

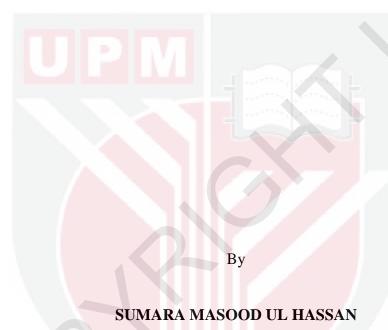
RELATIONSHIP BETWEEN FILIAL RESPONSIBILITY, SELF-ESTEEM, EMOTIONAL REGULATION AND SUBJECTIVE WELL-BEING AMONG PAKISTANI COMMUNITY-DWELLING OLDER ADULTS

SUMARA MASOOD UL HASSAN

FEM 2019 32



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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

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DEDICATION

Dedicated to my companion in life, AAP; to my beloved parents and siblings I owe my everything; and to my lovely and intelligent daughters, Aresha and Anaya



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

RELATIONSHIP BETWEEN FILIAL RESPONSIBILITY, SELF-ESTEEM, EMOTIONAL REGULATION AND SUBJECTIVE WELL-BEING AMONG PAKISTANI COMMUNITY-DWELLING OLDER ADULTS

By

SUMARA MASOOD UL HASSAN

May 2019

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Prior research on the psychosocial factors of subjective well-being as one of the key indicators of ageing well was mainly conducted in Western cultures and with little emphasis on mechanisms underlying older adults' subjective well-being. This correlational study aimed to determine the association of adult attachment, relationship quality, religiosity, filial responsibility, self-esteem, and emotional regulation with subjective well-being; the direct effects of filial responsibility, selfesteem, and emotional regulation on subjective well-being after controlling for the influences of covariates; and the mediating effects of self-esteem and emotional regulation on the relationship between filial responsibility and subjective well-being. Multistage cluster random sampling method was utilised to collect data from 400 older adults from Rawalpindi, Pakistan. The Concise Measure of Subjective Wellbeing (COMOSWB), The Experiences in Close Relationships-Revised Scale (ECR-RS), Affective Scale, Revised Intrinsic/Extrinsic Religious Orientation Scale (I/E-R), filial expectation and filial behaviour scales, Rosenberg Self-Esteem Scale (RSES) and The Emotional Regulation Questionnaire (ERQ) were administrated to the respondents through the interview method. The results showed that adult attachment, relationship quality, religiosity, filial behaviour, self-esteem, and emotional regulation were significantly while filial expectation was not significantly associated with subjective well-being. Filial behaviour of respect, self-esteem and emotional regulation were major predictors of subjective well-being after controlling for the influences of covariates. These variables explained 72% of the variability in subjective well-being. Structural equation modeling demonstrated that self-esteem and cognitive reappraisal of emotional regulation partially mediated the relationship between filial behaviour of respect but failed to function as significant mediators on the association of filial expectation and filial behaviour of daily maintenance with subjective well-being. Besides, suppression of emotional regulation did not show a mediating effect on the relationship between filial responsibility and subjective well-being. Overall, this study

provides valuable insights regarding the importance of eldest sons' filial behaviour of respect in their older parent's lives and highlights the roles of self-esteem and emotional regulation in the relationship between filial responsibility and older adults 'subjective well-being.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

HUBUNGAN ANTARA TANGGUNGJAWAB FILIAL, HARGA DIRI, PENGAWALAN EMOSIONAL DAN KESEJAHTERAAN SUBJEKTIF DALAM KALANGAN KOMUNITI PENGHUNI LEBIH TUA PAKISTAN

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Penyelidikan terdahulu ke atas faktor psikososial kesejahteraan subjektif sebagai salah satu indikator utama penuaan sejahtera telah dijalankan dalam budaya Barat dengan sedikit penekanan terdahap mekanisma-mekanisma berkenaan kesejahteraan golongan dewasa lebih tua. Tujuan keseluruhan kajian korelational ini adalah untuk meneliti perkaitan pertautan orang dewasa, kualiti hubungan, kewarakan, tanggungjawab filial, harga diri, dan pengawalan emosional dengan kesejahteraan subjektif; kesan langsung tanggung jawab filial, harga diri, dan pengawalan emosional ke atas kesejahteraan subjektif selepas pengawalan bagi pengaruh ciri latar belakang, pertautan, kualiti hubungan, dan kewarakan; dan kesan pengantara harga diri dan pengawalan emosional ke atas hubungan antara tanggungjawab filial dan kesejahteraan subjektif dalam kalangan komuniti prenghuni dewasa lebih tua Pakistani. Kaedah persampelan rawak kluster multiperingkat telah digunakan untuk mengumpul data daripada 400 orang dewasa lebih tua dari daerah Rawalpindi, Pakistan. Ukuran Padat Kesejahteraan Subjektif (COMOSWB), Pengalaman dalam Skala Semakan Hubungan Rapat (ECR-RS), Skala Afektif, Skala Orientasi Kewarakan Intrinsik/Ekstrinsik Semakan (I/E-R), ekspektasi filial dan skala tingkah laku filial, Skala Harga Diri Rosenberg (RSES) dan Soal Selidik Pengawalan Emosional (ERQ) telah diberikan kepada responden melalui kaedah temu bual. Keputusan penyelidikan menunjukkan bahawa tingkah laku filial (iaitu, tingkah laku hormat filial dan tingkah laku pengendalian harian filial), harga diri, pengawalan emosional, pertautan orang dewasa, kualiti hubungan, dan kewarakan adalah secara signifikan berkaitan dengan kesejahteraan subjektif. Walau bagaimanapun, ekspektasi filial adalah secara tidak signifikan berkaitan dengan kesejahteraan subjektif. Tingkah laku hormat filial, harga diri dan pengawalan emosional adalah prediktor bagi kesejahteraan subjektif setelah pengawalan bagi ciri-ciri latar belakang. Faktor-faktor tersebut menerangkan 72% variabiliti dalam kesejahteraan subjektif. Kemudian, ujian kesan pengantara pengikat menunjukkan bahawa harga diri dan penilaian semula kognitif pengawalan emosional pengantara separa hubungan antara tingkah laku hormat filial tetapi gagal berfungsi sebagai pengantara yang signifikan ke atas perkaitan ekspektasi filial dan tingkah laku pengendalian harian filial dengan kesejahteraan subjektif. Akhirnya, supresi pengawalan emosional tidak menunjukkan kesan pengantaraan ke atas hubungan dimensi tanggung jawab filial dengan kesejahteraan subjektif. Secara keseluruhannya, kajian ini marangkumi nilai-nilai murni mengenai kepentingan sikap hormat filial yang lebih tinggi daripada anak lelaki sulung yang akan menyebabkan kesejahteraan subjektif warga tua yang lebih tinggi. Ia juga menekankan peranan harga diri dan pengawalan emosional dalam hubungan di antara tanggungjawab filial dan kesejahteraan subjektif warga tua.



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Special gratitude to my friend who's genuine love and support worked as defense mechanism against my PhDstress.

Last but not the least; I would like to thanks my husband, my daughters, parents, and moreover my siblings, without their love, patience and support, I would not be what I am today.

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LIST OF ABBREVIATIONS

AGFI Adjusted Goodness of Fit Index

AMOS The Analysis of Moments Structures

ANOVA Analysis Of Variance

AVE Average Variance Extracted

BC Bias Corrected

CFA Confirmatory Factor Analysis

CFI Comparative Fit Index

CMIN/DF Chi-Square/Degree of Freedom Ratio
COMOSWB COncise Measure of Subjective Wellbeing

CR Construct Reliability

ECR-RS The Experiences in Close Relationships-Revised Scale

EDA Exploratory Data Analysis
EFA Exploratory Factor Analysis

ER Extrinsic Religiosity

ERQ Emotional Regulation Questionnaire

GFI Goodness of Fit Index

I-E/R Revised Intrinsic/Extrinsic Religious Orientation Scale

IFI Incremental Fit Index
IR Intrinsic Religiosity
KMO Kaiser-Myer Olkin
MI Modification Indices

NFI Norms-Fit Index

PBS Pakistan Bureau of Statistics

RMSEA Root-Mean-Square Error of Approximation

RSES Rosenberg Self-Esteem Scale
SEM Structural Equation Modelling

SIGN Scottish Intercollegiate Guidelines Network
SPSS The Statistical Package for Social Sciences

SST Socioemotional Selectivity Theory

STROBE STrengthening the Reporting of Observational Studies in

Epidemiology

TLI Tucker Lewis Index UN United Nations

VIF Variance Inflation Factor

CHAPTER I

INTRODUCTION

The present chapter describes the major elements that directed this study which include the background of the study, statement of the problem, research questions, objectives, hypotheses, theoretical framework, conceptual framework, significance of the study, and definitions of the key terms. Lastly, the organisation of the thesis and summary of the first chapter are also presented.

1.1 Background of the Study

Declining fertility and increased life expectancy are two major contributing factors to population aging worldwide. According to the United Nations (2017), adults age 60 and above make up 13% of the world's population; however, this percentage is expected to double by 2050. Developed countries have already undergone a demographic transition; hence they are facing problems related to ageing societies. On the other hand, the demographic shift in developing countries is relatively slow, but still manifests an increase in the number of the elderly population. UN estimates indicate that the growth rates of the ageing population in developing countries (3%) are higher than that of developed ones (1.9%). It shows that the process of the aging population is relatively advanced in rich countries, but the absolute number of aging population is higher in developing nations. Pakistan is one of the developing countries that is yet to experience demographic transition. Approximately 11 million of its population is 60 years and older, which is more than the population of 11 European nations (Population Reference Bureau, 2011). In 2009, 6.1% of Pakistan's population consisted of adults aged 60 and above, which is expected to increase to 14.9% by 2050 (United Nations, 2009). With an estimated 14.9% of its population comprising of adults aged 60 and over, Pakistan will be labelled as an aging nation by 2050.

Parallel to the socio-demographic shift, the sociocultural changes due to modernisation have also resulted in the transformation of the normative structure of the Pakistani family (Itrat, Taqui, Qazi, & Qidwai, 2007; Ibrahim, Abbas, Adnan, & Bhatti, 2011; Sabzwari & Azhar, 2011). The well-being of aged parents is largely dependent on the eldest son in a Pakistani family. However, due to changes in the family landscape, the eldest sons, on whom responsibility falls, are reluctant to provide filial support to their aged parents (Cheng & Chan, 2006). Consequently, the dynamics of inter-generational transfers in the families of old adults are in a transitional stage; emphasising the fact that the subjective well-being of this older segment of the population is at risk. It is therefore evident that the aging phenomenon, generally, and transitional changes, specifically, in the family landscape may affect the quality of life among Pakistani older adults.

An important determinant of quality of life and healthy aging is the maintenance and enhancement of subjective well-being (Baltes & Baltes, 1990; Peterson, Chatters, Taylor, & Nguyen, 2014; Tu & Yang, 2016). The concept "subjective well-being" refers to an individual's positive appraisal of life and emotional reaction to events (Diener, 1984; Diener, Oishi, & Lucas, 2002). It is categorised into three components, namely, life satisfaction (a cognitive component), positive affect and negative affect (affective component) (Herero & Extremera, 2010). The maintenance and enhancement of subjective well-being in old age is important because a higher sense of subjective well-being promotes positive functioning, delays illness and extends longevity (Zeng, Dudley, Jr, Vlosky, & Gu, 2008; Rowe & Kahn, 1998). Studies have shown that subjective well-being of an individual tends to increase in old age (Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Blanchflower & Oswald, 2008). Furthermore, increasing age is associated with lower negative emotions (Carstensen, 2006; Diener & Suh, 1997), increased life satisfaction (Mroczek & Spiro, 2005), stable positive affect (Charles et al., 2001) and lesser psychological vulnerability (Piazza & Charles, 2006). Despite the old age trajectories, a majority of older adults optimise their sense of subjective well-being by selecting emotionally meaningful goals which promote the use of regulatory processes (Baltes & Baltes, 1990; Carstensen, 2006).

