



***RELATIONSHIPS AMONG SOCIO-DEMOGRAPHIC FACTORS, FAMILY CHARACTERISTICS AND GRANDPARENT-GRANDCHILDREN RELATIONSHIP QUALITY WITH PSYCHOLOGICAL WELL-BEING AMONG THE MALAYSIAN ELDERLY***

**THAMILSELVI A. PANDIALAGAPPAN**

**IPPM 2018 6**



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By

**THAMILSELVI A. PANDIALAGAPPAN**

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

**August 2018**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in  
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**August 2018**

**Chair : Associate Professor Rahimah Ibrahim, PhD**  
**Faculty : Malaysian Research Institute on Ageing**

Psychological well-being as one of the most important indicators of successful aging has received substantial attention in the gerontological literature. Prior studies show that factors influencing elderly's psychological well-being are multiple and differ across cultures. The aim of this study was to examine the relationships between socio-demographic factors, family characteristics, and grandparent-grandchild relationship quality with psychological well-being among Malaysian elderly. The study included 600 grandparents aged between 41–93 years, selected through a multistage stratified random sampling method within Peninsular Malaysia. WHO-Five well-being index was used to measure psychological well-being. The descriptive study employed secondary data analysis which was collected for the purpose of Development and Testing of Grandparenting Stressor-Strength Inventory in Malaysia. Data analysis was conducted using the IBM SPSS version 22.0. Amongst the socio-demographic factors and family characteristics, grandparent's (G1) age, ethnicity, marital status, health status, level of education, adult child's (G2: father or mother of grandchild) marital status, parent-grandparent (G1-G2) relationship, grandchild's (G3) age and birth order, grandparent-grandchild (G1-G3) relationship quality was significantly associated with psychological well-being at bivariate level. Using multiple regression analysis, a significant model emerged ( $F(10, 589) = 49.004, p < .001$ ) where grandparent's ethnicity, health status, educational level, adult child (G2) marital status, and grandparent-grandchild relationship quality were significant predictors of psychological well-being among Malaysian elderly. Moderated hierarchical regression analysis demonstrated that grandparent's

level of education significantly moderates the association between grandparent-grandchild relationship quality and psychological well-being, after controlling for ethnicity, health status and G2 marital status. For older Malaysians, higher educational level was found to enhance the association between their relationship quality with grandchildren and their psychological well-being. Therefore, policy makers, and practitioners who work with elderly people should give special attention on the health, educational level and intergenerational relationships in the family.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia  
sebagai memenuhi keperluan untuk ijazah Sarjana Sains

**HUBUNGAN ANTARA FAKTOR SOSIO-DEMOGRAFI, CIRI KELUARGA  
DAN KUALITI HUBUNGAN DATUK NENEK-CUCU DENGAN  
KESEJAHTERAAN PSIKOLOGI DALAM KALANGAN WARGA TUA  
MALAYSIA**

Oleh

**THAMILSELVI A. PANDIALAGAPPAN**

**Ogos 2018**

**Pengerusi : Associate Professor Rahimah Ibrahim, PhD**  
**Fakulti : Institut Penyelidikan Penuaan Malaysia**

Kesejahteraan psikologi sebagai salah satu petunjuk yang paling penting dalam penuaan yang berjaya telah mendapat perhatian dalam kajian gerontologi. Kajian lepas menunjukkan bahawa faktor yang mempengaruhi kesejahteraan psikologi warga tua adalah pelbagai dan berbeza antara budaya. Tujuan kajian ini adalah untuk meneliti hubungan antara faktor sosio-demografi, ciri keluarga dan kualiti hubungan datuk nenek-cucu dengan kesejahteraan psikologi dalam kalangan warga tua Malaysia. Kajian ini melibatkan 600 datuk nenek berumur antara 41-93 tahun yang dipilih melalui kaedah persampelan rawak pelbagai peringkat berstrata dari Semenanjung Malaysia. Indeks kesejahteraan WHO digunakan untuk mengukur kesejahteraan psikologi. Reka bentuk kajian deskriptif ini telah menggunakan data sekunder yang dikumpul untuk tujuan Pembangunan dan Pengujian Inventori Kekuatan dan tekanan datuk nenek di Malaysia. Analisis data dilakukan dengan menggunakan IBM SPSS 22.0. Daripada faktor sosio-demografi dan ciri-ciri keluarga, umur, etnik, status perkahwinan, tahap pendidikan dan status kesihatan datuk nenek (G1), hubungan antara ibu bapa-datuk nenek (G1-G2), kualiti hubungan datuk nenek-cucu (G1-G3), status perkahwinan generasi anak dewasa (G2: ibu atau bapa cucu) umur, dan turutan kelahiran cucu (G3) dikaitkan dengan kesejahteraan psikologi pada tahap bivariat. Dengan menggunakan analisis regresi berganda, satu model yang signifikan telah muncul ( $F(10, 589) = 49.004, p < .001$ ) di mana etnik, status kesihatan, dan tahap pendidikan datuk nenek, status perkahwinan anak dewasa (G2) dan kualiti hubungan datuk nenek-cucu adalah peramal kesejahteraan psikologi dalam kalangan warga tua Malaysia. Hasil analisis regresi hierarki moderasi menunjukkan bahawa tahap pendidikan datuk nenek memoderasikan hubungan antara kualiti hubungan datuk nenek-cucu dan kesejahteraan psikologi, setelah mengawal faktor etnik, status kesihatan dan status perkahwinan anak dewasa. Bagi warga tua Malaysia, tahap pendidikan

yang lebih tinggi didapati mempertingkatkan hubungkait antara kualiti hubungan dengan cucu dan kesejahteraan psikologi mereka. Justeru, perhatian khusus perlu diberikan oleh pembuat dasar dan mereka yang bekerja dengan orang tua ke atas kesihatan dan tahap pendidikan warga tua, serta hubungan antara generasi dalam keluarga.



## ACKNOWLEDGEMENTS

First, I would like to express my sincere gratitude to my supervisor Associate Professor Rahimah Ibrahim for the constant support of my Masters study and related research, for her patience, motivation, and immense knowledge. Her guidance helped me in all the time of research and writing of the thesis.

Besides my supervisor, I would like to thank my supervisory committee: Professor Tengku Aizan Hamid, for her insightful comments and encouragement, also for the hard questions which incited me to broaden my research from various perspectives.

I thank everyone from Malaysian Research Institute on Aging and faculty of Human Ecology who helped me directly or indirectly in my study.

Last but not the least, I would like to thank my family: Kartik, my husband who is my pillar of strength, Kanapathy, my uncle, who patiently believed in me, even when I did not believe in myself. I thank my family for supporting me spiritually throughout the writing of thesis and my life in general.

Most of all, thanks to God the Divine who continuous to make the impossible possible.



I certify that a Thesis Examination Committee has met on 17 August 2018 to conduct the final examination of Thamilselvi d/o A.Pandialagappan on her thesis entitled "Relationships Among Socio-Demographic Factors, Family Characteristics and Grandparent-Grandchildren Relationship Quality with Psychological Well-Being Among the Malaysian Elderly" 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.

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Committee: \_\_\_\_\_

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## LIST OF ABBREVIATIONS

PWB	Psychological well-being
OECD	The Organisation for Economic Co-operation and Development countries



# CHAPTER 1

## INTRODUCTION

The first chapter of this thesis presents the background of the current study on the relationships between socio-demographic factors, family characteristics and grandparent-grandchild relationship quality with psychological well-being among Malaysian elderly. Subsequently a problem statement is presented about issues related to the topic of this study, followed by research questions, research objectives, research hypothesis, the significance of the study, theoretical and conceptual framework.

### 1.1 Background of the Study

As a global trend, we are dealing with an ageing society. Ageing is seen as a lifelong process from conception, birth, maturity to death. Like many other countries around the world, Malaysia is also experiencing a rapid growth of the older population which is driven by declines in fertility and increase in health and longevity. Malaysia is in the third stage of demographic transition, where fertility rates are declining faster than mortality rates. Parallel to ageing, the Malaysian family structure has become increasingly diverse. Families are experiencing a process of 'verticalization' where more generations are alive simultaneously within a lineage and a decrease in the number of people within each generation (Hamid, 2012).

