Using Dollahite's ABCD - XYZ Resource Management Model of Crisis or Stress as a Framework for Understanding Financial Well-being

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Abstract

Financial well-being is a perception of an individual's financial situation. Mostly financial well-being is connected with personal resource management. However, hardly any investigation has been done under financial stress situation while managing resources. This reflects that, resource management and stress management have been investigated separately which bring a gap in both areas. In understanding financial well-being, there is a need to integrate resource management and stress theory. Therefore, a model that covers both resource management and stress theory will be used namely Dollahite's ABCD - XYZ Resource Management Model of Crisis or Stress. This paper studies some of the common predictor variables of financial well-being in resource management under stress circumstances through ABCD-XYZ Resources Management Model of Crisis or Stress. Hence, this may guide interested parties to integrate both areas in their field.

Keywords: financial well-being; financial stress; financial knowledge; locus of control; work environment; financial management practices

1. Introduction

Dollahite was initiated to develop ABCD-XYZ Resource Management Model of Crisis or Stress in 1991 as Key and Firebaugh (1989) had suggested that the integration of resource management with other theories would be able to explain a situation appropriately. In managing family resource, family undergoes a stressful or crisis situation (McCubbin, Joy, Cauble, Comeau, Patterson, & Needle, 1980). Integration of family resource management theory and family stress theory form a comprehensive perspective of crisis and stress management process. ABCD-XYZ Resource Management Model of Crisis or Stress (Dollahite, 1991) was built based on the conceptual foundation of management and stress theories by Dollahite (1989) and Garrison, Malia, Molgaard, and Norem (1990). It further consists of McCubbin and Patterson's (1983) Double ABCX Model, and Deacon and Firebaugh (1988) Model of family resource management.

The processes in family resource management particularly input, throughput and output do not just manage crisis and stress but also can avoid crisis and stress (Rice & Tucker, 1986). In managing crisis or stress, families apply strategies to cope with crisis or stress. Furthermore, Rice and Tucker (1986) added that family stress theory and coping theory concepts have been separately used in the resource management context. Thus, Dollahite (1989) and Garrison et al. (1990) had attempted to add more literature by integrating concepts from both theories.

As mentioned by Dollahite (1991), concepts from family resource management theory and stress theory have not been integrated widely enough. In the financial management context, no specific model has been introduced involving resource management model and stress theory. Hence, it is proposed to apply Dollahite's model in financial management to explain personal financial well-being.

This is because resource management theory emphasis on achievable goals and plans that can be met through conscious decision making whereas stress theory focus on coping responses in crisis or stress situations (Garrison et al., 1990). Coping is utilized to overcome stress but it is unsure whether coping strategy is effective until it can show certain goals. By using Dollahite's model (1991), Therefore, there is a need to integrate both resource management and stress theory to investigate the effectiveness of coping strategy to overcome stress towards an achievable plan. This paper studies some of the common predictor variables of financial well-being in resource management under stress circumstances through ABCD-XYZ Resources Management Model of Crisis or Stress.

2. ABCD - XYZ Resource Management Model of Crisis or Stress

ABCD-XYZ Model consist of four phase (Figure 1). Phase I of ABCD-XYZ model starts when stimulus in form of information and/or energy go through individual or family system that come from potentially crisis or stress (Rettig, 1988). Boss (1987) stated that stimulus originated from stressor event intimidate the status quo. As a result, response from stimulus was forced because of the 'A' factor which is a stressor events or situation.

Stressor is both affected and affected by the availability of resources to cope and demands of the situation. Deficiency of resources or presence of demands will cause and associated with stressor events. In addition, the stressor events are also able to enhance or reduce resources or demands. For example, a death of breadwinner will affect availability resources such loss source of income. At the same time the demands of the situation like necessities need to be fulfilled.

