

## Predictors of Financial Well-Being among Malaysian Employees: Examining the Mediate Effect of Financial Stress

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### Abstract

Financial well-being and its impact on the quality of life among employees have received considerable attention from researchers, consumer and financial educators, practitioners and policy makers. The purpose of this study is to examine the determinant factors of employees' financial well-being in Malaysia. The results of this study can be used for better understanding of the relationship between and among determinants of financial well-being by highlighting the relationships among financial literacy, financial behavior, financial capability, financial problem, and financial stress. Samples were selected using multi-stage sampling technique among employees in public and private sectors. A total of 2,000 completed questionnaires were analyzed using path analysis to identify direct and indirect effects on financial well-being. The results identified that financial well-being determinants were financial literacy, financial behavior, financial capability, financial problem; and financial stress had either a direct and indirect effect on financial well-being. The findings indicated that financial stress partially mediate the effect of factors on predicting financial well-being.

*Keywords:* Financial literacy, financial behavior, financial capability, financial problem, financial stress, financial well-being

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## **1. Introduction**

There are scarce research on financial well-being among Malaysians' especially employees, while workers' debt in current situation is growing more rapidly than inflation. Through the decreasing employment prospects, income instability and eroded purchasing power of Malaysian households, workers' financial security became a main concern among policy makers. Assessment of the statistics revealed that the annual growth of household debt average was about 14.8 during 2001-2007 and in 2007 this rate stood at a staggering 56% of total loans (Endut & Hua, 2009). These may result in a trend of financial problems and can be causes for decreasing financial well-being and increasing financial stress. According to Garman et al (2009), several factors such as overuse of credit, reckless spending, and lack of planning due to low level of financial literacy contributed to financial problems especially among employees. Moreover personal financial problem and financial stress are known as the main cause of workplace troubles such as work absenteeism, stress and crisis (Sporakowski, 1979). Hence this study explores the relationship between financial well-being to financial literacy, financial behavior, financial capability, financial problem and financial stress among employee in Malaysia. Understanding whether and how financial literacy, financial behavior, financial capability, financial problem and financial stress will be useful in designing more effective financial education programs to enhance the Malaysian employees' well-being and quality of life.

## **2. Literature Review**

### *2.1 Financial Well-Being*

Financial well-being has become a main concern among financial educator in recent decades, with the term financial well-being developed and employed in financial studies. Prior to the mid-1990s, several researchers make an effort to explain, predict, or

define related constructs such as financial well-being, financial satisfaction, and economic well-being. However these terms are likely to be used interchangeably with each other. Joo and Garman (1998) employed the term financial wellness and illustrated it as a comprehensive concept comprising financial satisfaction, objective status of financial situation, financial perception, and behavior that cannot be assessed through one measure. Frequent researchers have sought to develop conceptual model for the determinants of financial well-being (Hayhoe & Wilhelm, 1998; Joo & Garman, 1998; Porter & Garman, 1993; Wilhelm & Varcoe, 1991). Joo (1998) indicated that to determine factors to predict financial well-being is complicated in nature, which comprised objective and subjective statuses of financial situation behavioral assessment of personal finance, and satisfaction with personal financial situation that cannot be assessed through a single measure (Joo, 1998). Later Joo and Grable (2004) conducted a study among workers to determine the financial wellness determinants. Findings revealed that higher level of financial well-being is associated with higher performance ratings, less absenteeism, and less work time loss, while financial stress, financial strain and lack of financial literacy decrease the financial well-being.

