitive data may be open to question. Therefore, research that includes quantified, objective productivity measures is desirable. This issue is related to the issue of sample type. In some job areas, such as sales personnel and high technology researchers, the quantified productivity measures may exist. Research that uses more robust measures of productivity, absenteeism, and job performance ratings is needed.

5. Research that more precisely examines the effects of workplace financial education is recommended. This study tested a portion of the Joo conceptual model. The need for workplace financial education, however, was derived from this research. Researchers have asserted the importance of workplace financial education (Atchley, 1998; Brown, 1979; Garman, 1997c, 1997d, 1998; "Management briefing," 1998; Luther et al., 1997). Also, the conceptual model of this study includes workplace financial education as one of the buffers. Additional research is needed to examine workplace financial education, its effectiveness, and its relationship with personal financial wellness and job productivity.

6. Research that measures the effects of various financial education programs is recommended. To obtain a high return from an investment, employers and workers need to know which financial education programs are the most effective. Therefore, research that examines various types of

financial education programs is needed. Both the scope of the financial education content and the delivery systems need further analysis. The types of delivery system may include comprehensive financial counseling, limited financial counseling, group seminars, workshops, lunch and learn sessions, computer-generated plan, telephone “hotline”, computer diskette and CD-ROM, video and audio tape with workbook, printed materials, newsletter, and Internet and Intranet.

7. New research that includes other types of buffers is recommended. The conceptual model of this study explained the role of the buffering system. Financial education and financial adjustment were included as buffers. The information sources to buffers, such as personal knowledge and experience, coworkers, families, friends, relatives, union, informal supervisors, formal supervisors, employer personnel department, and advertising, and buffering support entities, such as self, friends, families, non-profit consumer counselors, cooperative extension, credit unions, banks, savings and loan associations, formal education, and other advisors and counselors may be examined in future research.

8. Replications of research to include other financial stressors is needed. The stressors of this study were not exhaustive. Therefore, other financial stressors, such as chronic health care need and unexpected adult or child care need, may be included in future research.

9. Research that focuses on theory development and model development is recommended. The Joo Model of Personal Financial Wellness and Worker Job Productivity may have room for improvement. A more robust theory that more fully explains the relationship between personal financial wellness and worker job productivity is needed.

10. Research that further develops the measure of work time used for personal financial matters is recommended. The measure of work time used for personal financial matters in this study includes some positive and negative aspects. For example, consulting with a financial planner may have positive impact on the personal financial wellness. Workers may improve their personal

financial wellness through professional help from financial planners. And improved personal financial wellness could positively influence worker productivity. On the other hand, workers who have financial problems may talk with a lender about a loan during work hours. Financial problems and concerns about getting a loan may negatively influence worker productivity.

Therefore, the work time used for personal financial matters may be divided two scales: positive and negative. Further measurement development in the area of work time used for personal financial matters is needed in future research.

Further Recommendations

1. Employers in America should be aware of the needs of workers for financial education. Many workers are not financially ready for retirement, and they want comprehensive financial education. Employers need to consider providing workplace financial education to retain valuable employees and improve worker job productivity.
2. Employers, policymakers, and providers of information, education, and seminars in financial education should be concerned about workers who have limited incomes. Workers who have limited incomes often have money problems associated with overspending, credit, and consumer rip-offs. More appropriate financial education programs need to be developed to help workers, especially those with limited incomes, improve their personal financial wellness.
3. Family and consumer sciences professionals need to develop more effective financial education programs. Workers desire comprehensive education. Workers in general know what they need to improve their personal financial situations. Financial education that includes financial stress management needs to be provided as a component of financial education programs for workers.
4. Employee assistance professionals need to be more concerned about the financial stressors affecting workers. Financial stress is one of the serious stresses affecting workers. Workplace stress management program should include financial stress management.

5. Marriage and family therapists should be more aware of the significance of financial problems in marriage and family relationships. Financial counseling and financial education is recommended as an important aspect of marriage and family therapy programs.

6. Workers need to know more about personal finance. The financial literacy of workers is not adequate in some areas, particularly on those topics associated with retirement. To improve their personal financial wellness and perhaps their job productivity, workers need to learn more about personal finance.