Firstly, older people are living longer and are healthier so they are more available. Also rising divorce rates, increases in single parenthood, more working mothers and the globalisation of work has fuelled family change. These age composition and demographic shifts have fostered considerable interest in terms of their implications for intergenerational relationships. At the same time, population ageing has brought 'family generations' onto national agendas (Keating & Gierveld, 2015). This generational conversation is happening at the intersections of population ageing, structural changes in families and concerns about the weakening of intergenerational family solidarity and support. The heightened interest in family generations coincides with the transition of baby boomers into late life and the challenges of managing caring relationships with ageing parents and adult children (Fingerman et al., 2012).

Families passed through many changes because of social dynamics. Today more than ever in human history extended multigenerational relationships are more frequent. Because of this, intergenerational relationship should be the focus of research, as they are a necessity more than optional elements. Most studies on grandparent-grandchild relationship quality focus on different aspects of the relationship, and consider the intergenerational family at different stages of development, point to substantial heterogeneity in the role. Demographic changes that affecting the time, length, and health of elderly are not uniform across countries. Not only are the major differences in fertility, mortality, and health evident between nations, but these factors also vary ethnicity and educational levels.

In addition, Malaysia has ethnic variations in population aging (Hamid & Nurizan, 2008). Despite the great amount of attention recently devoted to studying the demographic factors and family characteristics of grandparents in the United States, Malaysia still know little about how various characteristics of multigenerational (grandparent-parent-grandchild) correlates with the grandparent-grandchild ties. Therefore, the present study emphasized on differences in grandparent-grandchild relationship quality in the context of socio-demographic factors and family characteristics among Malaysian elderly.

Furthermore, grandparent-grandchild relationship is associated with multiple benefits for both generations. For instance, grandparent-grandchild relationship benefited grandchildren with less aggressive behaviours (Goodman, 2008; Sheridan et al., 2011). On the other hand, grandparents too have numerous benefits involving themselves in their grandchildren's life. For instance, the intense grandparent-grandchild relationship it was associated with an improvement in the grandparents' mental status (Goodman, 2008). Previous studies showed grandparent-grandchild relationship as the most important social capital for older adults (Lin, 2011). It was found to have significant positive effects on older adults' life satisfaction, mental health, and depressive symptoms (Cong & Silverstein, 2008).

The factors influencing elderly's psychological well-being are multiple and vary between societies. However, considerable body of research has concluded that age (Steger et al., 2008), employment status (Reininghaus et al., 2008), and educational attainment (Salsman & Meeks, 2003) are significant factors related to psychological well-being in old age, other studies revealed that being employed (Jang et al., 2009), economic status (Diener, 2009), and level of education (Wang & Fan, 2006) are not substantial contributors of elderly's psychological well-being. It has been theorized that social support that consist of a balance of family and friends may function by promoting a sense of purpose and belonging or by protecting from stress (Antonucci et al., 2009). In other words, intergenerational support is among the most significant factors behind older adults' health and well-being (Guo, 2011). This implies that what is essential for psychological well-being in an individual may be less essential in another, because individuals have different goals in life (Diener et al., 2003). In

view of the fact that factors predicting psychological well-being among Malaysian older adults within an intergenerational context were not researched adequately, this study attempts to test the relationships between the socio-demographic factors, family characteristics and grandparent-grandchild relationship quality with psychological well-being.

An individual's education is one major social structural context embedding social relationships that may shape the importance, quality and outcomes of relationships (Umberson, 1992). According to King and Elder (1998) educationally successful grandparents would tend to actively engaged in leisure activities with grandchildren as a way to maintain their sense of self-worth. In line with the literature on social inequality it can be assumed that social class attributes such as educational attainment provide opportunities and experiences that impact on the enactment, evaluation, and outcomes of the grandparent role (King & Elder, 1998; Silverstein & Marengo, 2001). Positive and negative experiences of the grandparent-grandchild relationship quality and the related consequences for elderly psychological well-being might therefore be unequally distributed among educational groups. Hence, the present study also aimed to evaluate moderating effect of educational level on the association between grandparent-grandchild relationship quality and psychological well-being.

## **1.2 Problem Statement**

Based on the 2015 Malaysia Census, the increase in life expectancy to 74.8 years (from 68.0 in 1980) and population's median age to 27.8 years (from 19.5 in 1980) has implied a growing proportion of grandparents and a shrinking proportion of younger children in the society (Antonucci et al., 2007). Hamid and Nurizan (2008) reported that 48% of people aged 60 years or over in Malaysia were currently residing with at least one grandchild. Thus, these demographic shifts may facilitate greater possibilities for meaningful and supportive relationships between grandparents and grandchildren (Attar Schwartz & Buchanan, 2011). Despite the growing importance of older adults living together with family members in an intergenerational context, it is relevant to study the factors that are connected with grandparent-grandchild relationship quality in Malaysia. Demographic shifts have brought new concept changing the quality of grandparent-grandchild relationship.

Theoretical discussions around intergenerational relationships were long time (and to some extent still are) limited to the question, whether these dimensions are adequate (Szydlik, 2000) or complete (Bengtson et al., 2002). Most of the literature regarding grandparent-grandchild relationships starts with the typical measurements of geographical distance, availability of kin, parents, socio-demographic factors such as age, sex, marital status, health status and working arrangements. Little research has examined determinants of closeness beyond 'structural' elements described above (sex, lineage, etc.). In addition, it can be stated that apart from the intergenerational solidarity model developed by

Bengtson and Roberts in (1991), no elaborated grand theory of intergenerational relationships exists. For better understanding, the present study has combined theories from diverse disciplines such as psychology and sociology to analyse the differences in grandparent-grandchild relationship quality within multigenerational context. For instance, Bowen family systems theory is particularly strong in collecting description of the extended family systems refers to at least three generations and also illustrating the interactions between grandparents, parents, and grandchildren (Nichols & Schwartz, 2001).

Approaching in the proportion of increases older people in many developing countries has drawn attention to resolve health issues, psychological concerns and well-being. The study of psychological well-being of older persons is important because data gathered on these problems can help government to plan appropriate action for the welfare of this category of population. There are numerous factors which influence the psychological well-being of older adults and these factors differ across countries. Besides, prior studies show that socio-demographic factors influencing elderly's psychological well-being are multiple and differ across cultures. Families with elderly people encounter challenges today, especially in terms of intergenerational relationships. Very few studies investigate the association between intergenerational relationship and psychological well-being among older adults.

Grandparents' relationship with their grandchildren are often associated with well-being for both generations, with some exceptions as they engage in extensive childcare responsibilities (Kim et al., 2017; Lee et al., 2016). Most older adults engage in activities with their grandchildren found their life to be meaningful, feel closer to their grandchildren, consider the grandparent role to be significant (Swartz, 2009), and experience lower well-being if they lose contact with their grandchildren (Drew & Silverstein, 2007). However, a growing proportion of children live in households maintained by grandparents (Settersten, 2007), and grandparents who care for their grandchildren without the support of the children's parents usually experience greater stress (Lee et al., 2016) and depressive symptoms. To address these gaps, present study examined factors influencing the psychological well-being of elderly at the demographic, family and grandparent-grandchild relationship quality levels in Malaysia.

The aged of the future will be more educated compared to their predecessors with a better standard of living and quality of life as the condition of the aged are improving. Education can have a lifelong impact on life satisfaction, with higher educated older adults more likely to exhibit more positive psychosocial traits (Murrell et al., 2003). Dozens of studies show that social status plays minor role in psychological well-being (PWB). For example, within countries, there is only a weak association between socioeconomic status (SES) and dimensions of psychological well-being, including life satisfaction and the experience of positive and negative emotions (Diener et al., 1999). However, prior research linking status and psychological well-being has focused almost exclusively on SES; material dimensions of status that arise from income and wealth, so it remains

an open question whether other forms of status may have a stronger impact on psychological well-being. Therefore, this study is an attempt to fill the gap in the literature by analysing the moderating effect of grandparents' educational level on the association between grandparent-grandchild relationship quality and psychological well-being of elderly in Malaysia. In sum, multiple demographic factors, family characteristics, and the intergenerational relationships contribute to elderly psychological well-being. Previous studies, however, did not examine this joint process as a whole. The model proposed in this study complements previous research by providing a framework that integrates selected sociodemographic factors, family characteristics, level of education and grandparent-grandchild relationship quality elements into research on elderly psychological well-being.