Substantial research has identified multiple psychosocial factors which are associated with older adults' subjective well-being in a positive and negative manner. According to Banjare, Dwivedi, and Pradhan (2015), there is strong evidence which indicates that certain aspects of social relationships such as affectional ties and social support from close networks can promote an intact sense of well-being. While, the lack of support from social circles, psychological stress and lower engagement in daily activities are associated with a poor sense of well-being in old age. Concomitantly, Zhang, Chen, Ran, and Ma (2016) reported that attachment relationships characterised by attachment avoidance and anxiety are strongly linked with lower subjective well-being in older adults. A cross-sectional study also concluded that lower social support, strain, parental dissatisfaction, and unequal intergenerational exchanges promote lower levels of well-being (Reczek & Zhang, 2015). Religiosity refers to an orientation of religiosity when individual chooses to see religion as an end in itself and involves in religious activities (Koening, 1990). It may serve as a protective agent against old age trajectories as evidences suggest that both domains of religiosity namely; intrinsic and extrinsic religiosity ameliorates longevity (Zimmer et al., 2016), and sense of subjective well-being in older adults (Momtaz, Hamid, Ibrahim, & Chai, 2011; Momtaz et al., 2012).

Filial responsibility is also linked with subjective well-being in older adults. Two dimensions of filial responsibility (i.e., filial expectation and filial behaviour) exhibit different effects on subjective well-being. Filial expectation from an adult child is positively associated with life satisfaction (Yeung, 1989; Chong & Liu, 2016). However, Simon, Chen, Chang, and Dong, (2014) reported no significant relationship between this link. Regarding filial behaviour, several studies have reported a consistent positive association between filial behaviour and subjective well-being (Krause, 1997; Takagi & Saito, 2012; Ju et al., 2016)

Besides social factors, self-esteem and emotional regulation have been identified as significant psychological factors of subjective well-being in older adults. Self-esteem is an established protective factor as evidence suggests that it is associated with better levels of subjective well-being (Schimmack & Diener, 2003; Fagerström et al., 2007; Herero & Extremera, 2010). High self-worth in individuals is a consequence of closely attached supportive relationships (Mickelson, Kessler, & Shaver, 1997; Mlikulincer & Shaver, 2003), which further facilitates subjective perceptions of individuals about their sense of happiness. Likewise, emotional regulation optimises positive functioning and promotes higher levels of subjective well-being (Baltes & Baltes, 1990; Carstensen, 2006). Hu et al. (2014) reported that two dimensions of emotional regulation are significantly associated with subjective well-being. The first is cognitive reappraisal which is positively associated with subjective well-being; whereas the second dimension is suppression, which is negatively associated with subjective well-being (Gross & John, 2003). In addition, Mikulincer and Shaver (2003, 2007) reported that secure or insecure relationships with an attachment figure influence a person's regulatory skills in both adaptive and maladaptive manner, leading to higher or lower subjective well-being in older adults.

Thus, this study sought to examine the relationship of adult attachment, relationship quality, religiosity, filial responsibility, self-esteem, and emotional regulation with the subjective well-being of older adults in Pakistan.

1.2 Statement of the Problem

The maintenance of subjective well-being is crucial to quality of life and healthy aging. The upsurge in geriatric population and sociocultural changes in the family landscape may affect the subjective well-being of older adults (Cheng & Chan, 2006; Takagi & Saito, 2012; Ul-Haq, 2012; Thanakwang, 2015). Hence, it is imperative to know whether older adults are happy and satisfied with their quality of life.

Subjective well-being of older adults is associated with multiple psychosocial factors in various ways. Studies have shown that adult attachment (Zhang, Chen, Ran, & Ma, 2016), relationship quality (Reczek & Zhang, 2015), and religiosity (Zimmer et al., 2016) are significantly associated with subjective well-being of older adults. Attachment security helps persons to manage interpersonal relationships (Mikulincer & Shaver, 2007) and has been consistently linked with higher levels of subjective wellbeing (Kafetsios, & Sideridis, 2006; David, Morris, & Drake, 2016). Parent-adult child relationship quality is pivotal for well-being and is known to be highly associated with subjective well-being of older adults (Merz, Consedine, Schulze & Schuengel, 2009; Cheng, Birditt, Zarit, & Fingerman, 2015). Individuals with higher levels of intrinsic and extrinsic religious orientations find religion as an important aspect of their lives and seek to contextualise other aspects of their life through religion (Whitley & Kite, 2010). Indeed, greater levels of intrinsic and extrinsic religiosity promote greater levels of psychological well-being (Momtaz, Hamid, Ibrahim, Yahaya, & Abdullah, 2012). However, no study has examined the associations between all these variables in one study. Therefore, one of the main objectives of the study was to examine the

association of adult attachment, relationship quality and religiosity with subjective well-being in older adults.

There is agreement in extant literature on the multifaceted structure of filial responsibility (Hamid, 1992). The two facets of filial responsibility, namely, filial expectation and filial behaviour have been examined separately in different studies (Cheng & Chan, 2006; Yunong, 2012). The investigation of filial responsibility in association with subjective well-being from a multifaceted perspective is relatively sparse. As such, this study attempted to fill the void by incorporating both facets of filial responsibility. Additionally, previous studies investigated any child (Lee, Netzer, & Coward, 1994) or close child (Cheng & Chan, 2006) as the referral child. Instead, the current study focused on eldest sons as they are of fundamental value in the Pakistani society. Eldest sons are expected to cater to their aged parents' needs and are considered a source of emotional and familial gratification (Kakar, 1981; Gupta et al., 2003; Ebenstein & Leung, 2010). Owing to the cultural significance of the eldest son in the Pakistani society, the current study examined filial responsibility of the eldest son in relation to the subjective well-being of older adults.

Additionally, the two dimensions of filial responsibility engender different forms of associations with older adults' subjective well-being. A few studies reported that lesser filial expectations from an adult-child relationship lead to better life satisfaction (Yeung, 1989; Chong & Liu, 2016), while others reported null associations between these constructs (Simon, Chen, Chang, & Dong, 2014; Dong, Zhang & Chang, 2016). Moreover, filial behaviour has been significantly and consistently associated with subjective well-being. Specifically, higher levels of filial behaviour from the adult child promotes higher levels of subjective well-being in older adults (Krause, 1997; Takagi & Saito, 2012; Yunong, 2012; Ju et al., 2016). Such variations in findings on filial expectation and filial behaviour in relation to subjective well-being require deeper exploration of how filial responsibility from an adult-child predict subjective well-being in older adults. Hence, this study examined both filial expectation and filial behaviour as independent variables to explain subjective well-being in older adults.

The positive association of self-esteem with subjective well-being in older adults is likewise well-entrenched in literature (Herero & Extremera, 2010; Wiesmann & Hannich, 2014). Older adults with poor self-evaluation are more susceptible to psychological vulnerability later in life (Fagerström et al., 2007; Ali, Suhail, & Ali, 2016). Mickelson, Kessler, and Shaver (1997) corroborated the view that truth-worthy relationships induce a sense of higher self-esteem. To the best of the present researcher's knowledge, no empirical study has identified the positive association between filial responsibility and self-esteem as well as employed self-esteem as a mediator in the relationship between filial responsibility and subjective well-being. Hence, this study endeavoured to understand the pathways between filial responsibility and subjective well-being via self-esteem.

Several studies have shown significant associations of two dimensions of emotional regulation (i.e., cognitive reappraisal and suppression) with subjective well-being in

older adults (Hu et al., 2014; Gross & John, 2003). However, based on a systematic search of literature, no empirical study has examined how filial responsibility and emotional regulation work together in accounting for variations in subjective well-being. Therefore, one of the main objectives of this study was to investigate if emotional regulation mediates the relationship between filial responsibility and subjective well-being in older adults. Although literature on emotional regulation and filial responsibility has established their relationship with subjective well-being, these constructs have remained independent of each other. Clarifying the nature of these relationships can provide efficient intervention programs on the enhancement of subjective well-being.

One of the important tasks of a scholar is to discover the factors associated with subjective well-being in older adults. Simultaneously investigating various psychosocial factors in relation to subjective well-being in one study will provide a holistic view to scholars and counsellors about the unique nature of these factors. This may help them to plan intervention programs for the improvement of subjective well-being in older adults. Therefore, this study was carried out fill the void in subjective well-being literature.

Finally, most studies on subjective well-being have been conducted on Western samples which are characterised by individualistic cultures (Herero & Extremera, 2010; Augusto-Landa, Pulido-Martos, & Lopez-Zafra, 2011; Ferrand, Martinent, & Durmaz, 2014; Wiesmann & Hannich, 2014). Consequently, little empirical evidence on subjective well-being exists in the context of collectivistic cultures. There is in fact a need to replicate studies on subjective well-being in non-Western settings owing to cultural and geographical differences to establish generalisability of results. Theoretical and empirical findings on subjective well-being will be more worthwhile if they are collected from various cultures. As a collectivistic society, subjective wellbeing in Pakistan has been relatively understudied in terms of its associations with adult attachment, relationship quality, religiosity, filial responsibility, self-esteem, and emotional regulation. Several studies in Pakistan have focused on the financial aspect of well-being (Afzal, 1997; Qureshi & Arif, 2001; Alam & Karim, 2006; Gulzar, Zafa, Ahmad, & Ali, 2008; Ali & Kiani, 2003; Ul-Haq, 2012), with little emphasis on its psychosocial factors. Therefore, this study endeavoured to provide deeper understanding of the association of subjective well-being with adult attachment, relationship quality, religiosity, filial responsibility, self-esteem, and emotional regulation in Pakistani older adults.

1.3 Research Questions

The study addressed the following research questions:

1. What are the background characteristics of the respondents and their eldest son, levels of subjective well-being, adult attachment (i.e., attachment avoidance and anxiety), relationship quality, religiosity (i.e., intrinsic and

- extrinsic religiosity), filial expectation, filial behaviour (i.e., filial behaviour of respect and filial behaviour of daily maintenance), self-esteem, and emotional regulation (i.e., cognitive reappraisal and suppression) among Pakistani community-dwelling older adults?
- 2. What are the associations of adult attachment (i.e., attachment avoidance and anxiety), relationship quality, and religiosity (i.e., intrinsic and extrinsic religiosity) with subjective well-being among Pakistani community-dwelling older adults?
- 3. What are the relationships of filial expectation, filial behaviour (i.e., filial behaviour of respect and filial behaviour of daily maintenance), self-esteem, emotional regulation (i.e., cognitive reappraisal and suppression) with subjective well-being among Pakistani community-dwelling older adults?
- 4. Do filial responsibility (i.e., filial behaviour of respect and filial behaviour of daily maintenance), self-esteem, and emotional regulation (i.e., cognitive reappraisal and suppression) significantly predict the subjective well-being of Pakistani community-dwelling older adults after controlling for the influences of background variables, adults attachment, relationship quality, and religiosity?
- 5. Do self-esteem and emotional regulation (i.e., cognitive reappraisal and suppression) significantly mediate in the relationship between filial responsibility (i.e., filial expectation, filial behaviour of respect, and filial behaviour of daily maintenance) and subjective well-being among Pakistani community-dwelling older adults?

