# **UCLA**

## **UCLA Electronic Theses and Dissertations**

## **Title**

Correlates and Determinants of Psychological Distress between Older Korean Immigrants in the United States and Older Koreans in Korea: A comparative study

## **Permalink**

https://escholarship.org/uc/item/5kd2s9qc

## **Author**

Chang, Miya

## **Publication Date**

2017

Peer reviewed|Thesis/dissertation

## UNIVERSITY OF CALIFORNIA

## Los Angeles

Correlates and Determinants of Psychological Distress between Older Korean Immigrants in the United States and Older Koreans in Korea:

A comparative study

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Social Welfare

by

Miya Chang

© Copyright by

Miya Chang

#### ABSTRACT OF THE DISSERTATION

Correlates and Determinants of Psychological Distress between

Older Korean Immigrants in the United States and Older Koreans in Korea:

A comparative study

by

## Miya Chang

Doctor of Philosophy in Social Welfare

University of California, Los Angeles, 2017

Professor Ailee Moon, Chair

Background and Aims. Relatively little research has focused on cross-cultural mental health comparisons between older Korean immigrants in the United States and older Koreans in Korea. This study explicitly aims to answer questions about the incidence, similarities and differences in the distribution of psychological distress across these populations. This study examines the relationship between socio-demographic characteristics, social resources, and psychological distress. Thus, this study aims to determine the similarities and differences between older Korean immigrants in the United States and older Koreans in Korea with regard to the correlates and predictors of psychological distress.

**Methods**. This study is based on primary data collected from self-administered surveys taken by 480 older Koreans (60 years to 79 years) in both countries. This study used Folkman and

Lazarus's (1984) stress and coping theory of social relations as its guiding theoretical and methodological framework, administering a cross-sectional survey method to examine the correlates and predictors of psychological distress among older Koreans in both countries. To test the prevalence of psychological distress, bivariate relationships were analyzed. Then, the interaction effects between socio-demographic characteristics and social resources on psychological distress were tested. Next, in order to test the relationship between independent variables and dependent variable, hierarchal multiple comparisons were tested.

Results. The prevalence of reported psychological distress was significantly different in the two samples, with 13% of older Korean immigrants in the United States reporting psychological distress and 21% of older Koreans in Korea reporting psychological distress. Health status was significantly associated with the experience of psychological distress in both countries. Income was not significantly associated with psychological distress in both countries. However, overall financial status was significantly associated with experiencing psychological distress in both countries. Hierarchical multiple regression revealed that there were significant associations between family relationships and help-seeking behavior among older Korean immigrants in the United States while there were significant associations between social support, social networks and psychological distress among older Koreans in Korea.

Conclusions. This study examines the correlates and determinants of psychological distress in both countries. Moreover, this is the first time that a comparative study has been used to understand psychological distress among older Koreans in both countries. Therefore, the findings of this study will be generalizable. Finally, the findings build on prior research on social support and social networks as stress coping buffers, adding a much-needed understanding of how stressors and different types of resources influence psychological distress outcomes.

The Dissertation of Miya Chang is approved.

Rosina Becerra

Fernando Torres-Gil

Janet C. Mentes

Ailee Moon, Committee Chair

University of California, Los Angeles

2017

# DEDICATION

This dissertation is dedicated to my mother, Mija Je.

# TABLE OF CONTENTS

| LIST OF TABLES                                      | X        |
|---|----------|
| LIST OF FIGURES                                     | xi       |
| ACKNOWLEDGMENTS                                     | xii      |
| VITA  | xiii-xiv |
| CHAPTER 1: INTRODUCTION                             | 1        |
| Statement of the Problem                            | 1        |
| The nature of the Problem                           | 1        |
| Prevalence of the Problem                           | 4        |
| Psychological distress among older Koreans in Korea | 7        |
| The consequence of the Problem                      | 8        |
| Purpose Statement                                   | 9        |
| Significance of the Study                           | 10       |
| Study Overview and Purpose                          | 12       |
| Definition of Key Terms                             | 13       |
| Organization of the Current Study                   | 14       |
| CHAPTER 2: LITERATURE REVIEW                        | 16       |
| Prevalence of Psychological Distress                | 16       |
| Correlates and Predictors of Psychological Distress | 18       |
| Socio-demographic Characteristics                   | 18       |
| Social Support and Social Networks                  | 22       |

| Family Relationships                                      | 24 |
|---|----|
| General Health Status and Functional Limitations          | 27 |
| Religion  | 29 |
| Living Arrangements                                       | 32 |
| Acculturation   | 35 |
| Help-seeking Behaviors                                    | 38 |
| CHAPTER 3: CONCEPTUAL FRAMEWORK                           | 43 |
| Stress and Coping Theory                                  | 43 |
| Conceptual Framework                                      | 46 |
| Research Questions and Hypotheses                         | 48 |
| CHAPTER 4 : METHODS                                       | 50 |
| Research Design   | 50 |
| Sampling Criteria   | 50 |
| Data Collection Method                                    | 52 |
| Overview of Instruments                                   | 57 |
| Measurement of Study Variables                            | 58 |
| Dependent Variable  | 58 |
| Moderating Variables                                      | 59 |
| Independent Variables                                     | 60 |
| Data Analyses   | 62 |
| CHAPTER 5: RESULTS  | 65 |
| Descriptive Analysis: Sample Characteristics              | 65 |
| Research Ouestion 1: Prevalence of Psychological Distress | 85 |

| Research Question 2: Relationship Differences    | 94  |
|--|-----|
| Research Questions 3: Interaction Effects        | 98  |
| CHAPTER 6: DISCUSSION AND CONCLUSIONS            | 111 |
| Major Findings                                   | 111 |
| Research Question 1                              | 113 |
| Research Question 2                              | 114 |
| Research Question 3                              | 117 |
| Strengths and Limitations                        | 120 |
| Strengths  | 120 |
| Limitations                                      | 122 |
| Implications for Social Work Practice and Policy | 123 |
| Older Korean Immigrants in the United States     | 123 |
| Older Koreans in Korea                           | 126 |
| Direction for Future Research                    | 129 |
| APPENDICS  | 131 |
| APPENDIX A:                                      | 131 |
| APPENDIX B:                                      | 132 |
| APPENDIX C:                                      | 133 |
| APPENDIX D:                                      | 135 |
| APPENDIX E:                                      | 137 |
| APPENDIX F:                                      | 138 |
| APPENDIX G:                                      | 139 |
| APPENDIX H:                                      | 150 |

|       | APPENDIX A1: | 151 |
|-------|--------------|-----|
|       | APPENDIX B1: | 152 |
|       | APPENDIX C1: | 153 |
|       | APPENDIX D1: | 155 |
|       | APPENDIX G1: | 156 |
|       | APPENDIX H1: | 166 |
|       |              |     |
| REFER | ENCES        | 168 |

# LIST OF TABLES

| Table 1.  | Matrix of Quota Sampling: Los Angeles County, Seoul, or Dae Gu            | 52  |
|-----------|---|-----|
| Table 2.  | Demographic Characteristics of the Sample (N=480)                         | 66  |
| Table 3.  | The Level of Acculturation (N=240)  | 72  |
| Table 4.  | Social Networks (N=480)   | 74  |
| Table 5.  | Perceived Social Support in both Countries (N=480)                        | 75  |
| Table 6.  | Family relationships in both Countries (N=480)                            | 80  |
| Table 7.  | Overall Family Relationships in both Countries (N=480)                    | 81  |
| Table 8.  | Elder Care Values in both Countries (N=480)                               | 83  |
| Table 9.  | Comparision of Prevelance of Psychological Distress                       | 85  |
| Table 10. | Contingency Table of Various Independent Variables with Psychological     |     |
|           | Distress in both Countries (N=480)(coded into 4 groups)                   | 87  |
| Table 11. | Hierarchal Regression Models tested on an Outcome Variable                |     |
|           | (Psychological Distress)  | 94  |
| Table 12. | Hierarchal Regression on Psychological Distress in both Countries (N=480) | )95 |
| Table 13. | Psychological Distress by Moderating Variables (Family relationships)     | 99  |
| Table 14. | Psychological Distress by Moderating Variables (Social support)           | 102 |
| Table 15. | Psychological Distress by Moderating Variables (Social networks)          | 104 |
| Table 16. | Psychological Distress by Moderating Variables (Help-seeking)             | 108 |

# LIST OF FIGURES

| Figure 1. | Stress-Coping Model (Buffering Model) by Lazarus & Folkman                 | 46 |
|-----------|--|----|
| Figure 2. | Conceptual Framework   | 46 |
| Figure 3. | Differences of Psychological Distress (US versus Korea)                    | 87 |
| Figure 4. | Education and Social Networks Predicting Psychological Distress (Korea)10  | Э0 |
| Figure 5. | Education and Family Relationships Predicting Psychological Distress       |    |
|           | (Korea)  | )1 |
| Figure 6. | Education and Social Support Predicting Psychological Distress (US)10      | )5 |
| Figure 7. | Education and Social Networks Predicting Psychological Distress (Korea)10  | )5 |
| Figure 8. | Health Status and Social Networks Predicting Psychological Distress (US)10 | ე6 |
| Figure 9. | Health Status and Help-seeking Behavior (Korea)10                          | 07 |

#### **ACKNOWLEDGEMEMTS**

This dissertation was supported by the fellowship through the UCLA Luskin School of Public Affairs (Meyer Renee Luskin Fellowship and Fisher fellowship).

I thank all of my family for their constant support and encouragement. This dissertation could not be finished without my husband's unconditional support and encouragement, and my parent's constant love. I also thank my sister and brother for their continuously continued cheering encouragement.

Upon the completion of this dissertation, I would like to thank my advisor, Ailee Moon, and all of my committee members, Rosina Becerra, Fernando M. Torres-Gil, and Janet C. Mentes for their comments and suggestions contributed to the overall richness of my doctoral dissertation.

I thank my colleagues who always showed me emotional support and gave me encouraging words during my journey at UCLA. I also thank the UCLA Statistical Consulting Group for assistance with statistical analysis.

I would like to thank the Korean associations and business owners who allowed me to reach their members or customers for the data collection and all of the older Koreans for their willingness to participate in the research project.

#### VITA

#### **EDUCATION**

| MSW    | California State University, Los Angeles<br>School of Social Work                     | 2008 |
|--------|---|------|
| M.Div. | San Francisco Theological Seminary<br>Theology  | 2002 |
| MA     | EWHA Womans University, Seoul, Korea<br>Sociology                                     | 1994 |
| BA     | DaeGu Catholic University (formerly Hyo-Sung Women University),<br>Korea<br>Sociology | 1991 |

## **PUBLICATIONS**

- Chang, M. (2016). Experience of elder abuse among older Korean Immigrants. *The Journal of Elder Abuse & Neglect*, 28(2), 76-94.
- Chang, M. & Moon, A. (2016). Correlate and predictors of psychological distress among older Asian immigrants in California. *Journal of Gerontological Social Work*, 59(2), 77-97.

#### **CONFERENCE PRESENTATIONS**

- Chang, M. (2016). *Correlates and predictors of psychological distress among older Asian immigrants*. Oral session presented at the annual conference of Society for Social Work and Research, January 13-17, Washington D.C.
- Chang, M. (2009). *Experience of Elder Abuse among Older Korean Immigrants*.

  Presentation at the Annual Conference: Korean Academy of Social Welfare, October 23 and 24, 2009, Busan, Korea.

#### FELLOWSHIPS AND AWARDS

| Franklin D. Gillam, Jr., Social Justice Award                | 2017      |
|--|-----------|
| Meyer and Rene Luskin Fellowship & Fisher Fellowships        | 2016-2017 |
| Meyer and Rene Luskin Fellowship & Hal E. Martin Scholarship | 2015-2016 |
| Meyer and Rene Luskin Fellowship                             | 2013-2014 |
| Meyer and Rene Luskin Fellowship                             | 2014-2015 |
| Leon and Toby Gold Endowed Fellowship                        | 2014-2015 |

| UCLA Social Welfare Departmental Fellowship                         | 2012-2013 |
|---|-----------|
| UCLA Social Welfare Departmental Fellowship                         | 2011-2012 |
| Los Angeles County, Department of Mental Health: Stipend (\$18,500) | 2008      |
| San Francisco Theological Seminary Fellowship                       | 1998-2001 |
| San Francisco Theological Seminary: Women Presidential Scholarship  | 1998-2001 |
| Disciple Seminary: Disciple of Christ Scholarship                   | 1999-2002 |
| Ewha Women's University: Research Assistant Fellowship              | 1991-1994 |
| Hyosung Women's University: Tuition Fellowship                      | 1987-1990 |

#### **CERTIFICATION**

#### **Older Adult Mental Health Services**

Foundation in Older Adults Mental Health (I)
Advanced Applications in Evidence Based and Promising clinical Interventions in Older Adults
Mental Health Services (II)

### RESEARCH EXPERIENCE

2016-Present Graduate Student Researcher/Independent Research (UCLA: Social Welfare)

"Knowledge and Subjective Experience of Elder Abuse between Older Korean Immigrants in the United States and Older Koreans in South Korea: A comparative Study.

Funded by Franklin D. Gillam, Jr., Social Justice Award

2010- **Principal Investigator** 

2008 MSW Thesis at California State University, Los Angeles, School of Social Work. Experience of Elder Abuse among Immigrant Korean Older Adults.

#### PROFESSIONAL EXPERIENCE

| 9/2007- | MSW Internship                                     |
|---------|--|
| 6/2008  | County of Los Angeles, Department of Mental Health |
|         | Empowerment and Advocacy Division                  |
|         | (formerly the Office of Family Advocate)           |
|         |  |
| 9/2006- | MSW Clinical Social Worker Internship              |
| 6/2007  | Charles Kim Elementary School, Los Angeles, CA     |

## CLINICAL TRAINING AND CONTINUING EDUCATION

| 6/2007- | Certificate in Older Adult Mental Health Services |
|---------|---|
| 1/2008  | Los Angeles County, Department of Mental Health   |
|         | (Course I & Course II)                            |

#### **CHAPTER 1: INTRODUCTION**

#### **Statement of the Problem**

## The nature of the problem

Psychological distress is commonly used as an indicator of emotional suffering (Mirowsky & Ross, 2007). It is viewed as emotional disturbances that may impact the social life and daily living of individuals. Thus, psychological distress is often described as a non-specific mental health problem. Indeed, the term is often applied to the undifferentiated combination of symptoms of depression and anxiety (Mirowsky & Ross, 2002).

Many Asian immigrants face challenges in their mental health and show elevated levels of psychological distress (Abe-Kim, et al., 2007; Chang & Moon, 2016). Multiple studies have found this to be a result of processes associated with immigration (Abe-Kim et al., 2007; Chang & Moon, 2016; Chiriboga, Black, Aranda, & Markides, 2002; Gonzalez, Hann, & Hilton, 2001; Jang & Chiriboga, 2009; Hwang, Chen, Takeuchi, Myers, & Siddharth, 2005; Oh, Koeske, & Sales, 2002; Park, 2009). Immigration is a stressful experience for immigrants with considerable challenges in adjustment, including changes in lifestyle, cultural norms, socio-economic status, family structure, language proficiency, social networks, and the overall social environment. Immigration poses special challenges to older adults, due to loss of well-established social networks and cultural values (Jang & Chiriboga, 2009; Oh et al., 2002).

The aforementioned changes, as well as the impact of cultural differences, influence the mental health status of older immigrants (Jang & Chiriboga, 2009). Major changes in cultural norms, language, and psychosocial factors (e.g., income and family adjustment) have been shown to cause psychological distress in older immigrants (Mui & Kang, 2006). Additionally, older immigrants are at risk of developing psychological distress with increasing age due to

health related conditions, such as multiple functional impairments and declining physical health, and non-health related conditions, such as decreasing social relationships (Fiske et al., 2003).

Among older immigrants in the United States, Korean immigrants are one of the fastest growing groups (Park & Bernstein, 2008). Older Korean immigrants are primarily first generation, and tend to maintain their Korean cultural heritage and cultural identity after immigrating to the United States (Oh et al., 2002; Park & Bernstein, 2008; Lee, 2007). However, older Korean immigrants face the challenges of maintaining their traditional family values in the cultural context of the United States. One study suggests that such loss may be a possible stressor for this population. For example, traditional Korean family values include care for older parents; this is often seen as a moral responsibility and expectation of adult children in the family system (Lee, 2007). These traditional, collectivistic family values may be challenged in the United States due to its juxtaposition against Western social contexts, in which individualism and independence are highly valued. Korean family systems are interdependent and family members are expected to serve various functions of support to older adults as they age (Lee & Holm, 2011).

Older Koreans in South Korea also face similar challenges of maintaining their traditional family values in the changing cultural landscape. The influence of modernization and industrialization on Korean society has changed Korean traditional family living. Younger generations have adopted aspects of individualistic cultural orientation than their older parents (Hyun, 2001). In accordance with this trend, traditional family roles have changed. The cultural gaps caused by such intergenerational difference can produce conflict between family members and by extension, psychological distress. Despite recent social changes such as urbanization and a Westernized nuclear family lifestyle, traditional family values, including filial piety to parents

women's Society, 2001). However, the younger Koreans are less likely to maintain such values of adult filial piety and Confucian principles of family relationships. Younger family members are less apt to support and care for older parents; thus, older Koreans are no longer guaranteed authority and care in the family system as they age (Moon, 2000).

Psychological distress is often conceptualized as unpleasant feelings or emotions that can adversely impact one's level of functioning. It is characterized by symptoms of depression, anxiety, distraction, and states of marked impairment (Mirowsky & Ross, 2002). It can be thought of as the emotional suffering in a stressful situation, which makes it challenging to cope with normal daily activities and negatively impact focus, concentration, and social activities. Psychological distress can impact on overall health and put one at higher risk of chronic diseases, including cardiovascular (Cohen, Janicki-Deverts, & Miller, 2007).

