

CHAPTER III. MODEL OF PERSONAL FINANCIAL WELLNESS AND WORKER JOB PRODUCTIVITY

Based on the previous research review the conceptual model of personal financial wellness and worker job productivity was developed. This chapter presents the conceptual model and explanation of the model and related variables. The empirical model is also described in this chapter. The measurements used in the empirical test are explained.

Joo Conceptual Model

The conceptual model of personal financial wellness and worker job productivity developed by Joo is presented in Figure 4. This model was based on The double ABCX Model by McCubbin and Patterson (1983). The ABCX factors are in parentheses.

The demographic characteristics of individual are assumed to influence personal financial wellness. Also, recent financial stress events, called financial stressors, such as life cycle events, job-related events, unexpected changes, and unfavorable financial situations are related to the person's financial wellness.

Personal financial wellness includes the subjective perception of personal finance, the behavioral assessment of personal finance, the objective economic status, and the satisfaction with personal financial situation. The subjective perception and the behavioral assessment are measured by the characteristics and problems of the five areas of credit management, cash management, income adequacy, personal financial management, and consumer shopping skills. The financial stressors and the demographic characteristics affect personal financial wellness, and the personal financial wellness level produces financial stress through satisfaction and dissatisfaction with the personal financial wellness status.

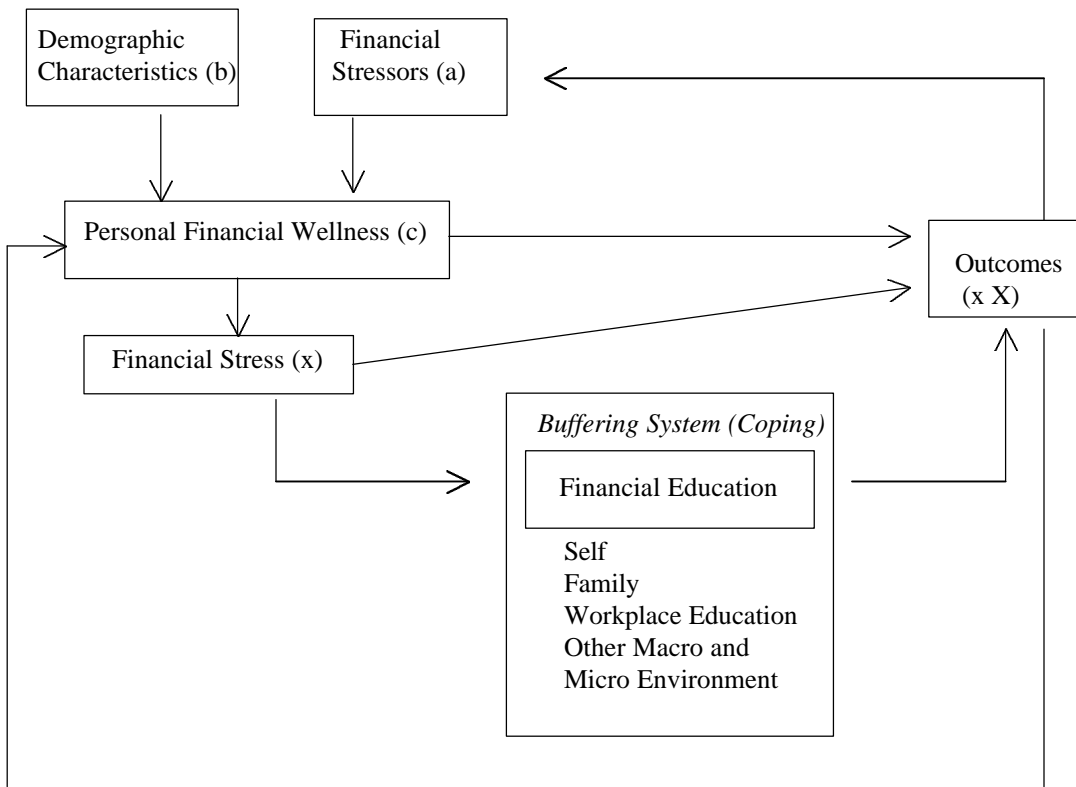


Figure 4

Joo Conceptual Model: Personal Financial Wellness and Worker Job Productivity,
The Effects of Workplace Financial Education