1.4 Research Objectives

- 1. To describe the background characteristics of the respondents and their eldest son, levels of subjective well-being, adult attachment (i.e., attachment avoidance and anxiety), relationship quality, religiosity (i.e., intrinsic and extrinsic religiosity) filial expectation, filial behaviour (i.e., filial behaviour of respect and filial behaviour of daily maintenance), self-esteem, and emotional regulation (i.e., cognitive reappraisal and suppression) among Pakistani community-dwelling older adults.
- 2. To examine the associations of adult attachment (i.e., attachment avoidance and anxiety), relationship quality, and religiosity (i.e., intrinsic and extrinsic religiosity) with subjective well-being among Pakistani community-dwelling older adults.
- 3. To examine the relationships of filial expectation, filial behaviour (i.e., filial behaviour of respect and filial behaviour of daily maintenance), self-esteem, emotional regulation (i.e., cognitive reappraisal and suppression) with subjective well-being among Pakistani community-dwelling older adults.
- 4. To identify the extent to which filial responsibility (i.e., filial behaviour of respect and filial behaviour of daily maintenance), self-esteem, and emotional regulation (i.e., cognitive reappraisal and suppression) significantly predict the subjective well-being of Pakistani community-dwelling older adults after controlling for the influences of background variables, adult attachment, relationship quality, and religiosity.

5. To determine the mediating roles of self-esteem and emotional regulation (i.e., cognitive reappraisal and suppression) in the relationship between filial responsibility (i.e., filial expectation, filial behaviour of respect, and filial behaviour of daily maintenance) and subjective well-being among Pakistani community-dwelling older adults.

1.5 Hypotheses

The following hypotheses were obtained according to the specific objectives 2 & 3:

Hypothesis 2.1: There is a significant negative association of attachment avoidance and attachment anxiety with subjective well-being

among Pakistani community-dwelling older adults.

Hypothesis 2.2: There is a significant positive association between relationship

quality and subjective well-being among Pakistani community-

dwelling older adults.

Hypothesis 2.3: There is a significant positive association of intrinsic and

extrinsic religiosity with subjective well-being among Pakistani

community-dwelling older adults.

Hypothesis 3.1: There is a significant association between filial expectation and

subjective well-being among Pakistani community-dwelling

older adults.

Hypothesis 3.2: There is a significant positive association between filial

behaviour (i.e., filial behaviour of respect and filial behaviour of daily maintenance) and subjective well-being among

Pakistani community-dwelling older adults.

Hypothesis 3.3: There is a significant positive association between self-esteem

and subjective well-being among Pakistani community

dwelling older adults.

Hypothesis 3.4: There is a significant positive association between cognitive

reappraisal of emotional regulation and subjective well-being

among Pakistani community dwelling older adults.

Hypothesis 3.5: There is a significant negative association between suppression

of emotional regulation and subjective well-being among

Pakistani community-dwelling older adults.

The following hypotheses were obtained according to the specific objective 4:

Hypothesis 4.1: The regression coefficients for selected variables (i.e.,

background characteristics of older adults, their eldest son, adult attachment, relationship quality, religiosity, filial responsibility, self-esteem, and emotional regulation) are significant when regressed against the subjective well-being of

Pakistani community-dwelling older adults.

Hypothesis 4.2:

Filial responsibility (i.e., filial behaviour of respect and filial behaviour of daily maintenance), self-esteem and emotional regulation (i.e., cognitive reappraisal and suppression) significantly predict the subjective well-being of Pakistani community-dwelling older adults after controlling the influences of background variables, adult attachment, relationship quality, and religiosity.

The following hypotheses were obtained according to the specific objective 5:

Hypothesis 5.1: Sel

Self-esteem mediates the associations between filial responsibility (i.e., filial expectation, filial behaviour of respect, and filial behaviour of daily maintenance) and subjective well-being among Pakistani community-dwelling older adults.

Hypothesis 5.2:

Cognitive reappraisal mediates the associations between filial responsibility (i.e., filial expectation, filial behaviour of respect, and filial behaviour of daily maintenance) and subjective wellbeing among Pakistani community-dwelling older adults.

Hypothesis 5.3:

Suppression mediates the associations between filial responsibility (i.e., filial expectation, filial behaviour of respect, and filial behaviour of daily maintenance) and subjective wellbeing among Pakistani community-dwelling older adults.

1.6 Significance of the Study

The current study presented a holistic picture by 1) describing the background characteristics of the respondents, their eldest sons and the levels of study variables 2) examining the association of adult attachment, relationship quality, religiosity, filial responsibility, self-esteem, and emotional regulation with subjective well-being in one study 3) determining the predicting roles of filial responsibility, self-esteem, and emotional regulation on subjective well-being 4) investigating the mediating effects of self-esteem and emotional regulation between filial responsibility and subjective well-being. Such empirical connections between studies variables added immensely towards the expansion of knowledge, theory, therapeutic intervention and policy development. Additionally, the findings of this study are extremely valuable for the families of older adults. The current study is imperative in the following ways:

1.6.1 Contribution to knowledge

With respect to knowledge, the study expanded the gerontological knowledge related to subjective well-being by incorporating adult attachment, relationship quality, religiosity, filial responsibility, self-esteem, and emotional regulation in association with subjective well-being among Pakistani community-dwelling older adults in one study. It is expected that the study provided a deeper understanding of familial and

individual interaction by identifying filial responsibility, self-esteem, and emotional regulation as unique predictors of subjective well-being after controlling the role of background characteristics and covariates (i.e., attachment, relationship quality and religiosity). Secondly, the study gave fundamental knowledge by uncovering how different cognitive-emotional regulatory processes (i.e., self-esteem and emotional regulation) may boost the subjective well-being of older adults when they have trusting and supportive social networks. Thirdly, conduction of this study in the Pakistani context offered a rich insight into generalizability of past findings on subjective well-being in the non-Western context.

1.6.2 Contribution to theory

The present study extended the socio-emotional selectivity theory (SST, Carstensen, 2006) 1) by explaining the phenomenon of subjective well-being with reference to the functional aspects of familial relationships (i.e., filial responsibility of the eldest son towards aged parents) 2) and by integrating cognitive-emotional regulatory processes (i.e., self-esteem and emotional regulation) between filial responsibility and subjective well-being explained through attachment theory. Hence, theoretical understanding of subjective well-being among older adults would hopefully lead to better outcomes in terms of healthy aging and quality of life among Pakistani community-dwelling older adults.

1.6.3 Relevance to practice and policymakers

With regard to prevention and intervention, the present study provided a scientific orientation about the predicting effects of filial responsibility, self-esteem, and emotional regulation on subjective well-being and mediating effects of self-esteem and emotional regulation between filial responsibility and subjective well-being. The joint consideration of these variables impels policymakers to develop intervention programs which promote and enhance the mental health and well-being among older adults within their family context. Likewise, the mediating effects of self-esteem and emotional regulation between filial responsibility and subjective well-being may help counsellors and health professionals to understand the significance of individual factors in collectivistic society. It may enable them to incorporate these underlying mechanisms in their therapeutic work while development and maintenance of subjective well-being in older person within their familial context.

1.6.4 Relevance to family

Aged individuals are at risk population globally. In Pakistan, the social security system has not been fully developed (Ali & Kiani, 2003). Majority of older people are dependent on their family for their happiness and well-being. It is hoped that the study can help family members to refine their knowledge about the resilience and risk factors of subjective well-being and familial needs of their aged individuals. It may also help

them to understand the cognitive-emotional regulatory factors that further manage the subjective well-being of older adults within their familial context.

Hence, the findings of the current study may be beneficial to professionals and policymakers to develop family-oriented intervention programs and policies that involve the whole family with the aim to promote the subjective well-being of aged people and help them to flourish as functional members of the society.

1.7 Theoretical Background

The theoretical framework of the current study was built on the socio-emotional selectivity theory (SST, Carstensen, 2006), Diener's subjective well-being approach (Diener, 1984; Diener, Lucas, & Oshi, 2002), and attachment theory (Bowlby, 1982). This study describes subjective well-being as a developmental outcome, is a result of the interactions among psychosocial factors. Diener's framework explains the phenomenon of subjective well-being in older adults. Specifically, Diener emphasised a domain of subjective well-being that maintains or improves across ageing and a domain that decreases across ageing. In particular, evaluative well-being such as life satisfaction increases with age. On the other hand, hedonic well-being has two components (i.e., positive affect and negative affect), the positive affect which tends to remain stable or even improve with age and the negative affect which decreases with age (Diener, 1984; Diener & Suh, 1997; Diener, Lucas, & Oshi, 2002). Certain demographic and psychosocial factors (i.e., adult attachment, relationship quality and religiosity) have been linked to subjective well-being (Diener & Seligman, 2002; Diener & Oishi, 2006; Tay, Li, Myers & Diener, 2014). In this study, subjective wellbeing of older adults was investigated as a dependent variable and was assessed through the Concise Measure of Subjective Well-Being (COMOSWB). It combined the evaluative and hedonic domains to assess the subjective well-being of older adults.

The socio-emotional selectivity theory (Carstensen, 1992, 2006) posits that well-being is a function of emotionally meaningful goals and balanced emotional states. It further stipulates that as people grow older, they become increasingly conscious about the amount of time left to live. This awareness of impending mortality may lead older adults to prioritise emotional balance and emotionally meaningful goals (Cartensen, 1995; Carstensen, Fung, & Charles, 2003; Charles & Carstensen, 2010). Therefore, older individuals focus on the activation of person-oriented goals than future-oriented goals. Personal goals are related to emotional meaning and motivational preferences; whereas, future goals are linked to knowledge acquisition or establishing new social contacts (Carstensen, 1995, 2006). Additionally, due to the motivational shift, older adults develop a greater capacity to experience and regulate emotional states (Lockenhoff & Carstensen, 2004; Carstensen, 1995; John & Gross, 2004; Kessler & Staudinger, 2009). Thus, SST provides evidence that the maintenance of well-being is dependent on the pursuit of emotional gratification in one's social networks and focus on positive regulatory strategies. In this study, an emotionally gratifying interpersonal relationship was manifested by filial responsibility of the eldest son towards his aged parents. On the other hand, emotional regulation and self-esteem were regarded as

cognitive-emotional regulatory processes that have been considered by the attachment theory as underlying mechanisms for the relationship between social contacts and subjective well-being.

The attachment theory was originally developed to elucidate an infant's emotional bonding with the maternal figure (Bowlby, 1973, 1988). Nonetheless, Hazen and Shaver (1987) shifted the focus of attachment from the infant to adult relationships. The attachment theory (Bowlby, 1973, 1988; Hazen & Shaver, 1987) postulates that close relationships must be taken into account in human functioning, especially in the context of health and well-being. The theory suggests that interpersonal relationships are linked to well-being through self and stress appraisal patterns, as they are related to an individual's beliefs and expectations about being able to cope with stressful situations (Mikulincer & Shaver, 2007).

Moreover, self-esteem as an internal regulator that mainly involves a self-resistant attitude linked to the appraisal of oneself as able to cope with the interpersonal environment. Attachment theorists suggest that people who perceive trust, respect and support in social relationships view themselves as self-worthy and experience improved overall well-being (Hazen & Shaver, 1987; Mikulincer & Shaver, 2003). This involves the belief and perception of emotional responsiveness of primary caregivers at the time of need, leading to higher degrees of self-esteem and subjective well-being. Indeed, there are signs of individual differences in adaptive functioning such as mental health and well-being (Mikulincer & Shaver, 2003). Furthermore, an insecure attachment relationship is associated with lower self-esteem (Parker, Crocker, & Mickelson, 2004), while a secure attachment relationship is correlated with higher subjective well-being (Mickelson, Kessler, & Shaver, 1997). It is expected that the qualitative and functional aspects of attachment relationships contribute to higher self-esteem, which may, in turn, improve subjective well-being.