Psychological distress is prevalent among older immigrants in the United States. Factors associated with distress in older immigrants include: length of time spent in the United States, level of English proficiency, acculturation status, service barriers, health status, family/child relationships, social networks, and level of social support (Chang & Moon, 2016; Leung, Cheung, Kao, & Gulati, 2015). A number of studies have also confirmed the relative impact of sociodemographic factors (e.g., gender, age, education, marital status, health status, and employment) and acculturation factors (e.g., English proficiency, length of residency in the United States) on the psychological distress experienced by older Korean immigrants (Bernstein, Park, Shin, Cho, & Park, 2011; Jang, Chiriboga, Kim, & Rhew, 2010; Kim,Han, Shin, Kim, & Lee, 2005; Noh, Kaspar, & Wickrama, 2007; Shin, D'Antonio, Son, Kim, & Park, 2011).

In addition, traditional Korean values have influenced how Korean immigrants perceive and express psychological distress, as well as mental health service utilization (Park & Bernstein, 2008). Although older Koreans have a high prevalence of psychological distress, they rarely reveal their psychological distress, due to stigmatization of mental health issues and the desire to save face (Min & Moon, 2015). For this reason, older Koreans are less likely to openly express their distress to mental health professionals (Min & Moon, 2015).

As the number of older Korean immigrants in the United States increases, the need to investigate this population further is warranted. The older Korean population aged 65 and over in the United States is projected to increase from 32 million to 70 million in the United States by 2030. The population of older minorities is expected to increase from 4.3 million to 22.5 million by 2050. Additionally, the number of Koreans in the United States has dramatically increased from 109,442 to 1,463,474 (2010), an increase primarily attributed to immigration (U.S. Bureau of Census, 2010). Therefore, there is a critical need for expanded mental health services that are available to older Koreans.

## The prevalence of the problem

Psychological distress has consistently received the attention of researchers and authorities in the general population. From 2009 to 2013 in the United States, the National Health Interview Survey (NHIS) found that 2.4% of older adults aged 65 and over reported serious psychological distress, including 1.8% of men and 2.8% of women (Weissman, Pratt, Miller, & Parker, 2015). These adults were almost five times as likely to have activities of daily living (ADL) limitations (27.3%) compared with those without serious psychological distress (5.7%).

A recent study found that the prevalence of severe psychological distress among older Asian immigrants varied significantly across five Asian groups in California. Among the five groups studies in California, psychological distress was the highest for Filipinos (4.8%), followed by Koreans (3.9%), Vietnamese (1.9%), Chinese (1.6%), and other mixed Asian immigrants (e.g., Japanese, combodian, south Asian) (Chang & Moon, 2016). This study estimated that the number of older Koreans in Korea has increased annually. Multiple studies have found depressive symptoms in the older Korean population. In the Korean Longitudinal Study on Health and Aging, a national study on health outcomes of aging, 10 % of 1118 older Koreans (n=1,118) reported depressive symptoms (Park et al., 2010). In another study, the Korean Community Health Survey has found approximately 15 % of older Koreans in Korea experience depressive symptoms (Oh et al., 2013).

A recent study demonstrated that older Koreans in Korea had anxiety three times higher than that of adults aged 18 to 60 years old (National Health Insurance Service, 2014). The prevalence rate of depression in older Koreans in Korea has ranged from 15 % to 25 % depending on the screening tools and study samples. For example, Jeon and colleague found that the prevalence of depressive symptoms among 930 respondents living in Korea was 17.0% for older Korean men and 24.7% for older Korean women. Existing empirical findings showed relatively consistent evidence that the risk of depression increased among older Koreans who were female, had lower household income, lower educational attainment, and poor health status (Chang & Moon, 2016; Jean, Jang, Rhee, Kawachi, & Cho, 2007).

In the United States, severe psychological distress among older Korean immigrants is a growing public health concern (Chang & Moon, 2016; Cho, Park, Bernstein, Roh, & Jeon, 2015). Several studies reported significant prevalence of depressive symptoms in older Korean

immigrants to be between 12.6% and 17.6% of the population report depressive symptoms (Kim, Han, Shin, Kim, & Lee, 2005; Kim, Seo, & Cain, 2010; Oh et al., 2002; Shin, Han, & Kim, 2007), a level that is higher than the general population in the United States (from 7.94 % to 9.25 %), and the national sample of South Korea (Kim et al, 2010; Lee, 2015). In another study using a small sample (n= 67), Mui (2001) found the prevalence of depressive symptoms in older Koreans in the United States to be 45%. Similarly, Jang, Kim, and Chiriboga (2005) found that between 24% and 30% of older Korean immigrants experience depressive symptoms. Overall, older Korean immigrants have demonstrated a higher prevalence of psychological distress than the general population (Bernstein et al., 2011; Chang & Moon, 2016; Jang et al., 2007; Jang, Kim, & Chiriboga, 2005; Oh et al., 2002).

Another body of research has focused on the mental health status of older Asian immigrants, compared to other aging populations in the United States. It is estimated that 19 % of older adults in the United States suffer from clinically significant depressive symptoms (Cole & Dendukuri, 2004). However, researchers have consistently noted higher risk, prevalence, and severity of depressive symptoms among older Asian immigrants. For example, one study found that older Asian immigrants suffer from depression at a rate the higher than that of their White older adult counterparts (Jang, Kim, Hansen, & Chiriboga, 2007; Lee, Moon, & Knight, 2005). Another study demonstrated that older Korean immigrants have the highest rates of suicide (compared to other subgroups) among all ethnic groups in the United States (Sharpe, 2008). In a recent study of older Korean immigrants, prevalence rate of psychological distress (depression) was estimated between 24% and 30.3%, higher than the rate found in the general population of older Americans (15% to 20%) (Jang & Chiriboga, 2011). This study suggests higher risk of

morbidity of mental health symptoms in this group, as compared to other non-immigrant aging populations in the United States.

### Psychological distress among older Koreans in Korea

The dramatic change in the number of aging adults in Korea has resulted in a greater demand for personal care and social and health services. According to the National Statistics of Korea, the number of older adults (65 years old and older) has grown substantively in Korea from 4.17 millions, or 8.7% of the total population in 2004 to 6.49 millions or 12.7% of the total population in 2014. Considering the rapid growth of the aging population in Korea, the number of older adults is projected to reach 19.0% of the total population in 2024 and 27.6% in 2034 (Korea National Statistical Office, 2014). It is estimated that older adults will make up 33% of the general population in 2040 in Korea (National Statistics of Korea, 2014).

As a result of the continued and substantial growth of older population in Korea, demand for long- term health care for older adults in Korea has also been growing rapdly (National Statistics of Korea, 2014). Over time, older adults experience a multiple losses of productivity, physical health, mental health, financial security, and daily independence. These cognitive and physical functional limitations, as well as loss of or reduced income, have been associated with increased risk for psychological distress in this group (Chang & Moon, 2016).

Although older Korean immigrants in the United States have been exposed to Western cultural values of individualism, gender equality, self-respect, and freedom, Confucianism continues to influence family structure, and family relationships, and gender roles in the family system (Park & Bernstein, 2008). As the older population grows in Korea, rapid industrialization and exposure to Western cultural values have greatly influenced social attitudes towards family and marriage (Keum, 2003). Societal changes, such as increasing gender equality in the

workforce and the nuclear family rather than the traditional extended family, have become the norm. As a result of these changes, the traditional family support structure has also weakened (Oh et al., 2013). In particular, the influence of traditional Confucian principles in society (including filial piety) has waned (Oh et al., 2013). While younger generations are less likely to adhere to traditional family values, many older adults continue to adhere to expectations for social support and ongoing care by their family members. As result of these changing and divergent attitudes in social expectations regard care for older people has indeed caused intergenerational conflict and attendant psychological distress particularly among older parents. To understand the phenomenon of psychological distress between older Koreans in Korea and their counterparts in the United States, this study explores how cultural contexts and associated risk factors affect the prevalence of psychological distress.

## The consequences of the problem

Psychological distress negatively impacts one's mental health, physical health, and social functioning. Severe psychological distress is associated with decreased quality of life, lower perceived self-efficacy, diminished capacity to make decisions, reduced motivation and reduced quality of social relationships (Beekman et al., 2002; Charlson & Peterson, 2002; Shin, Choe, Kim, & Jeon, 2010). Older adults who experience psychological distress show increased mortality rate compared to others (Beekman et al., 2002; Charlson & Peterson, 2002; Shin, Choe, Kim, & Jeon, 2010).

One potential consequence of severe psychological distress is increased risk of suicide (Ahn, 2012; Conwell, Duberstein, & Caine, 2002; Han et al., 2016b; Park et al., 2014; Shin et al., 2010). Individuals with severe depression are considerably more at risk of developing suicidal thoughts (Han et al., 2016a; Kim & Kim, 2008; Park, Schepp, Jang, & Koo, 2006). For example,

60% of those who die from suicide attempts have some form of depression (Barbui & Tansella, 2009; Conwell & Thompson, 2008; Oquendo & Mann, 2008). Both developing and developed countries, up to 85% of those who complete suicide suffered from or was diagnosed with depression (Barbui & Tansella, 2009). Thus, depression is a significant risk factor and predictors to suicide attempts.

Studies conducted in Asian countries also demonstrate a correlation between suicidal ideation, suicide attempts, and depression (Aiba, Matsui, Kikkawa, Matsumoto, & Tachimori, 2011; Jeon et al., 2010). For example, a study in Korea found that depression was the strongest contributor to suicide among older Koreans in Korea (Park et al., 2014). Suicide rate is significantly higher in Korea than most other countries like the United States. According to the Korea National Statistical Office (2008), suicide rates of older adults were 24.8 of every 100,000 in 2007, higher compared to 10.1 of every 100,000 in the United States (Organisation for Economic Co-operation and Development, 2008).

Some research in the United States has estimated the cost of depression in terms of related service utilization. For example, severely depressed older adults collectively spend more than \$31 billion annually on mental health treatment, compared to peers without depression (Stewart, Ricci, Chee, Hahn, & Morganstein, 2003) in the United States. This medical cost can inflict significant economic burden on the mental health system, as well as individuals who are suffering from depression.

## **Purposes of the Study**

This purpose of this study is to explore the differences and similarities of psychological distress among older Koreans in the United States and in South Korea. The aims of the study are as follows: 1)To examine and compare the prevalence of psychological distress between older

Korean immigrants in the United States and older Koreans in Korea; 2)To identify and compare what factors are significantly associated with older Koreans' experience of psychological distress by examining how the occurrence of psychological distress is affected by socio-demographic characteristics; and 3) To identify and compare such variables as family relationships, social support and social networks, help-seeking behaviors, moderate the relationship between socio-demographic characteristics (e.g., age, gender, marital status, educational attainment, health status, income) and psychological distress, the study's outcome variable.

### **Significance of the Study**

Over the last several decades, psychological distress has been recognized as a growing social concern that affects individuals, families, and society at large. This study will provide significant and useful information for professionals in the field of social work who are working with Koreans both in Korea and the United States. There is a lack of comparative studies focusing on the prevalence predicting and comparisons of psychological distress older Koreans in South Korea and their counterpart in the Unites States. This study compares the experiences of older Koreans living in Korea and older Korean immigrants living in the United States. It explicitly aims to answer questions about the prevalence, similarities, and differences in distribution of psychological distress across these populations based on socio-demographic factors contributing to psychological distress. This study seeks to provide knowledge about mental health as it applies to aging Korean populations.

Specifically, psychological distress is underreported among Korean Americans and Koreans due to unique cultural values and beliefs that include saving face and the stigmatization of mental illness (Ali, 2014). Compared to non-Koreans in the general population, older Koreans

in both Korea and the United States are also less likely to recognize and report mental health problems (Jang, Chiriboga, & Okazaki, 2009; Jang et al., 2016).

Thus, this study aims to determine the similarities and differences between older Koreans in Korea and older Korean immigrants in the United States and correlates and predictors of psychological distress. It also aims to increase awareness of psychological distress, and recommends effective strategies for prevention and intervention or treatment of psychological distress among the study populations. Indeed, this study is important to the areas of practice, research, and policy on psychological distress for the following reasons.

First, this study attempts to identify the significant factors associated with the occurrence of psychological distress among older Koreans in both countries. Therefore, by investigating the relationship between psychological distress levels and types and levels of stressors, this study may offer some useful suggestions for culturally relevant intervention strateries in the context of life in the original home country and the courty of immigration.

Second, this research also provides information about prevalence of psychological distress and attempts to better understand its prevalence among older Koreans in Korea and older Korean immigrants in the United States. This study is meaningful because older Koreans lack awareness about this psychological distress. Consequently, there is lack of information about how older adults perceive of psychological distress, and which factors are associated with help-seeking behavior. This study explores how individual differences in factors such as socioeconomic status, living arrangements, social values, family values, social support, religious affiliation, and living conditions affect level of perceived psychological distress. The death of relevant research may be caused by a lack of culturally competent services, and the barriers associated with mental health services for older Korean immigrants.

Finally, this study provides important information about the determinants of psychological distress and effective strategies for treating mental health consumers concerning their experience of stigma, shame, and discrimination associated with mental illness.

Addressing this gap in the literature, providing accurate information about prevalence, correlates, and predictors of psychological distress among older Koreans in these two settings can allow a meaningful comparison of mediating factors (i.e. the role of religion, culture, family relationships, social support, social networks, and help-seeking behaviors) that can be used to devise culturally competent interventions, and to encourage greater use of mental health services among this population.

## **Study Overview and Purpose**

The purpose of this study is to further understanding the current knowledge of the knowledge of the effects of socio-demographic characteristics, social support and social networks, family relationship, and help-seeking behavior on psychological distress. In particular, this study aims to understand whether there is 1) a relationship between socio-demographic characteristics and psychological distress, 2) a relationship between moderating variables (e.g., social support and social network, family relationship, help-seeking behavior) and psychological distress, and 3) an interaction effect of moderating variables on the relationship between socio-demographic characteristics and psychological distress.

By utilizing a cross-sectional survey design, the study allows comparison of the prevalence of psychological distress between older Koreans in Korea and their counterparts in the United States. The present study highlights whether influences on psychological distress operate differently between older Korean immigrants in the United States and older Koreans in Korea across socio-demographic characteristics. Additionally, the present study provides a

nuanced understanding of the relationship between socio-demographic characteristics and psychological distress outcomes beyond literal psychological distress. This study builds on prior research on the stress process and stress buffering role of social support and social networks, family relationship, and help-seeking behavior by adding a much-needed understanding of how stressors and different types of resources may lead to psychological distress outcomes in particular. Prior to this study, the stress process model had not been used to understand the link between socio-demographic characteristics, social support and social networks, help-seeking behavior, and psychological distress outcomes. Findings from this study provide a greater understanding of different socio-demographic characteristics and psychological distress. While there is a growing understanding of various socio-demographic characteristics and psychological distress, we still know little about their relationship to psychological distress and emotional well-being. Findings regarding these relationships, and the potential buffering effects of social support and social networks, as well as help-seeking behavior, can inform practice and policy for organization setting older Koreans both in the United States and in Korea.

## **Definition of Key Terms**

**Stressor**: "Stressors exists as a force, external to the person, which constitute a source of challenge to current functioning capacities" (Wheaton, 1999).

**Stress**: "a non-specific biological response to a demand or stressor that is not necessarily harmful to the individual" (Ridner, 2004, p. 339).

**Distress**: "a non-specific, biological or emotional response to a demand or stressor that is harmful to the individual" (Ridner, 2004, p. 339).

**Psychological distress**: "the unique discomforting, emotional state experience by an individual in response to a specific stressors or demand that results in harm, either temporary or permanent, to the person" (Ridner, 2004, p. 339).

The Kessler Psychological Distress Scale (K10): This is a 10-item questionnaire intended to yield a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent 4 week period. The K10 includes the items of "feeling nervous," "feeling hopeless," "feeling restless or fidgety," "feeling depressed so that nothing could cheer you up," "feeling that everything was an effort," "feeling worthless," "feeling tired out for no good reason," "feeling so nervous that nothing could calm you down," "feeling so restless that you could not sit still," and "feeling so sad that nothing could cheer you up" (Kessler et al., 2002).

**Depression**: according to DSM-IV criteria for "Major Depressive Disorder is often described by the person as depressed, sad, hopeless, discouraged, or down in the dumps" (American Psychiatric Association, & American Psychiatric Association, 2000, p. 349).

**Anxiety**: is "characterized by at least 6 months of persistent and excessive anxiety and worry" (American Psychiatric Association, & American Psychiatric Association, 2000, p. 429).

**Coping**: "the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them" (Folkman & Lazarus, 1980, p. 223).

**Korean immigrants**: Korean immigrants refer to Korean-born individuals who currently reside in the United States (U.S. Census Bureau, 2010).

## **Organization of the Current Study**

Chapter 1 briefly outlines the scope and nature of psychological distress among older Koreans in the United States and in Korea. Chapter 2 reviews the current literature of the relationship between socio-demographic characteristics and psychological distress. Chapter 3 introduces the study's conceptual design guided by stress coping theory and concludes with the associated research questions and hypotheses. Chapter 4 details the methodology for the study, including data sources, study sample ad the sampling method, and analytical approaches. The results are presented in Chapter 5, and are organized according to specific research questions. Finally, Chapter 6 discusses the overall findings, strengths and limitations of the study, and implications for future research and social work practice and policy.

#### **CHAPTER 2: LITERATURE REVIEW**

This chapter introduces a rationale for a proposed study, and provides an overview of relevant research literature on this topic. This section will provide a theoretical framework to understand of psychological distress, and a cross-cultural comparison between older Koreans and older Korean immigrants. A broad range of factors contribute to psychological distress in this group, including socio-demographic characteristics, health and functional conditions, religious affiliation, living arrangements, acculturation, social support and social networks, family relationships. These predictors of psychological distress have been previously used as indicators of the mental health and cross-cultural comparisons between these two groups.

