

UNIVERSITI PUTRA MALAYSIA

DETERMINANTS OF RETIREMENT CONFIDENCE AMONG WORKING WOMEN IN GOVERNMENT AGENCIES IN PENINSULAR MALAYSIA

TEO TZE JUEN

FEM 2015 12



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By

TEO TZE JUEN

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirements for the Degree of Master of Science

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

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By

TEO TZE JUEN

April 2015

Chairman : Mohamad Fazli bin Sabri, PhD

Faculty : Human Ecology

A number of working women neglected the importance of retirement preparedness. This causes them to be less confident towards their retirement life. Past research indicated that women often perform at their lower level of retirement confidence than men. The purpose of this study is to determine the relationships between individual characteristics (age, education, marital status, and money adequacy), financial literacy, saving motives, financial management practices, and retirement confidence among working women in public sectors.

The sample of the present study consisted of 447 working women in public agencies located in four states in Peninsular Malaysia, selected through multi stage sampling technique. Data was collected through self-administered questionnaires. Descriptive analysis, independent sample t-test, and multiple regression were used in the Statistical Software Package for Social Science (SPSS).

The results of this study showed that the mean age of respondents was 35.8 years old. Most of the respondents were among moderate-income group with secondary education. Only 14.7% respondents scored high level of financial literacy, whereas 53.6% scored in high financial management practices, and 87% respondents scored moderate level in retirement confidence. There was 41.3% respondents had their own savings for retirement purpose. There was a significant difference in retirement confidence in term of saving motives (p<0.001) and marital status (p<0.01). Pearson Correlation indicated that there were significant relationships between financial literacy, financial management practices, and retirement confidence.

The variables used in this study contributed 32.9% towards the model. Multiple regression result also showed that individual characteristics (marital status, education, and money adequacy), financial literacy, saving motives, and financial management practices have significant influence on retirement confidence, while saving motives is the strongest predictor of retirement confidence among working women.

This study suggested that the findings are useful for the government to help working women in financial planning direction. Women could be more alert with the enhancement of their financial preparation in order to maintain their standard of living during retirement life. On the other hand, some financial education workshops could be provided by their workplaces' management to help them to have better understanding in all kinds of financial aspects which could help them to make wise financial decisions. The determinants of retirement confidence would help working women to be more financial literate and be aware of the retirement preparedness in advance. By doing so, this could prevent or reduce women from facing issues regarding their financial inadequacy during retirement life.

Abstrak tesis ini yang dikemukakan kepada senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

KEYAKINAN PERSARAAN DALAM KALANGAN WANITA BEKERJA DI SEKTOR AWAM DI SEMENANJUNG MALAYSIA

Oleh

TEO TZE JUEN

April 2015

Pengerusi : Mohamad Fazli bin Sabri, PhD

Fakulti : Ekologi Manusia

Sebahagian wanita bekerja telah mengabaikan tentang kepentingan persediaan persaraan. Ini akan menyebabkan mereka kurang yakin terhadap kehidupan persaraan mereka pada masa hadapan. Banyak kajian lepas menunjukkan bahawa wanita sering mempunyai keyakinan persaraan yang rendah berbanding dengan lelaki. Tujuan kajian ini adalah untuk menentukan hubungan antara ciri-ciri individu (umur, tahap pendidikan, status perkahwinan, dan kecukupan wang), literasi kewangan, motif simpanan, amalan pengurusan kewangan, dan keyakinan persaraan di kalanagn wanitayang bekerja di sector awam.

Sampel kajian ini terdiri daripada 447 wanita yang bekerja di agensi awam di empat buah negeri di Semenanjung Malaysia, yang dipilih melalui teknik persampelan rawak berperingkat. Data dikumpulkan melalui soal selidik yang diselia sendiri oleh responden. Analisis deskriptif, ujian-t sampel bebas, dan regresi pelbagai telah digunakan melaluli *Statistical Package for Social Science* (SPSS).

Dapatan kajian menunjukkan min umur bagi responden adalah 35.8 tahun.Kebanyakan responden berpendapatan sederhana dengan tahap pendidikan di peringkat menengah. Hanya 14.7% responden mempunyai tahap literasi kewangan tinggi, 53.6% mempunyai tahap amalan pengurusan kewangan tinggi, dan 87% responden mempunyai tahap keyakinan persaraan yang sederhana. Terdapat 41.3% responden menabung untuk tujuan persaraan.Terdapat perbezaan yang signifikan dalam keyakinan persaraan dari segi motif simpanan (p<0.001) dan status perkhawinan (p<0.01).Korelasi Pearson menunjukkan terdapat hubungan yang signifikan antara literasi kewangan, amalan pengurusan kewangan, dan keyakinan persaraan.

Pembolehubah yang digunakan dalam kajian ini menyumbang 32.9% kepada model. Analisis regresi pelbagai juga menunjukkan bahawa ciri-ciri individu (kecukupan wang, status perkahwinan dan tahap pendidikan), literasi kewangan, motif simpanan, dan amalan pengurusan kewangan yang mempunyai pengaruh yang kuat terhadap keyakinan persaraan, di mana motif simpanan paling mempengaruhi terhadap keyakinan persaraan di kalangan wanita yang bekerja.

Penemuan kajian ini adalah berguna kepada pihak kerajaan untuk membantu wanita ke arah perancangan kewangan. Wanita boleh menjadi lebih peka dengan peningkatan penyediaan kewangan mereka untuk mengekalkan taraf hidup mereka semasa bersara. Sebaliknya, beberapa bengkel pendidikan kewangan boleh disediakan di tempat bekerja untuk membantu wanita untuk pemahaman yang lebih baik dalam semua jenis aspek kewangan yang boleh membantu mereka membuat keputusan yang lebih baik. Dengan memahami lebih lanjut mengenai penentu keyakinan persaraan boleh membantu wanita yang bekerja menjadi lebih peka terhadap kewangan dan lebih sedar terhadap persediaan persaraan terlebih dahulu. Ini boleh menghalang wanita mengalami kemiskinan dalam kehidupan persaraan.

ACKNOWLEDGEMENTS

I would like to express my deep and sincere gratitude to my supervisor, Dr. Mohamad Fazli bin Sabri, Head of Department of Resource Management and Consumer Studies, Faculty of Human Ecology. His wide knowledge and his logical way of thinking have been of great value to me. His understanding, encouragement and personal guidance have provided a good basis for the present thesis.

Besides my supervisor, I would like to thank my thesis committee, Dr Afida Mastura binti Muhammad Arif, for her encouragement, insightful comments, and important support throughout this work.

Finally, special thank you is extended to the working women who graciously participated in the "Retirement Confidence among Women Working in Public Sector in Peninsular Malaysia" study and gave us access to their lives.