This model assumes two different paths of financial stress. Some people may utilize the buffering system and some people may not. If a worker did not utilize the buffering system and has a high level of financial stress, the outcomes in the workplace can be negative for both the employee and for the employer. These negative outcomes in the workplace may lead to further significant outcomes, such as bankruptcy, wage garnishment, and job loss. Consequently these further outcomes will affect his or her personal financial wellness. On the other hand, people utilize the buffering system — the system may be the employee's self-problem solving mechanism, family and relatives, workplace financial education, non-profit financial counselors, and other fee-based financial counselors — the financial education and further adjustment will likely produce different outcomes. The coping effort through financial education can change or reorganize the person's resources in a positive manner, and it can improve a person's financial wellness. The outcomes from the buffering system can also affect the person's financial wellness.

Explanation of the Variables

This section explains the variables associated with Joo's Personal Financial Wellness and Worker Productivity Model. The related variables are (a) demographic characteristics, (b) financial stressors, (c) personal financial wellness, (d) financial stress level, (e) buffering system, (f) personal finance employee education, and (g) outcomes.

Demographic Characteristics

Demographic characteristics, such as gender, marital status, education, ethnicity, age, income, life cycle stage, number of young children, occupation, and housing tenure are related to personal financial wellness (O'Neill, 1995; Porter, 1990; Ross & Huber, 1985; Shinn, 1992). Ross and Huber (1985) found that personal financial wellness was positively related to income, education, and age. They also found a negative relationship between personal financial wellness and the number of young children in the household.

Shinn (1992) found relationships between personal financial wellness and age, education, and income.

Financial Stressors

McCubbin and Patterson (1983) defined stressor as “a life event or occurrence in or impacting upon the family unit which produces change in the family social system” (p.88). Stressors are agents of stress (Shinn, Rosario, Morch, & Chestnut, 1984). Financial stressors come from three different sources: personal, family, and financial situation. The sources of personal stress can be divided into two different categories, which are job related events and other. Job related events include job change, decrease in wage, job loss, and retirement. These personal job life events have been reported as significant financial stressors (Varcoe, 1990; Williams, 1988). Other personal stressors include investment loss, injury, disability, accident, illness, and wage garnishment.

Family events include a number of life cycle events. Marriage, birth of a child, child goes to college, retirement of family member, job loss of family member, divorce or separation from spouse, and death are related to the employee’s personal financial wellness (Sporakowski, 1979). Those events are financial stressors because they require substantial amounts of money, and especially sudden changes or unexpected events can cause serious financial problems.

Financially stressful situations include moving from one residence to another, major house repair, major vehicle repair, mortgage foreclosure, vehicle repossession, legal problems, bankruptcy, low wage, medical bills, and pre-existing excessive consumer debt.

Personal Financial Wellness

Personal financial wellness is conceptualized as a level of financial health. It includes the satisfaction with material and non-material aspects of one’s financial situation, perception

of financial stability, including adequacy of financial resource, and material and non-material financial resources that each individual possesses. Personal financial wellness can be measured with four levels of scales: subjective perception scale, behavioral scale, objective scale, and overall satisfaction scale.

A subjective perception scale can measure subjective perception of personal finance. A subjective perception scale includes a respondent's perception of cash management, credit management, income adequacy, personal finance management, and consumer shopping skills. Cash management refers to the financial practices for allocating and distributing income to living expenses and achieving financial goals through maximizing interest earnings and minimizing fees on funds (Garman & Fogue, 1997; Porter, 1990). Credit management is defined as "identifying, analyzing, and implementing credit use based on needs and wants so that a safe debt load is maintained" (Porter, 1990, p. 22). Income adequacy means availability of income for necessities and other living expenses, including insurance. Personal financial management is "the management of the personal and family resources to achieve financial success. Financial success is the achievement of financial aspirations that are desired, planned, or attempted" (Garman & Fogue, 1997, p.4). Consumer shopping skills incorporate adequate knowledge and desirable practices in marketplace transactions for acquiring high quality goods and services at fair or low prices.