This study was designed to answer the following research question;

1. Does grandparent-grandchild relationship quality differ by respondent's socio-demographic factors and family characteristics?
2. Are there significant association between socio-demographic variables, family characteristics, grandparent-grandchild relationship quality with psychological well-being among respondents?
3. Which factors significantly predict psychological well-being of respondents?
4. Does grandparents educational level moderate the association between grandparent-grandchild relationship quality and psychological well-being of elderly?

### 1.3 Research Objectives

The main objective of the present study is to determine the relationships between selected socio-demographic factors of respondents (age, gender, marital status, ethnicity, employment and health status of grandparents (G1), marital status of parents (G2), age, gender and birth order of grandchild (G3), family characteristics (lineage, geographic distance, number of grandchildren. parent-grandparent relationship), grandparent-grandchildren relationship quality with psychological well-being among Malaysian elderly. The present study also aimed to evaluate moderating effect of educational level on the association between grandparent-grandchild relationship quality and psychological well-being of respondents.

The specific objectives of the current study are:

1. To describe the socio-demographic variables and family characteristics of grandparent (G1), parent (G2) and grandchild (G3) in Malaysia.
2. To test the differences in the distribution of grandparent-grandchild relationship quality by selected socio-demographic and family characteristics of older adults.
3. To study the association between selected socio-demographic variables, family characteristics, grandparent-grandchild relationship quality with psychological well-being among elderly.
4. To examine the significant predictors of psychological well-being among elderly.
5. To determine the moderating effect of older adults' educational level on the association between grandparent-grandchild relationship quality and their psychological well-being.

## 1.4 Research Hypothesis

Based on the objectives of the study the following hypotheses are formulated:

Objective 2: To test the differences in the distribution of grandparent-grandchild relationship quality by selected socio-demographic variables and family characteristics of respondents.

H<sub>A1a</sub>: There is a significant relationship between grandparent's age and grandparent-grandchild relationship quality.

H<sub>A1b</sub>: There is a significant difference in grandparent-grandchild relationship quality between grandmothers and grandfathers.

H<sub>A1c</sub>: There is a significant difference in grandparent-grandchild relationship quality between currently married and non-married grandparents.

H<sub>A1d</sub>: There is a significant difference in grandparent-grandchild relationship quality between Malay and non-Malay grandparents.

H<sub>A1e</sub>: There is a significant difference in grandparent-grandchild relationship quality between currently working and not working grandparents.

H<sub>A1f</sub>: There is a significant difference in grandparent-grandchild relationship quality between healthy and non-healthy grandparents.

H<sub>A1g</sub>: There is a significant difference in grandparent-grandchild relationship quality between grandparents who are with primary school and below qualification and secondary school and above qualification.

H<sub>A1h</sub>: There is a significant difference in grandparent-grandchild relationship quality between grandparents with currently married and non-married adult child (G2).

H<sub>A1i</sub>: There is a significant relationship between parent-grandparent (G1-G2) relationship and grandparent-grandchild relationship quality



H<sub>A1j</sub>: There is a significant relationship between grandchild's age and grandparent-grandchild relationship quality.

H<sub>A1k</sub>: There is a significant relationship between geographic proximity and grandparent-grandchild relationship quality.

H<sub>A1l</sub>: There is a significant relationship between number of grandchildren and grandparent-grandchild relationship quality.

H<sub>A1m</sub>: There is a significant difference in grandparent-grandchild relationship quality between grandparents with granddaughters and grandsons.

H<sub>A1n</sub>: There is a significant difference in grandparent-grandchild relationship quality between maternal and paternal grandparents.

H<sub>A1o</sub>: There is a significant difference in grandparent-grandchild relationship quality among grandparents with eldest, middle, youngest and only grandchild.

Objective 3: To study the association between selected socio-demographic variables, family characteristics, grandparent-grandchild relationship quality with psychological well-being among Malaysian elderly.

H<sub>A2a</sub>: There is a significant association between grandparent's age and psychological well-being.

H<sub>A2b</sub>: There is a significant difference in psychological well-being between grandmothers and grandfathers.

H<sub>A2c</sub>: There is a significant difference in psychological well-being between currently married and non-married grandparents.

H<sub>A2d</sub>: There is a significant difference in psychological well-being between Malay and non-Malay grandparents.

H<sub>A2e</sub>: There is a significant difference in psychological well-being between currently working and not working grandparents.

HA2f: There is a significant difference in psychological well-being between healthy and non-healthy grandparents.

HA2g: There is a significant difference in psychological well-being between grandparents who are with primary school and below qualification and secondary school and above qualification.

HA2h: There is a significant difference in psychological well-being between grandparents with currently married and non-married adult child (G2).

HA2i: There is a significant association between parent-grandparent (G1-G2) relationship and psychological well-being.

HA2j: There is a significant association between grandchild's age and psychological well-being.

HA2k: There is a significant association between geographic proximity and psychological well-being.

HA2l: There is a significant association between number of grandchildren and psychological well-being.

HA2m: There is a significant difference in psychological well-being between grandparents with granddaughters and grandsons.

HA2n: There is a significant difference in psychological well-being between maternal and paternal grandparents.

HA2o: There is a significant difference in psychological well-being among grandparents with eldest, middle, youngest and only grandchild.

HA2p: There is a significant association between grandparent-grandchild relationship quality (G1-G3) and psychological well-being.

Objective 4: To examine the significant predictors of psychological well-being among Malaysian elderly.

H<sub>A3</sub>: There are significant predictions of psychological well-being by selected socio-demographic factors, family characteristics and grandparent-grandchild relationship quality.

Objective 5: To determine the moderating effect of respondents' educational level on the association between grandparent-grandchild relationship quality and psychological well-being.

H<sub>A4</sub>: Educational level significantly moderates the association between grandparent-grandchild relationship quality and psychological well-being.

### **1.5 Significance of the Study**

This study aims to determine the relationships between selected socio-demographic variables and family characteristics of G1, G2, G3 and grandparent-grandchild relationship quality with psychological well-being among Malaysian elderly. This study offers various potential contributions to the body of knowledge and future research. The association among grandparent-grandchild relationship and psychological well-being have been studied widely in western countries. As a result, there are lack of comparative studies in Malaysia. Therefore, this study is an attempt to assess the psychological well-being of Malaysian elderly, and identify significant factors contributing to their psychological well-being.

The present study focused on grandparents, with a referent grandchild 12 years old and below. Previous work considering factors related to grandparent-grandchild bond has focused primarily on older children or adolescents (King, 2003). Importantly, grandparent involvement patterns that are established when grandchildren are young may be maintained over time such that grandparents who are highly involved during early childhood maintain a high level of involvement over time. Moreover, grandparent involvement during early childhood may be particularly beneficial for all generations. First, involvement with grandchildren, provided that it is non-custodial, may keep grandparents active and engaged, and may serve as a considerable source of satisfaction for grandparents (Reitzes & Mutran, 2004; Thiele & Whelan, 2006).

Particularly relevant to the present study, Silverstein and Marengo (2001), reported that among a nationally representative sample of grandparents, those with younger grandchildren reported higher levels of contact, more salient grandparent role identification, more frequent participation in fun shared activities with grandchildren, and greater emotional closeness to grandchildren.

Thus, grandparent-grandchildren relationship quality may be highest and most closely related to older adult's psychological well-being when grandchildren are young. It is hoped that the outcome of the study could contribute towards a better understanding of grandparent-grandchildren relationship quality in Malaysia and its association with psychological well-being. Furthermore, this study gives a significant understanding on how the relationship between grandparent-grandchild relationship quality and psychological well-being could be buffered by grandparents' educational level.

## **1.6 Theoretical Framework**

This part attempts to explain the theoretical connections between socio-demographic factors, family characteristics, grandparent-grandchildren relationship quality and psychological well-being. The theoretical framework of the present study is based on four main theories as follows:

- (i) Family System Theory (Bowen, 1974)
- (ii) Ryff and Singer's Model of Psychological well-being (Ryff & Singer, 2006)
- (iii) Intergenerational Solidarity Model (Bengtson & Roberts, 1991)
- (iv) Social Capital Framework (Coleman, 1990)

Family Systems Theory focuses more on family relationships than on examining individual family members (Fingerman & Bermann, 2000). Bowen family systems theory is good for describing the relationship among grandparents, parents, and grandchildren because it emphasizes the influence of the extended family system. Bowen's theory defines family as system refers to at least three generations (Titleman, 1998).