I certify that a Thesis Examination Committee has met on 8 April 2015 to conduct the final examination of Teo Tze Juen on her thesis entitled "Determinants of Retirement Confidence among Working Women in Government Agencies in Peninsular Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

Members of the Thesis Examination Committee were as follows:

Adlina Binti Ab Halim, PhD

Senior Lecturer Faculty of Human Ecology Universiti Putra Malaysia (Chairman)

Husniyah bt Abdul Rahim @ Abdul Wahab, PhD

Senior Lecturer Faculty of Human Ecology Universiti Putra Malaysia (Internal Examiner)

Nor Azila Mohd. Noor, PhD

Associate Professor Universiti Utara Malaysia Malaysia (External Examiner)

ZULKARNAIN ZAINAL, PhD

Professor and Deputy Dean School of Graduate Studies Universiti Putra Malaysia

Date: 17 June 2015

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

Mohamad Fazli bin Sabri, PhD

Associate Professor Faculty of Human Ecology Universiti Putra Malaysia (Chairman)

Afida Mastura Mohammad Arif, PhD

Senior Lecturer Faculty of Human Ecology Universiti Putra Malaysia (Member)

BUJANG BIN KIM HUAT, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date:

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Name and Matric No:		-	

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Signature:	
Name of Chairman of Supervisory Committee:	
Mohamad Fazli bin Sabri, PhD	
Signature:	
Name of Member of Supervisory Committee:	
Afida Mastura Mohammad Arif, PhD	

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LIST OF ABBREVIATIONS

EPF Employee Provident Fund
NPS National Pension Scheme
LCH Life-Cycle Hypothesis

EBRI Employee Benefit Research Institute

ANZ Australia and New Zealand Banking Group Limited

RUGS Research University Grant Scheme

EDA Exploratory Data Analysis VIF Variance inflation factor

SPSS Statistical Package for Social Science
CCDMA Agensi Kaunseling dan Pengurusan Kredit

(Credit Counseling and Debt Management Agency)

CCRIS System Credit Reference Information

BNM Bank Negara Malaysia

DGI Director-General of Insolvency

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Retirement is a stage where an individual will permanently leave his or her workplace. As a result of absent from labor market, the retirees will not receive any official income during their golden years. Based on the findings by Bosworth and Burke (2012), the major sources of income during retirement are savings, social support, and pensions. Thus, proper retirement planning during pre-retirement stage is highly needed to safeguard an enjoyable retirement life.

Retirement planning is a complex process which requires wide financial knowledge (Lusardi & Mitchell, 2011). A proper retirement planning should include several practices such as preparing a spending list during retirement phases and saving for retirement funds. However, recent study showed a declining commitment in retirement planning among United States' employees (Helman, Adams, Copeland, & Van Derhei, 2013). There are only 66% of the United States' employees who prepare savings for retirement in year 2013, which marked a sharp declination as compared to 75% who prepare savings for their retirement in 2009 (Helman et al., 2013). Many workers (41%) cited that the increasing cost of living is one of the main obstacles which influence them in contributing for their retirement plan (Helman et al., 2013). Consequently, poor retirement planning would increase the risk for pre-retirees to suffer from poor economic well-being in later years (Bender, 2012; Masud, Haron, & Gikonyo, 2012). Failure in retirement planning would lead to insufficient retirement sources during retirement (Bender, 2012). Therefore, many elderly are forced to continue working in labor market even though they have reached their retirement age (Bosworth & Burke, 2012). This is due to the act of highly depending on the income to overcome their daily expenditures. They do not have sufficient money to cover their daily expenses if they quit the labor market. On the other hand, other negative consequences of improper retirement planning are poor retirement satisfaction (Sundali, Westerman, & Stedham, 2006), heavy stress, and anxiety (Dada, 2004) after retirement.

In turn, pre-retirees with proper retirement planning tend to be more confident in having a secured retirement life, which could be described in terms of retirement confidence (Helman, VanDerhei, & Copeland, 2008a; Joo & Grable, 2001). Retirement confidence is a concept which includes the view and attitude towards retirement, the preparations for retirement, and the confidence with regard to various aspects of retirement (Kim, Kwon, & Anderson, 2005b). Pre-retirees whom are actively involved in retirement planning are more likely to display positive retirement confidence (Helman et al., 2013). In other words, pre-retirees with high retirement confidence are those who believe that they are well prepared for their upcoming retirement. They are

confident with their accumulated retirement funds to be sufficient for them to have a healthy lifestyle during retirement years. Conversely, those with low retirement confidence tend to have doubts and anxiety on the adequacy of their accumulated retirement funds. Many of them expect themselves to continue working even though they have reached or passed their expected retirement age.

Retirement planning is important especially for women based on several reasons. First, the Department of Statistics Malaysia (2013) found out that women tend to live longer than men, whereby the life expectancy of women is 77.2 years old and 72.3 years old for men. In Malaysia, mandatory retirement age for civil servants is 60 years old. Hence, women are expected to live for another 17 years after their retirement. Without proper retirement planning during pre-retirement stage, their next 17 years of living after retirement can be traumatic for them. Secondly, women have consistently displayed poor level of retirement confidence. Most of the past researchers agreed that men have higher retirement confidence than women (Malroutu & Xiao, 1995; Quick & Moen, 1998; Joo & Pauwels, 2002). Poor retirement confidence among women might put them at a higher risk to face financial crisis during retirement age. Next, past study has also found out that women are less likely to implement financial management practices as compared to men (Chan, Masud, Hamid & Paim, 2010). As explained by Chen and Volpe (2002), women bear larger burdens such as financing and raising family, earning less than men in career, living a longer life expectancy, and facing extra challenges in financial management practices. Throughout these cases, women face more obstacles in financial management practices and this would influence them to have less confident in their future retirement life. Based on the above reasons, it can be stressed upon that retirement planning is highly needed as a protective step for women. Thus, the present study puts the main focus on women in Peninsular Malaysia, with the aim to grasp a better understanding on how women react towards retirement.

Alarmed by the importance of retirement planning, Malaysia government introduced a dual pension system to protect the employees. The dual pension system refers to Employee Provident Fund (EPF) and Civil Service Pension. The EPF is a compulsory saving plan for all Malaysians especially in private sectors. EPF scheme is a contribution plan which contributed by both employees and employers, whereby the employees are required to contribute 11% of their monthly income and employers contribute 12%. On the other hand, only workers from public sectors are eligible for the Civil Service Pension, which is National Pension Scheme (NPS). There are two types of pension scheme under NPS, which are Service Pension and Service Gratuity (Jabatan Perkhidmatan Awam, n.d.). It is important to note out that public sectors' employees are required to choose only one either EPF or Civil Service Pension. For example, if the public employees choose to contribute in EPF, he/she is no longer covered under Civil Service Pension. Conversely, if he or she chooses Civil Service Pension, he or she does not need to contribute in EPF.

1.2 Statement of Problem

The issue on awareness of retirement among Malaysians has lead the government to come out with the pension scheme which is made compulsory for every public sector workers. This policy is important to ensure public servants to have enough savings to live during their retirement life. However, it is noteworthy that a recent survey conducted by Ahmad, Masud, and Ibrahim (2013) found out that there is a relatively low retirement confidence among Malaysian public sectors' working women, also they reported insufficient preparation for retirement life (Ahmad et al., 2013). It is plausible that the feeling of unpreparedness would lead these individuals to be less confident during their retirement life and might have negative perceptions and attitudes toward their retirement life (W. K. M. Lee & Law, 2004). Clearly, low retirement confidence among Malaysians will put them at a great risk for negative development during retirement life. Further research on retirement confidence among Malaysians is beneficial in helping the pre-retirees to build more positive attitude towards retirement.