A behavioral scale can measure behavioral assessment of personal financial management in cash management, credit management, income adequacy, personal financial management, and consumer shopping skills. An objective scale can measure objective aspects of one's economic status. It can include some financial ratios and other economic data, such as income, assets, or savings. Certain financial ratios, such as consumption-to-income ratio, liquidity ratio, housing expense ratio, consumer debt-service ratio, annual debt-service ratio, debt-to-income ratio, solvency ratio, savings ratio, and investment

assets-to-net worth ratio, can be included in objective scales of personal financial wellness. An overall satisfaction scale of personal financial wellness can measure satisfaction with one's personal financial situation. Moreover, an employee's financial wellness status can be examined utilizing the four scales of personal financial wellness.

Worker's Financial Stress Level

When examining one's financial wellness status, satisfaction with his or her financial status also needs to be determined, because satisfaction or dissatisfaction with one's personal financial situation impacts one's financial stress level. Financial stress could be caused by crisis or chronic situations. Those who feel stress are likely to need financial education or financial adjustments from their micro and macro environments.

Buffering System

The buffering system hypothesis asserts that social support protects people from the deleterious effects of stress on their life functions (Peirce et al., 1996, p.39). Peirce et al. argued that different life stressors require different forms of buffers. In this study, the stressors are financial problems and difficulties; therefore, the buffers are financial support and financial education from various sources, including the workplace. According to the buffering system hypothesis, there should be a difference in workplace productivity between people with a low level of financial education and people with a high level of financial education.

The buffering system requires information sources. Information sources refer to the places where each individual might get information about financial advice, counseling, and education. Some individuals may have financial information already available; therefore, the individual can be one of the sources. In that case, personal knowledge and experience are the key agents of the information source. People also can acquire financial information from personal relationships with families, friends, and peers who have this

knowledge. The workplace is another key source of information. People often can obtain information from their coworkers, union, informal supervisors, formal supervisors, and employer personnel department. For example, if one has a financial problem with reimbursement of medical expenses, information may be received from coworkers or the personnel department. Lawyers and insurance agents can be information sources for similar reasons. Advertising through television, newspaper, magazines, radio, and Internet is an important source of financial advice and information.

The buffering system consists of various entities of support. It can include self-adjustment or coping with financial stress through personal financial management; family, relatives, and friends; non-profit consumer credit counselors; cooperative extension; credit unions; banks; savings and loan associations; formal education; workplace employee education; cafeteria employee benefits; employee assistance programs; and other advisors and counselors.

Personal Finance Employee Education

Personal finance employee education is information, education, and services provided by an employer to help its workers make informed decisions about employer-sponsored retirement plans, other employer furnished fringe benefits, credit and money management, and consumer protection (Garman, 1997b). It is one of the significant buffers.

Outcomes

Personal financial wellness and the level of financial stress produce outcomes for personal and work life. Negative and positive outcomes exist in this model. Personal outcomes include some negative outcomes and positive outcomes.

Negative Personal Outcomes. Workers who have high levels of financial stress and low levels of personal financial wellness produce negative outcomes in personal and family

life. Research has indicated a relationship between personal financial stress and backache, alcoholism, gambling, and drug abuse (Cash, 1996; Garman et al., 1996). Negative outcomes include stress-related illness, failure in marital relationships, and lack of financial preparedness for the future.

Positive Personal Outcomes. Positive outcomes through workplace financial education include a lower financial stress level, less stress related illness, fewer poor financial behaviors, better financial wellness, and formation of a desirable personal financial portfolio. Workplace financial education can help employees save more for retirement, select the best pension plan(s), diversify one's investment portfolio, and improve both personal financial management skills and consumer knowledge.

Workplace outcomes also include positive outcomes and negative outcomes both for employees and employers.