Bowen family systems theory accepts the grandparent entering into the relationship of the parent and the child. Bowen family systems theory perceives grandparents as a positive resource for stable family interactions. To identify internal interactions in the family, Bowenian family therapists often apply a genogram. Nichols and Schwartz (2001) stated that genograms are 40 schematic diagrams listing family members and their relationships to one another. The genogram includes ages, marital status, and gender of each family member. It is a static dyad because it includes the conditions of the relationships among listed people, such as conflicts, strong bonds, cut-off, or triangles. Findings from a study by Ryff and Singer (2000) explained strong influence of positive family relationships on health and psychological well-being.

Besides, intergenerational relationships are the main source of support and social integration in later life and therefore crucial to older adults' psychological well-being (Antonucci et al., 2007). Therefore, family system theory can be extended to intergenerational analysis to understand the association between

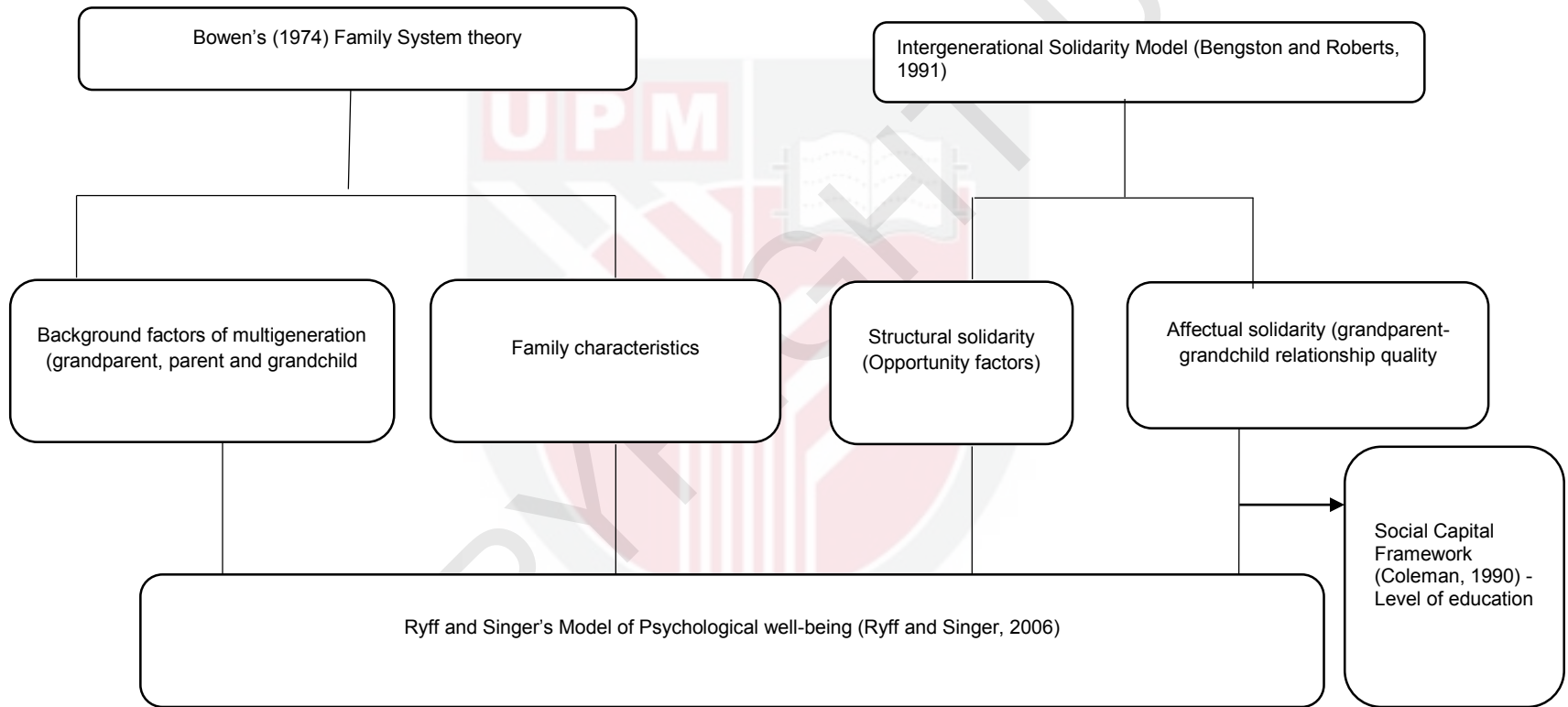
socio-demographic variables, family characteristics, grandparent-grandchildren relationship quality with psychological well-being among Malaysian elderly.

Psychological well-being (PWB) has become a focus of research attention in gerontology because it is an important indicator of successful aging. Based on Ryff and Singer's Model of Psychological Well-being (2006), development of positive relationships is among the most important components of well-being. Previous studies showed grandparent-grandchild relationship as the most important social capital for older adults (Lin, 2011). It was found to have significant positive effects on older adults' life satisfaction, mental health, and depressive symptoms (Xu, 2013). The present study aimed to evaluate the correlation between grandparent-grandchild relationship quality and psychological well-being of older adults.

The Intergenerational Solidarity Model was used to figure grandparent-grandchild relationship quality. Bengston and Roberts (1991) developed the model, which distinguishes between structural, consensual, functional, associational, effectual, and normative solidarity. The present study focusses on structural and affectual solidarity dimensions. Structural solidarity refers to factors that facilitate or prevent the opportunity for contact between generations such as lineage, gender and proximity. The concept of affectual solidarity refers to feelings and evaluations expressed by family members about their relationships with other family members (Bengston, 2001). In the previous studies, affectual solidarity is typically invoked with one or two items that assess emotional closeness and the degree of getting along. Silverstein and Marenco (2001) found that emotional closeness is predicted by the frequency of contact with grandchildren.

For Coleman (1990) social capital consists of 'some aspects of a social structure' which facilitates 'certain actions of individuals who are within the structure'. The present study adopted Coleman's (1990) Social Capital Framework and argued that that social class element such as educational attainment provides opportunities and experiences that impact on the enactment, evaluation, and outcomes of the grandparent-grandchild relationship quality (Silverstein & Marenco, 2001) and promotes the psychological well-being of older adults.

Ryff et al. (1999) studied the influence of education on the different dimensions of psychological well-being in their Wisconsin Longitudinal Study (WLS). The investigation found that higher scores on the Scales of Psychological Well-Being (SPWB) predicted higher number of years of education. In the present study, Family System Theory, Ryff and Singer's Model of Psychological well-being, Intergenerational Solidarity Model and Social Capital Framework was merged together to investigate various factors associated with psychological well-being among Malaysian elderly within a multigenerational context. The theoretical framework for the current study is demonstrated in figure 1.1.



**Figure 1.1: Theoretical Framework of the Study**

## 1.7 Conceptual Framework

Later years of life are accompanied by many physical, emotional and environmental changes which may impact on the well-being of the individual. Many factors are known to influence the psychological well-being of older adults, but most, if not all of this information was the result of studies in the Western world. This study aimed at obtaining and documenting the factors associated with psychological well-being (PWB) among older Malaysians. Despite an abundance of research, a single agreed-upon definition of psychological well-being remains elusive (Dodge et al., 2012). According to Ryff and Singer (2006) psychological well-being relates to growth and human fulfilment and has consequences for health.

In addition to conceptualizing the psychological well-being model, Ryff and various other researchers identified key correlations that are regarded as frequent antecedents, consequences or complements of psychological well-being. Ryff and Markus (2010) found a link between culture and well-being, while Ryff (2013b) reported on the linkage between family experiences and well-being. Socio-demographic associations such as age and socio-economic status, have been noted in the literature to be linked with well-being (Ryff & Singer, 2008). Psychological well-being has further been indicated to be related to psychological constructs, such as life experiences, emotional intelligence and personality traits (Augusto et al., 2011; Ryff, 2013b). A strong positive link was also found between educational standing and psychological well-being (Ryff & Singer, 2008).