## *2.2 Financial Stress*

According to Kim and Garman (2006); it is estimated that 15% to 20% of workers in the United States are suffering from financial stress which impacts their productivity. Research reveals that financial stress is associated with employees 'health and sometimes absenteeism. Bailey et al. (1998) findings showed financial stress level is negatively related to financial satisfaction as the study among health care professionals revealed that financial stress significantly contributed to explain financial wellbeing. Prior studies indicated that financial stress affect overall personal satisfaction as well as work satisfaction (Boles, Howard, & Donofrio, 2001; Kantak, Futrell, & Sager, 1992). However although the effect of financial stress on financial well-being was documented

by researchers, there is limited research on financial stress and financial well-being among employees. Kim and Garman (2004) indicated that, although financial stress could be a more valid measure than income in predicting job performance, worker productivity, tardiness, absenteeism, retention, turnover, work commitment, job satisfaction, morale and loyalty are human satisfaction indicators of employee outcomes at workplaces but there is limited research in this area.

### *2.3 Financial Behavior*

Financial behavior has been known as the main determinant of financial well-being (Shim, Xiao, Barber, & Lyons, 2009; Xiao, Tang, & Shim, 2009). In other words financial behavior is the main contributor to the satisfaction with one's financial status (Parrotta & Johnson, 1998). Garman and Fogue (2006) argued that personal financial behavior could be an important component in defining financial well-being. However, while positive financial behavior enhances the level of financial well-being, failure to manage finances contributes to financial problems. The findings of research studies generally reveal that those who practice more of the financial behavior recommended by experts report a lower level of financial problem and stress (Joo & Grable, 2004; Lea, Webley, & Walker, 1995) and a greater satisfaction with their financial situation (Godwin, 1994; Joo & Grable, 2004; Kim, Garman, & Sorhaindo, 2003; Lown & Ju, 1992; Parrotta & Johnson, 1998; Porter & Garman, 1993; Scannell, 1990).

### *2.4 Financial Problem*

Financial problems, as a direct output of negative financial behavior, have been a topic of interest among financial researchers. Although the term financial problem has not been defined consistently in the literature, the term generally refers to a mismatch between financial resources and demands (Kerkmann, Lee, Lown, & Allgood, 2000). Numerous studies revealed that affirmative financial behavior, such as financial planning and budgeting, are the main component of one's financial satisfaction (Garman

& Forgue, 2006; Xiao, et al., 2009) and, on the other hand, frequent financial problems are an indicator of financial insecurity. Financial problems in addition to financial stressors can contribute to other personal and family burdens. Marcolin and Abraham (2006) pointed out that financial problems are often the basis for divorce, mental illness such as isolation, emotional stress, depression and lower self-esteem and a variety of other unhappy experiences. To lessen the likelihood of financial problems, researchers identified the role of financial literacy and financial capability. For instance, Marcolin and Abraham (2006) indicated that having financial literacy and financial capability are essential basis for both avoiding and solving financial problems.

### *2.5 Financial Literacy*

Financial literacy which is known as a basic living skill for individuals to persist in difficult financial situation is also a concern among financial educators. Interest in financial literacy education at the workplace has increased rapidly in recent years, and financial education is now promoted as a lifetime responsibility (Gramlich, 2004). A number of financial services organizations and community and consumer groups seek to improve both the financial literacy and the financial well-being of their workers (Prawitz et al., 2006). Research has found that financial literacy is related to financial behaviors (Hira & Brinkman, 1992; Mugenda, Hira, & Fanslow, 1990). Lusardi and Mitchell (2007) assessed the impact of financial literacy on financial behavior. Hilgert, Hogarth and Beverly (2003) also documented a positive link between financial literacy and financial behavior. A result from a prior study shows that financial mistakes are most prevalent among the younger people who are displaying the lowest amount of financial literacy (Agarwal, Driscoll, Gabaix, & Laibson, 2009).

### *2.6 Financial Capability*

Financial capability often contains the development of the literacy and numeracy skills which strengthen daily financial activities, such as reading and understanding written

and numerical information and financial information. Financial capability is essential means in everyday life, as Kempson et al., (2006) emphasized financial capability involved the practices and behaviors that form part of a consumer everyday life. Kempson (2006) indicated that financial capability and competence makes available to people the necessary skills to allow them to plan, monitor, manage and resolve any financial problems or opportunities.