As Malaysians started to be aware of the importance of retirement savings, many financial institutions also take the opportunities by introducing financial products of savings for their retirement life. However, many people are still holding on with "wait and see" behaviour instead of taking immediate action towards the retirement preparedness (Ibrahim, Isa & Ali, 2012). This kind of behaviour would drag people away from early saving and might affect the socioeconomic problems in Malaysia. Ibrahim et al. (2012) further provided some examples for the socioeconomic problems such as homeless and increment of crime rate. Hence, the consequences of not having enough money for retirement preparation are serious and might become one of the sources of problems in the future in Malaysia.

On the other hand, recent studies claimed that the pension scheme in Malaysia is inadequate (Rahim, Yusof, & Ismail, 2011; Zin, Lee, & Abdul-Rahman, 2002). One indicator that is commonly used to measure the adequacy of the pension scheme is the replacement rate, which is the ratio of retirement income over pre-retirement income (Borella & Fornero, 2009). The replacement rate of a well-developed pension system should place between 60% and 75% (Park & Estrada, 2012). Park and Estrada (2013) conducted a research to identify the adequacy of public pension system in Asian developing countries, which are China, Indonesia, Korea, Malaysia, Philippines, Singapore, Thailand and Vietnam. As expected by Park and Estrada (2013), the public pension system in the mentioned countries is too weak and inadequate as compared to the developed countries. For instance, the replacement rate for pension system in Malaysia is around 40%. It is clearly seen that the replacement rate for Malaysia is far below than the recommended range which was suggested by Park and Estrada (2012). In addition, there was a research conducted in East Asia countries, which are South Korea, Taiwan, Hong Kong, Singapore, Malaysia and China in order to ask their expected sources of retirement income during retirement life. Most of the Malaysians are too relying on government pension scheme (Jackson, Howe, & Peter, 2012). Therefore, the present study mainly focuses on women from public sectors and investigates their confidence towards their preparedness for retirement.

Despite the low retirement confidence among Malaysians, factors that lead to this phenomenon remained unclear. From the existing literature, several factors have been identified as the determinants of retirement confidence, such as age, education, marital status, money adequacy, financial literacy, saving motives, and financial management practices (Li, Montalto, & Geistfeld, 1996; Mutran, Reitzes, & Fernandez, 1997; Joo & Pauwels, 2002; Kim et al., 2005b). Nonetheless, it is notable that many studies were conducted in the western countries. For instance, Mutran et al. (1997) and Kim et al. (2005b) conducted their studies in United States. Conceivably, more efforts should be given to Malaysian context due to the significant cultural differences between Malaysia and western countries. Findings from the Westerns might not be applicable into Malaysia context. Thus, further research is needed to be conducted in Malaysia context in order to understand the factors that influence the retirement confidence among Malaysians. However, one might argue that the present study is similar with the research conducted by Folk, Beh, and Baranovich (2012), which attempted to identify the determinants of retirement planning in Malaysia. Yet again, it is important to note that Folk et al. (2012) drew sampling from one particular area only which is Klang Valley, Malaysia. Hence, Folk et al. (2012) should not be generalized over into the whole Malaysia context. Contradict to Folk et al. (2012), the present study draws samplings from four states in Peninsular Malaysia. As compared to Folk et al. (2012) which focused on one district in Malaysia only, the data of the present study can be generalized into the whole Malaysia context.

Besides that, there are some contradict findings from the past research. For instance, Turner and Scott (1994) suggested a positive relationship between age and retirement confidence because older individuals spend many years in preparing for their retirement. In turn, Moorthy et al. (2012) argued that younger individuals are tend to be more confident in retirement, whereby these younger individuals still have plenty of time to prepare for their retirement as compared to the older individuals who have very limited time before their pension. Both of these different views are supported by evidences and arguments. In the same vein, debates on the associations between education, marital status, money adequacy, financial literacy, saving motives, financial management practices, and retirement confidence remains a hot topic in the academia. These contradictory arguments will be further discussed in the next chapter.

In essence, empirical studies showed that many Malaysians perceived low level of retirement confidence especially women. Yet, many individuals tend to delay their retirement saving and rely dependently on the public pension scheme. While recent study found out that the public pension scheme in Malaysia is insufficient, it is conceivable that many individuals from public sectors are at risk for negative development during their retirement. Therefore, studies that determine the factor that affects retirement confidence are beneficial in helping this group of individuals. However, it is notable that much research on this issue are well conducted in western countries. The findings in the existed research in western countries limit its applicability in Malaysia context. Upon above reasons, further research on factors that affect retirement confidence in Malaysia is in a great need. Hence, the present study aims to study how several factors can give impacts on retirement confidence among Malaysian women who work in public sectors, which include individual characteristics

(age, education, marital status, money adequacy), financial literacy, saving motives, and financial management practices.

1.3 Research Question

Empirically, individual characteristics (age, education, marital status, and money adequacy), financial literacy, saving motives, and financial management practices affect retirement confidence (Alessie, Van Rooij, & Lusardi, 2011; Kim et al., 2005b; Moorthy et al., 2012; Mullock & Turcotte, 2012; Smith & Moen, 2004; Taylor-Carter, Cook, & Weinberg, 1997). Therefore, this study investigates the effects of individual characteristics, financial literacy, saving motives, and financial management practices on retirement confidence. Specifically, the present study determines the correlation of retirement confidence among working women from public sectors in Malaysia. Four research questions are being formulated in this present study:

- 1. What are the saving motives, level of financial literacy, level of financial management practices, and level of retirement confidence among women working in public sectors in Malaysia?
- 2. Are there any differences in retirement confidence based on marital status and saving motives among working women?
- 3. Are there any significant relationships between individual characteristics, financial literacy, and financial management practices on retirement confidence of the respondents?
- 4. Which of the factors that uniquely predict retirement confidence?

1.4 Significance of Study

The findings of this study will contribute to a new knowledge in the scope of retirement confidence. To date, there is a very limited knowledge regarding this field especially in the context of Malaysia. Therefore, this study is proposed to be done to provide a clearer picture on how the mentioned factors can give impacts on retirement confidence.

1.4.1 Public Sectors Working Women

A better understanding on retirement confidence will increase the awareness of all public sectors working women in planning their retirement life in the future. As retirement planning is a complicated process which requires several skills, working women can attend different workshops to attain some of the related skills for a healthier retirement planning. For example, working women can attend workshops and classes in order to learn financial knowledge and financial management practices.

1.4.2 Financial Advisor and Educator

This study also provides practical implications to financial advisors or financial institutions, as both have been frequently advising and guiding clients from various backgrounds for a better retirement planning. The financial advisors can consider this study as a reference to design and create interventions in helping their clients to have a more secured retirement life in the future. Moreover, financial institutions can help their clients by improvising their operation management. For instance, some financial institutions can offer suitable types of investment which benefit most to lower income people. In addition, educators can apply the findings of this study to develop educational programs that encourage earlier retirement planning.