Research has shown that psychological well-being as conceptualized by Ryff can be described as an outcome variable as well as a predictor and can be determined through self-reports, observer ratings or performance scores (Huta & Waterman, 2014). As an outcome variable, psychological well-being has been shown to be influenced by meaningful activities such as healthy family relationships (Kashdan & Oishi 2008). The present study views PWB as dependent variable, and aims to add to the current body of knowledge by examining the association between selected socio-demographic factors, family characteristics, grandparent-grandchild relationship quality with psychological well-being of Malaysian elderly.

The study of intergenerational relations is predominantly situated within the familial realm. For older persons, intergenerational relationships are focused primarily around parent-child and grandparent-grandchild relations. The Family Systems Theory is a theory developed by Dr. Murray Bowen suggests that individuals cannot be understood in isolation from one another, but rather as a part of their family, as the family is an emotional unit.

Families are systems of interconnected and interdependent individuals, none of whom can be understood in isolation from the system (Bowen, 1978). Present study adopts the concept of Family System Theory in developing framework of the study focusing on socio-demographic factors and family characteristics of multi generation (grandparent, parent and grandchild). The study intended to look into the association between family background, grandparent-grandchild relationship quality with psychological well-being among elderly in Malaysia.

The concern of applying the intergenerational solidarity model to grandparent–grandchild relationship quality is due to importance of middle generation in between plays a key role in connecting grandparents and grandchildren. That is, they often serve as a lineage bridge between grandparents and grandchildren by either facilitating or hindering the contact. Likewise, parents shape the opportunity structure for intergenerational contact for instance through their choices regarding residential location, parental divorce and the quality of the parent-grandparent relationship (Uhlenberg & Hammill, 1998).

The theory of Social Capital views capital as the resources contained in social relation (Coleman, 1990). In recent years research on family background, educational and socioeconomic success has begun adopting a multi-generation approach. Drawing on Coleman’s Social Capital Framework, this study adds to existing multi-generation research by empirically measuring grandparents’ social capital (level of education) and by analyzing the moderating effect of educational level on the association between grandparent-grandchild relationship quality and psychological well-being among elderly in Malaysia. The conceptual framework is illustrated in figure 1.2.



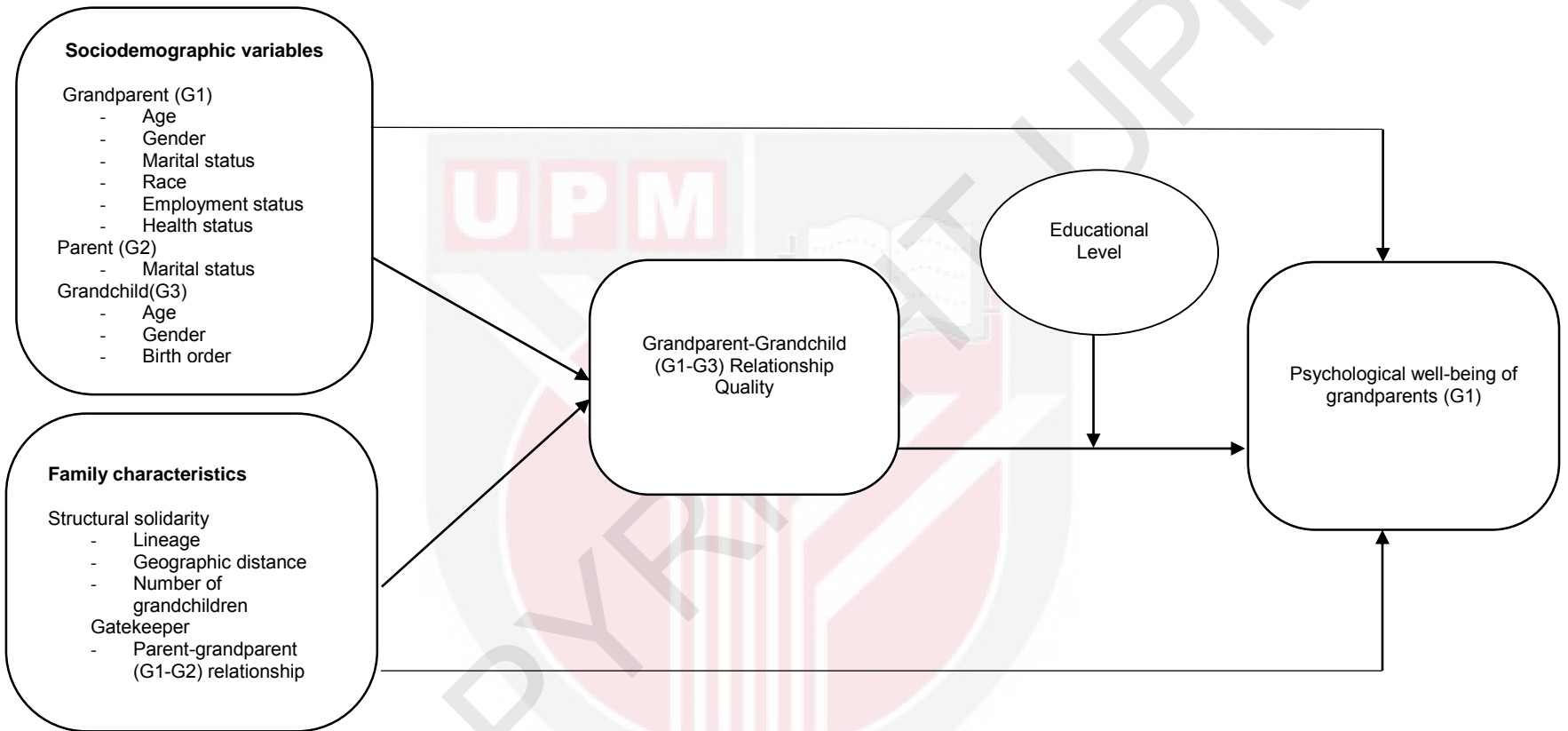


Figure 1.2: Conceptual Framework of the Study

## **1.8 Definitions of Concepts**

In accordance with the study aims and scope and based on their implication in the current study, the definitions of the study concepts were presented in the following order: i) conceptual, and ii) operational definitions.

### **1.8.1 Psychological well-being**

According to Ryff (1989) psychological well-being is an active engagement in a number of existential challenges. Psychological well-being is a multidimensional construct comprised of six areas of positive functioning: autonomy, positive relations with others, purpose in life, personal growth, environmental mastery, and self-acceptance. Thriving in life depends on the degree one sees himself or herself competently functioning in these areas.

In the present study, the psychological well-being of respondents is measured with WHO-Five Well-being Index. Higher scores indicated greater well-being and lower score means lower well-being (Psychiatric Research Unit, 1998).

### **1.8.2 Grandparent-grandchild relationship quality**

Grandparent-grandchild relationship quality connotes interaction between grandparents and grandchildren. Grandparent-grandchild relationships exist along a number of dimensions: association, affect, role meaning and significance, degree of involvement and participation in activities (Taylor & Bates, 2014).

In accordance with the present study nature, grandparent-grandchild relationship quality is measured as getting along, closeness, amount of in-person (companion), knowledge of their own grandchild, and role satisfaction (feeling appreciated) (Valarie & Glen, 1998).

### **1.8.3 Educational level**

Respondents' educational level comprises of information on credential (i.e., never attended school, with or without completed primary school, with or without completion of secondary school, diploma or certificate, at least bachelor's or master's degree / PhD). Conclusions do not differ when the present study measure education as a dichotomous variable indicating a secondary school and above versus primary school and below (Brand, 2010).

## 1.9 Chapter Summary

The study focuses on the psychological well-being of elderly in Malaysia. This study tries to examine the relationships between socio-demographic factors, family characteristics, and grandparent-grandchild relationship quality with psychological well-being of respondents. There are 5 objectives and 4 hypotheses. Secondary data were used for this study, adapted from "The development and testing of grandparenting stressor-strength Inventory in Malaysia". Data were collected by using set of questionnaires. Participants are grandfathers or grandmothers, with a referent grandchild 12-years-old and below lived in Peninsular, Malaysia.