## **Prevalence of Psychological Distress**

Psychological distress is generally defined as a state of emotional suffering represented by depression (e.g., hopelessness, feeling tired, lost interest in daily activities, helplessness, and sadness) and anxiety (e.g., restlessness, feeling tense, and difficulty concentrating). Symptoms of psychological distress do necessary meet the threshold of major depression or anxiety disorder. Psychological distress is often used as part of public health measurements with the general population. The prevalence rate for psychological distress among older immigrants varies. Currently, no national estimates exist because no such study has ever been done. However, rates of psychological distress among older Asian Americans have ranged from 5% to 40 % in the United States, which may reflect this population's ethnic and cultural diversity, and concentration in specific geographic areas (Ina et al., 2011; Kuo, Chong, & Joseph, 2008; Lai, 2004).

According to the Substance Abuse and Mental Health Services Administration's 2014

National Survey on Drug Use and Health, approximately 43.6 million Americans over the age of

18 have experienced some form of mental illness in the past year, and an estimated 9.8 million adults have mental illness (Substance Abuse and Mental Health Services Administration, 2014). Another study showed mental illness affecting between 5 % and 27 % of the general population (Chittleborough, Winefield, Gill, Koster, & Taylor, 2011).

A considerable body of research has focused on mental illness in the older Asian communities. In the case of older Korean immigrants, the prevalence rate of psychological distress of older Korean immigrants in the United States ranged from 24% to 45% in a systematic review and meta-analysis during the past 10 years (from 2004 to 2014) (Kim, Park, Storr, Tran, & Juon, 2015; Jang et al., 2009; Jang, Kim, & Chiriboga, 2005). For example, a study by Jang et al. (2010) indicated that 31% rate of older Koreans (*n*=675) had depressive symptoms, according to a study using the Center for Epidemiological Studies Depression Scale (CESD) (Jang, Kwag, & Chirlboga, 2010).

Compared to other Asian subgroups (e.g., Chinese, Filipino, and Vietnames) older Korean immigrants had the highest level of psychological distress supporting previous research findings that older Korean immigrants have relatively high levels of psychological distress (Chang & Moon, 2016; Lee et al., 2005; Min, Moon, & Lubben, 2005). These results reflect lower acculturative adjustment, as compared to other Asian groups due to limited English proficiency and lack of economic opportunities (Choi, Miller, & Wilbur, 2009). Among different ethnic subgroups in the United States, Kim et al. (2015) performed a meta-analysis of 58 studies examining the prevalence of depression. Both adult Koreans (33%) and Filipino Americans (34.4%) show similarly high prevalence rates, which were significantly higher than that for Chinese Americans (15.7%) and Japanese Americans (20.4%). The prevalence rate of depression in Japanese Americans was estimated to be 20.4%, a rate that is similar to Chinese Americans

(Kim et al., 2015). Similarly, California Health Interview Survey found that both older Korean immigrants and older Filipino immigrants experienced severe psychological distress (4.8% and 3.9%, respectively), higher than that of older Chinese immigrants (1.6%)(Chang & Moon, 2016).

In Korea, the prevalence of depression in older Koreans in Korea is highest in those aged 80 years and over (35.4%) and lowest in those aged group 40 to 49 years (7.6%), as measured by the Center for Epidemiological Studies Depression Scale (Park & Kim, 2012). Studies on psychological distress have shown that approximately 20% to 30% of older adults (aged 65 and over) experience psychological distress in Korea (Park et al., 2012). The prevalence of psychological distress is growing. Subsequently, the social and economic costs of care are also increasing in Korea. The total cost of psychological distress was estimated to be \$ 4, 05 billion in 2005 and 22 billion in 2010. In sum, older Koreans in Korea and in the United States are more likely than older non-Korean Americans to experience psychological distress. Therefore, more attention must be paid to the prevalence and management of psychological distress is these communities (Jung, 2005).

## **Correlates and Predictors of Psychological Distress**

A number of researchers have identified various risk factors involved in psychological distress in older Koreans. This section focuses on predictors of psychological distress, including social support and social networks, family relationship, health status and functional limitations, religion, living arrangements, acculturation, and help-seeking behaviors.

## **Socio-demographic Characteristics**

Numerous studies have identified the relationships between socio-demographic characteristics and psychological distress, including gender, education, marital status, and economic status. The following sections detail literature relevant to each of these factors.

**Gender.** Several studies demonstrate that psychological distress was indicated among older Asian American women (Boey, 2001; Jang et al., 2010; Kuo et al., 2008; Lai, 2003; Wu, Tran, & Amjad, 2004). For example, Jang et al. (2011) found that a higher level of psychological distress was more prevalent among female older Korean immigrants, as compared to their counterparts (Jang, Kim, & Chiriboga, 2011). Older Korean women have a tendency to internalize their feelings, which can lead to psychological distress (Ahn & Kim, 2015; Cho et al., 2013). For example, older Korean women are likely to attribute their hardship to fate and external forces beyond their control (Ahn & Kim, 2015). Consequently, gender roles for women in the family and society might be significant causes of psychological distress (Kuo & Guan, 2006). A substantial body of research indicates that the differences in psychological distress between men and women are the result of environmental factors. However, other significant contextual factors play a defining role in shaping the pattern of psychological distress in women. Overall, a higher prevalence of psychological distress is related with women's experience of sexiam in the family and society more demands as compared to men. From this perspective, men' lower psychological distress can be attributed to their collectively smaller contribution to household labor.

Marital status. Marital status has also been found to have an impact on the mental well-being of older Koreans. A study in Korea comparing married and unmarried older Koreans found that the married group, on average showed better mental health status that the unmarried group (Ahn & Kim, 2015; Jang & Chiriboga, 2011; Jang et al., 2009). Unmarried or widowed older adults are more likely to experience greater psychological distress compared to their married counterparts. For example, Pan et al. (2008) found that prevalence of psychological distress among Chinese men (ages 50 to 70) without a spouse was 2.6 times higher than that for married

men, but marital status was not significantly associated with psychological distress among women in China (Pan et al., 2008). These gender differences in the health benefit of marriage in Asian societies may be derived from the social and cultural environment, which includes strictly divided gender roles stemming from traditional Confucianism.

During the past several decades, Korean families have become more similar to Westernized families with nuclear family structures as a result of industrialization and urbanization. However, the traditional patriarchal and Confucian norms still persists in Korean families, especially in older couples (Cha, 2007). In recent decades, increasing life expectancy in Asia has resulted in marriages of increased duration as reflected in higher rates of married couples living together without their children in the home. Older Koreans (ages 65 years and older) marriage rate is 55.4 % in 2005, an increase of 3.4% since 2000 (Korean National Statistics, 2006).

These increases in the number of married older Koreans have reduced the dependence on children, leading to lives that are increasingly focused on the couple in later life. Behind these gradual trends, however, conflict remains with regard to family members' roles and norms. Specifically, women's participation in the workforce has rapidly grown in Korean during recent years, and consequently, the traditional childbearing and caregiving roles have shifted to older women in the family (Jang et al., 2009). In addition, the rapid rise in dual-income households has resulted in increased caregiving burdens on husbands, adult children, and grandchildren in Korea. Given these conditions, older Korean women might experience high levels of psychological distress in later life due to marital conflict and the cumulative impact of gender role expectations.

**Educational attainment.** Level of education has consistently been found to be a significant predictor of psychological distress in later life in the United States and Korea (Boey,

2001; Jang et al., 2005; Lee, Moon, & Knight, 2005; Leung et al., 2010). Educational attainment was significantly associated with psychological distress. Lower educational attainment is associated with a higher prevalence of psychological distress among older Korean immigrants (Jang, Kim, & Chiriboga, 2005; Lai, 2004; Lee et al., 2005; Stokes, Thompson, Murphy, & Gallagher-Thompson, 2001). For example, Jang et al. (2005) found that a greater number of older Korean immigrants with lower educational attainment were more at risk for psychological distress than those with an education of high school or above. In another study, Lai (2004) found that older Chinese Canadians who reported lower levels of education were associated with higher levels of psychological distress. One study noted that Korean women reported experiencing distress as hwa-byung, a unique manner of expressing distress and a state that can precede depressive symptom (Park, Kim, Kang, & Kim, 2001; Park, Kim, Schwartz-Barcott, & Kim, 2002). Overall, these results reported lower educational attainment is significantly associated with psychological distress. Therefore, increased educational attainment has a protective effect in preventing high levels of psychological distress (Chang & Moon, 2016; Lee et al., 2005; Richards, Shipley, Fuhrer, & Wadsworth, 2004).

Economic status. Lack of economic resources plays a notable role in stress outcomes among older immigrants (Lai, 2004; Lee et al., 2005; Kuo & Guan, 2006; Mui, 2000). For example, Lai (2004) found that older Chinese Canadians who experienced depressive symptoms frequently reported economic difficulties, in comparison to those who reported no depression. In another example, Kuo and Guan (2006) found that financial difficulty was a significant correlate and predictor of psychological distress. Financial difficulty is also related to psychological distress among older Korean immigrants (Lee et al., 2005). For example, Mui (2000) found that financial difficulty was strongly associated with psychological distress among older Korean

immigrants. Economic insecurity among older Koreans is related to a higher poverty rates. The poverty rate of older Korean immigrants is 23%, higher than older Whites (7%) and other populations due to their greater age, language barriers, and physical limitations (Chang & Moon, 2016). Many older Korean immigrants face a higher risk of financial difficulty compared with both general older adults and other Asian immigrants; this is often due to lack of job opportunities, and thus, lack economic resources to support themselves and their families (Min et al.,2005). Previsious studies have established evidence concerning the numbers of low income and women, lack of economic resources, higher rates of psychological distress among older Koreans in Korea and older Korean immigrants in the United States.

# **Social Support and Social Networks**

The roles of social support and social networks on mental health outcomes among older Asian immigrants have also been explored. Social networks are a resource that an individual uses in order to facilitate support. Most people participate in a mutually beneficial network of relatives, friends, and neighbors, in which advice and counsel are frequently sought out. Studies found that individuals with psychological distress have networks characterized by fewer linkages to family and friends and less perceived social support from those networks than normal people (Lee et al., 2005; Min et al., 2005; Han, Kim, Lee, Pistulka, & Kim, 2007).

Social support can often encompass both tangible and intangible support, including emotional support and the obtainment of information that is critical to daily functioning. Social support can also facilitate maintenance of cultural identity, build coping strategies throughout one's lifetime, and enhance self-esteem (Southwick et al., 2016). Social support has been positively associated with health status, and is a protective factor for positive mental health outcomes (Han et al., 2007).

Researchers have also shown the role of social support among older Asian immigrants' mental health. For example, Han et al. (2007) found that higher level of social support were predictive of lower psychological distress among older Koreans (Han et al., 2007). In general, social support with this group is often sought out through formal means (e.g., counselors, psychologists, psychiatrists, social workers, and health care physicians) and informal means (e.g. family, friends). Social support have also been shown to assist immigrants in adapting to acculturation stress by problem solving and coping with specific challenges associated with immigration (Kim et al., 2005). Conversely, a number of studies found that a lack of social support increased psychological distress among older Koreans (Han et al., 2006; Min et al., 2005). In another study, Min et al. (2005) reported that increased social support significantly decreased psychological distress in older Korean immigrants. Several studies found that social support mediates the relationship between stress and depression levels in older Korean immigrants. Social supports have been identified as an important factor for mental health and social adjustment among this population (Hovey, 2000; Kim et al., 2005).

Older Korean immigrants prefer to rely on their family members and close friends to help buffer against psychological distress, and tend to rely on these networks more than younger Koreans (Lee et al., 2005). However, a strong solidarity toward collectivism may actually decrease access to social support. For example, individuals may seek mental health services outside of their primary social networks to avoid compromising in-group harmony (Kim et al., 2008). In addition, older Korean immigrants may have fewer social supports, a stressor that is compounded by acculturative stress (Han et al., 2007; Kim et al., 2005; Noh & Kaspar, 2003). However, older Asian immigrants tend to underutilize social support compared to Whites in the general population due to cultural differences in emotional expression (Kim, Sherman, & Taylor,

2008; Mulvaney-Day, Alegria, & Sribny, 2007; Zhang &Ta, 2009). In traditional Asian culture, the maintenance of harmonious social relationships supersedes the importance of emotional expression or mental health care (Soto, Levenson, & Ebling, 2005).

Several studies found that social support is a notable protective factor the prevention of depressive symptoms among other ethnic minority groups (Han, et al., 2007; Min, et al., 2005; Noh & Kaspar, 2003; Van Der Horst & McLaren, 2005; Zang & Ta, 2009). For example, Noh and Kaspar (2003) found that social support among ethnic minorities was found to reduce psychological distress associated with experiences of discrimination. The available literature on cultural factors found that older Koreans and older Korean immigrants show unconscious or conscious reluctance to seek support. Older Koreans and older Korean immigrants experience feelings of shame, social stigma, and negative cultural beliefs about mental illness that greatly influence their help- seeking behavior (Berenstein, 2007).

These findings indicated that social support plays a significant role in alleviating acculturative stress and maintaining better mental health outcomes in older Asian immigrants. In sum, older Koreans utilize different coping strategies for activating social support and social networks when facing psychological distress. Social support, in turn, may lead to either more active or less help-seeking, depending on cultural context, and the type of mental health service (formal or informal) that is being examined. Access to supportive social networks is especially crucial to older Korean immigrants (Oh, Kreps, Jun, Chong, & Ramsey, 2012), as it can often decrease psychological distress.

#### **Family Relationships**

Family is the most important source of social and practical support in Korean culture, and some of the issues and challenges faced by older adults and their families substantially depend

on cultural values. Historically, families have played a significant role in caring for older adults in immigrant Asian populations. In Asian communities, families are the center of all social organization and adhere to cultural norms whereby the family is more important than the individual (Lee, 2007).

Korean culture is deeply rooted in Confucianism, where maintaining a hierarchical order within the family include respecting one's older adults, fulfilling family obligations, being obedient to rule and authority, and keeping rigid sex roles are essential (Moon, 2000; Scharlach, Kellam, Ong, & Goldstein, 2006). With Confucian principles as a driving force, the family serves as the main source of support for older adults facing major challenges and difficulties as they age (Moon, 2000; Scharlach et al., 2006). For this reason, the primary caregiver is frequently a family member within the system (Ayres &Woodtli, 2001; Min & Moon, 2015; Scharlach et al., 2006). In particular, spouses, daughters, or daughters-in-law fulfill the primary caregiving role for the older adults and provide the majority of daily caregiving responsibilities in Korean families (Hooyman & Kiyak, 2005). The family relationship between daughter-in-law and mother-in law, is a unique relationship maintained in families of Korean culture. In the Korean cultural society, adult children, both men and women, traditionally are expected to show unconditional respect for their older parents and tend to their daily needs.

In addition, Confucianism defines the role of women and emphasizes different role of husbands and wives (Keum, 2003). Korean women are expected to maintain three obediences: to father prior to marriage, to husband after marriage, and to sons after the husband's death (Park, 2007). Among these cultural values, specifically, filial piety plays a significant role. The concept of filial piety is closely linked to the notion of returning love and support back to family members who have given the same and showing respect for the authority of older adults.

According to traditional Asian cultural values, caring for older adults is a responsibility that fulfills cultural values, maintains cultural norms and continuity, and strengthens family solidarity (Malley-Morrison, You, & Mills, 2000; Scharlach et al., 2006; Xia, Do, & Xie, 2013). Thus, the cultural context in which care is provided for older adults differs from the majority culture in the United States. That is, caregiving is considered a tradition, a family affair, and a part of the culture.

These traditional Asian cultural values are quite different from those of American cultures, particularly principles of individualism and collectivism. Many Asian countries have been characterized as being collectivistic while the United States has been described as an individualistic culture. Specifically, Korean younger generations are acculturated much more quickly than their older parents. At the same time, Korean younger generations have been shown to have declining adherence to filial piety and commitments, which can contribute to intergenerational conflict. The decline of filial piety also reflects a large number of generational differences between older Korean parents and their children due to the contrasting cultural values of Korea and the United States. These intergenerational conflicts in the family are often cause stress and psychological distress in older Korean immigrants (Lee et al., 2005).

Traditional family values diminished and older adults expected little from their children in the United State. Older Koreans perceive changes in the traditional family values of respect for older adults and supports for the aged. These changed family values diminished power and authority of older Koreans. Changes in traditional family values are leading contributors to the decline in the status and psychological well-being of older Koreans (Park, Phua, McNally, & Sun, 2005).

In addition, when examining psychological distress among older Koreans, researchers must focus on psychological and physiological changes that occur in the transition from adulthood to older age. Some developmental transitions, including lack of self-care, poor judgment, limited language capabilities, and intergenerational conflicts with adult children can serve as psychological stressors (Jang & Chiriboga, 2011; Jang, Roh, & Chiriboga, 2014).

Overall, the available literature on health status and function limitations found that older Koreans tend to experience of psychological distress over time.

## **General Health Status and Functional Limitations**

Health status and functional limitations predict psychological distress in both older Koreans and general older populations (Chiriboga, Black, Aranda, & Markides, 2002; Djernes, 2006; Kraaij, Arensman, & Spinhoven, 2002). Those with poor health are also a key factor in psychological distress among older Koreans. Physical and cognitive impairments were found to put individuals at elevated risk for psychological distress (Chang & Moon, 2016; Jang, Small, & Haley, 2001).