1.4.3 Government as Policymaker

As suggested by Park and Estrada (2013), the public pension scheme in Malaysia is inadequate for steady retirement. Further improvement in public pension scheme is highly needed to ensure the security of retirement among public employees in the future. Thus, the findings of this study can serve as one of the inputs for Public Service Department to refine the public pension scheme. By understanding the factors affecting retirement confidence among women in public sectors, Public Service Department can develop pension scheme that could maximize and level up the retirement confidence among the female retirees. For further explanation, Credit Counselling and Debt Management Agency (CCDMA) is providing a number of services to help individuals to manage their financial situation in a better way. Individuals can follow the guidelines which have been highlighted by CCDMA on how to spend and control their money for the betterment of their future. Since the services provided are free of charge, individuals do not have to worry about any high charges on consultant fees.

1.5 Research Objective

1.5.1 Main Objective

This study aims to determine the relationships between individual characteristics (age, education, marital status, and money adequacy), financial literacy, saving motives, financial management practices, and retirement confidence among working women in public sectors.

1.5.2 Specific Objective

- 1. To identify saving motives, level of financial literacy, level of financial management practices, and the level of retirement confidence among working women from public sectors in Malaysia.
- 2. To explore the differences in retirement confidence based on marital status and saving motives of working women.
- 3. To determine the relationships between age, education, money adequacy, financial literacy, and financial management practices on retirement confidence of working women.
- 4. To determine the factors that uniquely predicts retirement confidence among working women.

1.6 Hypothesis

There are 8 null hypotheses that will be discussed in the present study:

- H₀1 : There is no significant difference in retirement confidence between married and non-married respondents.
- H_02 : There is no significant difference in retirement confidence between respondents who save for retirement and respondents who save for other purposes.
- H_o3 : There is no significant relationship between money adequacy and retirement confidence among respondents.
- H_04 : There is no significant relationship between age and retirement confidence among respondents.
- H_o5 : There is no significant relationship between education and retirement confidence among respondents.
- H_o6 : There is no significant relationship between financial literacy and retirement confidence among respondents.
- H_07 : There is no significant relationship between financial management practices and retirement confidence among respondents.

H_o8 : Individual characteristics (age, education, marital status, and money adequacy), financial literacy, saving motives, and financial management practices are not the significant determinants of retirement confidence among respondents.

1.7 Definition of Terminology

This present study involves the use of certain important terminologies. These terms will be defined and explained further in this section.

1.7.1 Working Women

Conceptual Definition:

Working women refers to female who participate in workforce and contribute to the families' income (Boushey, & O'Leary, 2010).

Operational Definition:

Working women refers to women who work in government agency in Malaysia who are above the age of 21 years old.

1.7.2 Retirement Confidence

Conceptual Definition:

Retirement confidence refers to the state of confidence to have enough money in order to live comfortably during retirement stage (Helman et al., 2013).

Operational Definition:

Retirement confidence refers to working women who believe that they are well-prepared for their retirement life with sufficient funds. Confidence of respondents can be defined by examining the retirement preparedness among respondents; the higher the mean score, the higher it is for the retirement confidence. (Kim, Kwon & Anderson, 2005b)

1.7.3 Financial Literacy

Conceptual Definition:

Financial literacy refers to the ability of an individual to make informed judgement and manage various financial conditions (Samy, Nagar, Huang, & Tawfik, 2008).

Operational Definition:

Financial literacy in this study refers to the working women's knowledge towards financial aspects (general knowledge, credit card, debt and loan, Islamic banking, and saving and investment). Financial literacy among respondents is being further examined whereby higher score indicates higher level of financial literacy (Sabri & MacDonald, 2010).

1.7.4 Financial Management Practices

Conceptual Definition:

Financial management practices refer to a set of behaviour which includes cash management, credit management, financial planning, investments, insurance, retirement planning, and estate planning (Dowling, Cornet, & Hoiles, 2009).

Operational Definition:

Financial management practices in this study refer to working women's ability in managing their financial aspects (cash management, credit management, and risk management). Their actions and decisions are made to meet their targeted objectives; higher score indicates better financial management practices (Hogarth & Anguelov, 2004).

1.7.5 Saving Motives

Conceptual Definition:

Saving motives refer to the saving purposes for future preparation of life planning rather than keeping money for no reasons (Hong, Sung, & Kim, 2002).

Operational Definition:

Saving motives in this study refer to working women saving purposes. For those who aim to save for retirement indicated they do have prepared for their retirement life (Haron, Sharpe, Adel-Ghany, & Masud, 2013).

1.8 Limitations

Similar to the other research, there are several limitations presented in this present study. Current study is only focusing on women who work in government agencies in Peninsular Malaysia. So, the result of the study could not be generalized beyond this population. Further studies should include wider population in order to have a better generalization. For example, the involvement of both government and private agencies should be done in order to achieve a greater generalization. Secondly, this study is a cross-sectional study. Therefore, the causal relationship between the variables remains unclear. For instance, although significant relationship has been proven between financial literacy and retirement confidence, the direction of causality is still remained unknown. Thirdly, the present study is based on self-reported questionnaire. Thus, respondent biasness might exist, which may yield inaccurate results. For example, the respondents might choose the "correct" answer rather than their true practices. As mentioned in previous section, retirement planning is a very complex process. There are some unidentified factors that can affect retirement confidence among the respondents.

REFERENCES

- Ahad, N. A., Yin, T. S., Othman, A. R., & Yaacob, C. R. (2011). Sensitivity of normality tests to non-normal data. *Sains Malaysiana*, 40(6), 637-641.
- Ahmad N. A., Masud, J., & Ibrahim, R. (2013). Domains of pre-retirement planning: Experiences of never-married malay women retirees of the Malaysian civil services. *The Macrotheme Review*, 2(5), 79-96.
- Alessie, R. J., Van Rooij, M., & Lusardi, A. (2011). Financial literacy, retirement preparation and pension expectations in the Netherlands (Working Paper No. w17109). Retrieved from National Bureau of Economic Research website http://www.nber.org/papers/w17109
- Amato, P. R. (2000). The consequences of divorce for adults and children. *Journal of Marriage and Family*, 62(4), 1269-1287.
- Andrade, C., Bazelais, W., & Das, N. (2014). *The effect of financial literacy on retirement planning*. Retrieved from http://academyfinancial.org/wp-content/uploads/2014/01/B2_Andrade_Bazelais_Das.pdf
- Arkib (2014, February 11). Kos sara hidup bukan alasan jadi muflis. *Utusan Malaysia*. Retrieved from http://www.utusan.com.my/utusan/Dalam_Negeri/20140211/dn_23/Kos-sara-hidup-bukan-alasan-jadi-muflis
- Australia and New Zealand Banking Group Limited (2011). Adult financial literacy in Australia. Retrieved from http://www.anz.com/resources/3/d/3dbcd380493e8b9395e5d7fc8cff90cd/2011 -Adult-Financial-Literacy-Summary.pdf.pdf?MOD=AJPERES
- Badrul, M. (2014, February 20). Debts among us: Young Malaysian are going bankrupt.