Perceiving Phase of Phase II include 'B', 'C', 'D' and 'X' factors which indicates process on how family perceived the available resources (B factor) to be in equilibrium state with the demands (D factor). Interaction of actual and perceived for both resources and demands is called as 'B' and 'D' factor. The definition of situation (C factor) was influenced by the interaction which later affect the perceived of crisis or stress (X factor). Both Phase I (stimulus) and Phase II (perceive) in ABCD-XYZ Model represent input components in Deacon and Firebaugh's Family Resource Management Model (1988). Followed by a throughput or can be known as Phase III in Dollahite's model which is called deciding. Coping is a cognitive process in decision making. So, it named as cognitive coping. Cognitive coping and crisis or stress management decisions are affected by stressor (A factor), resources (B factor), demands (D factor), definition of situation (C factor) and crisis/stress (X factor). Decisions making are made in this phase to manage stress process in order for an individual or family to cope with the stressor events. Critical decision making is made towards the use of resources, seeking for information, clarifying values, planning, considering alternatives and setting goals are the examples of cognitive processes for resources management.

Coping is mentioned by Menaghan (1983) comprised of coping resources, coping efforts and coping styles. Attitudes and skills like esteem, coherent, intellectual ability and social competence are known as coping resources. Coping efforts are certain action resulted from certain situation that will be undertaken to alleviate a faced problem. Coping styles are defined as general routine preference in approached problems. In contrast, Boss (1988) proposed that coping required both managerial and adaptation terms. This is due to massive use of status quo however lack of explanations in managing stress to adapt.

Resource management consumption is a goal-directed behaviour that is driven through valuing, planning, decision making and organizing processes in order to improve the quality of life (Rice & Tucker, 1986). While Rettig (1988) identified decision making and controlled over implementation of decision are conscious management adaptation towards opportunities and demands of life. Crisis or stress induced management happened either because of overload demands or lack of fitness between resources and demands which engaged as conscious coping. Both cognitive coping and resource management process in the ABCD-XYZ Model is called 'Y' factor.

ABCD-XYZ Model phase ended with Phase IV which is acting that is known as 'Z' factor. Execution of coping responses and managerial plan are subsequent of perception and decision making. Acting or taking action of decision making and plans is called implementation in management theory (Deacon & Firebaugh, 1988; Rice & Tucker, 1986) which make 'Z' factor as adaptive behaviour.

According to Siegel (1984), adaptation happened when change and growth are due to environments that need to be met. 'Z' factor identified as resources changes and demands responses in Deacon and Firebaugh (1988). All changes of resources that made to cope with crisis or stress are saving, exchanging, producing transferring, protecting and/or consuming. Whilst, demand responses are aim to alleviate, reduce and eliminate demands which can be directed to internal demand for changing goals or even external demand for reorganizing debts.

Feedback that comes from adaptive behaviour and moving towards actual and perceived for both coping resources (B factor) and demands of the situation (D factor) influence how earlier stressor as well as future stressor being perceived. Feedback from demands response adjusts actual and perceived demands of the situation while resources changes feedback amends the actual and perception of available coping resources. This 'Z' factor and feedback represent the output of the family resource management models.

In summary, ABCD-XYZ Resource Management Model of Crisis or Stress (Dollahite, 1991) manages stress or crisis when stimulated from stressor which perceived through the interaction between resources and demands. As a result, definition of the situation emerged which influence crisis or stress. Then, crisis or stress required coping processes and resource management that will affect the adaptive behaviour response.

3. Financial Well-Being as an Output in Financial Management Model

Family resource management theory comprised of family management model. Deacon and Firebaugh Resource Management Model (1988) (*Figure 2*) is among the popular model that has been applied. Financial well-being is among the output of the resource management model. Various aspects such as psychological, emotional, physical and social can influence financial well-being. The impact on financial well-being has gained tremendous attention from researchers, practitioners, financial educators and policy makers. Shim, Xiao, Barber, and Lyons (2009) and Van Praag, Frijters, and Ferer-i-Carbonell (2003) stated that financial well-being or financial satisfaction has been used extensively in past research. In addition, financial satisfaction and financial well-being terms are used interchangeably in this study.

Variety of terms and definitions has been used by researchers to define financial well-being. Lown (1986) defined financial well-being as ownership of and control over durable goods, services, and property. While, Porter and Garman (1993) and as well as Kim, Sorhaindo, and Garman (2003) identify financial well-being as happiness or satisfaction on financial situation.

Nowadays, perceptions towards financial well-being have changed compared to before as culture, values, technology, economic and norms evolve among communities. The fast changing of time and location have mould people to be more aware on their savings, income, needs, safety satisfaction, life comforts and satisfaction on incomes and bonuses satisfaction. Due to that, Joo (1998) mentioned that financial well-being in the past is solely about satisfaction or happiness with assets or financial positions while currently changed to improve people's standard of living.