Many studies have found poor health to be a significant predictor of psychological distress among older Korean immigrants. Research has shown an consistent and inverse relationship of poor health status and higher psychological distress level among older Korean immigrants (Chang & Moon, 2016; Jang et al., 2006; Lee et al., 2005; Kraaij et al., 2002; Leung, Cheung, & Cheung, 2010; Mui & Kang, 2006). For example, Lee et al. (2005) found that older Korean immigrants with poor health were three times more likely to experience psychological distress than those with good health status.

Functional limitations are defined as diminished capacity to perform basic daily activities that are usually required for independent living in the community (Chang & Moon, 2016). There

is growing empirical evidence to support that the presence of functional limitations contribute to psychological distress in later life (Chang & Moon, 2016; Conwell et al., 2002; Kaplan, McFarland, Huguet, & Newsom, 2007; Conwell et al., 2010; Park, Cho, & Moon, 2010). In a recent study of older Asian immigrants (*n*=1028), Chang and Moon (2016) found that functional limitations are associated with psychological distress. Park et al.(2010) in their study of older Koreans in Korea showed that the effects of functional limitations had a strong independent association with suicidal ideation; depression played a significant mediating role between functional limitations and suicidal ideation. Perhaps more pointedly, one study showed that an increase in functional limitations was found to be a significant risk for psychological distress among older Korean immigrants (Ahn, 2012; Kim & Ahn, 2014; Min et al., 2005).

Many first-generation older Korean immigrants come to the United States to reunite with their family members and provide essential support (e.g. assistance with household tasks, childrearing) to help their adult children successfully adjust in the United States. However, after immigration, new lifestyles change the family structure, including growing numbers of adult children living at a distance from their older parents (Min et al., 2005). In consideration of the characteristics, older Korean immigrants living alone, or only with their spouse has become more common as a living arrangement (Ahn, 2012; Min et al., 2005). Older Korean immigrants who experience functional limitations while living alone may be more susceptible to emotional distress, due to loneliness and decreased social support. For example, Ahn (2012) found that among older Korean immigrants' limitation in activities of daily living were a significant predictor of high psychological distress and high suicidal ideation.

In sum, functional impairment has a profound impact on older adults, affecting their mental health and quality of life. In providing social work services to older adults, recognition

and attention age-related functional impairment is important. Rates of reported functional limitations increase with age. The population of older adults with function limitations is growing as a result of longer life spans and decreased functional decline.

## Religion

Research has shown that psychological distress is inversely related to religious involvement, and thus, may have a positive impact on well-being in this population. Religion provides older adults protection against psychological distress (Lee et al., 2005; Koenig, 2008). Many studies found that religion plays a critical role in maintaining better physical and mental health among older adults (Koenig, 2006; Koenig, McCullough, & Larson, 2001), in coping with stress (Koenig, 2008; Nelson-Becker, 2005), negative life circumstances, and in recovering from relationship problems (Centore & Clinton, 2008), and illness (Koenig et al., 2001).

Religion can help in changing from stressful situations to see the positive aspects, provide more positive reinterpretation. Religion can also influence the specific coping strategies available to individuals confronted with stressful encounter (Park, 2005). It appears that making religious reappraisals is a major form of religious coping. Religion will be related to the appraised meaning of death and will influence their understanding of stressful events (Park, 2007). More specifically, religion can be involved in changing the appraised meaning of a stressful situation by helping the individual to see the positive aspects that have come from the stressful situation (Koenig, 2009; Park, 2007). For example, people often considered the stressful life events as the will of a loving God (Park, 2005) and aspects of religion have been shown to predict lower rates of disability and a range of illnesses (Miller & Thoresen, 2003). Religion may have positive impact and encourage making meaning of negative life events in benign ways.

Most studies concluded that religion plays a role as effective and beneficial ways of coping for individuals with mental illness, consequently ensuring its integration into psychological practice (Koenig, 2007; Tepper, Rogers, Coleman, & Malony, 2001). For example, Tepper et al.(2001) found that over 80% of 406 respondents with mental illness spent as much as half of their coping time in religious activities(e.g., prayer, meditation, rituals), which can reduce experiences of psychological distress. Religion may have great impact and influence on individual coping when confronted with difficult situations.

In cases where older Korean immigrants adjust better in stressful situations, religion plays an important coping role and an effective protective role for older Koreans. The Korean church provides various services, including: spiritual guidance, personal and social service information (e.g., health care, employment, child rearing, settlement services, business, and religious counseling), cultural activities, and socialization in the United States, which helps new immigrants, adjust to a new environment (Lee et al., 2005; Jang et al., 2016). In addition, religious leaders in ethnic communities are considered the first point of contact for mental health and emotional problems with life stressors (e.g., bereavement) (Lee, Hanner, Cho, Han, & Kim, 2008). For example, Jang et al. (2016) reported the knowledge and beliefs of psychological distress held by Korean American clergy using a qualitative research.

Religious leaders acknowledged the multiple roles they play for the general well-being of their community members, including their mental health (Jang et al., 2016). The same study found that the Korean church is the most important organization for the immigrant community specifically for older Koreans (Jang et al., 2016). The same study also reported that most of older Korean immigrants gather together at least once a week to attend a service in a Korean church, which provides diverse activities such as worship, educational and cultural activities. In addition,

Lee et al. (2005) found that older Korean immigrants who had more religious participation tend to report lower level of depression than those who did not have religion. Religious participation also has a positive association with good mental health (Behere, Das, Yadav, & Behere, 2013). In another study, Jang et al. (2006) found that religious involvement may increase older adults coping abilities and can reduce the negative effects of stress on well-being (Jang, Kim, & Chiriboga, 2006).

A growing number of studies have reported that religious community is a unique aspect of older Korean immigrants' culture and lives. Older Korean immigrants reported that higher religious involvement than comparable White population (Lee et al., 2005). For example, Lee et al. (2005) found that more than two-thirds of older Korean immigrants identify as Christians (Lee, et al., 2005; Min et al., 2005; Mui, 2000). About 80% of older Korean immigrants have close affiliations with immigrant Korean religious organizations (Lee, 2007; Lee et al., 2005; Moon & Cho, 2012; Mui, 2000; Ryan, Mui, & Cross, 2003), the major role of which is to serve as a support and coping resource for its members. In this way, Korean religious organizations have a profound impact providing a coping resource to individuals in the community. Moreover, Tirrito and Choi (2004) illustrated that Korean immigrants' churches play a major role in the process of acculturation for older adults by providing social services, information sharing for health care, and maintaining the Korean cultural traditions.

Recent research on the relationship between religious activities and mental health has found that religious activities are associated with lower levels of psychological distress, higher levels of positive emotional well-being, and higher life satisfaction among older adults (Koenig et al., 2001). For example, among older Asians immigrants, religious and spiritual involvement among people experiencing stressful life events is significantly associated with lower levels of

anxiety and depression (Mui & Kang, 2006; Nelson-Becker, 2005). Therefore, religious activities may have a positive effect on health perceptions and act as a buffer against the negative impact of physical and emotional problems in this population.

# **Living Arrangements**

Living arrangements among this population can be categorized into several common arrangements, including: living alone; living with a spouse only; living with a spouse in an extended family; living with a spouse in a nuclear family; living without a spouse in an extended family; and living without a spouse in a nuclear family (Oh et al., 2013).

In recent decades, Korean society has experienced rapid industrialization, urbanization, and Westernization that has impacted the population's pattern of living arrangements (Park et al., 2010). For example, the percentage of older Koreans living alone increased dramatically from 3% in 1960 to 31% in 2010 for females, and from 1% in 1960 to 11% in 2010 for males (Park & Choi, 2015). The traditional extended family and the influence of traditional family values (including filial piety) has resulted in a primary living arrangement in which living with a spouse is the predominant family structure for older Koreans. This change in living arrangement may have a negative effect on overall mental health status among older Koreans (Jang et al., 2009; Fan, 2007; Oh et al., 2015).

In short, older Koreans more commonly reside with a spouse; and living with extended family is no longer a common living arrangement in Korea. In modern Korean society, many families have transformed from extended family to nuclear family structures, which increased from 6.8% in 1970 to 82% in 2000( Korea National Statistical Office, 2000). The majority of older Koreans prefer to live independently or only with a spouse, rather than living with their adult children, due to divergent preferences in lifestyles (KIHASA, 2010). Some older parents

support adult children who have come back to their parents' home following divorce or financial difficulties. Korea also experienced financial crisis and an increased divorce rate from 1.3% in 1990 to 2.6% in 2011(Wang, Chen, Pan, Jing, & Liu, 2013). As a consequence of increased divorce rates, adult children are more likely to rely on their parents to care for their children (Wang et al., 2013).

Several factors are associated with independent living of older adults. Previous studies demonstrated that sufficient economic resources have the strongest relationship to independent living of older adults (Gibler & Lee, 2005; Kim et al., 2015). Older adults' ability to live independently from adult children is closely correlated with higher economic resources. Older adults' health status is associated with living arrangements among older adults. Kim et al. (2015) suggests that the poor health status of older adults who need personal assistance due to limited functional ability (i.e., activities of daily living) has a negative association with this population's ability to live independently. Lastly, availability of social support is positively associated with living alone in older adults.

Studies have indicated that the role of living arrangements upon depression symptoms in older adults can differ across various social and cultural contexts (Chan, Malhotra, Malhotra, & Ostbye, 2011; Hughes & Waite, 2002; Lai, 2004; Raymo, Kikuzawa, Liang & Kobayashi, 2008; Mui & Kang, 2006; Taqui, Itrat, Qidwai, & Qadri, 2007). Several studies found that older Asian immigrants who lived alone displayed more symptoms of depression than those who lived with others (Lai, 2004) while other studies found that those who lived with a spouse or children experienced depression (Stokes et al., 2001). Park et al. (2015) found, among older Korean immigrants, those who were living alone had higher levels of loneliness and depressive symptoms compared to those living with a spouse or children (Park, Jang, Lee, & Chiriboga,

2015). This result also suggest that lack of social ties can put individuals at a risk of psychological distress (Oh et al., 2015; Park, Jang, Lee, Haley, & Chiriboga, 2013; Shin, 2014).

Yet, few studies addressed the relationship between living alone and psychological distress in consideration of social cultural factors. Those who live in ethnic enclaves where ethnic social activities and resources are readily available may compensate for the negative aspects of living alone (Park et al., 2015). Thus, the experience of living alone may differ depending on social and cultural environments. With the immigration-related adjustment process, older immigrants may reconsider the meaning of living arrangements in the new social environment (Lin, Bryant, Boldero, & Dow, 2015; Wong, Yoo, & Stewart, 2007).

Fewer studies have demonstrated on the relationship between living arrangements and depression among older Koreans in Korea (Jeon, Jang, Rhee, Kawachi, & Cho, 2007; Oh et al., 2015; Oh, Kim, & Hong, 2009; Oh et al., 2013). For example, Oh et al. (2009) found that the older adults who lived in a traditional Korean household with extended family members could prevent depressive symptoms in older Koreans by providing economic resources and emotional support (Oh, Kim, & Hong, 2009). On the other hand, Oh et al. (2013) found that older Koreans who lived in a traditional family system- including their adult children-experienced more psychological distress compared with those who lived alone or a with spouse only (Oh et al., 2013). However, close geographic proximity between older parents and children can promote positive interaction between older parents and younger family members, and is also associated with lower levels of depression and anxiety in older adults (Har & Carr, 2005).

In a recent study, Oh et al. (2015) conducted a nationally representative cross-sectional health survey in South Korea among 60,305 older adults, using the Center for Epidemiologic Studies depression Scale (CES-D) as an assessment of psychological distress, Oh et al. (2015)

found that 17% of the total sample showed symptoms of depression. Living arrangement played a role; respondents who reported living with a spouse were the least likely to report depression. Living with children may also contribute to negative interactions between younger and older family members. However, living without a spouse in a nuclear family system, and living alone were most strongly associated with symptoms of depression among older Koreans in Korea (Oh et al., 2015).

The Korean Centers for Disease Control and Prevention (KCDC) in 2009, the Korea Community Health Survey (KCHS), administered an annual nationwide cross-sectional health interview survey that interviewed a total of 230,715 adult (over 18 years of age) respondents. Among the total of 60,305 older respondents (60 years or older) depression was significantly related to living arrangements, and the most commonly reported type of living arrangements included: living with a spouse only (46.3%) and living alone (20.1%). Moreover, living with a spouse only was associated with lower levels of depression than living alone. However, rates of depression were highest among single women living in nuclear family and single men living alone. Therefore, living alone is a main risk factor for depression among older adults (Russell & Taylor, 2009; Shin & Sok, 2012). In addition, this finding also indicates that traditional extended co-residence is no longer the predominant living arrangement in Korea.

In consideration of these results, living arrangement itself is not a sufficient determinant of psychological distress among older Koreans. Additional research is needed establishing a direct correlation between living arrangement and psychological distress among this population.

#### Acculturation

Acculturation is a critical process of a cultural adjustment in a new society. A number of studies indicated that acculturation is a cultural change from when individuals come to contact

with another culture is often challenging and a source of stressful process (Berry, 2005). Current research indicates that immigrants experience various stressors in the process of resettlement (Kirmayer et al., 2011). This resettlement does not simply involve geographic location, but also involves a challenge of to an emigrant's lifelong values. This stress related to this process is referred to as "acculturative stress," which exceeds the immigrant's coping ability.

Research has identified acculturative stress as one of the important predictors of psychological distress among older Asian immigrants (Choi et al., 2009; Miller et al., 2006; Mui & Kang, 2006). The difficulty of acculturation has been associated with depression (Lee et al., 2005; Miller et al., 2006). Older immigrants are considered at high risk of various mental health problems in the United States as a result of the process of acculturation, which can be stressful. For example, Lee et al. (2005) found that the level of acculturation was quite low for older Korean immigrants. They also demonstrated that the majority of older Korean immigrants had limited English proficiency and participated primarily in social activities in their own ethnic communities.

Research has found that higher levels of acculturation in a new society are associated with better mental health status (Chiriboga et al., 2002; Jang et al., 2006). In addition, Jang et al. (2010) found that lower acculturation predicted depression among older Korean immigrants.

Among older Korean immigrants, the process of acculturation requires reorganization in the way of thinking that is prevalent in the new culture. In this regard, the less acculturated older Korean immigrants may keep to a more traditional family value and social value while more acculturated older Korean immigrants may be more accepting of Americanized way of thinking and expression (Jang et al., 2010). Individuals with higher levels of acculturation were less likely to have depressive symptom than those with lower acculturation (Jang & Chiriboga, 2011; Jang et

al., 2006; Kuo et al., 2008; Lai & Surood, 2008). In another study, Jang and Chiriboga (2010) found that higher levels of acculturation were related to lower levels of acculturative stress in a sample of older Koreans in Florida. Specifically, mental health was a common problem for older Koreans higher acculturation was associated with better mental health (Han et al., 2007; Jang & Chiriboga, 2011; Kang, Domanski, & Moon, 2009; Lee & Yoon, 2011; Min et al., 2005).

Another important factor impacting acculturative process is the role of the family system. Traditional family values can impact the process of acculturation in this group. For example, a survey of six groups of 407 older Asian immigrants found that about 40% of the respondents were depressed (Mui & Kang, 2006). Regarding this feeling, Mui and Kang (2006) suggested that acculturation stress was caused by older immigrants' perception of a cultural gap between themselves and their adult children; this perception was associated with higher levels of depression. Mui and Kang (2006) found that older Koreans who were more likely to be depressed had reported poorer health, more stressful life events, and limited social support from family.

Furthermore, Koreans who emigrate in later life are more likely to be vulnerable to psychological distress, compared to those who immigrate earlier in life. Previous studies indicated that older immigrants experienced various stressors in the process of adjusting to a new environment. Stressors are related to: limited language proficiency, smaller social support networks, social isolation, decreased influence of traditional family values, family conflicts, role changes in the family system, cultural differences from new country, weak ties to social institutions, and strong dependence on family members (Jang & Chiriboga, 2011; Wilmoth, 2012). Additional factors include a lack of familiarity in navigating the American social welfare system, which can put older Korean immigrants at a higher risk of depression (Wilmoth, 2012).

Research on traditional family relationships provides background to understanding the cultural tradition of aging and family support. In Korean family structures, a core value is filial piety, which refers to a deferential attitude towards older adults in the family; such values continue to have considerable influence, even when an individual has immigrated to a new country. In addition, the presence or lack of coping resources was a significant factor affecting the mental health status of older Korean immigrants. For example, Kang et al. (2009) observed that common coping resources in this group included: spiritual, social, financial, and social supports. Results from the same study also demonstrated the positive effect of available social support on mental health outcomes.

#### **Help-seeking Behaviors**

Help-seeking behaviors for psychological distress are defined as behaviors to obtain various resources, including support, advice, information, and assistance from family, friends, and professionals (Shin, 2002). Several factors influence help-seeking behaviors and attitudes among Asian immigrants, including cultural value conflicts between traditional Asian values and Western psychological therapy, religious factors, lack of self-acceptance of mental illness, and shame and stigma associated with mental illness. The literature demonstrates that these factors contribute to the underutilization of mental health care among Asian and Asian immigrants.

Among these factors, two of the most common reasons for not seeking help are related to fear and shame about mental illness. This often leads to individuals and families being secretive about the presence of mental illness, instead of seeking early intervention. Specifically, older Koreans and older Korean immigrants recognize that stigma and discrimination are associated with having mental problems. In addition, cultural beliefs about mental illness influence older

Korean immigrants' help-seeking behaviors (Bernstein, 2007). This stigma may also negatively impact their vocational status, reputation with family members, or social relationships.

In addition to fear and shame, Shin (2002) stated that the major reason that Asian Koreans delay seeking help from mental health treatments is Koreans and Korean immigrants' strong reluctance to identify and accept their problems as psychological distress. Shin (2002), also pointed out that Koreans, traditionally, view depression as a state of imbalance between body and mind. Furthermore, religion also affects perception of mental health, as Koreans and Korean immigrants have described mental illness as having a spiritual basis, whether they are Christian, Buddhist, or Confucian (Park, Hong, Park, & Cho, 2012). Lastly, most Koreans do not usually speak their minds to unfamiliar people due to stigma associated with mental problem.