On the other hand, emotional regulation particularly involves the appraisal of a stressful situation as threatening or not, and a person's way of handling the stressors. Mikulincer and Shaver (2003, 2007) proposed that emotional regulation is a mechanism through which interpersonal relationships result in higher subjective wellbeing. When an individual perceives his/her relationship with the attachment figure as untrustworthy, he/she relies more on hyperactivating or deactivating coping strategies and views a stressful situation as more threatening (Birnbaum, Orr, Mikulincer, & Florian, 1997). The unsettled interpersonal distress damages an individual's stress management skills, suggesting a low reappraisal of the stressful event and more inhibition of emotional expression (Berant, Mikulincer, & Shaver, 2008). In contrast, secure interpersonal relationships influence a person's regulatory skills and well-being in an adaptive manner. It is conceivable that emotional regulation, as a stress appraisal factor, facilitates the association between interpersonal relationship and well-being by making the relationship with the attachment figure more promising and supportive. In the current study, self-esteem and emotional regulation were considered as supplementary factors in the stress-appraising process which may play mediating functions in the association between family relationships and well-being. Figure 1.1

demonstrates the linkage between the theories and variables investigated in the current study.

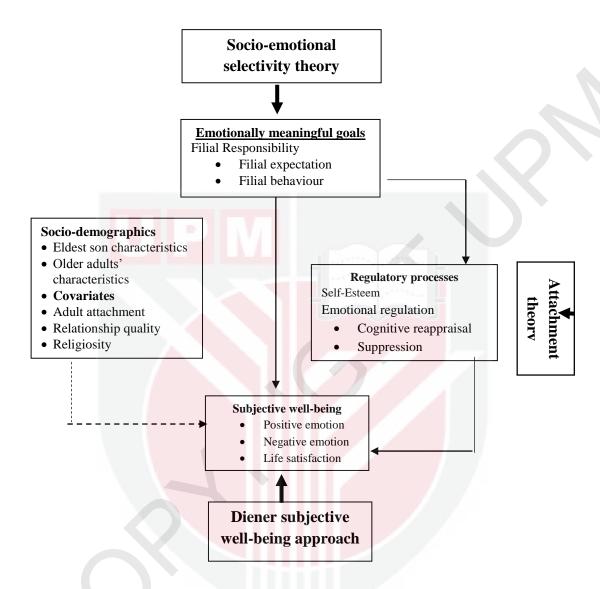


Figure 1.1: The linkage between theories and variables of the current study

1.8 Conceptual Framework

The conceptual framework of this study was based on a sound theoretical background. It was developed from the pressing need to comprehensively understand subjective well-being of older adults from an integrated view of psychosocial factors. The conceptual framework may be considered in-depth in such a way that two dimensions of filial responsibility, self-esteem, and emotional regulation were included in the model. Besides, it considered adult attachment, relationship quality and religiosity as covariates that influence filial responsibility and subjective well-being. Life satisfaction, positive emotion, and negative emotion encompassed the subjective well-being variable. In examining the model, filial responsibility was treated as an

independent variable, adult attachment, relationship quality, and religiosity as covariates, and subjective well-being was examined as the dependent variable. In connecting the relationship between the endogenous and exogenous variables, self-esteem and emotional regulation (cognitive reappraisal and expressive suppression) were hypothesised as mediators. Altogether, the conceptual framework of the study is depicted in Figure 1.2.

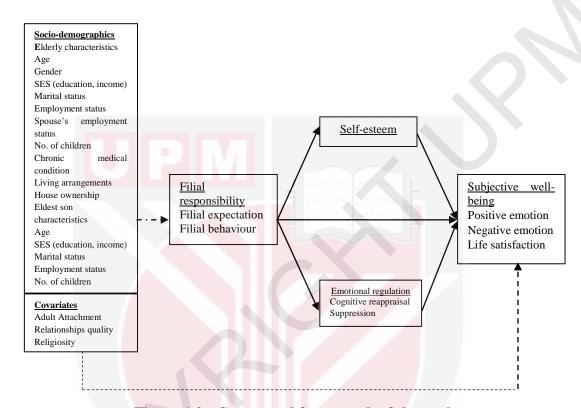


Figure 1.2: Conceptual framework of the study

1.9 Conceptual and Operational Definitions of the Terms

Older adults

Conceptual: Older person is defined as old individual aged 60 years and over

(United Nations, 2015).

Operational: Individual aged 60 and above lives in community from Pakistan.

Subjective well-being

Conceptual: Subjective well-being is defined as one's cognitive and affective

evaluations of his/her life (Diener, Oishi, & Lucas, 2002).

Operational: Subjective well-being was operationally defined as positive emotion, negative emotion and life satisfaction. It was measured by COncise Measure Of Subjective Well-being scale (COMOSWB, Suh & Koo, 2011). It assessed subjective well-being on 5-point likert type scale. Higher score indicates higher level of subjective well-being.

Adult attachment

Conceptual: Attachment is broadly defined as a close emotional bond between the child and his/her attachment figure that gave a sense of security, protection, and safety (Bowlby, 1982). Adult attachment is conceptualized as individual differences on the two dimensions of attachment namely; attachment avoidance and attachment anxiety. Attachment avoidance reflects a preference for interpersonal distance, discomfort from emotional dependency and closeness to the attachment figure. Attachment anxiety involves intense worries about the availability and responsiveness of attachment figure, at the same time having a strong desire for closeness and safety from attachment figure (Brennan, Clark, & Shaver, 1998).

Operational: Adult attachment was operationally defined as the quantitative scores obtained from the Experiences in Close Relationships- Revised Scale (ECR-RS, Fraley, Heffernan, Vicary, & Brumbaugh, 2011). Attachment avoidance was operationally defined as the sum of the score obtained by the respondents on six items about individual differences on attachment avoidance between respondents and their eldest son. Attachment anxiety was operationally defined as the sum of the score obtained by the respondents on three items about the individual differences on attachment anxiety between respondents and their eldest son. Higher score indicates higher levels of attachment insecurity.

Relationship quality

Conceptual: Relationship quality is conceptualized as positive feelings (Bengtson, Biblarz, & Roberts, 2002) and emotional closeness between parents and their adult children (Bengtson & Mangen, 1988).

Operational: Relationship quality was operationally defined as perception of the quality of parent-eldest son relationships. Quality of parent and eldest son relationship was measured by using affective scale developed by Hamid (1992). It assessed relationship quality on 4-point likert type scale. Higher score indicates higher relationship quality.

Religiosity

Conceptual: Religiosity is the degree to which one believes in and is involved in religion (Chayya et al., 2007), while Gorsuch and McPherson (1989) conceptualized religiosity into two domains namely; intrinsic and extrinsic religiosity. Intrinsic religiosity refers to as an inward expression of religious beliefs while extrinsic religiosity focuses on how individual act out his/her religious beliefs such as prayer and meditation (Allport, 1964; Koening, 1990).

Operational: In the present study, religiosity was operationally defined as the quantitative scores obtained from the Revised Intrinsic/Extrinsic Religious Orientation Scale (I-E/R, Gorsuch & McPherson, 1989). Intrinsic religiosity was operationally defined as the sum of score obtained by respondents on eight items about their personal religious beliefs. Extrinsic religiosity was operationally defined as the sum of score obtained by respondents on six items about their involvement in religious activities. It assessed religiosity on 5-point Likert type scale. Higher score indicates higher levels of extrinsic religiosity.

Filial responsibility

Conceptual: Filial responsibility is defined as "an adult-child's duty required by law, by custom, or by personal attitude to meet the needs of the elderly parents" (Schorr as cited in Hamid, 1992, p.10). Seelbach (1977) also stated that filial responsibility refers to an adult child's responsibility towards maintenance of his/her parental well-being. Hamid (1992) conceptualized filial responsibility into two dimensions namely; filial expectation and filial behaviour. Filial expectation is defined as "expectations of care and support of parents from their children" and filial behaviour as "caregiving behaviour or performance of various services and activities by children for their parents" (Hamid, 1992, p.12-13).

Operational: Filial responsibility was operationally defined as the quantitative scores obtained from Gallois et al., (1999) filial expectation and filial behaviour scale. Filial expectation and filial behaviour was operationally defined as the sum of the score obtained by the respondents on twelve items about expectation to meet the need of parents and aid and support received by older adults from their eldest son. A higher score indicates higher levels of filial expectation and filial behaviour.

Self-esteem

Conceptual: Self-esteem is generalized feelings of self-acceptance, goodness and

self-respect (Rosenberg, 1965).

Operational: Self-esteem was operationally defined as respondent's scores on ten

positive and negative items measured through Rosenberg Self-Esteem Scale (RSES, Rosenberg, 1965). It used a 4-point likert scale ranging from strongly agree to strongly disagree. Higher score indicates higher

self-esteem.

Emotional regulation

Conceptual: It is defined as how a person can influence the emotions being

experienced, when and how theses emotions are felt and expressed (Gross, 1998). Emotional regulation is conceptualized as individual differences on habitual use of cognitive reappraisal and expressive suppression as emotional regulation strategies. Cognitive appraisal refers to a reframing of emotional situation to alter its impact (Gross, 1998) defined, while, suppression refers to an inhibition of continuous emotion expressive behaviour. It is a type of response modulation

(Gross & Levenson, 1993).

Operational: Emotional regulation was operationally defined as the quantitative

scores obtained on Emotional Regulation Questionnaire (ERQ, Gross & John, 2003). Cognitive reappraisal was operationally defined as the sum of the score obtained by the respondents on six items of ERQ whereas suppression was operationally defined as the sum of the score obtained by the respondents on four items of ERQ. Higher score

indicates higher levels of cognitive reappraisal and suppression.

1.10 Organization of the Thesis

This study is organized in five chapters.

Chapter 1: The first chapter comprises of key components that drove the research. These components are background of the study, statement of the problem, research questions, objectives, hypotheses, significance of the study, theoretical framework,

conceptual framework and definitions of the key terms.

Chapter 2: This chapter provides a comprehensive review of relevant literature related to all constructs. Besides, it also shed light on the gaps identified during systematic literature review conducted from 2011 to 2017 (see Appendix A).

Chapter 3: This section gives a detailed description about the research design, population, sampling technique, sampling procedure, data collection methods, instruments, pilot study, data analysis, data preparation and measurement model.

Chapter 4: This chapter discusses the results generated through univariate, bivariate, and multivariate analyses. It also presents the findings in relation to research hypotheses.

Chapter 5: The final chapter concludes the major findings. It also offers implications, limitations and suggestions for the future studies.

1.11 Chapter Summary

The current chapter provided a detailed description about the background of the study, statement of the problem, research questions, objectives, hypotheses, significance of the study, theoretical framework, conceptual framework and definitions of the key terms. Besides, it gave an overview of the content of all other sections.