## REFERENCES

- Alavi, K., Rahim, M., Idris, S. M., & Chan, C. (2011). Emotional support needs in caring for the elderly parents by the adult children. *Journal of Social Sciences and Humanities*, 6(1), 102- 114.
- Adams, S. J. (2002). Educational attainment and health: Evidence from a sample of older adults. *Education Economics*, 10, 97–109.
- Antonucci, T. C., Jackson, J. S., & Biggs, S. (2007). Intergenerational relations: Theory, research, and policy. *Journal of Social Issues*, 63, 679–693.
- Antonucci, T. C., Birdtt, K. S., & Akiyama, H. (2009). Convoys of social relations: An interdisciplinary approach. In V. Bengtson, M. Silverstein, & N. Putney (Eds.), *Handbook of theories of ageing* (pp. 75-105). New York, NY: Springer.
- Aziz, R. A. (2007). Grandparenting: Issues and challenges. *Akademika*, 70, 103-116.
- Balasundaram, R. (2006). *As you grow older: Successful ageing*, 3, Kuala Lumpur: AUM Enterprise.
- Bengtson, V. L., & Roberts, E. L. (1991). Intergenerational solidarity in aging families: An example of formal theory construction. *Journal of Marriage and the Family*, 53(4), 856–870.
- Bengtson, V. L., Giarrusso, R., Mabry, J. B., & Silverstein, M. (2002). Solidarity, Conflict, and Ambivalence: Complementary or Competing Perspectives on Intergenerational Relationships. *Journal of Marriage and the Family*, 64, 568-576.
- Bengtson, V. L., (2001). Beyond the nuclear family: the increasing importance of multigenerational bonds. *Journal of Marriage and Family*, 63, 1-16.
- Bech, P. (2004). Measuring the dimension of psychological well-being by the WHO-5. *Quality of Life Newsletter*, 32, 15-16.
- Bennett, K. M. (2005). Psychological well-being in later life: The longitudinal effects of marriage, widowhood and marital status change. *International Journal of Geriatric Psychiatry*, 20, 280–284.
- Birren, J. E., & Renner, V. J. (1980). Concepts and issues of mental health and aging. In J. E. Birren, & R. B. Sloane (Eds.), *Handbook of mental health and aging* (pp. 3-33). Englewood Cliffs, NJ: Prentice Hall.

- Bonsignore, M., Barkow, K., Jessen, F., & Heun, R. (2001). Validity of the five-item WHO well-being index (WHO-5) in an elderly population. *European Archives of Psychiatry and Clinical Neuroscience*, 251(2), 27-31.
- Brand, J. E. (2010). Civic returns to higher education: A note on heterogeneous effects. *Social Forces*, 89, 417-433.
- Bowen, M. (1978). *Family therapy in clinical practice*. NY: Jason Aronson.
- Butts, D., Thang, L. L., Yeo, A. H., & Jefferson, T. (2012). *Policies and programs supporting intergenerational relations*. New York, NY: UNDESA.
- Buchanan, A. (2017). Changing roles of grandparents in the UK: Emergence of the new grandfather. In D. Shwalb, & Z. Hossain (Eds.), (pp. 111-132). New York, NY: Routledge.
- Carr, D., & Springer, K. W. (2010). Advances in families and health research in the 21st century. *Journal of Marriage and Family*, 72, 743-761.
- Carr, D., Freedman, V. A., Cornman, J. C., & Schwarz, N. (2014). Happy marriage, happy life? Marital quality and subjective well-being in later life. *Journal of Marriage and Family*, 76, 930-948.
- Caputo, R. (2001). Grandparents and co-resident with grandchildren in a youth cohort. *Journal of Family Issues*, 22(5), 541-556.
- Chan, C. G., & Elder, G. H. (2000). Matrilineal advantage in grandchild-grandparent relations. *The Gerontologist*, 40, 179-190.
- Chai, S. T., & Hamid, T. A. (2015). Population ageing and the Malaysian Chinese: Issues and challenges. *Malaysian Journal of Chinese Studies*, 4(1), 1-13.
- Chatters, L. M. (1983). Subjective well-being evaluations among older black Americans. *Psychology and Aging*, 3, 184-190.
- Cherlin, A., & Furstenberg, F. (1986). *The new American grandparent: A place in the family, life apart*. New York: Basic Books.
- Chen, X., & Silverstein, M. (2000). Intergenerational social support and the psychological well-being of older parents in China. *Research on Aging*, 22, 43-65.
- Choi, N. G., & Jun, J. (2009). Life regrets and pride among low-income older adults: Relationships with depressive symptoms, current life stressors and coping resources. *Aging & Mental Health*, 13(2), 213-225.
- Costa, P. T., & McCrae, R. R. (1984). Personality as a lifelong determinant of well-being. In C. Z. Malatesta, & C. E. Izard (Eds.), *Emotion in adult development* (pp. 141-152). Beverly Hills, CA: Sage.

- Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, MA: Harvard University Press.
- Cohen, O., & Farchi, A. (2010). A typology of marital quality of enduring marriages in Israel. *Journal of Family Issues, 31*, 727-747.
- Cong, Z., & Silverstein, M. (2008). Intergenerational support and depression among elders in rural China, do daughters in law matter? *Journal of Marriage and Family, 70*(3), 599-612.
- Crosnoe, R., & Elder G. H. (2002). Life course transitions, the generational stake, and grandparent-grandchild relationships. *Journal of Marriage and the Family, 64*(4), 1089-1096.
- Department of Statistics Malaysia. (2010). *Education and social characteristics of the population*. Putrajaya: DOSM.
- Department of Statistics Malaysia. (2015). *Current population estimates*. Putrajaya: DOSM.
- Deci, E. L., & Ryan, R. M., (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies, 9*, 1-11.
- Douglas, G., & Ferguson, N. (2003). The role of grandparents in divorced families. *International Journal of Law, Policy and the Family, 17*, 467.
- Doyle, M., Dywer, C., & Timonen, V. (2010). The reshaping of paternal grandparent–grandchild relationships following divorce or separation in the middle generation. *Family Relations, 59*, 587-598.
- Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining well-being. *Journal of Wellbeing, 2*(3), 222–235.
- Diener, E. (2009). Subjective well-being: The science of well-being. *Social Indicators Research Series, 37*, 11-58.
- Diener, E. D., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology, 54*, 403-425.
- Diener, E., Scollon, C. N., & Lucas, R. E. (2003). The evolving concept of subjective well-being: Multifaceted nature of happiness. *Advances in Cell Aging and Gerontology, 15*, 187-219.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999) Subjective well-being: Three decade of progress. *Psychological Bulletin, 125*, 276-302.
- Drew, L. M., & Silverstein, M. (2007). Grandparent's psychological well-being after loss of contact with their grandchildren. *Journal of Family Psychology, 21*, 372–379.

- Drew, L. M., & Smith, P. K. (2002). Implications for grandparents when they lose contact with their grandchildren: Divorce, family feud and geographical separation. *Journal of Mental Health and Aging, 8*, 95-120.
- Dykstra, P. A., & Fokkema, T. (2007). Social and emotional loneliness among divorced and married men and women: Comparing the deficit and cognitive perspectives. *Basic and Applied Social Psychology, 29*, 1-12.
- Dush, C. M., Taylor, M. G., & Kroeger, R. A. (2008). Marital happiness and psychological well-being across the life course. *Family Relations, 57*, 211-226.
- Elder, G., & Conger, R. (2000). Wisdom of the ages. In G. Elder, & Conger (Ed.), *Children of the Land* (pp. 127-151). Chicago, University of Chicago.
- Fingerman, K. L., & Bermann, E. (2000). Applications of family systems theory to the study of adulthood. *International Journal of Aging and Human Development, 51*(1), 5-29.
- Fingerman, K. L., Pillemer, K. A., Silverstein, M., & Suiitor, J. J. (2012). The Baby Boomers' intergenerational relationships. *The Gerontologist, 52*, 199-209.
- Findler, L., Ben-Ari, O. T., Shwartz, N. O., & Lazar, R. (2013). Construction and Validation of the Multidimensional Experience of Grandparenthood Set of Inventories. *Social Work Research, 37*(3), 237-253.
- Goodman, C. C. (2008). Caregiving grandmothers and their grandchildren well-being nine years later. *Children and Youth Services Review, 34*, 648-654.
- Hawkins, D. N., & Booth, A. (2005). Unhappily ever after: Effects of long-term, low-quality marriages on well-being. *Social Forces, 84*, 451-471.
- Hamid, T. A. (2012). Population ageing: Past, present and future trends. In T. A. Hamid, H. Sulaiman, & S. F. Abdullah (Eds.), *Profile of Older Malaysians: Current and Future Challenges* (pp. 3-32). Serdang, Malaysia: Universiti Putra Malaysia Press.
- Harwood, J., & Lin, M. (2000). Affiliation, pride, exchange, and distance in grandparents' accounts of relationships with their college-aged grandchildren. *Journal of Communication, 50*, 31-47.
- Howell, R. (2009). Review: Positive psychological well-being reduces the risk of mortality in both ill and healthy populations. *Evidence Based Mental Health, 12*, 41-49.
- Hayslip, B., Henderson, C. E., & Shore, R. J. (2003). The structure of grandparental role meaning. *Journal of Adult Development, 10*, 1-11.