### **3. Methodology**

#### *3.1 Sample*

The sample for this study comprised 2,246 employees in public and private sectors, in which 1,122 samples were from public sectors and 1,124 samples. Samples were selected using multistage sampling technique. The data were collected using self-administered questionnaire which were distributed through human resource personnel of selected agencies. Instrument for the study was adopted from an instrument developed by Joo and Garman in 1998. Data was coded and analyzed using SPSS. After careful selection, a total of 2000 questionnaires were analyzed using path analysis method to identify direct and indirect determinants of financial well-being among Malaysian employees. The mean age of the sample was 32 years (SD= 8.92, median age = 30 years). Of this sample, 50.0% were male and 50.0% were female. The majority of the respondents were Malay (93%). The mean monthly income of the respondents was MYR 2,400.00 (USD727.00). Regarding marital status, more than half of the respondents reported that they were married.

#### *3.2 Research Instrument and Measurements*

##### *3.2.1 Financial Well-Being*

The employees' financial well-being (subjective) was measured with a ten-point-likert type question. Twelve items on financial well-being such as overall satisfaction with the

financial situation, ability to meet living expenses, financial management, savings for retirement, financial adequacy and current financial satisfaction. A financial well-being score was computed by summing the averages score for all twelve items. Those who were not satisfied ended up towards the lower scores, while those who were more satisfied ended up towards the higher scores. The index was found to offer an adequate level of internal consistency (Cronbach's alpha = 0.92).

### *3.2.2 Financial Literacy*

Financial literacy was measured by testing for correct answers on 25 questions concerning financial goals, financial records, saving, investment, retirement, banking system, time value of money, wills, insurance, education loan, and general knowledge on personal finance. The average score is 11.77, with a standard deviation of 3.66.

### *3.2.3 Financial Behavior*

Employees' financial behavior was examined using three point likert-type questions, ranging from 1 (never) to 3 (always). Eight financial behaviors items were asked including discussed finances with spouse and children, pay bills on time, streamline the checkbook and examine credit report. The Cronbach's alpha for financial behavior was 0.85.

### *3.2.4 Financial Capability*

Financial capability (use or need to use financial products or services) of employees was examined using a modified version of measure employed by Joo and Garman (1998). This modified scale comprised eight three point questions scored from one to three (1=have, 2=not have, and 3= not sure) concerning on financial planning domain such as financial goals, family's saving and spending, savings for emergency and retirement,

credit card, insurance, short-term debt and investment. The Cronbach's alpha reported was 0.87.

### *3.2.5 Financial Problem*

The frequency of financial problem scale was employed to measure the frequency of problems related to lack of money for essential expenses, uncertain about where money is spent, owe friend(s) money, spend more than can afford, skip meals to save money, upset when cannot buy things, impulsive shopping and lending money to friends. This scale comprised of fifteen items scored from (1) never to (4) every month. The index was found to offer an adequate level of internal consistency (Cronbach's alpha = 0.90).

### *3.2.6 Financial Stress*

The overall level of employees' financial stress was measured with a three point likert-type question (1=never, 2=seldom and 3=always). Nine questions on financial stress asked include items related to worry over delay in payment, bill payment, financial condition, medical cost, ability to provide food and care for sickness, stress and suffering depression over financial condition. The Cronbach's alpha for financial stress was 0.82.

## **4. Results and Discussions**

Statistical testing of the initially proposed structural model was consistent of six observed variables, which the financial stress was considered as mediating factor. The moderating effect of sector (public and private) on the relationship between financial literacy, financial behavior, financial management, financial problem, financial stress and financial well-being were examined.