REFERENCES

- Aboderin, I. (2005). *Conditionality and Limits of filial obligation*. United Kingdom, UK: Oxford Institute of Ageing.
- Afzal, M. (1997). Population ageing issues in Pakistan: A further analysis, some problems and issues of older persons in Asia and pacific. *ESCAP Asian Population Studies*, (144).
- Akram, M., & Rana, S. A. (2013). Positive Schooling and Subjective Well-Being of Pakistani Children (A Qualitative Study). *Pakistan Journal of Social & Clinical Psychology*, 11(1).
- Alam, A. (2008). Factors and consequences of nuclearization of family at Hayatabad phase-ii, Peshawar. *Sarhad Journal of Agriculture*. 24(3).
- Alam, A., Ibrar, M., & Khan, P. (2016). Socio-Economic and Psychological Problems of the Senior Citizens of Pakistan. *Peshawar Journal of Psychology and Behavioral Sciences* (*PJPBS*), 2(2), 249-261.
- Alam, M., & Karim, M. (2006). Changing demographics emerging risks of economic-demographic mismatch and vulnerabilities faced by older persons in South Asia: Situation review in India and Pakistan. *Asia-Pacific Population Journal*, 21(3), 63-92.
- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical psychology review*, 30(2), 217-237.
- Ali, S. A., Suhail, N., & Ali, S. A. (2016). Low self-esteem leads to depression among elderly: Case study of nursing home. *Journal of Universal Surgery*, 4(2), 1-4. DOI: 10.21767/2254-6758.100052.
- Ali, S. M., & Kiani, M. F. K. (2003). *Ageing and poverty in Pakistan*. Pakistan Institute of Development Economics, Islamabad: Pakistan.
- Allen, P., & Bennett, K. (2012). SPPS Statistics: A Practical Guide, version 20. South Melbourne, Victoria: Cengage Learning Australia.
- Allport, G.W. (1964). Prejudice: Is it societal or personal? *Religious Education*, 59(1), 20-29.
- Ansari, S. K., & Taj, R. (2014). Original Article Risk Vulnerable Age Group in Community and Affective Expression of Negative Emotions. *Journal of Islamabad Medical & Dental College*, 3(1), 22-24.
- Antonucci, T. C., & Akiyama, H. (2007). Social network, support, and integration. In J. E. Birren (Ed.), *Encyclopedia of Gerontology* (2nd ed.) pp.531-541. San Diego, SD: Academic Press.

- Augusto-Landa, J. M., Pulido-Martos, M., & Lopez-Zafra, E. (2011). Does perceived emotional intelligence and optimism/pessimism predict psychological well-being? *Journal of Happiness Studies*, *12*(3), 463-474. DOI: 10.1007/s10902-010-9209-7.
- Awang, H. (2012). *A Handbook on SEM, "Structural Equation Modeling"* (4th ed). University Technology MARA Kelantan: Malaysian Press.
- Babbie, E. (2012). *The practice of social research*. USA: Wadsworth Publishing Company.
- Baig, L. A., Hasan, Z., & Iliyas, M. (2000). Are the elderly in Pakistan getting their due share in health services? Results from a survey done in the peri-urban communities of Karachi. *JPMA*. The Journal of the Pakistan Medical Association, 50(6), 192-196.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M.M. Baltes (Ed.), Successful aging: Perspectives from the behavioral sciences pp.1-34. New York, NY: Cambridge University Press.
- Banjare, P., Dwivedi, R., & Pradhan, J. (2015). Factors associated with the life satisfaction amongst the rural elderly in Odisha, India. *Health and quality of life outcomes*, 13(1), 201. DOI: 10.1186/s12955-015-0398-y.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: a test of a four-category model. *Journal of personality and social psychology*, 61(2), 226-244. DOI: 10.1037/0022-3514.61.2.226.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological science in the public interest*, 4(1), 1-44.
- Bengtson, V. L., & Mangen, D. J. (1988). Family intergenerational solidarity revisited. In D. J. Mangen, V. L. Bengtson, & P. H. Landry (Ed.). *Measurement of intergenerational relations* pp.222-238. Newbury Park, CA: Sage,
- Bengtson, V. L., & Schrader, S. S. (1982). Parent-child relations. In D. J. Mangen & W. A. Peterson (Ed.), *Research instruments in social gerontology* pp.115-128. Minneapolis: The University of Minnesota Press.
- Bengtson, V., & Silverstein, M. (1993). Families, aging, and social change: Seven agendas for 21st-century researchers. *Annual review of gerontology and geriatrics*, 13(1), 15-38.

- Bengtson, V., Biblarz, T., & Roberts, R. (2002). *How families still matter: A longitudinal study of youth in two generations*. New York, NY: Cambridge University Press.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological bulletin*, 107(2), 238-246.
- Berant, E., Mikulincer, M., & Shaver, P. R. (2008). Mothers' attachment style, their mental health, and their children's emotional vulnerabilities: A 7-year study of children with congenital heart disease. *Journal of personality*, 76(1), 31-66. DOI: 10.1111/j.1467-6494.2007.00479.x.
- Bernhardt, E., & Wiik, K.A. (2016). Family ties in the 'empty nest' phase: Relations between parents and their adult children across Europe. Paper presented at the European Population Conference in Mainz. Retrieved from http://www.epc2016.princeton.edu/uploads/160779.
- Besser, A., & Priel, B. (2008). Attachment, depression, and fear of death in older adults: The roles of neediness and perceived availability of social support. *Personality and Individual Differences*, 44(8), 1711-1725. DOI:10.1016/j.paid.2008.01.016.
- Bhamani, M. A., Karim, M. S., & Khan, M. M. (2013). Depression in the elderly in Karachi, Pakistan: a cross sectional study. *BMC psychiatry*, *13*(1), 181.
- Birnbaum, G. E., Orr, I., Mikulincer, M., & Florian, V. (1997). When marriage breaks up-does attachment style contribute to coping and mental health?. *Journal of Social and Personal Relationships*, 14(5), 643-654. DOI: 10.1177/0265407597145004.
- Biswas-Diener, R., & Diener, E. (2001). Making the best of a bad situation: Satisfaction in the slums of Calcutta. *Social Indicators Research*, 55(3), 329-352.
- Blanchflower, D. G., & Oswald, A. J. (2008). Is well-being U-shaped over the life cycle?. Social science & medicine, 66(8), 1733-1749.
- Bosson, J. K., Swann Jr, W. B., & Pennebaker, J. W. (2000). Stalking the perfect measure of implicit self-esteem: The blind men and the elephant revisited? *Journal of personality and social psychology*, 79(4), 631.DOI: 10.1037/0022-3514.79.4.631
- Bosworth, H. B., Siegler, I. C, Olsen, M. K., Brummett, B. H., Barefoot, J. C, Williams, R. B., Clapp-Channing, N. E., & Mark, D. B. (2000). Social support and quality of life in patients with coronary artery disease. *Quality of Life Research*, *9*, 829-839.
- Bowlby, J. (1969). Attachment and loss: Attachment. New York, NY: Basic Books.

- Bowlby, J. (1973). Attachment and loss: Vol. 2. Separation: Anxiety and anger. New York, NY: Basic Books.
- Bowlby, J. (1982). Attachment and loss attachment (Vol. 1, 2nd ed.). New York, NY: Basic Books.
- Bowlby, J. (1988). A secure base: clinical applications of attachment theory. London: Routledge.
- Bradburn, N. M. (1969). The Structure of Psychological Well-Being. Chicago: Aldine.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Ed.), *Attachment theory and close relationships* pp.46-76. New York, NY, US: Guilford Press.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of cross-cultural psychology*, 1(3), 185-216.
- Brown, T.A. (2006). *Confirmatory Factor Analysis for Applied Research*. New York, NY: The Guilford Press.
- Burns, M. J., Nixon, G. J., Foy, C. A., & Harris, N. (2005). Standardisation of data from real-time quantitative PCR methods—evaluation of outliers and comparison of calibration curves. *BMC biotechnology*, 5(1), 5-31.
- Byrne, B.M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming* (2nd ed.). Routledge Academic. Retrieved from: http://www.amazon.com/dp/0805863737.
- Carstensen, L. L. (1992). Social and emotional patterns in adulthood: support for socioemotional selectivity theory. *Psychology and aging*, 7(3), 331-338. DOI: 10.1037/0882-7974.7.3.331.
- Carstensen, L. L. (1995). Evidence for a life-span theory of socioemotional selectivity. *Current directions in Psychological science*, *4*(5), 151-156.
- Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science*, 312(5782), 1913-1915. DOI: 10.1126/science.1127488.
- Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and emotion*, 27(2), 103-123.
- Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselroade, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of personality and social psychology*, 79(4), 644-655.
- Carter, S. E., & Walker, R. L. (2014). Anxiety symptomatology and perceived health in African American adults: moderating role of emotion regulation. *Cultural*

- *Diversity & Ethnic Minority Psychology*, 20(3), 307-315. DOI: 10.1037/a0035343.
- Chaaya, M., Sibai, A. M., Fayad, R., & El-Roueiheb, Z. (2007). Religiosity and depression in older people: Evidence from underprivileged refugee and non-refugee communities in Lebanon. *Aging and Mental Health*, 11(1), 37-44.
- Charles, S. T., & Carstensen, L. L. (2010). Social and emotional aging. *Annual Review of Psychology*, 61, 383-409.
- Charles, S. T., Reynolds, C. A., & Gatz, M. (2001). Age-related differences and change in positive and negative affect over 23 years. *Journal of personality and social psychology*, 80(1), 136-151.
- Chen, S. X., Bond, M. H., & Tang, D. (2007). Decomposing filial piety into filial attitudes and filial enactments. *Asian Journal of Social Psychology*, *10*(4), 213-223. DOI: 10.1111/j.1467-839X.2007.00230.x.
- Cheng, L., Yuan, J. J., He, Y. Y., & Li, H. (2009). Emotion regulation strategies: cognitive reappraisal is more effective than expressive suppression. *Advances in Psychological Science*, 17(4), 730-735.
- Cheng, S. T., & Chan, A. C. M. (2006). Filial Piety and Psychological Well-Being in Well Older Chinese. *The Journals of Gerontology series B Psychological Sciences and Social Sciences*, 61(5), 262–269. DOI: 10.1093/geronb/61.5.P262.
- Cheng, Y. P., Birditt, K. S., Zarit, S. H., & Fingerman, K. L. (2015). Young adults' provision of support to middle-aged parents. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 70(3), 407-416. DOI: 10.1093/geronb/gbt108.
- Chong, A. M. L., & Liu, S. (2016). Receive or give? Contemporary views among middle-aged and older Chinese adults on filial piety and well-being in Hong Kong. *Asia Pacific Journal of Social Work and Development*, 26(1), 2-14. DOI: 10.1080/02185385.2015.1131619.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300-314.
- Coleman, P. G., Carare, R, O., Petrov, I., Forbes, E., Saigal, A., Spreadbury, J, H., Yap, A., & Kendrick, T. (2011). Spiritual belief, social support, physical functioning and depression among older people in Bulgaria and Romania. *Aging & Mental Health*, 15(3), 327-333. DOI: 10.1080/13607863.2010.519320.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of personality and social psychology*, 78(6), 1053-1073.

- Consedine, N. S. & Fiori, K. L. (2009). Gender moderates the associations between attachment and discrete emotions in later life. *Aging & Mental Health*, *13*(6), 847-862. DOI: 10.1080/13607860903046545.
- Consedine, N. S., & Magai, C. (2006). Emotion development in adulthood: A developmental functionalist review and critique. In C. Hoare (Ed.), *The Oxford handbook of adult development and learning* pp. 209-244. New York: Oxford University Press.
- Consedine, N. S., Fiori, K. L., Tuck, N. L., & Merz, E. M. (2013). Attachment, activity limitation, and health symptoms in later life: the mediating roles of negative and positive affect. *Journal of Aging & Health*, 25(1), 56-79. DOI: 10.1177/0898264312466260.
- Consedine, N.S., & Magai, C. (2003). Attachment and emotion experience in later life: The view from emotions theory. *Attachment & Human Development*, 5, 165-187. DOI: 10.1080/1461673031000108496.
- Cramer, D. (1988). Self-esteem and facilitative close relationships: A cross-lagged panel correlation analysis. *British Journal of Social Psychology*, 27(2), 115-126. DOI: 10.1111/j.2044-8309.1988.tb00809.x.
- Cramer, D. (1990). Self-esteem and close relationships: A statistical refinement. *British journal of social psychology*, 29(2), 189-191.
- David, T. J., Morris, M., & Drake, M. M. (2016). The moderation effect of mindfulness on the relationship between adult attachment and wellbeing. *Personality and Individual Differences*, 96, 115-121. DOI: 10.1016/j.paid.2016.02.080.
- Diener, E, Emmons, R, A, Larsen, R, J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71-75. DOI: 10.1207/s15327752jpa4901-13.
- Diener, E. (1984). Subjective well-being. Psychological bulletin, 95(3), 542-575.
- Diener, E., & Biswas-Diener, R. (2002). Will money increase subjective well-being? *Social Indicators Research*, 57(2), 119-169.
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, 3(1), 1-43.
- Diener, E., & Diner, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of personality and social psychology*, 68(4), 653-663. DOI: 10.1037/0022-3514.68.4.653.
- Diener, E., & Oishi, S. (2006). The nonobvious social psychology of happiness. *Psychological Inquiry*, 16, 162–167.