 Malaysian

 Digest. Retrieved from http://www.malaysiandigest.com/opinion/488936-debts-among-us-young-malaysians-are-going-bankrupt.html
- Bandura, A. (1977), Social learning theory. Englewood Cliffs, NJ: Prentice Hall.
- Bender, K. A. (2012). An analysis of well-being in retirement: The role of pensions, health, and 'voluntariness' of retirement. *The Journal of Socio-Economics*, 41(4), 424-433.
- Boone, H. N., & Boone, D. A. (2012). Analyzing likert data. *Journal of Extension*, 50(2). Retrieved from http://www.joe.org/joe/2012april/tt2.php
- Borella, M., & Fornero, E. (2009). Adequacy of Pension Systems in Europe: An analysis based on comprehensive replacement rates. Retrieved from http://aei.pitt.edu/10967/1/1837[1].pdf

- Bosworth, B., & Burke, K. (2012). Changing sources of income among the aged population. Retrieved from http://crr.bc.edu/wp-content/uploads/2012/11/wp_2012-27-508.pdf
- Boushey, H. & O'Leary, A. (2010). How working women are reshaping America's families and economy and what it means for policymakers. Retrieved from http://www.americanprogress.org/wp-content/uploads/issues/2010/03/pdf/our_working_nation.pdf
- Broadridge Investor Communication Solution, Inc. (2013). Borrowing options: Secured vs. unsecured loans. Retrieved from https://eyfpc.com/Portals/0/Documents/Secured% 20vs% 20Unsecured% 20Loans.pdf
- Brown, M., & Graf, R. (2013).Financial literacy and retirement planning in Switzerland. Retrieved from http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1133&context=nu meracy
- Bucks, B. K., Kennickell, A. B., Mach, T. L. & Moore, K. B. (2009). Recent changes in U.S. family finances: Evidence from the 2004 and 2007 Survey of Conusmer Finances. *Federal Reserve Bulletin*, *95*, A1-A55.
- Campbell, D. E. (2006). What is education's impact on civic and social engagement.

 Retrieved from http://www1.oecd.org/education/innovation-education/37425694.pdf
- Carifio, J., & Perla, R. J. (2007). Ten common misunderstandings, misconceptions, persistent myths and urban legends about Likert scales and Likert response formats and their antidotes. *Journal of Social Sciences*, 3(3), 106-116.
- Carifio, J., & Perla, R. (2008). Resolving the 50-year debate around using and misusing Likert scales. *Medical education*, 42(12), 1150-1152.
- Chan, Y. F., Masud, J., Hamid, T. A., & Paim, L. (2010). Financial wellbeing of older peninsular Malaysians: A gender comparison. *Asian Social Science*, 6(3), 58-71.
- Chatterjee, S., Salter, J. R., & Harness, N. J. (2011). Financial confidence among retirees: The role of financial advice and planning duration. *Economics Bulletin*, 31(1), 315-323.
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107-128.
- Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review*, 11(3), 289-307.
- Clason, D. L., & Dormody, T. J. (1994). Analyzing data measured by individual Likert-type items. *Journal of Agricultural Education*, *35*(4), 31-35.

- Commission for Financial Literacy and Retirement Income (2013).Financial knowledge and behaviour survey: Key point summary. Retrieved from http://www.cflri.org.nz/sites/default/files/docs/FL-FinKnowBehavSurvey-Summary-Jun-2013.pdf
- Dada, M. F. (2004). Counselling strategies for managing pre-retirement anxiety among employees. Retrieved from http://www.unilorin.edu.ng/publications/idowuade/Prof.%20Idowu's%20Paper.pdf
- Darity, W. A., & Mason, P. L. (1998). Evidence on discrimination in employment: Codes of color, codes of gender. *The Journal of Economic Perspectives*, 63-90
- Davis, E. P., & Weber, J. A. (1990).Patterns and obstacles to financial management. *Financial Counseling and Planning*, 1, 41-51.
- Deacon, R., & Firebaugh, F. (1988). Family resource management: Principles and applications. Boston, MA: Allyn and Bacon.
- Delafrooz, N., & Paim, L. H. (2011). Determinants of saving behaviour and financial problem among employees in Malaysia. *Australian Journal of Basic and Applied Sciences*, 5(7), 222-228.
- Department of Statistics Malaysia (2013).State/District Social Statistics Malaysia 2013.

 Retrieved from http://www.statistics.gov.my/portal/download_Labour/files/PSND/Perangkaan _Sosial_Negeri-Daerah_Malaysia2013.pdf
- Devaney, S. A. & Su, T. P. (1997). Factors predicting the most important source of retirement income. *Compensation and Working Conditions*, 25-31.
- Dollahite, D. C. (1991). Family resource management and family stress theories: Toward a conceptual integration. *Lifestyles: Family and Economic Issues*, 12(4), 361-377.
- Dommermuth, M. (2014). *The* era of an aging society: Are Malaysians ready for retirement? Retrieved from https://www.maaklmutual.com.my/Html/Spotlight/14_AreMalaysiansReadyf orRetirement(MC).pdf
- Dowling, N. A., Cornet, T., & Hoiles, L. (2009). Financial management practices and money attitudes as determinants of financial problems and dissatisfaction in young male austrialian workers. *Journal of Financial Counseling and Planning*, 20(2), 6.
- Durkin, T. A. (2000). Credit cards: Use and consumer attitudes, 1970-2000. *Fed.Res. Bull.*, 86, 623-634. Retreived from http://www.federalreserve.gov/pubs/bulletin/2000/0900lead.pdf
- Dynan, K. E., Skinner, J., & Zeldes, S. P. (2004). Do the rich save more?. *Journal of Political Economy*, 112(2), 397-444.

- Emmons, W. R., & Noeth, B. J. (2013). The economic and financial status of older Americans: Trends and prospects. Retrieved from http://www.appam.org/assets/1/7/The_Economic_and_Financial_Status_of_Older_AmericansTrends_and_Prospects.pdf
- Employee Benefit Research Institute (2006). Retirement plans and retirement confidence in higher education [Note]. Retrieved from http://www.ebri.org/pdf/notespdf/EBRI_Notes_03-20063.pdf
- Faisal, M., Akhtar, A., & Rehman (n.d.). Awareness of islamic banking in India: An empirical study.Retrieved from https://www.academia.edu/5218913/AWARENESS_OF_ISLAMIC_BANKING_IN_INDIA-An_Empirical_Study
- Falahati, L., & Paim, L. (2011). Gender differences in financial literacy among college students. *Journal of American Science*, 7(6), 1180-1183.
- Falahati, L., Paim, L., Ismail, M., Haron, S. A., & Masud, J. (2011). Assessment of university students' financial management skills and educational needs. *African Journal of Business Management*, 5(15), 6085-6091.
- Fillenbaum, G. G., George, L. K., & Palmore, E. B. (1985). Determinants and consequences of retirement among men of different races and economic levels. *Journal of Gerontology*, 40(1), 85-94.
- Folk, J. Y., Beh, L. S., & Baranovich, D. L. (2012). Financial education: Determinant of retirement planning in malaysia. *Journal of Business Management & Economics*, 3(2), 69-78.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 19, 39-50.
- Fowdar, S. (2007). Financial literacy: Evidence from Mauritius. Retrieved from http://www.mrc.org.mu/Projects/ESFinancial.pdf
- Furnham, A. (1985). Why do people save? Attitudes to, and habits of saving money in Britain. *Journal of Applied Social Psychology*, 15(5), 354-373.
- Gale, W. G., & Levine, R. (2011). Financial literacy: What works? How could it be more effective?. How could it be more effective. Retreived from https://www.cgsnet.org/ckfinder/userfiles/files/10_financial_literacy_gale_levine.pdf
- George, D., Mallery, P. (2001). SPSS for windows step by step: A Simple Guide and Reference. *Boston: Allyn*.
- Githui, T., & Ngare, P. (2014). Financial Literacy and retirement planning in the informal sector in Kenya. *International Journal of Education and Research*, 2(1). Retrieved from http://www.ijern.com/journal/January-2014/21.pdf