Based on available studies on psychological distress among older Korean immigrants, research results indicate that older Koreans suffer from higher levels of psychological distress than other Asian American groups (Akutsu & Chu, 2006; Hovey, Kim, & Seligman, 2006; Ji & Duan, 2006; Kim, 2010; Oh et al., 2002). Furthermore, older Koreans report greater communication difficulties in daily life and in health care systems than other Asian Americans (Shon, 2004). Not surprisingly, older Korean immigrants are reluctant to use mental health services, delay obtaining diagnosis and mental health services, and tend to terminate treatment prematurely(Akutsu, Tsuru, & Chu, 2004; Bernstein, 2007; Jang et al., 2007; Kim, 2002).

Existing studies on underutilization of mental health services and delayed treatment among older Korean immigrants emphasize an imperative need for a broader understanding of their help-seeking behaviors. In many Asian cultures, seeking help from non-family members for emotional problems is a source of shame. This leads to decreased or delayed use mental services among Asian immigrants (Cummings & Druss, 2011). In general, the stigma of mental illness

has often been considered a potential cause of reluctance to seek help for mental problems (Schomerus, Matschinger, & Angermeyer, 2009). Asian immigrants are likely to express somatic symptoms, in accordance to socially acceptable norms. Moreover, stigmatization of mental health problems and the cultural value of shame among older Koreans contribute to the denial and failure to recognize symptoms of mental health problems (Moon & Cho, 2012). These negative responses can exacerbate issues of underutilization of services.

In addition, older Koreans who first seek help through informal resources (e.g., family members) tend to delay obtaining treatment from mental health professionals (Shin, 2002; Watari & Gatz, 2004). Given the substantial influence of informal and formal help-seeking behaviors on mental health service utilization among older Koreans, there is a need to promote and encourage seeking help at earlier stages with mental problems.

Mental health help-seeking studies in Korean immigrants have studied help-seeking in several forms: self-help, informal services, and formal services, and mental health services. Self-help behaviors are the primary and most frequently used resources among older Koreans. For example, Shin (2002) found that over 20% of older Korean respondents used self-help resources (Shin, 2002). These self-help resources correspond with the traditional cultural values, such as personal behavioral control to foster and maintain family harmony. Regarding cultural perspectives in help-seeking, Lee (2015) investigated the effects of cultural values and reported that self-help behaviors were significantly related to cultural values of older Koreans (e.g., shame, fear, stigma, non-verbal communication, and filial piety). Older Koreans who used self-help behaviors expressed these values more strongly than people who sought help from others. Therefore, cultural values held by Korean immigrants play a critical role in older adults' manifestation of psychological distress, and may limit Koreans' help-seeking behaviors.

Regarding informal services, older Koreans chose informal sources of help from their family members, relatives, close friends, and neighbors. For example, Shin (2002) reported that 25% of Korean respondents reported asking for help from informal resources when they encountered psychological distress (Shin, 2002). Among informal resources, Korean immigrant families are deeply involved in the help-seeking process of family members in a tightly-knit, complex process of help-seeking. In Korean families, members play an important role in encouraging or discouraging older adults with mental illness to seek outside professional treatment. The Korean family can make a referral to a mental health service, and at the same time, can also act as a barrier to mental health service use (Akutsu, Castillo, & Snowden, 2007; Shin, 2002; Watari & Gatz, 2004). For example, Akutsu et al. (2007) reported that the Korean American family is a major referral resource, responsible for 23% of Korean immigrants in the public mental health services. However, Korean immigrants living in the United States suffered greater mental health symptoms at the time of first contact with a mental health professional than Korean immigrants living alone, suggesting a greater delay in seeking help when families were a factor (Watari & Gatz, 2004). Among the reasons given for delaying professional help (keeping problems within the family) are fear of losing confidentiality, pride, disgrace, and fear of stigma against the family(Shin, 2002).

In various treatment settings, many older Korean immigrants may seek medical sector for psychological distress rather than formal mental health professionals, as it is more socially acceptable to reporting having physical health problems (Leong & Lau, 2001). As a result, older Korean immigrants are more likely to visit traditional alternative health practitioners (e.g. herbalist, acupuncturist) or religious counselors (Shin, 2002; Inman & Yeh 2007). Additional research has also supported the important role of religion as a coping resource for older Korean

immigrants (Inman & Yeh 2007; Min & Kim, 2002; Soonthornchaiya & Dancy 2006). Delayed or absent help-seeking from mental health professionals increases the risk of more severe health and mental health status, hospitalization, and suicide; therefore, this highlights the need to investigate help-seeking among Korean immigrants further.

#### **CHAPTER 3: CONCEPTUAL FRAMEWORK**

This chapter discusses stress and coping theory as a theoretical background and application for this study. Stress and coping theory was developed by Lazarus and Folkman. This theory guides understanding of various life stresses.

# **Stress and Coping Theory**

Stress and coping theory, as an analytical tool, emphasizes the role of coping strategies related to an individual's cognitive appraisal of a stressor and their response to that stressor. Lazarus & Folkman (1984) explained that stress occurs from a relationship between individuals and their environments through a person's perception of a stressful life event and his or her resources to address or adapt to stress. In their model, psychological stress occurs when individual accesses personal or social resources to respond to an event and those resources are insufficient to address the event. Therefore, Lazarus and Folkman's (1984) model of stress and coping explains that stress is defined by the stressors that exceed a person's ability to cope and their resources, thus endangering their well-being (Lazarus & Folkman, 1984). A typical stress response begins with a stressor, and results in negative mental health consequence. Responses to stress are associated with an individual's coping resources, including physical, psychological, spiritual, and social support; these are resources that are considered as having a mitigating effect on stress (Lazarus & Folkman, 1984, 1986; Pearlin & Schooler, 1978). As stated before, older immigrants experience stress related to multiple losses, including such loss of family relationships, the decline of physical activities, social interactions, and changes to their financial status.

Coping has been conceptualized as a response to external stressful events (Endler & Parker, 1990). In addition, Cohen and Lazarus (1979) addressed the functions of coping,

including the reduction of harmful external conditions, improved chances of resiliency to negative life events, maintenance of a positive self-image, emotional stability, and a balanced relationship with environment. Therefore, coping is extensive range of attempts an individual makes to lessen the impact of stressful life events (Lazarus & Folkman, 1984).

Coping refers to efforts to mediate between person-in-environment relationships and to reduce the impact of stressful life events (Lazarus & Folkman, 1984). According to Lazarus and Folkman(1984), stress is when a situation exceeds one's coping abilities and personal resources. Therefore, it is necessary to include a discussion of coping in any examining of stress. Lazarus and Folkman found new approaches to assessment of coping through several studies (Folkman, 1984; Folkman & Lazarus, 1980; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Lazarus & Folkman, 1984). There are two basic types of coping: problem-focused coping (the management of the problem that is causing the distress) and emotion-focused coping (the regulation of distress). Problem-focused coping minimizes the impacts of stressful situation by either changing stressful situation or increasing coping resources. On the other hand, emotional-focused coping attempts to manage the distressing emotion related to the stressor (Parker & Endler, 1992, 1997). To deal with stressful life events, individuals use both problem-focused and emotion-focused coping strategies (Folkman & Lazarus, 1980).

For older Korean immigrants, immigration is itself often considered a stressful life event during later life in the United States. Older Korean immigrants experience dramatic changes in individually and socially. Additionally, older immigrants are often vulnerable due to limited English proficiency and a competitive job market, and limited contact with social institutions (Lee, 2015). Approximately two-thirds of older immigrants in the United States had limited English proficiency, compared to about one-thirds of long-term immigrants (Wilmoth, 2012). As

a result, older immigrants tend to depend heavily on family members for their language capabilities they may lack. This dependency can negatively impact intergenerational family relations, and increase risk of isolation and psychological distress for older adults.

Older Korean immigrants may try to cope with daily difficulties related in acculturation process differently by utilizing distinct methods of coping. Existing studies on the effects of stress and coping on psychological distress have been done. For example, Mui and Kang (2006) found that the number of stressful life events (e.g., poor health, poverty, limited English proficiency, weakening family relationships, and lack of social support) is predictors of depression among older Asian immigrants. In another study, Noh and Kaspar (2003) found that older Koreans' problem-focused coping strategies reduced the stress of perceived discrimination, while emotion-focused coping resource was related to higher level of depression (Noh & Kaspar, 2003). In addition, most studies found that active coping strategies are related to more positive health outcomes. For example, Noh et al. (2003) indicated that the efficacy of individuals' coping resources was related to their acculturation status. Research is needed to further clarify the relationships among coping strategies, cultural characteristics, and mental health outcomes among older Koreans.

Coping resources include available financial, spiritual, family support and relationships, and social support systems. Based on the stress and coping framework, this study examines the effects of stress (e.g. stressful life events, poor health status, functional limitations) and relative availability of coping resources (e.g. social support, social networks, and help-seeking behavior) on psychological distress among older Koreans.

The proposed framework for this study is also an adaptation of stress and coping incorporating experiences of immigration. Several studies have shown that personal factors (i.e.,

socio-economic characteristics) and social factors (i.e., social support and acculturation status) mediate the relationship between stressful life events and psychological distress in immigrants (Kim, 2002; Mui & Kang, 2006).

## **Conceptual Framework**

Based on the theoretical backgrounds and literature review of psychological distress in both older Koreans in Korea and older Korean immigrants in the United States, this study's conceptual framework is presented in Figure 1. The conceptual framework consists of three major factors: (1) an outcome variable, (2) three moderating variables, and (3) demographic and socio-economic variables.

The present study hypothesize that the outcome variable was primarily affected by sociodemographic variables. The present study further hypothesize that the relationships between the
outcome variable and socio-demographic variables are moderated by family relationships, social
support, and help-seeking behaviors. The present study expects that the experience of
psychological distress was initially affected by socio-demographic characteristics. The present
study further suggests that family relationships, social support and networks, and help-seeking
behaviors can moderate the relationships between the experience of psychological distress and
socio-demographic variables. These moderating variables may buffer the experience of
psychological distress by older Koreans. Therefore, it is assumed that these variables (sociodemographic variables and moderating variables) directly or indirectly affect the outcome
variable through interaction effects. Therefore, this study examines whether and to what extent
these socio-demographic characteristics and moderating variables directly or indirectly affect the
outcome.

# **Conceptual Framework for the Current Study**

Figure 1.Stress-Coping Model (Buffering Model) by Lazarus & Folkman, 1984

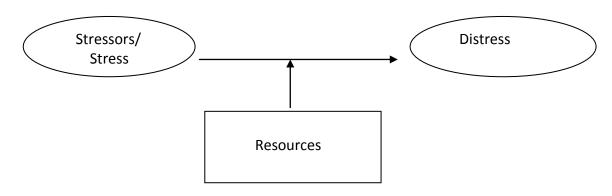
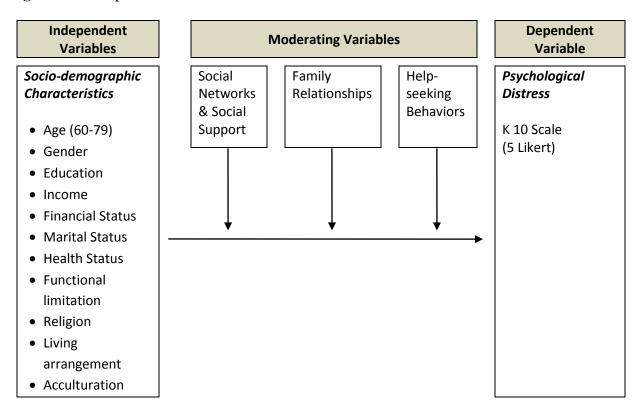


Figure 2. Conceptual Framework



In this study of older Koreans and older Korean immigrants, a stress and coping framework (Lazarus & Folkman, 1984) was used to conceptualize and examine the relationships between life stress, coping resources, and psychological distress. Ways of coping with stress are

determined by cognitive appraisal as taxing (Lazarus & Folkman, 1984). The stress and coping framework acknowledges the importance of personal and environmental stress and their effects on older Koreans and older Korean immigrants' psychological well-being. Coping resources include family relationships, social support and social networks, and help-seeking behaviors that are available to individuals. Based on the stress and coping framework, the present study examined the effects of stress (e.g., poor health stress) and coping resources on the self-reported psychological distress among older Koreans and older Korean immigrants.

Applying Lazarus and Folkman's (1984, 1986) theory of stress and coping, which remains a popular theoretical framework in understanding stress process and coping strategies, this study investigated the effects of such moderating variables as coping, social support, socal networks, family relationships, and help-seeking behaviors on the relationship between stressful life circumstances and psychological distress among the Korean population.

# **Research Questions and Hypotheses**

Research questions and hypotheses are presented below:

- What is the prevalence and severity of psychological distress of older Koreans and those
  in the United States? Are there significant differences between the two groups?
   H1a: Older Korean immigrants in the United States are less likely to experience severe
  psychological distress than older Koreans in Korea.
- 2. What is the relationship between socio-demographic factors and psychological distress in older Koreans in Korea and in the United States? How do the relationships differ between these two groups?
  - H2a: Education level will be negatively associated with psychological distress, such that those with lower education will show higher psychological distress.

- H2b: Income will be negatively associated with psychological distress, such that those with lower income will show higher psychological distress.
- H2c: Marital status will affect psychological distress, such that those who are not married/ divorced/widowed will show more psychological distress than married older Koreans.
- H3d: Health status will affect psychological distress, such that those who have poor health status will show more psychological distress than those with better health status.
- 3. Are relationships between socio-demographic characteristics and psychological distress moderated by resource variables, such as availability and amount of social support and social networks, quality of family relationships, and help-seeking behaviors)? Do the effects of moderating variables differ between older Koreans in Korea and those in the United States?

The effect of socio-demographic characteristics on psychological distress will be affected by the following moderating variables:

- H3a: The negative effects of socio-demographic characteristics on psychological distress will be buffered in those with greater social support and social networks.
- H3b: The negative effects of socio-demographic characteristics on psychological distress will be buffered in those with closer family relationships.
- H3c: The negative effects of socio-demographic characteristics on psychological distress will be buffered in those with more active help-seeking behaviors.

#### **CHAPTER 4: METHODS**

This chapter discusses an overview of the research methods used in this study. Research design, sampling and data collection procedures, description of the participants, translation of research instrument, and measurement of study variables are presented.

# **Study Design**

A cross-sectional survey design was used in this study. The researcher compiled a group of self-administered questionnaires to examine correlates and predictors of psychological distress among older Koreans in South Korea and older Korean immigrants in the United States. Data were collected from November 2016 to January 2017. The self-administrated questionnaires assured anonymity. To provide anonymity, the researcher did not collected identifying information of participants, such as names, addresses, phone numbers, and e-mail addresses: thus, the researcher cannot link individual responses with research participants' identities.

# **Sampling Criteria**

This study employs a sample of 480 older Koreans, 240 residing in Korea and 240 in Los Angeles County. The study's participants were recruited based on the following criteria.

#### 1) Eligibility

- (1) Nationality: self-identification as a Korean and Korean immigrant;
- (2) Age: age range from 60 years to 79 years at the time of data collection;
- (3) Place of birth: Korea; and
- (4) Location of current residence: Los Angeles County or Seoul or Daegu in Korea.

# 2) Sampling Plan

The researcher used a quota sampling method which is a non-probability sampling technique. Non-probability sampling techniques can be somewhat risky because they can limit

the scope of representation and generalization of the study results. Quota sampling divides a population into various categories, such as demographic characteristics (e.g., age, gender) and involves setting quotas on the number of elements to be selected from each category. Quota sampling begins with a matrix or table that describes the characteristics of the target population. In quota sampling, a researcher decides how many characteristics (participants) to enroll from each category (Kothari, 2004). Therefore, a quota sampling is an improvement over convenient sampling because the researcher can ensure the inclusion of diverse elements of the population. To enhance the diversity and representativeness of this study, participants are categorized by age (60-69 and 71-79) and gender (male and female) using the quota sampling method.

Nevertheless, quota sampling has several problems. First, the quota frame must be accurate, which is often difficult to ensure. Second, selection biases may exist in the selection of elements within a given cell even though cells of the population are accurately designed.

Participants were recruited from two different areas; (1) Los Angeles County, California consists of eight service planning areas, including the Antelope Valley, San Fernando Valley, San Gabriel Valley, Downtown Los Angeles, West Los Angeles, South Los Angeles, East Los Angeles, and South Bay/Harbor; (2) Seoul and DaeGu in South Korea. Seoul and Daegu are urban and major city in Korea. To reduce sampling bias, research participants were selected from a number of sampling sites including Korean churches, temples, affiliated religious organizations, markets, barbershops, coffee shops, shopping malls, senior organization and senior housing, and Korean adult day health care centers in both countries.

**Table 1**Matrix of quota sampling: Los Angeles County, Seoul, or Dae Gu

| Older Korean Immigrants in the U.S. |       |       | Older Koreans in Korea |       |       |
|-------------------------------------|-------|-------|------------------------|-------|-------|
| Gender                              | Age   | Quota | Gender                 | Age   | Quota |
| Male                                | 60-69 | 60    | Male                   | 60-69 | 60    |
|                                     | 70-79 | 60    |                        | 70-79 | 60    |
| Female                              | 60-69 | 60    | - Female               | 60-69 | 60    |
|                                     | 70-79 | 60    |                        | 70-79 | 60    |
| Total                               | -     | 240   | Total                  | -     | 240   |

#### **Data Collection Methods**

Data were collected using a self-administred questionnaire. Self-administered survey poses some challenges, such as requirement of certain level of literacy, low response rates, and a higher incidence of skipped questions (Fowler, 2009). On the other hand, Creswell and colleague (2003) pointed out four major advantages of self-administered questionnaire surveys (Creswell, Plano Clark, Gutmann, & Hanson, 2003). First, these provide annountity of the participants for sensitive questions. The data are stored in a locked cabinet for three years after completion of the study and at the end of three years the data will be destroyed. Second, self-administered questionnaire surveys are cheaper and quicker to answer than interviews. Third, they also generate large numbers of all at once and involve less administrative time.