- Diener, E., & Seligman, M. E. P. (2002). Very happy people. *Psychological Science*, 13, 81-84.
- Diener, E., & Suh, M. E. (1997). Subjective well-being and age: An international analysis. *Annual review of gerontology and geriatrics*, 17(1), 304-324.
- Diener, E., Oishi, S., & Lucas, R. E. (2002). Subjective well-being: The science of happiness and life satisfaction. In C.R. Snyder & S.J. Lopez (Ed.), *Handbook of Positive Psychology*. Oxford and New York, NY: Oxford University Press.
- Dong, X., & Zhang, M. (2016). The Association between Filial Piety and Perceived Stress among Chinese Older Adults in Greater Chicago Area. *Journal of Geriatic Palliat Care*, 4(1), 1-25.
- Dong, X., Zhang, M., & Chang, E. S. (2016). The association between filial piety and loneliness among Chinese older adults in the greater Chicago area. *Journal of Epidemiological Research*, 2(1). DOI: 10.5430/jer.v2n1p62.
- Donorfio, L. M., & Sheehan, N. W. (2001). Relationship Dynamics between Aging Mothers and Caregiving Daughters: Filial Expectations and Responsibilities. *Journal of Adult Development*, 8(1), 39-49. DOI: 10.1023/A:1026497721126.
- Ebenstein, A., & Leung, S. (2010). "Son Preference and Access to Social Insurance: Evidence from China's Rural Pension Program". *Population and Development Review*, 36(1), 47-70. DOI: 10.1111/j.1728-4457.2010.00317.x.
- Extremera, N., & Rey, L. (2015). The moderator role of emotion regulation ability in the link between stress and well-being. *Frontiers in Psychology*, 6, 1-9. DOI: 10.3389/fpsyg.2015.01632.
- Fagerström, C., Borg, C., Balducci, C., Burholt, V., Wenger, C. G., Ferring, D., ... Hallberg, I. R. (2007). Life satisfaction and associated factors among people aged 60 years and above in six European countries. *Applied Research in Quality of Life*, 2(1), 33-50. DOI: 10.1007/s11482-007-9028-0.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58(2), 281-291. DOI: 10.1037/0022-3514.58.2.281.
- Fernández-Fernández, V., Márquez-González, M., Losada-Baltar, A., & Romero-Moreno, R. (2013). Frequency of leisure activities and depressive symptomatology in elderly people: the moderating role of rumination. *International Psychogeriatrics / IPA*, 26(2), 297-305. DOI: 10.1017/S1041610213001877.
- Ferrand, C., Martinent, G., & Durmaz, N. (2014). Psychological need satisfaction and well-being in adults aged 80 years and older living in residential homes: Using a self-determination theory perspective. *Journal of Aging Studies*, *30*(1), 104-111. DOI: 10.1016/j.jaging.2014.04.004.

- Field, A. (2005). Discovering statistics using SPSS (2nd ed.). London: Sage.
- Fornell, C. & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 41-54.
- Foster, J. D., Kernis, M. H., & Goldman, B. M. (2007). Linking adult attachment to self-esteem stability. *Self and Identity*, *6*(1), 64-73. DOI: 10.1080/15298860600832139.
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The Experiences in Close Relationships-Relationship Structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23(3), 615-625.
- Frijda, N. H., & Sundararajan, L. (2007). Emotion refinement: a theory inspired by Chinese poetics. *Perspectives on Psychological Science*, 2(3), 227-241.
- Gallois, C., Giles, H., Ota, H., Pierson, H. D., Ng, S. H., Lim, T.S., Mather. J. (1999). Intergenerational communication across the Pacific Rim: The impact of filial piety. In J. C. Lasry, J. Adair, & K. Dion (Ed.), *Latest contribution to cross-cultural psychology* pp. 192-211. Lisse, Netherlands: Swets & Zeitlinger.
- Glass, Y. N. (2014). *African American Women, Psychological Well-being, Religiosity, and Stress* (Doctoral dissertation). Kent State University Kent, Ohio. Retrieved from: https://etd.ohiolink.edu/!etd.send_file?accession=kent1416416324&dispositi on.
- Gorsuch, R. L., & McPherson, S. E. (1989). Intrinsic/Extrinsic Measurement: I/E-Revised & Single-Item Scales. *Journal for the Scientific Study of Religion*, 28(3), 348-354. DOI: 10.2307/1386745.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271-299. DOI: 10.1037/1089-2680.2.3.271.
- Gross, J. J. (2001). Emotion regulation in adulthood: Timing is everything. *Current Directions in Psychological Science*, 10(6), 214-219. DOI: 10.1111/1467-8721.00152.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348-362. DOI: 10.1037/0022-3514.85.2.348.
- Gross, J. J., & Levenson, R. W. (1993). Emotional suppression: Physiology, self-report, and expressive behavior. *Journal of Personality and Social Psychology*, 64(6), 970-986.

- Guillemin, F., Bombardier, C., & Beaton, D. (1993). Cross-cultural adaptation of health related quality of life measures: literature review and proposed guidelines. *Journal of Clinical Epidemiology*, 46(12), 1417-1432.
- Gull, F., & Dawood, S. (2013). Religiosity and Subjective Well-Being amongst Institutionalized Elderly in Pakistan. *Health Promotion Perspectives*, *3*(1), 124-128. DOI: 10.5681/hpp.2013.014.
- Gulzar, F., Zafa, M. I., Ahmad, A., & Ali, T. (2008). Socio-economic problems of senior citizens and their adjustment in Punjab, Pakistan. *Pakistan Journal of Agricultural. Science*, 45(1).
- Gunnoe, M. L., & Moore, K. A. (2002). Predictors of religiosity among youth aged 17-22: A longitudinal study of the national survey of children. *Journal for the Scientific Study of Religion*, 41(4), 613-622.
- Gupta, M.C., Zhenghua, J., Bohua, L., Zhenming, X., Chung, W., & Hwa-Ok, B. (2003). Why is Son Preference so Persistent in East and South Asia? A Cross-Country Study of China, India and the Republic of Korea. *The Journal of Development*Studies, 40(2), 153-187. DOI: 10.1080/00220380412331293807.
- Hafeez, A., & Rafique, R. (2013). Spirituality and Religiosity as Predictors of Psychological Well-Being in Residents of Old Homes. *The Dialogue*, 8(3).
- Hair, J. F., Anderson, R. E., Tatham, R. L., Tatham, R.L., & Black. W. C. (2010). Multivariate Data Analysis: A Global Perspective (7th ed). Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Hair, J. F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R. L. (2006). Multivariate data analysis: A global perspective (7th ed.). Upper Saddle River, NJ: Pearson. Retrieved from http://digitalcommons.kennesaw.edu/.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). Research methods for business. *Education and Training*, 49(4), 336-337.
- Hamid, T.A. (1992). Correlates of filial responsibility among Malay families in Selangor, Malaysia. (Doctoral dissertation). Iowa State University Ames, Iowa. Retrieved from http://lib.dr.iastate.edu/rtd.
- Han, K. H., Lee, Y. J., Gu, J. S., Oh, H., Han, J. H., & Kim, K. B. (2015). Psychosocial factors for influencing healthy aging in adults in Korea. *Health and Quality of Life Outcomes*, *13*(31). DOI: 10.1186/s12955-015-0225-5.
- Hayat, M-U-N., & Muhammad, S. (2014). *Emotional regulation, empathy and altruism among adults: A pilot study* (Unpublished master's thesis). Fatima Jinnah Women University, Rawalpindi, Pakistan.

- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication monographs*, 76(4), 408-420. DOI:10.1080/03637750903310360.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of personality and social psychology*, 52(3), 511-524.
- Herero, V. G., & Extremera, N. (2010). Daily life activities as mediators of the relationship between personality variables and subjective well-being among older adults. *Personality and Individual Differences*, 49(2), 124-129. DOI: 10.1016/j.paid.2010.03.019.
- Hu, T., Zhang, D., Wang, J., Mistry, R., Ran, G., & Wang, X. (2014). Relation between emotion regulation and mental health: a meta-analysis review. *Psychological Reports: Measures & Statistics*, 114(2), 341-362. DOI: 10.2466/03.20.PR0.114k22w4.
- Ibrahim, S., Abbasi, M. H., Adnan, A., & Bhatti, W. (2011). Cognition and impact of modernization in changing normative structure of family system (a case study). *International Journal of Business and Social Science*, 2(14).
- Iqbal, N. & Kamal, A. (2014). Role of adult attachment, conflict resoulation, communication competence and social support in marital satisfaction among couples (Unpublished doctoral dissertation). Quaid-i-Azam University, Islambad, Pakistan.
- Itrat, A., Taqui, A. M., Qazi, F., & Qidwai, W. (2007). Family Systems: Perceptions of elderly patients and their attendents presenting at a university hospital in Karachi, Pakistan. *Journal of the Pakistan Medical Association*, 57(2), 106-110.
- Jackson, B. R., & Bergeman, C. S. (2011). How Does Religiosity Enhance Well-Being? The Role of Perceived Control. *Psychology of Religion and Spirituality*, 3(2), 149-161. DOI: 10.1037/a0021597.
- John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, 72(6), 1301-1333.
- Jones, P. S., Lee, J. W., Phillips, L. R., Zhang, X. E., & Jaceldo, K. B. (2001). An adaptation of Brislin's translation models for cross-cultural research. *Nursing Research*, *50*(5), 300-304.
- Ju, H., Shin, J. W., Kim, C. M. W., Hyun, M. H, & Park, J. W. (2012). Mediational effect of meaning in life on the relationship between optimism and well-being in community elderly. *Archives of Gerontology and Geriatrics*, *56*, 309-313. DOI: 10.1016/j.archger.2012.08.008.
- Ju, Y. J., Han, K-T., Lee, T-H., Kim, W., Kim, J., & Park, E. (2016). Does relationship satisfaction and financial aid from offspring influence the quality of life of older parents? A longitudinal study based on findings from the Korean

- longitudinal study of aging, 2006-2012. *Health and Quality of Life Outcomes*, 14(108), 1-8. DOI: 10.1186/s12955-016-0509-4.
- Kafetsios, K., & Sideridis, G. D. (2006). Attachment, social support and well-being in young and older adults. *Journal of Health Psychology*, 11(6), 863-875. DOI: 10.1177/1359105306069084.
- Kakar, S. (1981). *The Inner World: Psychoanalytic Study of Childhood and Society in India*. Bombay: Oxford University Press.
- Karreman, A., & Vingerhoets, A. J. J. M. (2012). Attachment and well-being: The mediating role of emotion regulation and resilience. *Personality and Individual Differences*, 53(7), 821-826. DOI: 10.1016/j.paid.2012.06.014.
- Kessler, E. M., & Staudinger, U. M. (2009). Affective experience in adulthood and old age: The role of affective arousal and perceived affect regulation. *Psychology and Aging*, 24, 349-362. DOI: 10.1037/a0015352.
- Khalid, A. (2015). Correlates of mental health among Pakistani adolescents: an exploration of the interrelationship between attachment, parental bonding, social support, emotion regulation and cultural orientation using Structural Equation Modelling. (Doctoral dissertation). The University of Edinburgh, England. Retrieved from: https://www.era.lib.ed.ac.uk/handle/1842/15925.
- Khan, A., Ghous, R., & Malik, J.A. (2016). Validation of the Urdu version of religious orientation scale. *Journal of Pakistan Psychiatric Society*, 13(2).
- Kleinman, A. (1987). Anthropology and psychiatry. The role of culture in cross-cultural research on illness. *The British Journal of Psychiatry*, 151(4), 447-454.
- Kline, R.B. (2005). *Principle and Practices of structural equation modeling* (3rd ed). New York, NY: Guilford Press. Retrieved from http://books.google.com.my/.
- Kline, R.B. (2010). *Principle and Practices of structural equation modeling*. New York, NY: Guilford Press. Retrieved from http://books.google.com.my/.
- Knoester C. (2003). Transitions in young adulthood and the relationship between parents and offspring wellbeing. *Social Forces*, 81, 1431–1458. DOI: 10.1353/sof.2003.0063.
- Koenig, H. G. (1990). Research on religion and mental health in later life: A review and commentary. *Journal of Geriatric Psychiatry*, 23, 23-53.
- Koropeckyj-Cox, T. (2002). Beyond parental status: Psychological well-being in middle and old age. *Journal of Marriage and Family*, 64(4), 957-971. DOI: 10.1111/j.1741-3737.2002.00957.x.