Evidence in literatures revealed that financial well-being is measured through perception on their financial situation. On the other hand, core factors predicting financial well-being include health status, working status, marital status and education (Headey and Wooden, 2004), political environment (Frey and Stutzer, 2002), health level (O'Neill, Xiao, Sorhaindo, & Garman, 2005) and health insurance (Bender, 2004). Furthermore, a social variable such as religion studied by (Soydemir, Bastida, and Gonzaelz, 2004) and social capital which involves government quality perceptions (Helliwell, 2006) has received deliberation.

Literatures have reviewed that financial management practices and financial behaviour affiliated with financial well-being (Husniyah & Fazilah, 2009; Zaimah, 2010; Zaimah, 2011). According to Garman and Forgue (2006), Joo (2008), and Xiao, Tang, and Shim (2009) financial management has been recognised as the prominent determinant of one's financial well-being. Pertinent to that, the most common factor studied by researchers is the way an individual manages their personal finance which has become the main contributor on financial satisfaction. Joo (1998) mentioned that personal financial management is a vital element in personal financial wellness. Moreover, literature by Falahati and Paim (2011) and Xiao, Tang and Shim (2009) revealed that financial behaviour can influence financial satisfaction. It can be conclude that individual possess better financial management has a higher level of satisfaction towards finance.

On the other hand, Robb and Woodyard (2011) found that there is a significant positive relationship between financial knowledge and financial satisfaction through survey called National Financial Capability Study conducted by Financial Industry Regulatory Authority (FINRA). This can be supported by DelaFrooz and Paim (2013), financial knowledge directly associated with financial well-being. Besides that, past research conducted by Chen and Volpe (1998), DelaFrooz and Paim (2011), Joo and Grable (2004), and Robb and Woodyard (2011) also employed financial knowledge to measure respondents financial well-being. As a consequence, for those have more financial knowledge are more satisfied towards their financial that lead to better financial well-being.

Aside from that, financial knowledge also as a main predictor that can be associated with financial management practices (Mugenda, Hira & Fanslow, 1990). According to interviews conducted by Mugenda et al. (1990), financial knowledge guides an individual to take action of their money management. Existing literature in general proved that for an effective money management strong financial skill are required (Allgood & Walstad, 2012; Carswell, 2009; Collins, 2007; Lusardi & Mitchell, 2007; Scott, 2010). Financial knowledge acquired by individuals whether being illiterate (Hilgert, Hogarth & Beverly, 2003) or through education (Xiao, Sorhaindo, & Garman, 2006) is proven to be significantly correlating with financial behaviour.

Financial stress has been identified to be negatively significant in relation to financial wellness where report showed that the higher the level of financial stress, the lower the financial wellness (Delafrooz & Paim, 2011; Delafrooz & Paim, 2013). In addition, correlation between financial stress and financial wellness has become the most anticipated results due to it as the most determinant factor for financial wellness. Joo and Grable (2004) study revealed somewhat similar result by stating financial stress become the second most influential determinant while Bailey, Woodiel, Turner, and Young (1998) found 30 percent of financial satisfaction is explained by financial strain. Studies administered by Falahati, Sabri, and Paim, (2012), and Delafrooz, Paim, Sabri, and Masud (2010) resembled Joo and Grable (2004) and Bailey et al. (1998) studies. This exhibits that financial stress is one of the crucial factor in predicting financial well-being. Whenever an individual has a lower level of financial stress, their financial well-being will be higher.

Not just for financial wellness, previous research has suggested that financial stress can have a negative effect on overall personal satisfaction (Kantak, Futrell, & Sager, 1992; Boles, Johnson, & Hair, 1997), life satisfaction (Tariq, 2012) as well as work satisfaction (Ross, 2007). Nowadays, people faced all kind of stressor which exhibit poor financial behaviour that originated from personal financial problem as the primary source of stress (Delafrooz & Paim, 2013; Garman, Leech, & Grable, 1996). Pertinent to that, Garman and Leech (1996) and Garman, et al. (1996) revealed that around 15 percent of workers facing stress resulted from poor financial behaviour that has reduces their job productivity.

Delafrooz and Paim (2013) majority of respondents underwent a moderate level of financial problem. They stated that financial problem and financial stress are significantly negative with each other. Even so, the most anticipated result from Delafrooz and Paim (2013) was the relationship between financial stress and financial wellness which revealed to have a strong relationship.