- Grall, T. S. (2007). Custodial mothers and fathers and their child support: 2005. Retrieved from https://www.census.gov/prod/2007pubs/p60-234.pdf
- Gunsualey, C.(2000). Crushing consumer debt hinders plan participation. Retrieved from http://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=3&sid=7a2ee761-35ea-44e3-9729-434468ecf394%40sessionmgr112&hid=121
- Haron, S. A., Sharpe, D. L., Abdel-Ghany, M., & Masud, J. (2012). Moving up the savings hierarchy: Examining savings motives of older Malay Muslims. *Journal of Family and Economic Issues*, 34(3), 314-328.
- Harnish, T. L. (2010). Boosting financial literacy in America: A role for state colleges and universities. *American Association of State Colleges and Universities*. Retrieved from http://www.aascu.org/policy/publications/perspectives/financialliteracy.pdf
- Helman, R. (2014). The 2014 retirement confidence survey: Confidence rebounds for those with retirement plans. *EBRI Issue Brief*(397). Retrieved from http://www.ebri.org/pdf/briefspdf/ebri_ib_397_mar14.rcs.pdf
- Helman, R., Adams, N., Copeland, C., & Van Derhei, J. (2013). The 2013 retirement confidence survey: Perceived savings needs outpace reality for many. *EBRI Issue Brief* (384). Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_03-13.No384.RCS2.pdf
- Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2014a). The 2014 Retirement Confidence Survey: Confidence rebounds for those with retirement plans. *EBRI* Issue Brief. Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_397_Mar14.RCS.pdf
- Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2014b). 2014 RCS fact sheet #1. Retrieved from http://www.ebri.org/pdf/surveys/rcs/2014/RCS14.FS-1.Conf.Final.pdf
- Helman, R., Copeland, C., & VanDerhei, J. (2012). The 2012 Retirement Confidence Survey: Job insecurity, debt weigh on retirement confidence, savings. *EBRI Issue Brief* (369).. Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_03-2012_No369_RCS2.pdf
- Helman, R., VanDerhei, J., & Copeland, C. (2008a). Americans Much More Worried About Retirement, Health Costs a Big Concern. *EBRI Issue Brief* (316).. Retrieved from http://www.ebri.org/pdf/briefspdf/ebrI_Ib_04-2008.pdf
- Helman, R., VanDerhei, J., & Copeland, C. (2008b). 2008 Retirement Confidence Survey fact sheet: Gender comparisons among workers. Retrieved from http://www.ebri.org/files/RCS08_FS3_Gender.pdf
- Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2009). What drives pension worries in Europe? A multilevel analysis (Discussion Paper 10/2009 055). Retrieved from http://arno.uvt.nl/show.cgi?fid=100124

- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. Federal *Reserve Bulletin*, 87, 309-322
- Hogarth, J. M., & Anguelov, C. E. (2004). Are families who use e-banking better financial manager? *Financial Counseling and Planning*, 15(2), 61-77.
- Hsu, C., & Leech, I. E. (n.d.).Retirement income satisfaction of American retired workers. Retireved from http://www.fermascholar.org/wp-content/uploads/2013/09/P6_retirement-income-satisfaction_Hsu.pdf
- Hong, G. S., Sung, J., & Kim, S. M. (2002). Saving behavior among Korean households. *Family and Consumer Sciences Research Journal*, 30(4), 437-462
- Hung, A., Parker, A., & Yoong, J. (2009). Defining and measuring financial literacy. RAND Corporation Publications Department.. Retrieved from http://www.rand.org/content/dam/rand/pubs/working_papers/2009/RAND_W R708.pdf
- Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296-316.
- Ibrahim, D., Isa, Z. M., & Ali, N (2012). Malaysian savings behavior towards retirement planning. *International Conference on Economics Marketing and Management*, 28, 102-105.
- Israel, G. D. (1992). Determining sample size. Retrieved from http://www.soc.uoc.gr/socmedia/papageo/metaptyxiakoi/sample_size/samplesize1.pdf
- Jackson, R., Howe, N., & Peter, T. (2012).Balancing tradition and modernity: The future of retirement in East Asia. Retrieved from http://csis.org/files/publication/120711_retirement_east_asia.pdf
- Jabatan Perkhidmatan Awam (n.d.). Pension scheme & pension benefit. Retrieved from http://www.jpapencen.gov.my/english/pension_benefits.html
- Joo, S. H., & Grable, J. E. (2001). Factors associated with seeking and using professional retirement-planning help. *Family and Consumer Sciences Research Journal*, 30(1), 37-63.
- Joo, S. H., & Pauwels, V. W. (2002). Factors affecting workers' retirement confidence: A gender perspective. *Financial Counseling and Planning, 13*(2), 1-10.
- Katona, G. (1975). Psychological economics. New York: Elsevier.
- Keynes, J. M. (1936). The general theory of employment, interest and money. London: MacMillan.

- Kim, J., Garman, E. T., & Quach, A. (2005a). Workplace financial education participation and retirement savings by employees and their spouses. *Journal of Personal Finance*, 4(3), 92-108.
- Kim, J., Kwon, J., & Anderson, E. A. (2005b). Factors related to retirement confidence: Retirement preparation and workplace financial education. *Financial Counseling and Planning*, 12(2), 77-89.
- Kong, S. H. (2014, April 28). Easiest way to become a bankrupt. *The Sun Daily*. Retrieved from http://www.thesundaily.my/news/1029680
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educ Psychol Meas 607-610. Retrieved from http://home.kku.ac.th/sompong/guest_speaker/KrejcieandMorgan_article.pdf
- Lee, J. M., & Hanna, S. D. (2011). The Influence of Saving Objectives on Saving: First Response Versus Any Response for Objectives (pp. 1-26). Working Paper Series.
- Lee, W. K. M., & Law, K. W. K. (2004). Retirement planning and retirement satisfaction: The need for a national retirement program and policy in Hong Kong. *Journal of applied gerontology*, 23(3), 212-233
- Lee, S., Park, M. H., & Montalto, C. P. (2000). The effect of family life cycle and financial management practices on household saving patterns. *Journal of Korean Home Economics Association English Edition*, 1(1), 79-93.
- Lerman, R. I. (2002). Marriage and the economic well being of families with children:

 A review of the literature. Retrieved from http://www.urban.org/UploadedPDF/410541_LitReview.pdf
- Li, J. Y., Montalto, C. P., & Geistfeld, L. V. (1996). Determinants of financial adequacy for retirement. *Financial Counseling and Planning*, 7, 39-48.
- Lusardi, A. (2009). Planning for retirement: The importance of financial literacy. *Public Policy & Aging Report*, 19(3), 7-13.
- Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare?. *American Economic Review: Papers & Proceeding*, 98(2), 413-417.
- Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs*, 44(2), 358-380.
- Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? *American Economic Review: Papers & Proceedings*, 98(2), 413-417.
- Lusardi, A., & Mitchell, O. S. (2011). *Financial literacy and planning: Implications for retirement wellbeing* (Working Paper No. w17078). Retrieved from National Bureau of Economic Research website http://www.nber.org/papers/w17078

- Lusardi, A, & Tufano, P. (2009). Debt literacy, financial experiences, and overindebtedness (Working Paper No. w14808). Retrieved from National Bureau of Economic Research website http://www.nber.org/papers/w14808
- Lytton, R. H. & Porter, N. M. (1995). Financial management: Do consumers practice what educators preach? *The Journal of Consumer Education*, *13*, 10-18.
- Mahani, I. (2014, June 12). Simpanan hari tua. *Berita Harian*. Retrieved from http://www.bharian.com.my/bharian/articles/Simpananharitua/Article/
- Malroutu, Y. L., & Xiao, J. J. (1995). Perceived adequacy of retirement income. *Financial Counselling and Planning*, 6(2), 17-24.
- Mandell, L. (2008). *The financial literacy of young American adults*. Washington, DC: The Jump\$tart Coalition for Personal Financial Literacy.
- Mastin, T. (1998). Employees' understanding of employer-sponsored retirement plans, a knowledge gap perspective. *Public Relations Review*, 24(4), 521-534.
- Masud, J., Haron, S. A., & Gikonyo, L. (2012). Exploring economic status of the elderly in Peninsular Malaysia using net flow and net worth. *International Journal of Humanities and Social Science*, 2(17), 154-160.
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. Franco Modigliani, 1.
- Moorthy, M. K., Chelliah, T. D., Chiau, S. S., Lai, C. L., Ng, Z. K., Wong, C. R., & Wong, Y. T. (2012). A study on the retirement planning behaviour of working individuals in Malaysia. *International Journal of Academic Research in Economics and Management Sciences*, 1(2), 54-72.
- Mottola, G. R. (2013). In our best interest: Women, financial literac, and credit-card behaviour. *Numeracy*, 6(2), 1-15.
- Mullock, K., & Turcotte, J. (2012). Financial literacy and retirement saving (Working Paper 2012-01). Retrieved from Department of Finance Canada website http://www.fin.gc.ca/wp/2012-01-eng.asp
- Muske, G., &Winter, M. (2004). Personal financial management education: An alternative paradigm. *Journal of Financial Counseling and Planning*, 15(2), 79-88.
- Mutran, E. J., Reitzes, D. C., & Fernandez, M. E. (1997). Factors that influence attitudes toward retirement. *Research on Aging*, 19(3), 251-273.
- Noone, J., Alpass, F., & Stephens, C. (2010). Do men and women differ in their retirement planning? Testing a theoretical model of gendered pathways to retirement preparation. *Research on Aging*, 32(6), 715-738.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

- Nyamute, W., & Maina, J. K. M. (2011). Effect of financial literacy on personal financial mangement practices: a case study of employees of finance and banking institututions. Retreived from http://erepository.uonbi.ac.ke/bitstream/handle/11295/9897/aibuma2011-submission224% 20-% 20EFFECT% 20OF% 20FINANCIAL% 20LITERACY% 20ON% 20PERSON AL% 20FINANCIAL% 20MANAGEMENT% 20PRACTICES.pdf?sequence=1
- Olsen, A., & Whitman, K. (2007). Effective retirement savings programs: Design features and financial education. *Social Security Bulletin*, 67(3), 53-72.
- Organization for Economic Co-operation and Development (2013). Financial literacy and inclusion: Results of OECD/ INFE survey across countries and by gender. Retrieved from http://www.oecd.org/daf/fin/financial-education/TrustFund2013_OECD_INFE_Fin_Lit_and_Incl_SurveyResults_by _Country_and_Gender.pdf
- Pallant, J. (2010). SPSS survival manual: A step by step guide to data analysis using SPSS. McGraw-Hill International.
- Park, D., & Estrada, G. B. (2012). Developing Asia's Pension Systems and Old-Age Income Support (Working Paper No. 358). Retireved from http://www.adbi.org/files/2012.04.26.wp358.dev.asia.pension.systems.pdf
- Park, D., & Estrada, G. B. (2013). Emerging Asia's Public Pension Systems: Challenges and Reform Efforts. Retrieved from http://209.133.61.144/external/np/seminars/eng/2013/oapfad/pdf/park_ppr.pdf
- Parrotta, J. L., & Johnson, P. J. (1998). The impact of financial attitudes and knowledge on financial management and satisfaction of recently married individuals. *Financial Counseling and Planning*, 9(2), 59-74.
- Pell, G. (2005). Use and misuse of Likert scales. Medical Education, 39(9). Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2929.2005.02237.x/pdf
- Quick, H. E., & Moen, P. (1998). Gender, employment and retirement quality: A life course approach to the differential experiences of men and women. *Journal of Occupational Health Psychology*, *3*(1), 44-64.
- Rahim, M. S., Yusof, M. A., & Ismail, M. S. (2011). The reporting of employee retirement benefits in Malaysia prior to FRS119. *International Journal of Business and Social Science*, 2(5), 249-258.
- Reiizes, D. C., Mutran, E. J., & Fernandez, M. E. (1994). Middle-Aged working men and women similar and different paths to self-esteem. *Research on Aging*, 16(4), 355-374.
- Rosenberg, E., & Gleit, A. (1994). Quantitative methods in credit management: a survey. Operations research, 42(4), 589-613.