Data were collected by using a structured self-administered questionnaire with pencil and paper. Self-administered surveys are especially appropriate for sensitive issues so that the respondents are assured complete anonymity (Babbie, 2004). During the data collection, only the respondents' I.D. numbers were used on the questionnaires in order to ensure confidentiality and protect personal privacy.

This study attempts to enhance representative of study participants and to ensure that they are representative of the larger population. First, survey participants were recruited from

different areas across Los Angeles County; including downtown Los Angeles, East Los Angeles, West Los Angeles, and the San Fernando Valley. The participants in Seoul Capital city were recruited from twenty five districts; excluding two districts representing the highest income district and the lowest income district) or Daegu (Metropolitan city: eight districts except two districts-the highest district and the lowest district) in Korea. Second, study respondents were recruited at various locations in these areas, including senior social clubs, associations, shops and shopping centers, and churches and temples in Korea and in the United States.

Data were collected using the group approach. This approach utilizes larger associations, institutions, and social clubs and the survey is handed out on a group bases. First, the researcher identified Korean social clubs, associations, and institutions where older Koreans are most likely to be involved through searching the yellow pages for Korean communities in Los Angeles County, Seoul, and DaeGu in Korea. Additionally, the researcher identified various Korean organizations, churches, and Buddhist temples listed in the same yellow pages. Once those associations, social clubs, and religious organizations were identified, the researcher called administrators or leaders of Korean churches, temples, social clubs, and associations located in different areas in Los Angeles County, Seoul, and Daegu (Telephone presentation script for administrators or leaders is presented in Appendix B). In these telephone calls, the researcher briefly described to administrators the purposes of the study, the nature of their involvement in the study, the anonymity and confidentiality of the study participants, the length of time it would take to fill out a survey, and that \$5.00 cash to be offered to each study participant. One of the main purposes of the telephone conversations was to get permission for the researcher to conduct the survey with their organization's members. Once the most convenient dates and times for the

researcher's visit for data collection were arranged, the researcher visited each association to attend the group meeting.

After being granted permission to visit a group, the researcher introduced herself and the study and request the participation of eligible older Koreans. The researcher read an announcement to the group stating the eligibility requirements for the study and the screening questions in order to determine people who were eligible to participate in the study.

Announcement about self-screen is presented in Appendix C.

Once the potential group members verbally agreed to participate in the study, the participants began filling out the questionnaire (Appendix G). While the potential participants filled out the questionnaires, the researcher was present at the back of the room, available to answer questions they might have about the questionnaire and the study. Respondents took about 50 minutes to complete the questionnaire. The researcher left a manila envelope in a designated location and asked participants to place their completed questionnaires in the envelopes. The researcher collected envelops without looking at them. After collecting the questionnaire, participants were given \$5.00 cash as a token of appreciation for their participation in the study. Further, informational material about psychological distress services and resources available in the community were given to them (Appendix H).

Other than these five administrators of associations that allowed the researcher to do a study with their group members, the researcher found it difficult to obtain permission to attend group meetings. The researcher contacted more than ten organizations and associations that were listed in the Korean yellow pages to ask if she could conduct a survey with group members. Unfortunately, half of the organizations immediately refused the request, except for a few groups that responded positively at the time, but subsequently gave a noncommittal answer. The

researcher found out that one of their concerns was that conducting a questionnaire, which takes about 50 minutes; might tie up their scheduled meeting time. After discovering this problem, the researcher consulted several administrators and leaders to see if she could approach the group members individually during or after their group activities, instead of introducing the study in front of the entire group and then conducting a survey during the group meetings. They responded positively to this request. As a result, the research was able to collect by the individual approach (380 participants) than in the small group settings (100 participants) in both countries.

In addition, data were collected, from participants approached on an individual basis. For those who met the eligibility criteria and showed their willingness to participate in the study, the researcher distributed an information sheet (in Appendix D), which the researcher verbally explained to the potential participants. The information sheet also addressed the purpose of the study, the procedures used, the duration of the survey, the intended benefits, information regarding anonymity and confidentiality, the right to withdraw from the study, the right to refuse to answer any questions, and the researcher's contact information. In particular, special attention was paid to the topic of ensuring the anonymity and confidentiality of the study participants. In addition, the researcher made sure that the participants had enough room to fill out the questionnaire without having their answers seen by other participants. The potential participants were encouraged to ask questions about the study. Those who did not meet the eligibility criteria or who did not want to participate in the study were free to leave the room. The researcher showed appreciation to those who were not eligible for their consideration.

Data were also collected on an individual basis, using surveys filled out by participants.

Individuals meeting the criteria for the data sample in social organizations, shops, and shopping malls in Los Angeles County, Seoul, and Daegu were randomly approached to determine

possible eligibility and willingness to participate in the study. With the permission of organization leaders, administrators and business owners, the study procedures explained above were used on selected individuals, starting with the self-introduction of the researcher to potential study subjects. The researcher asked the individual three elibible criteria are mentioned to determine if they were eligible to participate in the study (Appendix C). For those who met the eligibility requirements and showed their willingness to participate in the study, the researcher distributed an information sheet (Appendix D). The researcher showed the participant criteria to those who were not eligible for their consideration.

After distributing an information sheet, the researcher verbally explained the study to the potential participants. The researcher first addressed the purpose of the study, the procedures to be used, the duration of the survey, the benefits, information regarding anonymity, the right to withdraw from the study, the right to refuse to answer any questions, and the researcher's contact information. In particular, special attention was paid to ensuring the anonymity of the study participants. Furthermore, the researcher made sure that the participants had enough space between them while filling out the questionnaires to ensure that their answers could not be seen by the other participants. The potential participants were encouraged to ask questions about the study. The researcher was present at the back of the group room of the site (e.g., agencies) while being available to answer questions they might have about the survey and the study. Once the potential participants verbally agreed to participate in the study, they were given the questionnaire along with \$5.00 cash as a token of appreciation for their participation in the study. The researcher then asked the potential participant whether he/she wanted to fill out the questionnaire at the site or do it at their own convenient date and time. If the potential participants preferred to complete the questionnaire later, they were given a postage paid

stamped envelope addressed to the researcher's return mailing address and was requested to put the completed questionnaire in the envelope and mail it at their earliest convenience.

Overall, the questionnaires were distributed to 520 older Koreans in both countries, and 480 of them were completed. Consequently, the final sample for this study is 480 respondents in both countries. The overall response rate was 92 %. Therefore, the response rate of 92% for this study can be considered very high.

## **Overview of Instrument (Translation of the Research Instruments)**

This present study includes older Korean immigrants. For the respondents who recently immigrated to the United States and have trouble understanding questionnaire instruments written in English, Korean translations of the questionnaire were developed. Moreover, Korean translations of a telephone script, a screener, and an information sheet were also prepared. All instruments were translated into Korean. Proper procedures were followed in preparing the translated versions of the instruments. The researcher, whose native language is Korean, translated all the instruments from English to Korean.

All of respondents in Los Angeles and two study sites (Seoul and Daegu) in Korea participated the survey questionnaire in Korean. The data were collected from the primary investigator. Participants were provided a cash incentive for their research participation at the end of completion of the survey. The questionnaire took about 50 minutes to complete. Participation was on a voluntary basis. The data collection instrument consists of three major sections used for this study. Regarding research questionnaire, the first part of the questionnaire was designed to gather demographic information, including age, gender, educational attainment, marital status, economic status, living arrangements, health status, functional limitations, religion, and acculturation. The second part of the questionnaire consists of moderating

variables, including family relationships, social support and social networks, and help-seeking behaviors. The third part of the questionnaire is to capture each respondent experience of psychological distress.

### **Measurement of Study Variables**

## **Dependent Variable**

**Psychological distress.** This variable was measured using the Kessler Psychological Distress Scale (Kessler et al., 2002) designed to maximize the ability to identify cases of serious psychological distress. The Kessler Psychological Distress Scale is designed to measure anxiety and depression through a 10-item questionnaire. One of the most recent scales of psychological distress are the Kessler 10 scale (the K 10) with a 10-item scale as well as the Kessler 6 scale (the K 6) specifically designed to assess psychological distress in population survey (Kessler et al., 2002). Both Kessler 10 and Kessler 6 can be valid and reliable screening tools of psychological distress. These scales were developed as a brief and accurate psychological distress scale for serious mental health problems in the Substance Abuse and Mental Health Services Administration National Household Survey on Drug Abuse in the United States (Kessler et al., 2002). The scales contain how often respondents experienced both anxiety and depressive symptoms over the last 30 days. The respondents were answered 10 questions about "how often" during the past 30 days they had felt various emotions. Responses were scored from 1 (none of the time) to 5 (all of the time) and summed, with total K10 score ranging from 10 to 50. Responses were scored from 1 (none of the time) to 5 (all of the time). (The severances of psychological distress were assessed by using a 5-point Likert Scale: l = none of the time, 2=alittle of the time, 3=some of the time, 4=most of the time, and 5= all of the time). A total score ranges from 10 to 50 for the K10 with a higher score representing a higher level of psychological

distress. This Kessler Psychological Distress 10 has good internal consistency with Cronbach's alpha coefficients (.92) (Min & Lee, 2015). The Kessler Psychological Distress (K 10) is presented in Appendix A.

Regarding measurement instruments, multiple instruments have been assessed to measure the prevalence of psychological distress. Among multiple measurements, the most used measurements were the Center for Epidemiological Studies Depression Scale (CESD) with 20-items that measure how often over the past week respondents experienced symptoms associated with depression. Scale has been validated in older Koreans, but it contained too many items (20 items) to be used in the field of mental illness (Min & Lee, 2015). Older adults with limited cognitive capacity may have difficulty understanding long questionnaires, which could reduce the likelihood of obtaining valid responses to the items in older Koreans in both countries. The Kessler Psychological Distress Scale (K10) has also been validated in older Koreans Therefore, the Kessler Psychological Distress Scale (K10), because of precision, is being increasingly used for older adults in clinical study.

## **Moderating Variables**

Social support and social networks. This section measures the respondents' social networks and social support received from the respondents' resources. To measure respondents' social networks, the Lubben Social networks scale (LSNS-6) was used (Lubben & Gironda, 2003). Lubben et al. (2006) reported that reliability of the social networks scale (LSNS-6) was .83, as measured by Cronbach's alpha. The scale consists of two subscales, including family and friendships, with three questions on each subscale. All of the six questions designed in the social network scale and ranged from "1 (no one)" to "6 (nine or more)." The actual score ranged from 6 to 36. A higher score indicates a higher level of the participants' social networks. The

Cronbach's Alpha value for the perceived social networks was .82. Perceived social support was measured by a 10-item social support scale. Perceived social support scale was developed by Sherbourne and Stewart (1991). This scale was assessed by using a 5-point Likert Scale: I= seldom, 2=sometimes, 3=often, 4=very often, and 5=always. Responses were scored from 1(seldom) to 5(always) and a total score ranged from 10 to 50, with a higher score representing a higher level of social support.

Family relationships. This section measures the respondents' family relationships (e.g., changed family values, diminished power and authority). The family relationship scale was used to assess the relationship between older Korean parents and their adult children. This measure was developed by Yoon and Song (1991) in Korea. The scale was used to assess older Koreans' perceived conflicts in relationships with their adult children. These 13-item scale measure three different relationships: (1) older adults' perception of unpleasant communication with their children, (2) older adults' perception that their adult children have disrespect for parents, (3) older adults' feelings of alienation from adult children. Responses items (5-point Likert scale) range from (1) "very much" to (5) "not at all." Higher scores indicate better relationships with adult children. A previous study found the internal consistency ranged from Cronbach's alpha of the scale on the sample was .89.

**Help-seeking behavior.** This variable was represented by "Did you seek help for your psychological distress? (Answer: Yes/No). In this study, participants were asked about their willingness to seek professional help for psychological distress (Answer: Yes/No).

#### **Independent Variables**

A socio-demographic questionnaire was developed for the purposes of this study. Sociodemographic characteristics include age, gender, economic status, marital status, and educational attainment, general health status and functional limitations, religion, living arrangements, and acculturations.

**Age and gender.** These variables were measured by self-reported age (range from 60 years to 79 years) and gender.

**Educational attainment**. Educational attainment was measured by "What is the highest level of education you have completed?(Answer: less than high school, high school, college, and grasuate).

**Marital status.** This variable was measured by "What is your current marital status?" (Answer: never married, married, seperited/divorced/widowed, and other).

**Health status and Functional limitations**. Health status was measured by "Would you say that in general your health is excellent, very good, good, fair, or poor?" Functional health will be measured by two questions: (1) "Any difficulty dressing, bathing, or getting around inside the home?" and (2) "Any difficulty going outside the home alone to shop or visit a doctor's office?" (Answer: Yes/No).

**Religion.** This variable was measured by the following question: "Do you have a religion?" (Answer: Yes/No) or "What is your religion?" (Answer: no religion, Catholic, Protestant, Buddhist, and Other).

**Living arrangements.** This variable was measured by "What is your current living arrangement?" (Answer: live alone, live with spouse only, live with spouse and children, live with children only, live with relatives other than children, and live with others).

**Acculturation.** This variable was measured by 8-item scale, including language, lifestyle, cultural value, way of thinking, belief system, and close friends or people mainly socialized with, and family values and social value. These 8 items were adopted from a 20-item

scale of acculturation scale developed by Moon (2002), which was based on scales created by Martin and Martin (1991). The Cronbach's alpha score for the Moon's acculturation scale demonstrated high reliability (. 89).

## **Analyses to Test Hypotheses**

The primary purpose of the current study was to test 1) the prevalence of psychological distress 2) the relationship between socio-demographic characteristics and psychological distress, and 3) whether resource variables (e.g., social support, social networks, family relationships, and help-seeking behavior) moderated the relationship between socio-demographic characteristics and psychological distress. To test the main effects of socio-demographic characteristics and the conditional effects of social support on this relationship, hierarchal multiple regression was used. All analyses were conducted in Stata 14. To test the relationship between social support and psychological distress, all key variables and covariates were regressed on the outcome variables for psychological distress.

## **Research Question 1**

The first research question asks "Does the prevalence of psychological distress differ between older Koreans in Korea and older Koreans in the United States? Bivariate analysis was used to determine the relationship between socio-demographic and financial factors (e.g., gender, educational attainment, marital status, income, financial status, functional limitations, religious affiliation) and psychological distress. Hypothesis 1a suggests that older Koreans in Korea are more likely to experience severe psychological distress than older Korean immigrants in the United States. To test the hypothesis, bivariate relationships between each indicator of sociodemographic characteristics and psychological distress were analyzed first.

#### **Research Question 2**

Research Question 2 asks "What is the relationship between socio-demographic factors (e.g., gender, educational attainment, marital status, income, health status, and overall financial statues) and psychological distress in older Koreans in Korea and in the United States? How do the relationships differ between these two groups?" Hypothesis 2a suggests that those with lower education will show higher psychological distress. Hypothesis 2b posits that those with lower income will show higher psychological distress. Hypothesis 2c suggests that those who are not married/ divorced/widowed will show more psychological distress than married older Koreans. Hypothesis 2d posits that those who have poor health status will show more psychological distress than better health status. To test these relationships, hierarchal multiple regression was used.

### **Research Question 3**

Research Question 3 asks "Are relationships between socio-demographic characteristics and psychological distress moderated by non-socio-demographic variables such as social networks and support, family relationships, and help-seeking behaviors)? Do moderating variables differ between older Koreans in Korea and in the United States?" Hypothesis 3a suggests that the negative effects of socio-demographic characteristics on psychological distress will be buffered in those with greater social support and social networks. Hypothesis 3b posits that the negative effects of socio-demographic characteristics on psychological distress will be buffered in those with closer family relationships. Hypothesis 3c suggests that the negative effects of socio-demographic characteristics on psychological distress will be buffered in those with more active help-seeking behaviors. These separate conditional models therefore tested the interaction effects of socio-demographic characteristic and social support and networks on

psychological distress first, followed by the intersection effects socio-demographic characteristics and family relationships on psychological distress next, then the interaction effects of socio-demographic characteristics and help-seeking behavior. Next, hierarchal multiple comparisons was used.

#### **CHAPTER 5: RESULTS**

## **Descriptive Analyses**

# **Sample Characteristics**

A description of older Korean immigrants in the United States and older Koreans in Korea presents in Table 2. With regard to educational attainment, there were significant differences between older Korean immigrants in the United States and older Koreans in Korea. About 27 % of older Korean immigrants in the United States reported less than a high school education and about 35% were a high school graduates, 32% were college graduates, and 7% were graduate school graduates. In contrast, about 49 % of older Koreans in Korea reported less than a high school education and about 29% were a high school graduates. Over 22% of older Koreans in Korea were college graduates and about 3% were graduate school graduates. Overall, older Korean immigrants in the United States have higher level of educational attainment than older Koreans in Korea.

Regarding marital status, over two-thirds of older Korean immigrants (73%) in the United States were married and another one-third of the sample (27%) were separated and divorced (12%), never married (2%), or widowed (14%). In comparison, over two-thirds of older Koreans in Korea (68%) were married and another one third of older Koreans in Korea (32%) were separated and divorced (7%), never married (1%), or widowed (24%). Overall, marital status was similar patterns in both countries.