4. Model of Financial Well-Being under Stress Situation

In order to understand financial well-being, Dollahite's ABCD - XYZ Resource Management Model of Crisis or Stressis used for this study. Conceptual framework for this study is established by using resource management model of crisis or stress (Dollahite, 1991) to explain financial well-being under stress situation. Three main elements in the model are input, throughput and output.

Based on the financial resource management model and Dollahite's model, a conceptual framework to comprehend financial well-being among employees is proposed. The advantage of this integration model is that no research has used it previously for the general households in the personal financial management context except for households with disabled children. However, the study that was conducted by Sano, Dolan, Richards, Bauer and Braun (2008) do not involved a comprehensive financial management model as it does not link to family financial well-being.

The implementation of Dollahite's model focused only on crisis solving among households with disabled children. In their study, family experienced a crisis or stress in segregating household expenditure for disabled children. Thus, the study emphasized on the management process under stress circumstances without knowing the impact of the process.

Regardless of that, the implementation of Dollahite's model is only centred in the family context but not in the working environment.

The first element of the model namely input can be described in two forms which are resources and demands (Deacon & Firebaugh, 1988). Input that entered the system stimulates response which drives to motivate action that is called demands. Besides demand, a resource as mentioned by Leichtentritt and Rettig (2000) is anything that can be used to fulfil desired or goals. For this study, financial knowledge and locus of control can be examples for resources while work environment and financial stress as examples for demands.

According to Mugenda et al. (1990), financial knowledge is a main predictor of financial management practices. Meanwhile, Fox, Bartholomae, and Lee (2005) focused that financial knowledge is an important indicator towards financial well-being. One's financial knowledge thus has an impact on both financial management and financial well-being.

Previous researches such as Hira and Mugenda (1999) and Onkivisit and Shaw (1987) agreed that locus of control has an impact on both financial and non-financial preferences and behaviour. Study bySarah (2009) has administered a study between locus of control with financial behaviour. Nonetheless, not many study has been conveyed those correlations in this context. For this reason, it is proposed that locus of control as the input variable in this study. Internal locus of control would impact a better financial management which then influences ones financial well-being.

In addition, psychological variable of locus of control has an effect also on financial well-being. It can be supported by Sumarwan and Hira (1993) where locus of control is significantly associated with financial well-being whereby perceived locus of control is the second highest predictor of financial satisfaction. Result disclosed that individual who possessed an internal locus of control is more satisfied with their financial situation. Internal locus of control represents individual's belief regarding their behaviour will produce an expected outcome because they feel responsible of what is happening (Hoffman, Novak, & Schlosser, 2000).

Most importantly, stress as the demand in the model associates with personal financial problems that unveil a poor financial behaviour (Garman, et al., 1996). As for Delafrooz and Paim (2011), they reported that higher level financial stress will significantly lower the financial wellness. Parallel to financial knowledge, financial stress also has an association with financial management and financial well-being. Hence, financial knowledge and financial stress both have correlations with financial management and financial well-being.

In addition, work environment that act as a demand have been conducted in the organizational behaviour field. Stern (1970) classify work environment as demands or features characteristic perceived by the participants. So, this explains that individual's responses to activities are associated with a particular personal need orientation such as adaptability and achievement. Moos and Billings (1991) indicate that a work environment perception is a critical determinant of ones to work environment-related behaviour. The effects of work environment are commonly studied on job satisfaction (Lai, Abd Hamid, & Mohd Salleh, 2013) and job performance (Lim, Yeo, Cheah, & Ong, 2012). Furthermore, Cooper and Cartwright (1994), and Kompier (2005) mentioned that there is a positive impact of work environment employees' well-being or health.

On the report of Rath and Harter (2010), financial well-being is among the five essential elements of well-being. As Cooper and Cartwright (1994), and Kompier (2005) found that work environment has a positive effect on well-being thus work environment is suggested to have a positive effect on financial well-being. So far, no study divulges the association between work environment and financial matter particularly financial management practices and financial well-being. As a result, work environment is proposed as an input variable in this study.