- Huta, V., & Waterman, A. S. (2014). Eudaimonia and its distinction from Hedonia: Developing a classification and terminology for understanding conceptual and operational definitions. *Journal of Happiness Studies*, 15(6), 1425-1456.
- Hughes, M. E., & Waite, L. J. (2009). Marital biography and health at mid-life. *Journal of Health and Social Behavior*, 50, 344-358.
- Jang, S. N., Cho, S. I., Chang, J., Boo, K., Shin, H. G., & Berkman, L. F. (2009). Employment status and depressive symptoms in Koreans: Results from a baseline survey of the Korean longitudinal study of aging. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 64, 677-683.
- Jackson, J. S., Chatters, L. M., & Neighbors, H. W. (1986). The subjective life quality of black Americans. In F. Andrews (Ed.), *Research on the quality of life* (pp. 193-213). Ann Arbor: University of Michigan
- James, J. B., & Zarrett, N. (2006). Ego integrity in the lives of older women. *Journal of Adult Development*, 13(2), 61-75.
- Kashdan, T. B., Diener, B. R., & King, L. A. (2008). Reconsidering happiness: The costs of distinguishing between hedonics and eudaimonia. *The Journal of Positive Psychology*, 3(4), 219-233.
- Keating, N., & Gierveld, D. J. (2015). Editorial: Families and aging: from private troubles to a global agenda. *Canadian Journal on Aging*, 34(3), 261-263.
- Kim, H. J., Kang, H., & Motoyama, J. M. (2017). The psychological well-being of grandparents who provide supplementary grandchild care: A systematic review. *Journal of Family Studies*, 23, 118-141.
- King, V. (2003). The legacy of a grandparent's divorce: Consequences for ties between grandparents and grandchildren. *Journal of Marriage and Family*, 65, 170-183.
- King, V., Elder, J. R., & Glen, H. (1998). American children view their grandparents: linked lives across three rural generations. *Journal of Marriage & Family*, 57(1), 165-178.
- Kravdal, O., & Rindfuss, R. R. (2008). Changing relationships between education and fertility: a study of women and men born 1940 to 1964. *The American Sociological Review*, 73, 854-873.
- Kubzansky, L. D., Berkman, L. F., Glass, T. A., & Seeman, T. E. (1998). Does educational attainment associate with shared determinants of health in the elderly? Findings from the MacArthur studies of successful aging. *Psychosomatic Medicine*, 60, 578-585.



- Landa, J. M., Martos, P. M., & Zafra, L. E. (2011). Does perceived emotional intelligence and optimism or pessimism predicts psychological well-being? *Journal of Happiness Studies*, 12(3), 463-474.
- Latiffah, A. L., Afiah, N. M., & Shashikala, S. (2005). Psychological well-being of the elderly people in peninsular Malaysia. *The International Medical Journal*, 4, 38-43.
- Legros, B., & Stassen, J. F. (2002). Intergenerational solidarity: between the family and the state. *Current Sociology*, 50(2), 243-262.
- Lee, E., Hendrix, C. M., & Lee, Y. (2016). Parenting stress of grandparents and other kin as informal kinship caregivers: A mixed methods study. *Children and Youth Services Review*, 69, 29-38.
- Lee, M., & Gardner, J. E. (2010). Grandparents' involvement and support in families with children with disabilities. *Educational Gerontology*, 36(6), 467-499.
- Leung, J. C. (1997). Family support for the elderly in China, issues and challenges. *Journal of Aging & Social Policy*, 9(3), 87-101
- Lin, J. P., & Yi, C. C. (2011). Filial norms and intergenerational support to aging parents in China and Taiwan. *International Journal of Social Welfare*, 20, 109-120.
- Leder, S., Grinstead, L. N., & Torres, E. (2007). Grandparents raising grandchildren: Stressors, social support and health outcomes. *Journal of Family Nursing*, 13(3), 333-352.
- Lanzieri, G. (2011). The greying of the baby boomers. A century-long view of ageing in European populations. *Stat Focus*, 23, 1-12.
- Marquet, M., Missotten, P., Schroyen, S., & Adam, S. (2016). A Validation of the French Version of the Attitudes to Aging Questionnaire (AAQ): Factor Structure, Reliability and Validity. *Psychological Belgica*, 56(2), 80-100.
- Mahne, K., & Huxhold, O. (2012). Social contact between grandparents and older grandchildren. In S. Arber, & V. Timonen (Ed.), *A three generation perspective* (pp. 225-246). Bristol: The Policy Press.
- Mahne, K., & Huxhold, O. (2015). Grandparenthood and subjective well-being: moderating effects of educational level. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 70, 782-792.
- Mueller, M. M., & Elder, G. H. (2003). Family contingencies across the generations: grandparent-grandchild relationships in holistic perspective. *Journal of Marriage and Family*, 65, 404-417.

- Murrell, S. A., Salsman, N. L., & Meeks, S. (2003). Educational attainment, positive psychological mediators, and resources for health and vitality in older adults. *Journal of Aging and Health, 15*(4), 591-615.
- Momtaz, Y. (2011). Socio-demographic predictors of elderly's psychological well-being in Malaysia. *Aging Mental Health, 15*(4), 437-450.
- Monserud, M. A. (2008). Intergenerational relationships and affectual solidarity between grandparents and young adults. *Journal of Marriage and Family, 70*, 182-195.
- Mehta, K. K., & Thang, L. L. (2006). Interdependence in Asian families. *Journal of Intergenerational Relationships, 4*(1), 117-125.
- Meeks, S., & Murrell, S. A. (2001). Contribution of education to health and life satisfaction in older adults mediated by negative affect. *Journal of Aging Health, 13*, 92-119.
- Mares, M. L. (1994). The aging family. In M. A. Fitzpatrick, & A. L. Vangelisti (Eds.), *Explaining family interactions* (pp. 344-374). Thousand Oaks, CA: Sage.
- Myers, J. E., & Perrin, N. (1993). Grandparents affected by parental divorce: A population at risk? *Journal of Counselling & Development, 72*, 62-66.
- Marmot, M. G., Fuhrer, R., Ettner, S. L., Marks, N. F., & Ryff, C. D. (1998). Contribution of psychosocial factors to socioeconomic differences in health. *Milbank Quarterly, 76*, 403-448.
- Monserud, M. A. (2011). Changes in grandchildren's adult role statuses and their relationships with grandparents. *Journal of Family Issues, 32*, 425-451.
- Musil, C., Warner, C., Zauszniewski, J., & Kercher, K. (2006). Grandmothers, caregiving, and family functioning. *Journals of Psychological Sciences and Social Sciences, 61*, 89-98.
- Ostir, G. V., Markides, K. S., Peek, M. K., & Goodwin, J. S. (2001). The association between emotional well-being and the incidence of stroke in older adults. *Psychosomatic Medicine, 63*(2), 210-215.
- Proulx, C. M., Helms, H. M., & Buehler, C. (2007). Marital quality and personal well-being: A meta-analysis. *Journal of Marriage and Family, 69*, 576-593.
- Pinquart, M. (2003). Loneliness in married, widowed, divorced, and never-married older adults. *Journal of Social and Personal Relationships, 20*(1), 31-53.
- Pinquart, M., & Sorensen, S. (2001). Gender differences in self-concept and psychological well-being in old age: a meta-analysis. *Journal of Gerontology: Psychological Sciences, 56*(4), 195-213.