Negative Workplace Outcomes. From the worker's point of view, some direct negative effects of high levels of financial stress and low levels of personal financial wellness are: increased absenteeism, lowered productivity from poor communications, lower job performance, delayed promotion due to bad job performance and productivity, lessening of the quantity and quality of work, increased accidents, greater turnover, and lessening of work efficiency through tardiness, lowered ability to get along with fellow workers, mood swings, and unpredictable behavior. Further negative outcomes can occur, including wage garnishment, job loss, and changed income.

Negative outcomes for employers because of increased worker stresses include: higher overtime cost due to absenteeism, increased administrative costs, increased health care costs, more accidents, greater turnover, lessening of work efficiency, and profit losses from lowered productivity. Some indirect negative effects also exist for employers: loss

of experienced employees, job friction, low morale, demand for pay advance, requests for 401(k) loans, waste of supervisory time, bad decisions, and damaged consumer and public relations.

Positive Workplace Outcomes from Buffering System. Some effective outcomes can be produced from financial education. Direct savings for workers include reduced absenteeism, improvement in attendance, reduced stress level, reduced accidents, improved productivity and job performance, reduced inconvenience from wage garnishments, and increased satisfaction with work.

Some of the positive outcomes for employers include savings from reduced absenteeism and improvement in attendance, reduced use of sickness and accident benefits, savings from reduced medical care utilization, less administrative time handling money related problems of workers, and savings from increased productivity and job performance. Indirect positive effects also exist for employers: accuracy of work, reduced amount of scrap waste, reduced spending to replace workers, and improved morale, attitude, and relationship among employees.

Empirical Model

Figure 5 presents the Joo empirical model of this study. The empirical research focused on (a) identifying a personal financial wellness profile, (b) exploring the relationship between financial wellness and productivity, (c) examining the effects of financial stress on productivity, and (d) defining the need for workplace financial education as a buffering system on productivity.

Demographic Variables

A total of eight demographic variables were examined: gender, marital status, education, ethnicity, age, household income, number of financial dependents, and housing tenure. These variables have been founded to be significant in research on financial well-being

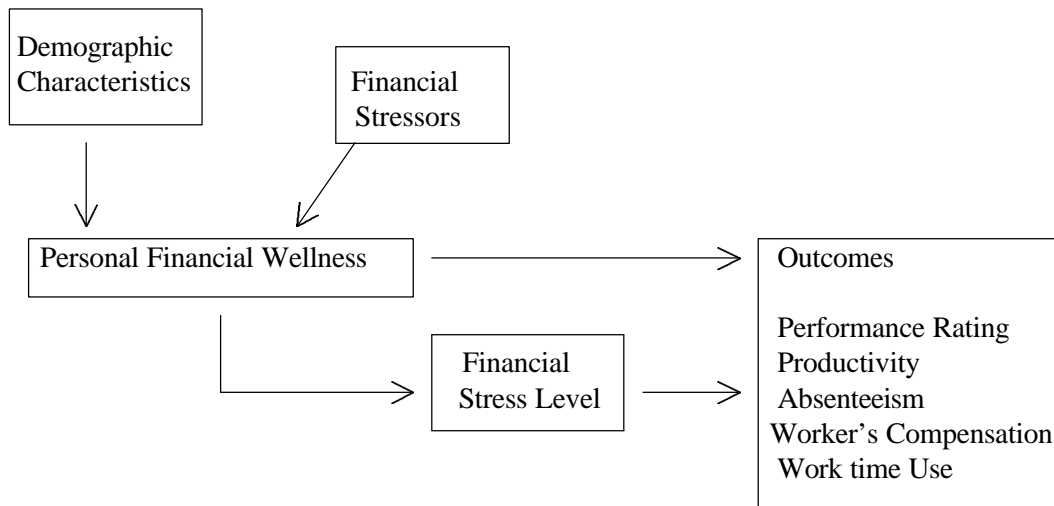


Figure 5

Joo Empirical Model: Personal Financial Wellness and Worker Job Productivity

and financial stress. In addition to these eight variables, the length of employment with current employer was included.