Both financial knowledge and locus of control as the resources in this study which interact with financial stress and as well as work environment that represents as demands under the input element. The interaction between resource and demand exert an influence on the plan's implementation which is called throughput. Study by Norman (2010) found that most financial stress is mainly caused by poor spending decisions caused by an inadequate financial knowledge. Similarly with Taft, Hosein, and Mehrizi (2013) study shows that financial stress significantly related with financial knowledge. Additionally, locus of control was found by Hayes (2006) has an association with financial stress and financial knowledge (Sarah, 2009). Therefore, the interaction between resource and demand formulate a behaviour plan as an adaptation or coping behavior towards the perceived crisis or stress situation which is called throughput.

Financial management practices or throughput act as an adaptation behaviour and also has the decision making process to achieve an outcome which is known as financial well-being. According to the formulated plan, financial management practices is put into action based on the interaction between resource and demand in order to adapt according to the perceived stress or crisis situation. Adaptation behaviour and decision making process are performed to attained financial well being as an output. An output is the core focus of the resource management model that reflects the desired goals.

In conclusion, financial knowledge, financial stress, work environment and locus of control are the inputs in this study. All these inputs being processed in the throughput via financial management to achieve an outcome or goals (output) which financial well-being.

5. Conclusion

Although ABCD - XYZ Model which composed of resource management model and stress theory has been developed for more than two decades, but its adoption is very scarce. Most studies in both stress and resources management have been conducted independently. This may be due to the separation of fields for stress and resource which bring a huge gap in terms of research. Particularly for those who are interested in both resources and stress context using Dollahite's model can probably explain the output from the integrated context. Similarly to financial well-being, it is among the common variable used in resource management research. However, financial well-being has been associated with resource management only without considering the stress circumstances even though financial stress is among the prominent predictor for financial well-being.

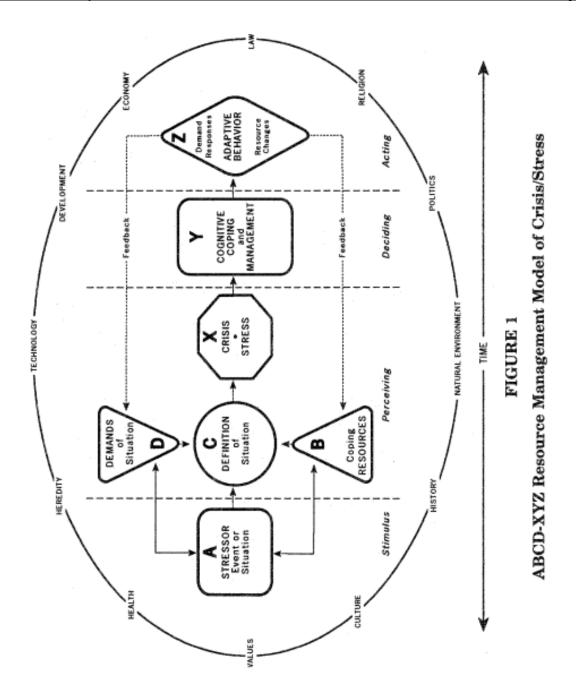
Stress in personal finance is among the core predictors of financial well-being which makes this model suitable to adopt in this research. Henceforth, the ABCD - XYZ resource management model of crisis or stress was considered in a different and broader context.