- Pruchno, R. A., & McKenney, D. (2002). Psychological well-being of black and white grandmothers raising grandchildren: Examination of a two-factor model. *Journal of Gerontology: Social Sciences*, (57), 444-452.
- Pong, S. L. (1994). Sex preference and fertility in Peninsular Malaysia. *Studies in Family Planning*, 25(3), 137-148.
- Ranchor, A. V., Bouma, J., & Sanderman, R. (1996). Vulnerability and social class differential patterns of personality and social support over the social class. *Personality and Individual Differences*, 20, 229-237.
- Rashid, A., Ong, E. K., Shu, E., & Wong, Y. (2012). The Attitude Towards Ageing Among Residents of An Elderly Care Institution in Penang Malaysia. *International Journal of Collaborative Research on Internal Medicine & Public Health*, 4(6), 1069-1083.
- Reininghaus, U. A., Morgan, C., & Craig, T. K. (2008). Unemployment, social isolation, achievement-expectation mismatch and psychosis: Findings from the AESOP Study. *Social Psychiatry and Psychiatric Epidemiology*, 43, 743-751.
- Revicki, D. A., & Mitchell, J. P. (1990). Strain, social support, and mental health in rural elderly individuals. *Journals of Gerontology*, 45(6), 267-274.
- Reitzes, D., & Mutran, E. J. (2004). Grandparenthood: Factors influencing frequency of grandparent–grandchildren contact and grandparent role satisfaction. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 59, 9-16.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Ryff, C. D., & Singer, B. H. (2006). Best news yet on the six-factor model of well-being. *Social Science Research*, 35(4), 1103-1119.
- Ryff, C. D., & Singer, B. H. (2008). Know yourself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9(1), 13-39.
- Ryff, C.D. (2013b). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics*, 83(1), 10-28.
- Ryan, R. M., & Deci, E. L. (2001) On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.

- Ryan, M. F., Song, Z., Wanberg, C., & Kinicki, A. (2005). Psychological and physical well-being during unemployment: a meta-analytic study. *Journal of Applied Psychology, 90*, 53-76.
- Saito, T., Wakui, T., & Kai, I. (2016). Effects of spousal illness on self-rated health in older couples: Role of sex and proximity to adult children. *Geriatrics & Gerontology International, 16*(12), 1332-1338.
- Skopek, J., & Leopold, T. (2017). Who becomes a grandparent and when? Educational differences in the chances and timing of grandparenthood. *Demographic Research, 37*, 917-928.
- Silverstein, M., & Marengo, A. (2001). How Americans enact the grandparent role across the family life course. *Journal of Family Issues, 22*, 493-522.
- Sheridan, K., Haight, W. L., & Cleeland, L. (2011). The role of grandparents in preventing aggressive and other externalizing behavior problems in children from rural, methamphetamine-involved families. *Children and Youth Services Review, 33*, 1583-1591.
- Steger, M. F., Kashdan, T. B., & Oishi, S. (2008). Being good by doing good: Daily eudaimonic activity and well-being. *Journal of Research in Personality, 42*, 22-42.
- Swartz, T. (2009). Intergenerational family relations in adulthood: Patterns, variations, and implications in the contemporary *United States: Annual Review of Sociology, 35*, 191-212.
- Settersten, R. A. (2007). Social relationships in the new demographic regime: Potentials and risks, reconsidered. *Advances in Life Course Research, 12*, 3-28.
- Smith, J., Fleeson, W., Geiselman, B., Settersten, R. A., & Kunzmann, U. (1999). Sources of well-being in very old age. In P. B. Baltes, & K. U. Mayer (Eds.), *The Berlin aging study: Aging from 70 to 100* (pp. 450-470). New York: Cambridge University Press.
- Smith, J., Maas, I., Mayer, K. U., & Baltes, P. B. (2002). Two-wave longitudinal findings from the Berlin Aging Study: Introduction to a collection of papers. *Journal of Gerontology: Psychological sciences, 57*, 471-473.
- Siahpush, M., Spittal, M., & Singh, G. K. (2008). Happiness and Life Satisfaction Prospectively Predict Self-Rated Health, Physical Health, and the Presence of Limiting, Long-Term Health Conditions. *American Journal of Health Promotion, 23*(1), 18-26.
- Somary, K., & Stricker, G. (1998). Becoming a grandparent: A longitudinal study of expectations and early experiences as a function of sex and lineage. *The Gerontologist, 38*(1), 53-61.

- Shlomo, B. S. (2014). What makes first time grandparents more satisfied with life? *Stress and Health*, 30, 23-30.
- Silverstein, M., Cong, Z., & Li, S. (2006). Intergenerational transfers and living arrangements of older people in rural China, consequences for psychological well-being. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 61(5), 256-266.
- Tan, J. P., Buchanan, A., Flouri, E., Schwartz, A. S., & Griggs, J. (2010). Filling the parenting gap? Grandparent involvement with UK adolescents. *Journal of Family Issues*, 31(7), 992–1015.
- Hamid, T. A., & Nurizan, Y. (2008). National policy and the elderly in Malaysia: Achievement and challenges. In H. G. Lee (Ed.), *Ageing in Southeast and East Asia: Family, social protection and policy challenges* (pp. 108-133). Pasir Panjang, Singapore: Institute of Southeast Asian Studies.
- Thiele, D. M., & Whelan, T. A. (2006). The nature and dimensions of the grandparent role. *Marriage and Family Review*, 40, 93-108.
- Taylor & James, S. B. (2014), Activities that Strengthen Relational Bonds Between Latter-Day Saint Grandfathers and their adult grandchildren. *Journal of Religion, Spirituality and Aging*, 26, 41-64.
- Titelman, P. (1998). Family systems assessment based on Bowen theory. In P. Titelman (Ed.), *Clinical applications of Bowen family systems theory* (pp. 51-68). New York: The Haworth Press.
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, 52, 145-161.
- Thomas, P. A. (2010). Is it better to give or to receive? Social support and the well-being of older adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 65, 351-357.
- Thomas, J. L. (1989). Gender and perceptions of grandparenthood. *International Journal of Aging and Human Development*, 29, 269-282.
- Tsai, F. J., Mohamed, S., Elia, N., & Rougemont, A. C. (2011). Evolution in intergenerational exchanges between elderly people and their grandchildren in Taiwan; data from a multiple round cross-sectional study from 1993 to 2007. *BMC Public Health*, 11(1), 635-641.
- Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and Family*, 54, 664-674.
- Uhlenberg, P., & Hammill, B. G. (1998). Frequency of grandparent contact with grandchild sets: six factors that make a difference. *Gerontologist*, 38, 276-285.

- Victor, C. G. (1984). Marital disruption and adult children's perception of their siblings help to elderly parents. *Family Relations*, 33, 613-621.
- Walker, R., Isherwood, L., Burton, C., Magambo, K., & Luszcz, M. (2013). Marital satisfaction among older couples: The role of satisfaction with social networks and psychological well-being. *The International Journal of Ageing and Human Development*, 76, 123-139.
- Ward, R. (2008). Multiple parent-adult child relations and well-being in middle and later life. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 63, 239-247.
- Ward, R. A., & Spitze, G. D. (2004). Marital implications of parent–adult child co-residence: A longitudinal view. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 59, 2-8.
- Wong, S. T., Yoo, G. J., & Stewart A. L. (2006). The changing meaning of family support among older Chinese and Korean immigrants. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 61(1), 4-9.
- Xu, L. (2013). Intergenerational support between grandparents and grandchildren in rural China and its effect on the psychological well-being of older adults. California: University of Southern California.
- Xu, L., & Chi, I. (2016). Determinants of support exchange between grandparents and grandchildren in rural china the roles of grandparent caregiving, patrilineal heritage, and emotional bonds. *Journal of Family Issues*, 12, 109-112.
- Yusuf, M. (2014). Grandparents as educators: A study of socio-cultural and religion perspectives. *Procedia-Social and Behavioral Sciences*, 140, 337-342.
- Zhang, W., & Liu, G. (2007). Childlessness, psychological well-being, and life satisfaction among the elderly in China. *Journal of Cross-Cultural Gerontology*, 22(2), 185-203.
- Zhou, Y. (2015). Socio-economic factors related with the subjective well-being of the rural elderly people living independently in China. *International Journal for Equity in Health*, 14(1), 105-111.
- Zebhauser, A., Xu, H. L., Baumert, J., & Emeny, R. T. (2014). How much does it hurt to be lonely? Mental and physical differences between older men and women in the Korea-Age study. *International Journal of Geriatric Psychiatry*. 29(3), 245-252.