#### *4.1 Predicting financial well-being*

The results presented in Table 1, indicate that financial literacy ( $\beta = .171, p \leq .05$ ), financial behavior ( $\beta = .148, p \leq .05$ ), financial capability ( $\beta = .197, p \leq .05$ ), financial problem ( $\beta = -.259, p \leq .05$ ) and financial stress ( $\beta = -.379, p \leq .05$ ) significantly predict financial well-being among employees. Results indicated that financial stress has the highest negative and direct effect on financial well-being. Moreover, results of direct effects presented in Table 1 indicated that financial literacy ( $\beta = -.083, p \leq .05$ ), financial behavior ( $\beta = -.084, p \leq .05$ ), financial capability ( $\beta = -.092, p \leq .05$ ) and financial problem ( $\beta = .708, p \leq .05$ ) contribute to predict financial stress among employees. It is clearly shown that financial problem have the highest effect on financial stress among employees.

Assessments of the findings indicate that financial stress was the most significant variable in predicting financial well-being among Malaysian employees. The negative coefficient of financial stress was interpreted as those exhibited greater economic distress they were more likely to report lower levels of financial well-being. Financial problem was found to have a direct relationship with financial well-being; those who experienced greater financial problem were more likely to report lower levels of financial well-being. Financial capability was related to financial well-being. Those who are able to manage their finances (i.e. having financial goals, savings, investments and insurance) tended to have higher levels of financial well-being. Financial literacy was found to have a direct and positive relationship with financial well-being. Financial behavior was also shown to have a positive direct effect on financial well-being. This was interpreted as those who practiced effective financial behavior were more likely to report higher levels of financial well-being.

The findings also indicated that financial problem was the most significant contributor towards employees' financial stress. This was interpreted as those who experienced greater financial problem (e.g. uncertain about where money is spent, spend more than can afford and impulsive shopping) tended to have higher levels of financial stress. Financial capability, financial behavior and financial literacy were found to have a direct relationship (negative) with financial stress. The negative coefficient of these variables were interpreted as those who are less capable of managing their finances, practiced ineffective financial behavior and having less literacy on finances aspects were more likely to report greater financial stress.

Assessment of findings indicated that financial problem is the main determinant of financial stress among employees. It is indicated that those with higher level of financial problem have higher level of financial stress which resulted in decreasing the level of financial well-being. However, results of total effects showed in Table 1, indicated that among all predictors, financial stress has the highest effect (a negative effect) on financial well-being. It can be assumed that by reducing the level of employees' financial strain it will improve their satisfaction towards finance aspects.

**Table 1: The Results of Standardized Path Coefficients for Financial Well-Being Predictors**

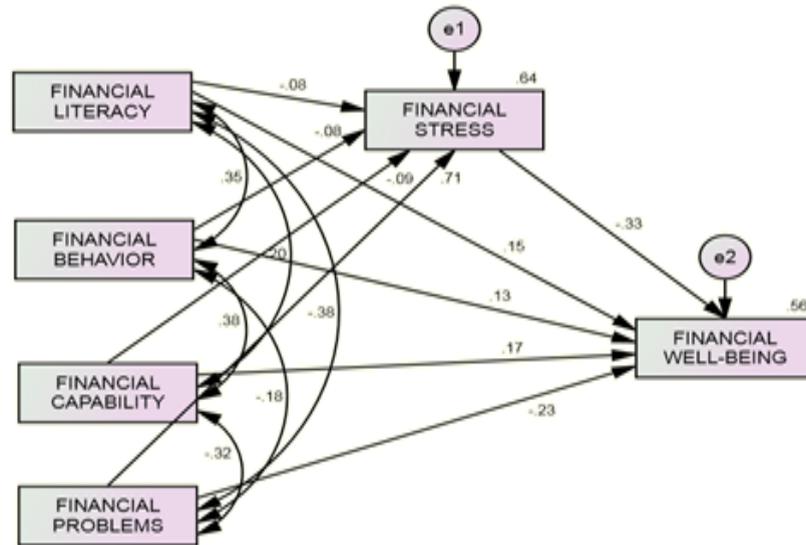
			Direct Effect	Indirect effect	Total Effect
<b>Direct Path</b>					
Financial literacy	==>	Financial stress	-.083	0	-.083
Financial behavior	==>	Financial stress	-.084	0	-.084
Financial capability	==>	Financial stress	-.092	0	-.092
Financial problem	==>	Financial stress	.708	0	.708
Financial literacy	==>	Financial well-being	.171	0	.171
Financial behavior	==>	Financial well-being	.148	0	.148
Financial capability	==>	Financial well-being	.197	0	.197
Financial problem	==>	Financial well-being	-.259	0	-.259
Financial stress	==>	Financial well-being	-.379	0	-.379
<b>Indirect path effects through financial stress</b>					
Financial literacy -->		Financial stress ->		Financial well-being	
			.151	.031	.182
Financial behavior -->		Financial stress ->		Financial well-being	
			.130	.031	.161
Financial capability -->		Financial stress ->		Financial well-being	
			.174	.03	.204
Financial problem -->		Financial stress ->		Financial well-being	
			-.228	-.268	-.496