References

- Allgood, S., and W. B. Walstad. (2012). The effects of perceived and actual financial literacy on financial behaviours. National Financial Capability Study Roundtable, The George Washington School of Business.
- Bailey, W. C., Woodiel, D. K., Turner, M. J., and Young, J. (1998). The relationship of financial stress to overall stress and satisfaction. Personal Finances and Worker Productivity, 2(2), 198-207.
- Bender, K. A. (2004). The Well-being of Retirees: Evidence Using Subjective Data" Center for Retirement Research Working Paper 2004-24, Boston College.
- Boles, J. S., Johnston, M. W., and Hair, J. S. (1997). Role stress, personal life stress, and symptoms of life strains: An examination of the moderating role of sense of competence. The Journal of Personal Selling and Sales Management, 17(1), 17-28.
- Boss, P. (1987). Family stress: Perception and context. In Sussman, M and Steinmetz, S (Eds.), Handbook on marriage and the family (pp. 695-723). New York: Plenum.
- Boss, P. (1988). Family stress management. Newbury Park, CA: Sage.
- Carswell, A. T. (2009). Does housing counselling change consumer financial behaviours? Evidence from Philadelphia. Journal of Family and Economic Issues, 30(4), 339-356.
- Chen, H. and Volpe, R. P. (1998). An analysis of personal financial literacy among college students. Financial Services Review, 7(2), 107-128.
- Collins, J. M. (2007). Exploring the design of financial counselling for mortgage borrowers in default. Journal of Family and Economic Issues, 28(2), 207-226.
- Cooper, C. L., and Cartwright, S (1994). Healthy mind; Healthy organization-A proactive approach to occupational stress. Human Relations, 47(4), 455.
- Deacon, R. and Firebaugh, F. (1988). Family resource management: Principles and applications. (2nd ed.). Boston: Allyn and
- Delafrooz, N. and Paim, L. (2011). Determinants of financial wellness among Malaysia workers. African Journal of Business Management, 5(24), 10092-10100.
- Delafrooz, N. and Paim, L. (2013). Role of financial stress on relationship between financial problem and financial wellness among Malaysia workers. African Journal of Business Management, 7(20), 1966-1972.
- Delafrooz, N., Paim, L., Sabri, M. F., and Masud, J. (2010). Effects of financial wellness on the relationship between financial problem and workplace productivity. World Applied Science Journal, 10, 871-878.
- Dollahite, D. (1989). An integration of family resource management, interpersonal resource exchange and stress and coping theories. Paper presented at the Theory Construction and Research Methodology Pre-conference Workshop at the annual meeting of the national Council on Family Relations, New Orleans, LA.

- Dollahite, D. (1991). Family resource management and family stress theory: Toward a conceptual integration. Lifestyle: Family and Economic Issues, 12(4), 361-377.
- Falahati, L. and Paim, L. (2011). Toward a framework of determinants of financial management and financial problems among university. African Journal of Business Management, 5(22), 9600-9606.
- Falahati, L., Sabri, M. F., and Paim, L. (2012). Assessment a Model of Financial Satisfaction Predictors: Examining the Mediate Effect of Financial Behaviour and Financial Strain. World Applied Sciences Journal, 20(2), 190-197.
- Fox, B. S., Bartholomae, S., and Lee, J. (2005). Building the case for financial education. The Journal of Consumer Affairs, 39(1), 195-214.
- Frey, S. and Stutzer, A. (2002). What can economists learn from happiness research?. Journal of Economic Literature, 40(2), 402-435.
- Garman, E. T. and Leech, I. (1996). Employers pay a high price for productivity losses caused by poor personal financial behaviours of employees. Presentation at the 14th Annual Conference of the Association for Financial Counselling and Planning Education.
- Garman, E. T., Leech, I. E. and Grable, J. E. (1996). The Negative Impact of Employee Poor Personal Financial Behaviours on Employers. Financial Counselling and Planning, 7, 157–168.
- Garman, T. E., and Forgue, R. E. (2006). Personal Finance (8th ed.). Boston: Houghton Mifflin Company.
- Garrison, M., Malia, J., Molgaard, V. and Norem, R. (1990). A comprehensive model of theoretical integration of family resource management theory and family stress theory. Paper presented at the Theory Construction and Research Methodology Pre-conference Workshop at the annual meeting of the national Council on Family Relations, Seattle, WA.
- Hayes, J. V. (2006). Money attitudes, economic locus of control, and financial strain among college students (Doctoral dissertation, Texas Tech University).
- Headey, B., and Wooden, M. (2004). The effects of wealth and income on subjective well-being and ill-being. Economic Record, 80, 24-33.
- Helliwell, J. F. (2006). Well-Being, Social Capital and Public Policy: What's New?. Economic Journal, 116, 34-45.
- Hilgert, M. A., Hogarth, J. M., and Beverly, S. G. (2003). Household financial management: The connection between knowledge and behaviour. Federal Research Bulletin, 89, 309.
- Hira, T. K., and Mugenda, O. M. (1999). The relationships between self-worth and financial beliefs, behaviour, and satisfaction. Journal of Family and Consumer Sciences Education, 91(4), 76–82.
- Hoffman, D. L., Novak, T. P., and Schlosser, A. (2000). Consumer control in on-line environments. Unpublished manuscript, eLab, Owen Graduate School of Management, Vanderbilt University: Nashville, TN.
- Husniyah, A. R., and M Fazilah, A. S. (2009). The impact of financial management practices on financial well-being of families in Malaysia. Jurnal Pengguna Malaysia, 12, 27-41.
- Joo, S. (1998). Personal financial wellness and worker productivity. Unpublished doctoral dissertation, Virginia Tech, Blacksburg.
- Joo, S. (2008). Personal Financial Wellness. In J. J. Xiao (Ed.), Handbook of Consumer Finance Research. Springer, pp. 21-33.
- Joo, S. and Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. Journal of Family and Issues, 25(1), 25-50.
- Kantak, D. M., Futrell, C. M., and Sager, J. K. (1992). Job Satisfaction and Life Satisfaction in a Sales Force. Journal of Personal Selling and Sales Management, 7(1), 2-7.
- Key, R. and Firebaugh, F. (1989). Family resource management: preparing for the 21st century. Journal of Home Economics, 81(1), 13-17.
- Kim, J., Sorhaindo, B., and Garman, E. T. (2003). Relationship between credit counselling, financial well-being and health. Consumer Interests Annual, 49, 1-4.
- Kompier, M. (2005). Assessing the psychosocial work environment-"subjective" versus "objective" measurement. Scandinavian Journal of Work Environment & Health, 31(6), 405-408.
- Lai, C. H., Abd Hamid, N. I N. and Mohd Salleh, N. (2013). A study on the factors affecting job satisfaction amongst employees of a factory in Seremban, Malaysia. Society for Business and Management, 3(1), 26-40.
- Leichtentritt, R. D., & Rettig, K. D. (2000). The good death: Reaching and inductive understanding. Omega: The Journal of Death and Dying, 41(3), 221-248.
- Lim, K. H., Yeo, S. F., Cheah, C. S., and Ong, K. Y. (2012). Factors affecting individual job performance. Proceeding of International Conference on Management, Economics and Finance, 661-676.
- Lown, J. M. (1986). Family financial well-being: Guidance from research. Journal of Home. Economics, 78(4), 5-8.
- Lusardi, A. and Olivia S. M. (2007). Baby Boomer Retirement Security: The Role of Planning, Financial Literacy, and Housing Wealth. Journal of Monetary Economics, 54, 205–224.
- McCubbin, H and Patterson, J. (1983). The family stress process: The Double ABCX model of adjustment and adaptation. Marriage and Family Review, 6, 7-37.