- Kozma, A. & Stones, M. J. (1980). The measurement of happiness: development of the Memorial University of Newfoundland Scale of Happiness (MUNSH). *Journal of Gerontology*, 35(6), 906-912.
- Krause, N. (1997). Anticipated support, received support, and economic stress among older adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 52(6), P284-P293. DOI: 10.1093/geronb/52B.6.P284
- Lang, F. R., & Schütze, Y. (2002). Adult children's supportive behaviors and older parents' subjective well-being-A developmental perspective on intergenerational relationships. *Journal of Social Issues*, *58*(4), 661-680. DOI: 10.1111/1540-4560.00283.
- Lang, F. R., Rieckmann, N., & Baltes, M. M. (2002). Adapting to aging losses: Do resources facilitate strategies of selection, compensation, and optimization in everyday functioning? *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 57(6), 501-509. DOI: 10.1093/geronb/57.6.P501.
- Lazarus, R. S., & Alfert, E. (1964). Short-circuiting of threat by experimentally altering cognitive appraisal. *Journal of Abnormal and Social Psychology*, 69, 195-205.
- Leary, M. R., Terdal, S. K., Tambor, E. S., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68(3), 518-530. DOI:10.1037//0022-3514.68.3.518.
- Lee, C-C., Li, D., Arai, S., & Puntillo, K. (2009). Ensuring Cross-Cultural Equivalence in Translation of Research Consents and Clinical Documents: A Systematic Process for Translating English to Chinese. *Journal of Transculture Nursing*, 20(1), 77-82. DOI: 10.1177/1043659608325852.
- Lee, G. R., Netzer, J. K., & Coward, R. T. (1994). Filial Responsibility Expectations and Patterns of Intergenerational Assistance. *Journal of Marriage and the Family*, 56(3), 559-565. DOI:10.2307/352867.
- Li, N., Pang, L., Chen, G., Song, X., Zhang, J., & Zheng, X. (2011). Risk factors for depression in older adults in Beijing. *Canadian Journal of Psychiatry*, 56(8), 466-473.
- Löckenhoff, C. E., & Carstensen, L. L. (2004). Socioemotional Selectivity Theory, Aging and Health: The Increasingly Delicate Balance between Regulating Emotions and Making Tough Choices. *Journal of Personality*, 72(6), 1395-424. DOI: 10.1111/j.1467-6494.2004.00301.x.
- Long, M. V., & Martin, P. (2000). Personality, relationship closeness, and loneliness of oldest old adults and their children. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 55(5), 311-319. DOI: 10.1093/geronb/55.5.P311.

- Lun, V. M. C., & Bond, M. H. (2013). Examining the relation of religion and spirituality to subjective well-being across national cultures. *Psychology of Religion and Spirituality*, 5(4), 304-315. DOI: 10.1037/a0033641.
- Lyubomirsky, S., Tkach, C., & DiMatteo, M. R. (2006). What are the differences between happiness and self-esteem? *Social Indicators Research*, 78(3), 363-404. DOI: 10.1007/s11205-005-0213-y.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological methods*, *1*(2), 130-149.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Ed.), *Growing points in attachment theory and research. Monographs of the Society for Research in Child Development Serial 209* pp.66-104. Chicago: University of Chicago Press.
- Manzoor, A., Siddique, A., Riaz, F., & Riaz, A. (2014). Determining the impact of subjective well-being on academic achievement of children in District Faisalabad. *Mediterranean Journal of Social Sciences*, 5(23), 2673.
- Marquine, M. J., Maldonado, Y., Zlatar, Z., Moore, R. C., Martin, A. S., Palmer, B. W., & Jeste, D. V. (2015). Differences in Life Satisfaction among Older Community-Dwelling Hispanics and non-Hispanic White. *Aging mental health*, 1-11. DOI: 10.1080/13607863.2014.971706.
- McDermott, M. A., & Palchanes, K. (1994). A literature review of critical elements in translation theory. *Journal of Nursing Scholarship*, 26(2), 113-117.
- Merz, E. M., & Consedine, N. S. (2009). The association of family support and wellbeing in later life depends on adult attachment style. *Attachment & Human Development*, 11(2), 203-221. DOI: 10.1080/14616730802625185.
- Merz, E. M., & Consedine, N. S. (2012). Ethnic group moderates the association between attachment and wellbeing in older adults. *Cultural Diversity & Ethnic Minority Psychology*, *18* (4), 404-415. DOI: 10.1037/a0029595.
- Merz, E. M., Consedine, N. S., Schulze, H. J., & Schuengel, C. (2009). Wellbeing of adult children and ageing parents: associations with intergenerational support and relationship quality. *Ageing and Society*, 29(5), 783. DOI: 10.1017/S0144686X09008514.
- Merz, E. M., Schuengel, C. & Schulze, H. J. (2007). Intergenational solidarity: An attachment perspective. *Journal of Aging Studies*, 21(2), 175-186. DOI: 10.1016/j.jaging.2006.07.001.
- Mickelson, K. D., Kessler, R. C., & Shaver, P. R. (1997). Adult attachment in a nationally representative sample. *Journal of Personality and Social Psychology*, 73(5), 1092-1106.

- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. Zanna (Ed.), *Advances in experimental social psychology* pp.53-152. New York, NY: Academic Press.
- Mikulincer, M., & Shaver, P. R. (2007). Attachment in adulthood: Structure, dynamics, and change. New York NY: Guilford Press.
- Milkie, M. A., Bierman, A., & Schieman, S. (2008). How adult children influence older parents' mental health: Integrating stress-process and life-course perspectives. *Social Psychology Quarterly*, 71(1), 86-105. DOI: 10.1177/019027250807100109.
- Momtaz, Y. A., Hamid, T. A., Ibrahim, R. Yahaya, N., & Abdullah, S. S. (2012). Moderating effect of Islamic religiosity on the relationship between chronic medical conditions and psychological well-being among elderly. *Psychogeriatrics*, 12(1), 43-53. DOI: 10.1111/j.1479-8301.2011.00381.x.
- Momtaz, Y. A., Hamid, T. A., Ibrahim, R., & Chai, S.T. (2011). Moderating effect of religiosity on the relationship between social isolation and psychological wellbeing. *Mental Health, Religion & Culture, 14*(2), 141-156. DOI: 10.1080/13674676.2010.497963.
- Mroczek, D. K., & Spiro, A. (2005). Change in life satisfaction during adulthood: findings from the veterans affairs normative aging study. *Journal of personality and social psychology*, 88(1), 189-202.
- Muthén, L. K., & Muthén, B. O. (1998-2012). Mplus User's Guide: Statistical Analysis with Latent Variables (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Nakagawa, T., Gondo, Y., Ishioka, Y., & Masui, Y. (2017). Age, Emotion Regulation, and Affect in Adulthood: The Mediating Role of Cognitive Reappraisal. *Japanese Psychological Research*, 59(4), 301-308. DOI: 10.1111/jpr.12159.
- Nolen- Hoeksema, S., & Aldao, A. (2011). Gender and age differences in emotion regulation strategies and their relationship to depressive symptoms. *Personality and Individual Differences*, 51(6), 704-708. DOI: 10.1016/j.paid.2011.06.012.
- Nunes, R. P., de Melo, R. L. P., da Silva Júnior, E. G., & Eulálio, M. do C. (2016). Relationship between coping and subjective well-being of elderly from the interior of the Brazilian Northeast. *Psicologia: Reflexão E Crítica*, 29(33). DOI: 10.1186/s41155-016-0032-x.
- Orth, U., Robins, R. W., & Meier, L. L. (2009). Disentangling the effects of low self-esteem and stressful events on depression: findings from three longitudinal studies. *Journal of Personality and Social Psychology*, *97*(2), 307-321. DOI: 10.1037/a0015645.
- Ouwehand, C., de Ridder, D. T. D., & Bensing, J. M. (2007). A review of successful

- aging models: Proposing proactive coping as an important additional strategy. *Clinical Psychology Review*, 27(8), 873-884. DOI: 10.1016/j.cpr.2006.11.003.
- Pakistan Bureau of Statistics. (2017). *Household Integrated Economic Survey (HIES)* 2015-16. Retrieved from www.bos.gop.pk/.
- Pakistani Institute of Legislative Development and Transparency. (2008). Retrieved from www.pildat.org.
- Pallant, J. (2010). SPSS survival manual: A step by step guide to data analysis using SPSS (4th ed.). Berkshire: Open University Press.
- Parker, L. E., Crocker, J., & Mickelson, K. D. (2004). Attachment Styles and Contingencies of Self-Worth. *Personality and Social Psychology Bulletin*, 30(10), 1243-1254. DOI: 10.1177/0146167204264000.
- Parrott, T. M., & Bengtson, V. L. (1999). The effects of earlier intergenerational affection, normative expectations, and family conflict on contemporary exchanges of help and support. *Research on Aging*, 21(1), 73-105.
- Pearlin, L. I., & Schooler, C. (1978). The Structure of Coping. *Journal of Health and Social Behavior*, 19(1), 2-21.
- Peterson, T. L., Chatters, L. M., Taylor, R. J., & Nguyen, A.W. (2014). Subjective well-being of older African Americans with DSM IV psychiatric disorders. *Journal of Happiness Studies*, 15(5), 1179-1196.
- Piazza, J. R., & Charles, S. T. (2006). Mental health among the baby boomers. In S. K. Whitbourne, & S. L. Willis (ED.), *The baby boomers grow up:* Contemporary perspectives on midlife pp. 111-146. Hillsdale, NJ: Erlbaum.
- Pokorski, M., & Warzecha, A. (2011). Depression and religiosity in older age. European Journal of Medical Research, 16, 401-406. DOI: 10.1186/2047-783X-16-9-401.
- Population Census Organization (2001). 1998 Provincial Census Report of Punjab. Statistics Division, Population Census Organization, Islamabad, Pakistan.
- Population Reference Bureau (2011). 2011 World Population Data Sheet: The World at 7 Billion. Retrieved from: https://www.prb.org/world-population-7billion/.
- Prakash, R. S., Hussain, M. A., & Schirda, B. (2015). The Role of Emotion Regulation and Cognitive Control in the Association between Mindfulness Disposition and Stress. *Psychology & aging*, 30(1), 160-171. DOI: 10.1037/a0038544.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891. DOI: 10.3758/BRM.40.3.879.