Measure of Financial Stressors

Personal stressors, family events, and financial stress circumstances were measured. Personal stressors included job change, decrease in wage, job loss, retirement, investment and/or business loss, injury, disability, accident, illness, and wage garnishment. Family events consisted of marriage, birth of a child, child goes to college, retirement of family member, job loss of family member, divorce or separation from spouse, and death. Major house repair, major vehicle repair, mortgage foreclosure, vehicle repossession, legal problem, bankruptcy, moving from one residence to another, low wage, medical bills, and excessive consumer debt were included in financial stress circumstances.

Respondents were asked to check all the events that have occurred during the past year. The individual stressor index was obtained from the sum of the checked events.

Measure of Personal Financial Wellness

The measure of personal financial wellness included four scales that were drawn from previous literature: subjective perception scales, behavioral assessment scales, objective scales, and overall financial wellness scales.

A subjective perception of the personal finance scale included attitudes of cash management, credit management, income adequacy, personal financial management, and consumer shopping skills. Each item was drawn from previous research (Conger et al., 1990; Dillman & Horton, 1986; Elder et al., 1992; Fitzsimmons et al., 1993; Garman et al., 1996; O'Neill, 1995; Pearlin et al., 1981; Peirce et al., 1996; Porter, 1990; Porter & Garman, 1993; Prochaska-Cue, 1993; Shinn, 1992; Varcoe, 1990; Williams, 1993) and modified several times. The final items were those that were shown to be statistically

significant predictors of personal financial well-being in previous research (Porter, 1990). Respondents were asked to choose one of the four answering categories: strongly disagree (SD), tend to disagree (TD), tend to agree (TA), and strongly agree (SA). Individual items of the attitudinal scales were as follows:

(1) Cash management

I am satisfied with the amount of money that I am able to save.

(2) Credit management

I worry about how much money I owe.

I would have trouble borrowing \$2,000 cash, if I needed it.

(3) Income adequacy

I have difficulty living on my income.

I worry about being able to pay monthly expenses.

(4) Personal financial management

When I think of my financial situation, I am optimistic about the future.

I think I will have enough money to live comfortably throughout retirement.

(5) Consumer shopping skills

I am knowledgeable about consumer protection laws and regulations.

Behavioral scales also included behavioral items of cash management, credit management, income adequacy, personal financial management, and consumer shopping skills from previous research (Conger et al., 1990; Dillman & Horton, 1986; Elder et al., 1992; Fitzsimmons et al., 1993; Garman et al., 1996; Linzey, 1993; O'Neill, 1995; Pearlin et al., 1981; Peirce et al., 1996; Porter, 1990; Porter & Garman, 1993; Prochaska-Cue, 1993; Shinn, 1992; Varcoe, 1990; Williams, 1993). The answer categories of these questions were: never (N), sometimes (S), usually (U), and always (A). Individual items were

(1) Cash management

I set money aside for savings.

I set money aside for retirement.

I spent more money than I have.

(2) Credit management

I reached the maximum limit on a credit card.

I paid credit card bills in full and avoided finance charges.

(3) Income adequacy

I had to cut living expenses.

I had to use a credit card because I ran out of cash.

I had financial troubles because I did not have enough money.

(4) Personal financial management

I had a plan to reach my financial goals.

I had a weekly or monthly budget that I followed.

(5) Consumer shopping skills

I purchased something expensive that I wanted, but really did not need.

I comparison shopped at two or more stores for an expensive consumer product.

Positive and negative questions were mixed in both the attitudinal and behavioral scales. Therefore, the coding between positive questions and negative questions was different. A negative aspect was coded by a lower number (i.e., 1) and a positive aspect was coded by a higher number (i.e., 4). A total subjective perception index and behavioral assessment index were obtained from the sum of the coded numbers. Those who have a better personal financial wellness profile get a higher score both in the subjective perception index and the behavioral assessment index.