- Ross, C. E., & Van Willigen, M. (1997). Education and the subjective quality of life. *Journal of Health and Social Behavior*, 38, 275-297.
- Russell, K., & Stramoski, S. (2011). Financial management practices and attitudes of dental hygienists: A descriptive study. *American Dental Hygienists Association*, 85(4), 340-347.
- Sabri, M. F., & MacDonald, M. (2010). Savings behavior and financial problems among college students: The role of financial literacy in Malaysia. *Cross-Cultural Communication*, 6(3), 103-110.
- Salkind, N. J. (2005). *Exploring research*. New York, NY: Macmillan Publishing Company.
- Samat, S. Z. (2010). Islamic banking: The lessons and challenges in Malaysia and beyond [PowerPoint slides] . Retrieved from http://www.bankislam.com.my/en/documents/shariah/presentationtofstep-dsz.pdf
- Samy, M., Nagar, A. K., Huang, R., & Tawfik, H. (2008). Financial literacy of youth: A sensitivity analysis of the determinants. *International Journal of Economic Sciences and Applied Research* 1(1), 55-70.
- Schafgans, M. (2000). Gender wage differences in Malaysia: Parametric and semiparametric estimation. *Journal of Development Economics*, 63(2), 351-378.
- Schellenberg, G., & Ostrovsky, Y. (2008). The retirement plans and expectations of older workers. *Canadian Social Trends*, 86, 11-34.
- Smith, D. B., & Moen, P. (2004). Retirement satisfaction for retirees and their spouses:

 Do gender and the retirement decision-making process matter? *Journal of Family Issues*, 25(2), 262-285.
- Stanford Center on Longevity (2012).Retirement planning in the age of longevity.

 Retrieved from http://longevity3.stanford.edu/wp-content/uploads/2012/12/Retirement-in-the-Age-of-Longevity-Conference-Proceedings11.pdf
- Steinberg, A., & Lucas, L. (2004). Shifting responsibility to workers: The future of retirement adequacy in the United States. *Benefits quarterly*, 20(4), 15-26.
- Sundali, J., Westerman, J. W., & Stedham, Y. (2008). The importance of stable income sources in retirement: An exploratory study. *Journal of Behavioral & Applied Management*, 10(1), 18-46.
- Taft, M. K., Hosein, Z. Z., Mehrizi, S. M. T., & Roshan, A. (2013). The relation between financial literacy, financial wellbeing and financial concerns. *International Journal of Business & Management*, 8(11), 63-75.

- Tan, H. B., Hoe, S. Y., & Hung, W. T. (2011). Financial literacy and personal financial planning in Klang Valley, Malaysia. *International Journal of Economics and Management*, 5(1), 149-168.
- Taylor, P., Fry, R., Cohn, D., Wang, W., Velasco, G., & Dockterman, D. (2010). Women, men and the new economics of marriage. Retrieved from http://www.pewsocialtrends.org/files/2010/10/new-economics-of-marriage.pdf
- Taylor-Carter, M. A., Cook, K., & Weinberg, C. (1997). Planning and expectations of the retirement experience. *Educational Gerontology: An International Quarterly*, 23(3), 273-288.
- The Edge Communication Sdn Bhd. (2014). The three components of retirement planning. Retrieved from http://www.ppa.my/wp-content/uploads/2014/02/The-Three-Components-of-Retirement-Planning.pdf
- The Organisation for Economic Co-operation and Development (2008).Rising food prices: Cause and consequences. Retrieved from http://www.oecd.org/trade/agricultural-trade/40847088.pdf
- Thode, H. C. (2002). Testing for normality (Vol. 164).CRC Press.
- Titus, P. M., Fanslow, A. M., & Jira, T. K. (1989). Effect of financial management knowledge of household money managers on behaviours and financial outputs. *Journal of Vocational Home Economics Education*, 7(1), 58-70.
- Turner, M. J. (1989). Factors influencing attitude toward retirement and retirement planning among midlife university employees (Doctoral dissertation, Texas Tech University).
- Turner, M. J., & Scott, J. P. (1994). Factors influencing attitude toward retirement and retirement and retirement planning among midlife universities employees. *The Journal of Applied Gerontology*, 13(2), 143-156.
- Turyn, T., Helman, R., & Greenwald, M. (2001). Women on savings and retirement:

 Results from the 2000 women's retirement confidence survey. *EBRI Notes*, 22(2).Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=261975#
- Uccello, C. E. (2001). Are Americans saving enough for retirement? Retrieved from http://crr.bc.edu/wp-content/uploads/2001/07/ib_7.pdf
- VanDerhei, J. (2011). The Importance of Defined Benefit Plans for Retirement Income Adequacy. EBRI Notes, 32(8). Retreived from http://www.nystrs.org/main/library/ebri_notes.pdf
- Van Dalen, H. P., Henkens, K., & Hershey, D. A. (2008). Are pension savings sufficient? Perceptions and expectations of American and Dutch workers (Working Paper No. 2008-58). Retrieved from https://www.nidi.nl/shared/content/output/2008/center-discussion-2008-58.pdf

- Van Dalen, H. P., Henkens, K., & Hershey, D. A. (2010). Perceptions and expectations of pension savings adequacy: A comparative study of Dutch and American workers. *Ageing and Society*, 30(5), 731-754.
- Van Rooij, M. C. J., Lusardi, A., & Alessie, R. J. M. (2012). Financial literacy, retirement planning and household wealth. *The Economic Journal*, 122(560), 449-478.
- Wahyuni, E. S. (2008). Gender issues in elderly care in Malaysia and Japan. *Are We Up to the Challenge?*, 67-76.
- Winkler, A. E. (1998). Earnings of husbands and wives in dual-earner families. *Monthly Labor Review*, 121, 42-48.
- Xiao, J. J., & Anderson, J. G. (1997). Hierarchical financial needs reflected by household financial asset shares. *Journal of Family and Economic Issues*, 18(4), 333-355.
- Xiao, J. J., & Fan, J. X. (2002). A comparison of saving motives of urban Chinese and American workers. *Family and Consumer Sciences Research Journal*, 30(4), 463–495.
- Xiao, J. J., & Noring, F. E. (1994). Perceived saving motives and hierarchical financial needs. *Financial Counseling and Planning*, 5(1), 25-44.
- Yakoboski, P. J. (2011a). Trends and issues: retirement confidence on campus: Tthe 2011 higher education retirement confidence survey. Retrieved from https://www.tiaa-crefinstitute.org/public/pdf/institute/research/trends_issues/ti_higheredRCS06 11_02.pdf
- Yakoboski, P. J. (2011b). Retirement confidence among hospital employees. Retrieved from https://www.tiaa-cref.org/public/pdf/healthcare/ti_rchospital1211.pdf
- Yoong, F. K., See, B. L., & Baronovich, D. L. (2012). Financial literacy key to retirement planning in Malaysia. *Journal of Management and Sustainability*, 2(1), 75-86.
- Yuh, Y., & Hanna, S. D. (2010). Which Households Think They Save?. *Journal of Consumer Affairs*, 44(1), 70-97.
- Yuh, Y., Montalto, C. P., & Hanna, S. D. (1998). Are Americans prepared for retirement?. Retrieved from http://www.afcpe.org/assets/pdf/vol911.pdf
- Yusoff, M., & Shamsuddin, A. S. (2003). Muslim consumer attitude towards Islamic Finance products in a Non Muslim Country. *Jurnal Kemanusiaan*, 94-103.
- Zaimah, R., Sarmila, M. S., Lyndon, N., Azima, A. M., Selvadurai, S., Suhana Saad, and Er, A. C. (2013). Financial behaviours of female teachers in Malaysia. *Asian Social Science*, 9(8), 34-41.

Zin, R. H. M., Lee, H. A., & Abdul-Rahman, S. (2002). Social protection in Malaysia. *Social Protection in Southeast and East Asia*, 121-169.