#### *4.2 Test of the Mediating Effects*

The mediation approach of Baron and Kenny (1986) was adopted to identify the mediating effect of financial stress on the relationship between financial literacy, financial behavior, financial problem and financial capability with financial well-being. A comparison between the direct effect of the predictor on the criteria in the absence and presence of the mediator is the main determinant of the mediation effect.

The assessment of the direct relationship of assumed factors with financial well-being reveals that financial literacy, financial behavior, financial capability and financial problem have significant effect on financial well-being and to assess the mediation effect these relationships were examined in presence of financial stress.

Findings revealed in Table 1, indicated that in presence of financial stress, all the relationships are still significant while the direct effects are decreased. This reduction in direct effects indicated on partial mediation effect of financial stress. Results of paths coefficients indicated that financial literacy, financial behavior, financial capability and financial problem decreased after controlling the effect of financial stress. Since the relationship of predictors with financial well-being in presences of financial stress is significant therefore the mediation effect is partially, which indicated that while factors directly may contribute to predicting financial well-being, this effect may be indirectly through mediating of financial stress as well.



**Figure 1: Predictors of Financial Well-Being among Malaysia Employees**

## 5. Conclusions and Implications

The main objective of the present study was to understand the determinants of financial well-being among Malaysian workers. The research employed structural equation model to determine the effect of financial literacy, financial behavior, financial capability, financial problem and financial stress on financial well-being. In addition the Baron and Kenny (1986) mediation approach was employed to identify the mediation effect of financial stress on the relationship between predictors and financial well-being. The results indicated that financial literacy, financial capability and financial behavior positively predict financial well-being. Results indicated that those with higher level of financial literacy, greater financial behavior, and higher level of financial capability have higher level of financial well-being. Conversely financial problems and financial stress were found to be negatively related to financial well-being, whereby those who were experiencing problems related to a lack of money for essential expenses; and low

skills in money management reported lower levels of financial well-being. More importantly the mediating effect of financial stress revealed that the predictors may indirectly through financial stress may have effect on financial well-being.

Findings of the present study showed that financial stress and financial problem were the two dominant determinant with negative effect on financial well-being. This finding was similar to studies by Sporkowski (1979) and Cash (1996). Scholars have mentioned that workplace financial education programs could improve workers' financial problem and reduce financial stress (Garman, Kim, Kratzer, Brunson, & Joo, 1999). Findings indicated that workers who attended financial education seminars and workshops reported less financial stress and greater financial well-being than those who did not (Garman, et al., 1999). In addition financial education programs at the workplace have been found to increase contributors' confidence in their financial practices and managements (Bernheim, Garrett, & Maki, 2001; Fletcher, Beebout, & Mendenhall, 1997). These findings suggest that any organizations in Malaysia may need to enhance their employee's financial literacy and capability in order to enhance the employees' financial well-being; as these two factors (what are these two factors? Need to determine correctly so that will not confuse the readers) will enhance financial behavior and decreases financial stress and problems.

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