- Pu, J., Hou, H., & Ma, R. (2015). The Mediating Effects of Self-Esteem and Trait Anxiety Mediate on the Impact of Locus of Control on Subjective Well-Being. *Current Psychology*, 6(1), 167-173. DOI: 10.1007/s12144-015-9397-8.
- Qadir, F., Haqqani, S., Khalid, A., Huma, Z., & Medhin, G. (2014). A pilot study of depression among older people in Rawalpindi, Pakistan. *BMC research notes*, 7(1), 409.DOI: 10.1186/1756-0500-7-409.
- Qidwai, W., & Ashfaq, T. (2011). Elderly patients and their health in Pakistan: current status, issues, challenges and opportunities. *JLUMHS*, 10(3), 100-101.
- Qureshi, S. K., & Arif, G. M. (2001). *Profile of Poverty in Pakistan, 1998-99*. Retrieved from www.pide.org.pk/Mimap/Report05.pdf.
- Qutub, S. (2009). The oneness of Allah. Online publication from the discover Islam.
- Rami, S. (2013). Social support, emotional well-being, and emotion regulation: A mediation model. (Bachelor thesis). University of Michigan. Retrieved from https://deepblue.lib.umich.edu/handle/2027.42/102761.
- Reczek, C., & Zhang, Z. (2015). Parent-Child Relationships and Parent Psychological Distress: How Do Social Support, Strain, Dissatisfaction, and Equity Matter? *Research on Aging*, 38(7), 742-766. DOI: 10.1177/0164027515602315.
- Rizwan, M., Aftab, S., Shah, I., & Dharwarwala, R. (2012). Psychometric properties of the Rosenberg self-esteem scale in Pakistani late adolescents. *The International Journal of Educational and Psychological Assessment*, 10(1), 125-138.
- Ron, P. (2014). Attitudes towards filial responsibility in a traditional vs. modern culture: A comparison between three generations of Arabs in the Israeli society. *Gerontechnology*, 13(2), 274. DOI: 10.4017/gt.2014.13.02.420.00.
- Ron, P. (2016). The Relationship between Attachment Styles in Adulthood and Attitudes towards Filial Responsibility: A Comparison between Three Generations of Arabs and Jewish Women. *Psychology*, 7, 741-752. DOI: 10.4236/psych.2016.76077.
- Ronneberg, C. R., Miller, E. A., Dugan, E., & Porell, F. (2016). The Protective Effects of Religiosity on Depression: A 2-Year Prospective Study. *The Gerontologist*, 56(3), 421-431. DOI: 10.1093/geront/gnu073.
- Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. Princeton, NJ: Princeton University Press.
- Rote, S., Hill, T. D., & Ellison, C. G. (2012). Religious Attendance and Loneliness in Later Life. *The Gerontologist*, *53*(1), 39-50. DOI: 10.1093/geront/gns063.
- Rowe, J. W., & Kahn, R. L. (1998). Successful aging. New York NY: Pantheon Books.

- Sabzwari, S.R., & Azhar G. (2011). Ageing in Pakistan-A New Challenge. *Ageing International*, *36*(4), 423-427. DOI: 10.1007/s12126-010-9082-z.
- Sahar, N. U., & Gillani, N. I. (2014). Loneliness and Depression among Wives of Pakistani Expatriate Husbands. *Journal of Identity and Migration Studies*, 8(2).
- Salahuddin, K., & Jalbani, A. A. (2006). Senior Citizens: A Case Study of Pakistan. *Journal of Independent Studies and Research (JISR)*, 4(2), 26.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair Jr, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, *5*(1), 105-115. DOI: 10.1016/j.jfbs.2014.01.002.
- Schimmack, U., & Diener, E. (2003). Predictive validity of explicit and implicit self-esteem for subjective well-being. *Journal of Research in Personality*, 37(2), 100-106. DOI: 10.1016/S0092-6566(02)00532-9.
- Seelbach, W. C. (1977). Gender differences in expectations for filial responsibility. *The Gerontologist*, 17(5), 421-425.
- Shahzad, F. (2011). Some demographic methods applied to urban and rural populations of Pakistan (Master's thesis). Retrieved from http://hdl.handle.net/1956/5030.
- Shao, J., Zhang, Q., Lin, T., Shen, J., & Li, D. (2014). Well-being of elderly stroke survivors in Chinese communities: mediating effects of meaning in life. *Aging & Mental Health*, 18(4), 435-443. DOI: 10.1080/13607863.2013.848836.
- Shoaib, M., Khan, S., & Khan, M. H. (2011). Family Support and Health Status of Elderly People: A Case Study of District Gujrat, Pakistan. *Middle Eastern Journal of Scientific Research*, 10(4), 519-525.
- Simon, M. A., Chen, R., Chang, E. S., & Dong, X. (2014). The association between filial piety and suicidal ideation: findings from a community-dwelling Chinese aging population. *The Journals of Gerontology:Biological Sciences and Medical Sciences*, 69B, S90-S97. DOI: 10.1093/gerona/glu142.
- Sowislo, J. F., & Orth, U. (2012). Does Low Self-Esteem Predict Depression and Anxiety? A Meta-Analysis of Longitudinal Studies. *Psychological Bulletin*, 139(1), 213-240. DOI:10.1037/a0028931.
- Suh, E. M., & Koo, J. (2011). A Concise Measure of Subjective Well-Being (COMOSWB): Scale Development and Validation. *Korean Journal of Social and Personality Psychology*, 25, 96-114.
- Sun, F., Park, N. S., Roff, L. L., Klemmack, D. L., Parker, M., Koenig, H. G., Sawyer, P., & Allman, R. M. (2012). Predicting the Trajectories of Depressive Symptoms Among Southern Community-Dwelling Older Adults: The Role of Religiosity.

- Aging and mental health, 16(2), 189-198. DOI: 10.1080/13607863.2011.602959.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using Multivariate Statistics* (3rd ed.). New York, NY: Harper Collins.
- Tabachnick, B., & Fidell, L. (2001). *Using multivariate statistics*. Needham Heights: Allen & Bacon.
- Tabachnick, B., & Fidell, L. (2013). *Using multivariate statistics* (6th ed.). Boston: Pearson.
- Takagi, E., & Saito, Y. (2012). A longitudinal analysis of the impact of family support on the morale of older parents in Japan: does the parent's normative belief in filial responsibilities make a difference? *Ageing and Society*, *33*, 1053-1076. DOI: 10.1017/S0144686X1200044X.
- Tay, L., Li, M., Myers, D., & Diener, E. (2014). Religiosity and subjective well-being: An international perspective. In *Religion and spirituality across cultures* (pp. 163-175). Springer, Dordrecht.
- Thanakwang, K. (2015). Family support, anticipated support, negative interaction, and psychological well-being of older parents in T hailand. *Psychogeriatrics*, 15(3), 171-178. DOI: 10.1111/psyg.12107.
- Tu, Y., & Yang, Z. (2016). Self-Control as Mediator and Moderator of the Relationship between Social Support and Subjective Well-Being among the Chinese Elderly. *Social Indicator Research*, 12(2), 813-828. DOI: 10.1007/s11205-015-0911-z.
- Ul-Haq, R. (2012). Subjective well-being of the elderly in Islamabad, Pakistan. (Doctoral dissertation). University of Groningen. Retrieved from: www.rug.nl/research/portal/.
- Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and the Family*, 54, 664-685.
- United Nations. (2009). World Population Prospects The 2008 Revision: Highlights. United Nations, NY: New York
- United Nations. (2017). World Population Prospects: The 2017 Revision, Key Findings and Advance Tables. New York, NY: USA. Retrieved from http://www.un.org/en/sections/issues-depth/ageing/.
- United Nations. (2015). *World Population Prospects: The 2015 Revision*. Retrieved from http://esa.un.org/unpd/wpp/.
- Urry, H. L., & Gross, J. J. (2010). Emotion Regulation in Older Age. *Current Directions in Psychological Science*, 19(6), 352-357. DOI: 10.1177/0963721410388395.

- Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gotzsche, P. C., & Vandenbroucke, J. P. (2008). The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *Preventive medicine*, 45(4), 247-251.
- Wang, D., Laidlaw, K., Power, M. J., & Shen, J. (2009). Older people's belief of filial piety in China: Expectation and non-expectation. *Clinical Gerontologist*, *33*(1), 21-38. DOI: 10.1080/07317110903347771.
- Ward, R. A. (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(4), 239-247. DOI: 63/4/S239.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, 6, 1063-1070. DOI: 10.1037/0022-3514.54.6.1063.
- Wei, M., Liao, K. Y.-H., Ku, T.-Y., & Shaffer, P. A. (2011). Attachment, Self-Compassion, Empathy, and Subjective Well-Being Among College Students and Community Adults. *Journal of Personality*, 79(1), 191-221. DOI: 10.1111/j.1467-6494.2010.00677.x.
- Westland, C. J. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications*, 9(6), 476-487.
- Weston, R., & Gore, P.A. (2006). A Bright Guide to Structural Equation Modeling. The counseling psychologist, 34(5), 719-751. DOI: 10.1177/0011000006286345.
- Whitley, B. E., & Kite, M. E. (2010). *The psychology of prejudice and discrimination*. Belmont, CA: Thomson-Wadsworth.
- Wiesmann, U., & Hannich, H. J. (2014). A Salutogenic Analysis of the Well-Being Paradox in Older Age. *Journal of Happiness Studies*, 15(2), 339-355. DOI: 10.1007/s10902-013-9425-z.
- World Values Survey Association (2014). Wave62010-2014OFFICIALAGGREGATE v.20150418.AggregateFileProducer:Asep/JDS. Madrid, Spain: World Values Survey Association.
- Yeung, G. T, Fung, H.H. (2007). Social support and life satisfaction among Hong Kong Chinese older adults: family first? *European Journal of Ageing*, 4(4), 219-227.
- Yeung, S. (1989). *The dynamics of family care for the elderly in Hong Kong*. (Doctoral Dissertation). The Hong Kong University, Hong Kong. Retrieved from http://hub.hku.hk/bib/B3123205X.

- Yunong, H. (2012). Family relations and life satisfaction of older people: a comparative study between two different hukous in China. *Ageing and Society*, 32(1), 19-40. DOI: 10.1017/S0144686X11000067.
- Zeng, Y., Dudley, P. L., Jr., Vlosky, D. A., & Gu, D. (2008). Healthy longevity in China: Demographic, socioeconomic, and psychological dimensions. Dordrecht: Springer.
- Zhang, X., Chen, X., Ran, G., & Ma, Y. (2016). Adult children's support and self-esteem as mediators in the relationship between attachment and subjective well-being in older adults. *Personality and Individual Differences*, *97*, 229-233. DOI:10.1016/j.paid.2016.03.062.
- Zimmer, Z., Jagger, C., Chiu, C.T., Ofstedal, M. B., Rojo, F., & Saito, Y. (2016). Spirituality, religiosity, aging and health in global perspective: A review. *SSM Population Health*, 2, 373-381. DOI: 10.1016/j.ssmph.2016.04.009.

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LIST OF PUBLICATIONS

- Hassan, S. M. U., Hamid, T. A., Haron, S. A., & Ibrahim, R. (2018). A Systematic Review on Psychosocial Determinants of Elderly Subjective Wellbeing. *Mediterranean Journal of Social Sciences*, 9(6), 107-120.
- Hassan, S. M. U., Hamid, T. A., Haron, S. A., & Ibrahim, R. (2019). Emotional regulation as a mediator between the filial behaviour of the oldest son and subjective well-being of older parents in Pakistan. *Psychogeriatrics*.





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