Objective scales consisted of the solvency measure, amount of emergency fund, amount of credit payment in each month, amount of loan payments per month, amount of savings in each month, and preparedness of retirement. These objective scales were recommended from previous literature (DeVaney, 1993a; DeVaney & Lytton, 1995; Greninger, et al., 1996). The solvency measure was investigated with a 5-points scale of the following question: “suppose you were to sell all of your major possessions (including your home), turn all of your investments and other assets into cash, and pay all of your debts. Would you be in debt, break even, or have something left over?” Amount of emergency fund was measured with the single question of “if you lost your job today, how many months could you live using your savings?” Seven different categories were given to the question: 0 months, 1-2 months, 3-4 months, 5-6 months, 7-12 months, 13-24 months, and more than 24 months. The monthly credit payment and the monthly installment loan payments were gathered with the following questions: “about how much money, if any, do you usually pay toward your credit cards each month?” and “about how much money, if any, do you pay for your vehicle loans and other installment loans (excluding mortgage loan)?” Amount of savings per month was measured with the question that asked monthly savings per month except retirement saving. Preparedness of retirement was measured with the amount of money that each respondent put into voluntary supplementary tax-sheltered employer-sponsored retirement investment contributions through the employer. For those who were not contributing to the voluntary supplementary tax-sheltered employer-sponsored retirement investment contributions, the primary reason of not saving was asked. The answers about the monthly credit payment, monthly installment loan payments, monthly savings, and monthly retirement contributions consisted of 12 categories: \$0, \$1 -\$100, \$101-\$200, \$201-\$300, \$301-\$400, \$401-\$500, \$501-\$600, \$601-\$700, \$701-\$800, \$801-\$900, \$901-\$1,000, and above \$1,000.

The overall financial wellness scales of personal financial wellness included satisfaction with personal financial situation, perceived financial wellness, and feeling about financial situation. The satisfaction with personal financial situation was measured with a 10-point stair-step scale. Those who are dissatisfied with their financial wellness marked the lower steps and those who are satisfied with their financial wellness marked toward the higher steps. Perceived financial wellness was measured with a 5-point Likert-type scale that ranges from “feel like I am always in financial trouble” to “feel like I am doing pretty well.” Another 5-point Likert-type scale measured the feelings of respondents about their personal financial situations. The scale ranged from “I find it is hard to pay bills” to “I save more than I spend.”

Measure of Financial Stress

Financial stress was measured with one item on a 10-point scale that asked how the respondent rated his or her stress level. Those who have no financial stress at all would check 1, and those who feel extremely stressful would check 10.

Measure of Productivity

Job productivity was measured by self-reports of productivity changes from last year, performance rating from boss, absenteeism during the past year, worker’s compensation claims during the past three years, and time used for personal finance matters in the workplace. The self-reports of productivity changes was measured with a 9-point scale: decreased 4% or more, decreased 3%, decreased 2%, decreased 1%, no change, increased 1%, increased 2%, increased 3%, and increased 4% or more. The performance rating was measured with a 5-point scale. Absenteeism was measured with a closed-ended question of “how many work days were you absent over the past year (excluding vacation and holidays)?” The answer categories were: none, 1-3 days, 4-6 days, 7-9 days, 10-12 days, and more than 12 days. Measurement of work time used for personal finance matters included time used for talking with coworkers about money related

matters, talking with a lender about a loan, making calls regarding an overdue credit payments, making calls to friends or relatives about financial matters, making calls to a lawyer, talking with a financial planner, making calls to arrange a vehicle loan, and making calls to a credit or budget counselor.

Desired Financial Education

The desired workplace financial education programs were measured with the following question: “In which of the following financial education programs would you participate, if available in the future (please circle all of interest)?” The answer categories were: understanding benefits, retirement planning, budgeting, investing, tax planning, college planning, estate planning, buying a home, getting out of debt, consumer protection laws, and other (please specify).

Summary

This chapter presented the Joo conceptual model of personal financial wellness and worker job productivity. The Joo conceptual model was explained and each variable in the model was discussed. The Joo empirical model was presented. The variables of the empirical model were explained.