**Table 2**Socio-economic characteristics of the sample

| Variables             | US  | (n=240) | Korea | (n=240) | $\chi^2$   |
|-----------------------|-----|---------|-------|---------|------------|
|                       | N   | %       | N     | %       | <b>7</b> 0 |
| Gender                |     |         |       |         | 0.00       |
| Male                  | 120 | 50.0    | 120   | 50.0    |            |
| Female                | 120 | 50.0    | 120   | 50.0    |            |
| Age                   |     |         |       |         | 7.28       |
| 60-64                 | 50  | 20.8    | 70    | 29.2    |            |
| 65-69                 | 70  | 29.2    | 50    | 20.8    |            |
| 70-74                 | 73  | 30.4    | 67    | 27.9    |            |
| 75-79                 | 47  | 19.6    | 53    | 22.1    |            |
| Education             |     |         |       |         | 20.29***   |
| Less High             | 65  | 27.1    | 117   | 48.8    |            |
| High School           | 83  | 34.6    | 70    | 29.2    |            |
| College               | 76  | 31.7    | 53    | 22.1    |            |
| Graduate              | 16  | 6.7     | 7     | 2.9     |            |
| Marital Status        |     |         |       |         | 10.49*     |
| Never married         | 5   | 2.1     | 3     | 1.3     |            |
| Married               | 174 | 72.5    | 162   | 67.5    |            |
| Separated or divorced | 28  | 11.7    | 17    | 7.1     |            |
| Widowed               | 33  | 13.8    | 58    | 24.2    |            |
| Health Status         |     |         |       |         | 4.00       |
| Very poor             | 14  | 5.4     | 10    | 4.2     |            |
| Poor                  | 76  | 31.7    | 68    | 28.3    |            |
| Fair                  | 102 | 42.5    | 123   | 51.3    |            |
| Good & very good      | 48  | 19.0    | 39    | 16.3    |            |
| Income                |     |         |       |         | 2.17       |
| Under \$1,000         | 156 | 65.0    | 160   | 66.7    |            |
| \$1,001-\$1,999       | 46  | 19.2    | 41    | 17.1    |            |
| \$2,000-\$2,999       | 25  | 10.4    | 31    | 12.9    |            |
| \$3,000 & over        | 13  | 5.4     | 8     | 3.3     |            |
| Financial Status      |     |         |       |         | 3.73       |
| Very bad              | 14  | 5.8     | 21    | 8.8     |            |
| Bad                   | 96  | 40.0    | 108   | 45.0    |            |
| Fair                  | 110 | 45.8    | 92    | 38.3    |            |
| Good & Very good      | 20  | 8.3     | 19    | 7.9     |            |
| Income sources        |     |         |       |         | 71.05***   |
| Public assistance     | 144 | 60.0    | 87    | 36.3    |            |
| Employment            | 78  | 32.5    | 57    | 23.8    |            |
| Assistance from child | 8   | 3.3     | 64    | 26.7    |            |
| Saving or Asset       | 10  | 4.2     | 32    | 13.3    |            |
| Living arrangement    |     |         |       |         |            |
| Alone (yes)           | 53  | 22.1    | 55    | 22.9    | 0.05       |
| Spouse (yes)          | 179 | 74.6    | 160   | 66.7    | 3.62       |
| Children (yes)        | 70  | 29.2    | 101   | 42.1    | 8.72**     |

<sup>\*\*\*</sup> p < .001, \*\*p < .01, \*p < .05

Table 2 (Continued)

| Variables            | US      |      | Korea   |      | $\chi^2$   |
|----------------------|---------|------|---------|------|------------|
|                      | (n=240) |      | (n=240) |      | <b>7</b> 0 |
|                      | N       | %    | N       | %    |            |
| Religion             |         |      |         |      | 42.20***   |
| No religion          | 56      | 23.3 | 43      | 17.9 |            |
| Protestant           | 140     | 58.3 | 117     | 48.8 |            |
| Catholic             | 33      | 13.8 | 35      | 14.6 |            |
| Buddhist             | 3       | 1.3  | 43      | 17.9 |            |
| Others               | 8       | 3.3  | 2       | 0.8  |            |
| Cognitive limitation |         |      |         |      | 0.07       |
| Yes                  | 30      | 12.5 | 28      | 11.7 |            |
| No                   | 210     | 86.5 | 212     | 88.3 |            |
| Physical limitation  |         |      |         |      | 0.37       |
| Yes                  | 38      | 12.5 | 43      | 17.9 |            |
| No                   | 202     | 84.2 | 197     | 82.1 |            |
| Inside difficulty    |         |      |         |      | 0.76       |
| Yes                  | 13      | 5.4  | 9       | 3.8  |            |
| No                   | 227     | 94.6 | 231     | 96.3 |            |
| Outside difficulty   |         |      |         |      | 0.75       |
| Yes                  | 24      | 10.0 | 30      | 12.5 |            |
| No                   | 216     | 90.0 | 210     | 87.5 |            |
| Hel-seeking          |         |      |         |      |            |
| Yes                  | 57      | 23.8 | 34      | 14.2 | 7.17**     |
| No                   | 183     | 76.3 | 206     | 85.8 |            |
| Length in the US     |         |      | N/A     | N/A  | N/A        |
| 1-10 years           | 0       | 0.0  |         |      |            |
| 11-20 years          | 80      | 33.3 |         |      |            |
| 21-30 years          | 109     | 45.4 |         |      |            |
| 31 and over          | 51      | 21.3 |         |      |            |
| English proficiency  |         |      | N/A     | N/A  | N/A        |
| Not at all           | 44      | 18.3 |         |      |            |
| Not well             | 142     | 59.2 |         |      |            |
| Well & very well     | 54      | 22.5 |         |      |            |

<sup>\*\*\*</sup> p < .001, \*\*p < .01, \*p < .05

Table 2 (continued)

| Age                    | US    |           |     |     | Korea |           |     |     | _        |
|------------------------|-------|-----------|-----|-----|-------|-----------|-----|-----|----------|
| Variables              | Mean  | Standard  | Min | Max | Mean  | Standard  | Min | Max | t-test   |
|                        |       | Deviation |     |     |       | Deviation |     |     |          |
| Age                    | 69.35 | 5.23      | 60  | 79  | 68.94 | 5.67      | 60  | 79  | -0.80    |
| Social support         | 20.56 | 6.53      | 10  | 47  | 26.65 | 10.34     | 10  | 50  | 7.71***  |
| Social network         | 13.70 | 4.75      | 6   | 24  | 17.37 | 6.58      | 6   | 31  | 6.98***  |
| Family relationships   | 38.57 | 5.81      | 22  | 56  | 42.37 | 5.77      | 22  | 59  | 7.19     |
| Elder Care             | 28.75 | 3.85      | 20  | 40  | 24.81 | 4.87      | 10  | 37  | -9.83*** |
| Psychological Distress | 22.22 | 5.30      | 10  | 36  | 23.86 | 6.63      | 10  | 43  | 2.99**   |

<sup>\*\*\*</sup> *p* < .001, \*\**p* < .01, \**p* < .05

Regarding health status, about 6% of older Korean immigrants in the United States reported "very poor health", 32% reported "poor", 43% reported "fair", and 20% reported "good or very good" health status. Over two-thirds (63%) were in "fair to very good" health status. In terms of functional limitations, about 13% of older Korean immigrants in the United States had functional limitation (e.g., difficulty dressing, bathing, getting around inside the home, or going outside the home alone to shop or visit a doctor's office). In contrast, about 4% of older Koreans in Korea reported "very poor" health status, 28% reported "poor", 51% reported "fair", and 16% reported "good" or "very good". Two-thirds (66%) of older Koreans in Korea were in "fair" to "very good" health status. About 11% of older Koreans in Korea had functional limitations and about 12% had cognitive limitation. Overall, health status follows similar patterns in both countries.

About one-third of older Korean immigrants in the United States (35%) reported that monthly income was less than \$1,000 and another one-third of older Korean immigrants in the United States (33%) were between \$1001 and 1,999. In contrast, 67% of older Koreans in Korea (67%) reported that their monthly income was less than \$1,000 and another one-third of the sample (33%) reported it was between \$1001 and over. Overall, there were also not significant differences in monthly income between older Korean immigrants in the United States and older Koreans in Korea.

About half of older Korean immigrants in the United States (46%) reported their overall financial states as "fair" and about 8 % of older Korean immigrants in the United States reported it as "good" or "very good," while another 46% of older Korean immigrants in the United States reported "very bad" or "bad." In comparision, 67% of older Koreans in Korea reported that their monthly income was less than \$ 1,000 and another over one-third of older Koreans in Korea

(33%) reported it was over \$ 1,000. In sum, overall financial status is not much difference between older Korean immigrants in the United States and their counterparts in Korea.

Regarding income source, 60% of older Korean immigrants in the United States reported that their income source was public assistance, about 43% reported it was employment, 7% reported it was assistance from their adult children, and 4% reported their saving. In contrast, 36% of older Koreans in Korea reported that their income source was public assistance, about 24% of older Koreans in Korea reported it was employment, 27% of the sample reported receiving financial support from their adult children, and 13% reported their savings. Overall, there were also significant differences in income sources between older Korean immigrants in the United States and their counterparts in Korea. Notably, significantly high percent of older Koreans in Korea received assistance from adult children (26.7%), whereas only 3% of older Korean immigrants in Los Angeles did receive assistance from adult children.

Regarding religion, about 59% of older Korean immigrants in the United States were Protestant, 14% were Catholic, and 2% were Buddhist while 23% reported no religious affiliation. In comparision, about 49% of older Koreans in Korea were Protestant, 15% were Catholic, and 18% were Buddhist, while 18% reported no religious affiliation. There were more Buddhists among older Koreans in Korea than their counterparts in the United States.

With regard to acculturation, acculturation is a process of a critical cultural adjustment in the host society; length of residency and language competency in English are often used as an indicator of acculturation (Lee et al., 2005). About one-fourth of older Korean immigrants in the United States (22%) reported having resided in the United States more than 30 years while over 33% reported having lived in the United States less than 20 years. Overall, 79% of older Korean immigrants in the United States reported having lived in the United States less than 30 years.

Finally, respondents' length of residency in the United States was 25 years on average. In terms of English proficiency, 78 % of older Korean immigrants in the United States reported their English as not at all or not well.

Acculturation. Older Korean immigrants' level of acculturation by 8-item scale which includes language, socialization, and life style presented in Table 3. The possible score ranged from 8 to 40 with higher score indicating a higher level of acculturation. As for language, almost half of older Korean immigrants reported that they read and speak "Only Korean" (48.3%) and 43% of older Korean immigrants reported "More Korean language than English." When they watch TV programs or radio programs, about 90% used "Only Korean language" or "More Korean language than English." When they read newspapers, 90% of the respondents reported reading newspaper is "Korean" (48.3%) or "More Korean newspaper than English newspaper" (41.4%). Overall, most of the respondents mainly prefer to speak, read, and listen to Korean, more Korean than English which indicates that levels of acculturation were low.

Regarding socialization, most of the respondents reported that their close friends were "All Korean or Korean Americans" (48.8%) or 43% reported "More Korean or Korean Americans than American." In addition, over 92% of the respondents indicated that the people they visit or who visit them are that "All Korean or Korean Americans" (47.1%) or "More Korean or Korean Americans than Americans" (45.0%).

In addition, most of the respondents prefered the Korean way responded "Prefer Korean way a lot" (44.6%) or "Prefer Korean way, but not a lot" (49.2%). Regarding the following statement "Do you prefer the Korean way of life or American way of life?" most of the respondents reported "Prefer Korean way a lot" (45.4%) or "Prefer Korean way, but not a lot" (46.3%). Therefore, overall acculturation level was low among older Korean immigrants.

Table 3
The level of acculturation (US: N=240)

|    |  | n   | %    |
|----|--|-----|------|
| 1. | In general, what language do you read and speak?               |     |      |
|    | Only Korean language   | 116 | 48.3 |
|    | More Korean language than English                              | 103 | 42.9 |
|    | Both equally   | 20  | 8.3  |
|    | More English than Korean language                              | 1   | 0.4  |
|    | Only English   | 0   | 0.0  |
| 2. | In what language are the TV programs you usually watch?        |     |      |
|    | Only Korean language   | 113 | 47.1 |
|    | More Korean language than English                              | 102 | 42.5 |
|    | Both equally   | 25  | 10.4 |
|    | More English than Korean language                              | 0   | 0.0  |
|    | Only English   | 0   | 0.0  |
|    | Only English   | O   | 0.0  |
| 3. | In what language are the radio programs you usually listen to? |     |      |
|    | Only Korean language   | 116 | 48.3 |
|    | More Korean language than English                              | 101 | 42.1 |
|    | Both equally   | 23  | 9.6  |
|    | More English than Korean language                              | 0   | 0.0  |
|    | Only English   | 0   | 0.0  |
| 4. | In what language are the newspapers you usually read?          |     |      |
|    | Only Korean language   | 116 | 48.3 |
|    | More Korean language than English                              | 100 | 41.7 |
|    | Both equally   | 24  | 10.0 |
|    | More English than Korean language                              | 0   | 0.0  |
|    | Only English   | 0   | 0.0  |
| 5. | Your close friends are:  |     |      |
| ٦. | All Korean or Korean Americans                                 | 117 | 48.8 |
|    | More Korean or than Korean Americans                           | 103 | 43.0 |
|    | About half and half  | 20  | 8.4  |
|    | More Americans than Koreans or Korean Americans                | 0   | 0.9  |
|    | All Americans  | 0   | 0.9  |
|    | , in , time reduits  | ŭ   | 0.5  |
| 6. | The persons you visit or who visit you are:                    |     |      |
|    | All Korean or Korean Americans                                 | 113 | 47.1 |
|    | More Korean or Korean Americans than Americans                 | 108 | 45.0 |
|    | About half and half  | 19  | 7.9  |
|    | More Americans than Koreans or Korean Americans                | 0   | 0.0  |
|    | All Americans  | 0   | 0.0  |

Table 3 (continued)

|    | e Continued)  |     |      |
|----|---|-----|------|
| 7. | Generally speaking, do you prefer the Korean way of life or American                  |     |      |
|    | way of thinking?  |     |      |
|    | Prefer Korean way a lot   | 107 | 44.6 |
|    | Prefer Korean way, but not a lot  | 118 | 49.2 |
|    | No preference   | 15  | 6.3  |
|    | Prefer Amrican way, but not a lot   | 0   | 0.0  |
|    | Prefer American way a lot   | 0   | 0.0  |
| 8. | Generally speaking, do you prefer the Korean way of thinking or American way of life? |     |      |
|    | Prefer Korean way a lot   | 109 | 45.4 |
|    | Prefer Korean way, but not a lot  | 111 | 46.2 |
|    | No preference   | 20  | 8.3  |
|    | Prefer American way, but not a lot  | 0   | 0.0  |
|    | Prefer American way a lot   | 0   | 0.0  |

**Social Networks.** Table 4 shows the frequency and percentages of a 6-scale of social networks. This scale was developed by Luben and Gironda (Luben & Gironda, 2003). This scale is composed of two dimensions of the social network: 1) family member support and 2) friend support.

With regard to the family members, about 50% of older Korean immigrants in the United States had not contacted their family members in the past month. About 50 % of older Korean immigrants contacted one to two family members or three to eight (1%) family members in a month. About 47% of older Korean immigrants reported not having family members to whom they can talk about private matters, 50% of the respondents reported having one to two family members, and 3% of the respondents talked to about their private matters with three to eight family members. In contrast, about 18% of older Koreans in Korea had not contacted their family members in the past month. About 53 % of the respondents in Korea contacted one to two family members and 26% had contact with three to eight family members in a month.

Approximately 19% of the respondents in Korea reported not having family members to whom they can talk about private matters, 51% of older Koreans in Korea reported having one to two

family members, and 28% of the respondents talked to about their private matters with three to eight family members. About 42% of older Koreans reported having one (18%) or two (24%) family members they could call on for help them.

About 45% of older Korean immigrants in the United States reported having one (32%) or two (13%) family members they could call on to help them. It is notable that Korean immigrants in the United States contacted their friends more often than their family members. About 86% reported contacting one (33%), two (20%), three or four (26%), or five to eight (8%) friends, while 14% of the respondents had not contacted friends in the past. About 93% of the respondents reported having one (37%), two (23%), or three (31%) friends they could talk to about private matters in a month. Approximately 85% of the respondents reported having one (29%), two (24%), or three or four (32%) friends they could call for help, while 11% of the respondents did not have anyone call and ask for help as needed. Overall, older Korean immigrants seem to more frequently contact their friends than family members. In comparision, older Koreans in Korea more frequently contacted their friends than their family members. Approximately 33% reported contacting one (10%), two (21%), three or four (22%), or five to eight (12%) friends, while only 10% of the respondents had not contacted friends.

About 70% of older Koreans in Korea reported having one (12%), two (28%), or three (30%) friends they could talk to about private matters. Approximately 87 % of the respondents reported having one (24%), two (33%), three or four (23%) or five to eight (7%) friends they could call for help, while 13% of the respondents could not call and ask for help as needed. Overall, older Koreans in Korea seem similarly willing to contact both friends and family members.