- McCubbin, H., Joy, C., Cauble, A., Comeau, J., Patterson, J., and Needle, R. (1980). Family stress and coping: A decade review. Journal of Marriage and the Family, 42, 855-871.
- Menaghan, E. (1983). Individual coping efforts and family studies: Conceptual and methodological issues. Marriage and Family Review, 6, 113-135.
- Moos, R. H., and Billings, A. G. (1991). Understanding and improving work climates. Applying psychology in business: The handbook for managers and human resource professionals, 552-562.
- Mugenda, O. M., Hira, T. K., and Fanslow (1990). Assessing the causal relationship among communication, money management practices, satisfaction with financial status, and satisfaction with quality of life. Lifestyles: Family and Economic Issues, 11(4), 343-360.
- Norman, A. S. (2010). Importance of financial education in making informed decision on spending. Journal of Economics and International Finance, 2(10), 199-207.
- O'Neill, B, Xiao, J. J., Sorhaindo, B. and Garman, E. T. (2005). Financially distressed consumers: their financial practices, financial well-being, and health. Financial Counselling and Planning, 16(1), 73-87.
- Onkivisit, S. and Shaw, J. (1987). Self-concept and Image congruence: Some research and managerial implications. Journal of Consumer Marketing, 4(1), 38-50.
- Potter, N. M., and Garman, E. T. (1993). Testing a conceptual model of financial well-being. Financial Counselling Planning, 4, 135-164.
- Rath, T. and Harter, J. (2010). Wellbeing: The five essential elements. New York: Gallup Press.
- Rettig, K. (1988). A framework for integrating family relations and family resource management. Paper presented at the Theory Construction and Research Methodology Pre-conference Workshop at the annual meeting of the national Council on Family Relations, Philadelphia, PA.
- Rice, A. and Tucker, S. (1986). Family life management (6th ed.). New York: MacMillan.
- Robb, C. A., and Woodyard, A. S. (2011). Financial knowledge and best practice behaviour. Journal of Financial Counselling and Planning, 22(1), 60-70.
- Ross, M. B. (2007). Financial stress and job satisfaction.
- Sano, Y., Dolan, E. M., Richards, L., Bauer, J., & Braun, B. (2008). Employment patterns, family resources, and perception: Examining depressive symptoms among rural low-income mothers. Journal of Rural Community Psychology, E11(1).
- Sarah, N. (2009). Financial knowledge, locus of control, cultural values and financial behaviour among new vision employees. (Unpublished master dissertation), University Kampala, Buganda.
- Scott, R. H. (2010). Credit card ownership among American high school seniors: 1997-2008. Journal of Family and Economic Issues, 31(2), 151-160.
- Shim, S., Xiao, J., Barber, B. and Lyons, A. (2009). Pathway to life success: A model of financial well-being for young adults. Journal of Applied Developmental Psychology, 30, 708-723.
- Siegel, P. (1984). Human ecology and ecology. In Micklin, M and Choldin, H. (Eds.), sociological human ecology (pg 21-49). Boulder, CO: Westview.
- Soydemir, A., Bastida, E. and Gonzaelz, G. (2004). The impact of religiosity on self assessments of health and happiness: Evidence from the US South west. Applied Economics, 36, 580-600.
- Stern, G. (1970). People in context: Measuring person-environment congruence in education and industry. New York: Wiley-Interscience.
- Sumarwan, U. and Hira, T. K. (1993). The effects of perceived locus of control and perceived income adequacy on satisfaction with financial status of rural households. Journal of Family and Economic Issues, 14(4), 343-364.
- Taft, M. K., Hosein, Z. Z., & Mehrizi, S. M. T. (2013). The relation between financial literacy, financial wellbeing and financial concerns. International Journal of Business and Management, 8(11), 63-75.
- Tariq, Q. (2012). Impact of Financial Stress on Life Satisfaction. Asian Journal of Social Science and Humanities, 1(3), 139-148.
- Van Praag, B., Frijters, P., and Ferrer-i-Carbonell, A. (2003). The anatomy of subjective well-being. Journal of Economic Behavior and Organization, 51, 29-49.
- Xiao, J. J., Sorhaindo, B., and Garman, E. T. (2006). Financial behaviours of consumers in credit counselling. International Journal of Consumer Studies, 30(2), 108-121.
- Xiao, J. J., Tang, C., and Shim, S. (2009). Acting for happiness: Financial behaviour and life satisfaction of college students. Social Indicator Research, 92(53), 53-68.
- Zaimah, R. (2010). Pola tingkahlaku kewangan pekerja keluarga dwi-kerjaya. Malaysian Journal of Consumer and Family Economics, 13, 114-124.
- Zaimah, R. (2011). Pengaruh pengetahuan, tingkahlaku dan pembuatan keputusan kewangan ke atas kesejahteraan kewangan pekerja sektor awam yang berkahwin. (Unpublished doctoral dissertation), Universiti Putra Malaysia, Serdang.



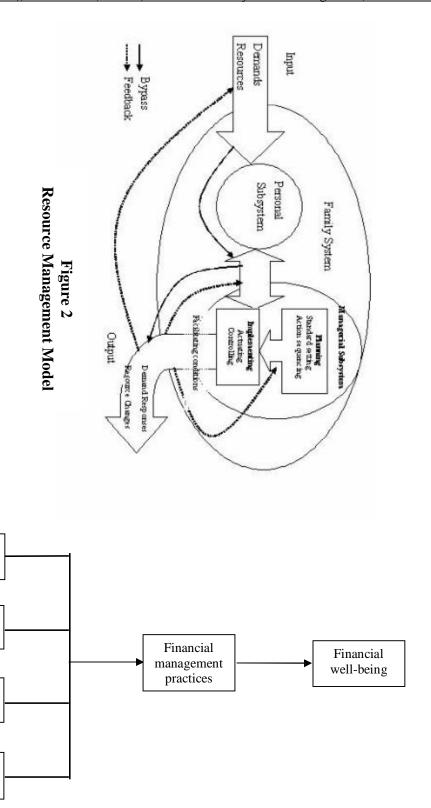


Figure 3: Model of Financial Well-Being under Stress Situation

Financial knowledge

Locus of control

Financial stress

Work environment