**Table 4**Social Networks (US: N=240 and Korea: N=240)

|   |  |                |               | US            |               |              |             |               |               | Korea         |               |               |              |
|---|--|----------------|---------------|---------------|---------------|--------------|-------------|---------------|---------------|---------------|---------------|---------------|--------------|
|   | Family members   | No one         | one           | Two           | 3 or 4        | 5 to 8       | 9 or mo.    | No one        | one           | Two           | 3 or 4        | 5 to 8        | 9 or mo.     |
| 1 | How many relatives do you see or hear from at least once a month?                    | 122<br>(50.8%) | 83<br>(34.6%) | 33<br>(13.8%) | 1<br>(0.4%)   | 1<br>(0.4%)  | 0<br>(0.0%) | 41<br>(17.1%) | 62<br>(25.8%) | 65<br>(27.1%) | 40<br>(16.7%) | 22<br>(9.2%)  | 10<br>(4.1%) |
| 2 | How many relatives do you feel at ease with that you can talk about private matters? | 122<br>(46.7%) | 97<br>(40.4%) | 24<br>(10.0%) | 7<br>(2.9%)   | 0<br>(0.0%)  | 0<br>(0.0%) | 45<br>(18.8%) | 64<br>(26.7%) | 59<br>(24.6%) | 42<br>(17.5%) | 25<br>(10.4%) | 5<br>(2.1%)  |
| 3 | How many relatives do you feel close to such that you could call on them for help?   | 118<br>(49.2%) | 77<br>(32.1%) | 30<br>(12.5%) | 15<br>(6.3%)  | 0<br>(0.0%)  | 0<br>(0.0%) | 44<br>(18.4%) | 57<br>(23.8%) | 63<br>(26.3%) | 48<br>(20.0%) | 24<br>(10.0%) | 4<br>(1.7%)  |
|   | Friends network  |                |               |               |               |              |             |               |               |               |               |               |              |
| 4 | How many friends do you see or hear from at least once a month?                      | 33<br>(13.8%)  | 78<br>(32.5%) | 48<br>(20.0%) | 63<br>(26.3%) | 17<br>(7.1%) | 1<br>(0.4%) | 24<br>(10.1%) | 54<br>(22.5%) | 72<br>(30.0%) | 53<br>(22.1%) | 29<br>(12.1%) | 8 (3.3%)     |
| 5 | How many friends_do you feel at ease with that you can talk about private matters?   | 16<br>(6.7%)   | 88<br>(36.7%) | 54<br>(22.5%) | 74<br>(30.8%) | 7<br>(2.9%)  | 1<br>(0.4%) | 29<br>(12.1%) | 68<br>(28.3%) | 73<br>(30.2%) | 55<br>(22.9%) | 11<br>(4.6%)  | 4<br>(1.7%)  |
| 6 | How many friends do you feel close to such that you could call on them for help?     | 26<br>(10.8%)  | 70<br>(29.2%) | 58<br>(24.2%) | 77<br>(32.1%) | 8<br>(3.3%)  | 1<br>(0.4%) | 29<br>(12.1%) | 68<br>(28.3%) | 73<br>(30.2%) | 55<br>(22.9%) | 11<br>(4.6%)  | 4<br>(1.7%)  |

In sum, social networks significantly differ in the two countries. Half of older Korean immigrants in the United State reported, when asked "how many relatives they see or hear from at least once a month and feel at ease speaking to about private matters," responded "no one." Around 5% of older Koreans in Korea, when asked the same question, responded "3 or 4." Older Koreans in both countries show similar pattern in how many friends they see, hears from, and talks to about private matters.

Perceived Social Support. Perceived social support was measured by a 10-item scale in Table 5. This scale is composed of two dimensions:1) emotional support (7 items) and 2) instrumental support (3 items). As for instrumental support, 76% of older Korean immigrants in the United States reported someone available "sometimes" or "often" for taking them to a doctor, preparing meals (81.7%), and helping with daily chores if they sick (80.8%). About one-fifth reported that someone was "seldom" available for taking them to a doctor (21.3%) or available for preparing meals (17.1%), or helping with daily chores if they were sick (17.5%). In comparision, approximately two- thirds of older Koreans in Korea reported someone available "sometimes" or "often" for taking them to a doctor (60.0%), preparing meals (80.8%), and helping with daily chores if they sick (65.0%). About one tenth reported that someone was "seldom" available for taking them to a doctor (15.4%) or available for preparing meals (10.0%), or helping with daily chores if they were sick (11.3%).

**Table 5**Perceived Social Support (US:N=240 and Korea: N=240)

|    |   |               |                | US            |             |             |               |                | Korea         |               |               |
|----|---|---------------|----------------|---------------|-------------|-------------|---------------|----------------|---------------|---------------|---------------|
|    | Statements  | Seldom        | Sometimes      | Often         | Very open   | Always      | Seldom        | Sometimes      | Often         | Veryopen      | Always        |
| 1  | How often is someone available to give you good advice about a crisis?                            | 42<br>(17.5%) | 142<br>(59.2%) | 46<br>(19.2%) | 7<br>(2.9%) | 3<br>(1.3%) | 29<br>(12.1%) | 114<br>(47.5%) | 43<br>(17.9%) | 26<br>(10.8%) | 28<br>(11.7%) |
| 2  | How often is someone available to take you to the doctor if you needed it?                        | 51<br>(21.3%) | 134<br>(55.8%) | 48<br>(20.0%) | 4<br>(1.7%) | 3<br>(1.3%) | 37<br>(15.4%) | 109<br>(45.4%) | 35<br>(14.6%) | 24<br>(10.0%) | 35<br>(11.7%) |
| 3  | How often is someone available to have a good time with?  | 41<br>(17.1%) | 134<br>(55.8%) | 59<br>(24.6%) | 4<br>(1.7%) | 2<br>(0.8%) | 18<br>(7.5%)  | 105<br>(43.8%) | 71<br>(29.6%) | 16<br>(6.7%)  | 30<br>(12.5%) |
| 4  | How often is someone available to confide in or talk about yourself or your problems?             | 45<br>(18.8%) | 146<br>(60.8%) | 46<br>(19.2%) | 1<br>(0.4%) | 2<br>(0.8%) | 23<br>(9.6%)  | 124<br>(51.7%) | 51<br>(21.3%) | 17<br>(7.1%)  | 25<br>(10.4%) |
| 5  | How often is someone available who shows you love and affection?                                  | 36<br>(15.0%) | 161<br>(67.1%) | 34<br>(14.2%) | 7<br>(2.9%) | 2<br>(0.8%) | 22<br>(9.2%)  | 119<br>(49.6%) | 45<br>(18.8%) | 22<br>(9.2%)  | 32<br>(13.3%) |
| 6  | How often is someone available to prepare your meals if you were unable to do it yourself?        | 41<br>(17.1%) | 139<br>(57.9%) | 57<br>(23.8%) | 1<br>(0.4%) | 2<br>(0.8%) | 24<br>(10.0%) | 113<br>(47.1%) | 42<br>(21.3%) | 10<br>(4.2%)  | 42<br>(17.5%) |
| 7  | How often is someone available to help you with daily chores if you were sick?                    | 42<br>(17.5%) | 143<br>(59.6%) | 51<br>(21.3%) | 2<br>(0.8%) | 2<br>(0.8%) | 27<br>(11.3%) | 114<br>(47.5%) | 42<br>(17.5%) | 13<br>(5.4%)  | 44<br>(18.3%) |
| 8  | How often is someone available to share your most private worries and fears with?                 | 61<br>(25.4%) | 126<br>(52.5%) | 46<br>(19.2%) | 7<br>(2.9%) | 0<br>(0.0%) | 26<br>(10.8%) | 103<br>(42.9%) | 66<br>(27.5%) | 22<br>(9.2%)  | 23<br>(9.6%)  |
| 9  | How often is someone available to turn for suggestions about how to deal with a personal problem? | 54<br>(22.5%) | 133<br>(55.4%) | 48<br>(20.0%) | 5<br>(2.1%) | 0<br>(0.0%) | 23<br>(9.6%)  | 105<br>(43.8%) | 66<br>(27.5%) | 20<br>(8.3%)  | 26<br>(10.8%) |
| 10 | How often is someone available to love and make you feel wanted?                                  | 60<br>(25.0%) | 135<br>(56.3%) | 41<br>(17.1%) | 4<br>(1.7%) | 0<br>(0.0%) | 21<br>(8.8%)  | 113<br>(47.1%) | 55<br>(22.9%) | 27<br>(11.3%) | 24<br>(10.0%) |

Regarding emotional support, 78 % of older Korean immigrants in the United States reported someone available "sometimes" or "often" for giving good advice, 80% having a good time, 80% talking about problems, 81% showing love or affection, 72% sharing private worries, 75% discussing personal problems, and 73% feeling loved and wanted. In contrast, 65% of older Koreans in Korea reported someone available "sometimes" or "often" for giving good advice, 73% having a good time, 73% talking about problems, 70% showing love or affection, 70% sharing private worrie, 71% discussing personal problems, or 70% feeling loved and wanted. Overall, there are similar patterns in both countries: around 20% of older Koreans in both countries indicate their social support is available "often."

**Family Relationships.** As presented in Table 6, respondents' family relationships were measured by a 13-item family relationship scale. The scale was composed of three different relationships: 1) older adults' perception of unpleasant communication with their children, 2) older adults' perception that their adult children have disrespect for parents, and 3) older adults' feelings of alienation from adult children.

Regarding family communication, older Korean immigrants in the United States reported that they agreed "much" or "somewhat" with the following statement: "I do frequently discuss something with my adult children" (12.5% or 24.6%), "I think my adult children understand me" (12.5% or 24.5%), "I can exchange confidences with my adult children" (10.0% or 28.3%), "My adult children tend to approve my opinions" (3.3% or 35.8%), and "My adult children dislike to take my advice" (14.6% or 22.1%). In contrast for older Koreans in Korea reported that they agreed "much" or "somewhat" with the following statements: "I do frequently discuss something with my adult children" (21.3% or 44.2%), "I think my adult children understand me" (17.5% or 43.3%), "I can exchange confidences with my adult children" (14.2% or 37.9%), "My

adult children tend to approve my opinions" (16.3% or 46.7%), and "My adult children dislike to take my advice" (9.2% or 32.1%).

As for disrespect, older Korean immigrants in the United Staes reported that they agreed "much" or "somewhat" with the following statement: "I feel I am a useless parent" (8.3% or 21.3%), "I feel guilty to my adult children as I get older" (3.8% or 21.3%), "I feel I am unconvincing my adult children" (1.7% or 15.4%), "I am a meaningful role in my home, even if I get older" (5.8% or 16.7%), and "My adult children disregard my taking share in family matters" (4.6% or 11.3%). In comparision for older Koreans in Korea reported that they agreed "much" or "somewhat" with the following statement: "I feel I am a useless parent" (2.5% or 14.2%), "I feel guilty to my adult children as I get older" (3.3% or 12.1%), "I feel I am unconvincing my adult children" (4.6% or 9.6%), "I am a meaningful role in my home, even if I get older" (17.9% or 27.9%), and "My adult children disregard my taking share in family matters" (3.3% or 11.3%).

Regarding alienation, older Korean immigrants in the United States reported that they agreed "much" or "somewhat" with the following statement: "I feel I am alienated from my adult children," (5.0% or 20.8 %) "It is inconvenient for me to live with my adult children" (7.1% or 27.1%), and "I feel my adult children are content with me as a parent" (9.6% or 28.3%). In comparision for older Koreans in Korea reported that they agreed "much" or "somewhat" with the following statement: "I feel I am alienated from my adult children" (5.0% 10.4%), "It is inconvenient for me to live with my adult children" (10.8% or 16.3%), and "I feel my adult children are content with me as a parent" (11.7% or 25.4%).

**Table 6**Family relationships (US: N=240 and Korea: N=240)

|   |             |               | US            |                |               |               |               | Korea          |                |               |
|---|-------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|
| Statements  | Very much   | Much          | Some<br>what  | slightly       | not at all    | Very much     | Much          | Some<br>what   | slightly       | not at all    |
| I do frequently discuss something with my adult children          | 0<br>(0.0%) | 30<br>(12.5%) | 59<br>(24.6%) | 105<br>(43.8%) | 46<br>(19.2%) | 12<br>(5.0%)  | 51<br>(21.3%) | 106<br>(44.2%) | 60<br>(25.0%)  | 11<br>(4.6%)  |
| 2. I think my adultchildren                                       | 0           | 30            | 59            | 111            | 40            | 5             | 42            | 104            | 84             | 5             |
| understand me   | (0.0%)      | (12.5%)       | (24.5%)       | (46.3%)        | (16.7%)       | (20.8%)       | (17.5%)       | (43.3%)        | (35.0%)        | (2.1%)        |
| 3. I can exchange confidences                                     | 0           | 24            | 68            | 109            | 39            | 6             | 34            | 91             | 101            | 8             |
| with my adult children.   | (0.0%)      | (10.0%)       | (28.3%)       | (45.4%)        | (16.3%)       | (2.5%)        | (14.2%)       | (37.9%)        | (42.1%)        | (3.3%)        |
| 4. My adult children tend to                                      | 4           | 8             | 86            | 103            | 39            | 6             | 39            | 112            | 76             | 7             |
| approve my opinions   | (1.7%)      | (3.3%)        | (35.8%)       | (42.9%)        | (16.3%)       | (2.5%)        | (16.3%)       | (46.7%)        | (31.7%)        | (2.9%)        |
| 5. My adult children dislike                                      | 7           | 35            | 53            | 114            | 31            | 3             | 22            | 77             | 98             | 40            |
| taking my advice  | (2.9%)      | (14.6%)       | (22.1%)       | (47.5%)        | (12.9%)       | (1.3%)        | (9.2%)        | (32.1%)        | (40.8%)        | (16.7%)       |
| 6. I feel I am a useless parent.                                  | 3           | 20            | 51            | 124            | 42            | 5             | 6             | 34             | 83             | 112           |
|   | (1.3%)      | (8.3%)        | (21.3%)       | (51.7%)        | (17.5%)       | (2.1%)        | (2.5%)        | (14.2%)        | (34.6%)        | (46.7%)       |
| 7. I feel guilty to my adult                                      | 0           | 9             | 51            | 144            | 36            | 3             | 8             | 29             | 98             | 102           |
| children as I get older   | (0.0%)      | (3.8%)        | (21.3%)       | (60.0%)        | (15.0%)       | (1.3%)        | (3.3%)        | (12.1%)        | (40.8%)        | (42.5%)       |
| 8. I feel I am unconvincing my                                    | 11          | 4             | 37            | 146            | 42            | 8             | 11            | 23             | 115            | 83            |
| adult children  | (4.6%)      | (1.7%)        | (15.4%)       | (60.8%)        | (17.6%)       | (3.3%)        | (4.6%)        | (9.6%)         | (47.9%)        | (34.6%)       |
| 9. I am a meaningful being in my home even if I getolder          | 3<br>(1.3%) | 14<br>(5.8%)  | 40<br>(16.7%) | 157<br>(65.4%) | 26<br>(10.8%) | 25<br>(10.4%) | 43<br>(17.9%) | 67<br>(27.9%)  | 65<br>(27.1%)  | 40<br>(16.7%) |
| 10. My adult children disregard my taking share in family matters | 0<br>(0.0%) | 11<br>(4.6%)  | 27<br>(11.3%) | 135<br>(56.3%) | 67<br>(27.9%) | 2<br>(0.8%)   | 8<br>(3.3%)   | 27<br>(11.3%)  | 111<br>(46.3%) | 92<br>(38.3%) |
| 11. I feel I am alienated from my adult children                  | 0<br>(0.0%) | 12<br>(5.0%)  | 50<br>(20.8%) | 120<br>(50.0%) | 58<br>(24.2%) | 4<br>(1.7%)   | 12<br>(5.0%)  | 25<br>(10.4%)  | 107<br>(44.6%) | 92<br>(38.3%) |
| 12. It is inconvenient for me to                                  | 0           | 17            | 65            | 129            | 29            | 7             | 26            | 39             | 122            | 46            |
| live with my adult children.                                      | (0.0%)      | (7.1%)        | (27.1%)       | (53.8%)        | (12.1%)       | (2.9%)        | (10.8%)       | (16.3%)        | (50.8%)        | (19.2%)       |
| 13. I feel my adult children are content with my being a parent.  | 5<br>(2.1%) | 23<br>(9.6%)  | 68<br>(28.3%) | 140<br>(58.3%) | 4<br>(1.7%)   | 8 (3.3%)      | 28<br>(11.7%) | 61<br>(25.4%)  | 116<br>(48.3%) | 27<br>(11.3%) |

Regarding overall perception of family relationships (Table 7), 36% of older Korean immigrants in the United States reported "very bad" or "bad" family relationships and 41% of older Korean immigrants reported their family relationships were "fair." About 24% of older Korenan immigrants reported their family relationships were "good" or "very good." In comparision, 17% of older Koreans in Korea reported "very bad" or "bad" family relationships and 58% of the older Koreans in Korea reported their family relationship was "fair." In addition, 25% of older Koreans in Korea reported their family relationships were "good" or "very good."

Overall family relationships have similar patterns (e.g., very bad, fair, good, very good) in both countries. However, 33% of older Korean immigrants in the United States report "bad" versus 16% of older Koreans in Korea.

**Table 7**Overall family relationships (US: N=240 and Korea: N=240)

| Statements    | Very bad | bad     | fair    | Good    | Very good |
|---------------|----------|---------|---------|---------|-----------|
| United Ctates | 1        | 79      | 99      | 39      | 16        |
| United States | (2.9%)   | (32.9%) | (41.3%) | (16.3%) | (6.7%)    |
| Vorce         | 2        | 39      | 139     | 54      | 6         |
| Korea         | (0.83%)  | (16.3%) | (57.9%) | (22.5%) | (2.5%)    |

Help-Seeking Behaviors. Overall, older Korean immigrants in the United States are unlikely to seek help. Only one-fourth of the respondents reported that they would seek help (23.8%). Over two-thirds of older Korean immigrants in the United States (76.3%) expressed that they were not willing to seek help for their psychological distress. They were generally reluctant to seek help. Similarly, older Koreans in Korea reported unwillingness to seek help. Only 15% of the respondents reported that they would seek help. A majority of the respondents (85.8%). expressed that they were not willing to seek help for their psychological distress. Older Koreans in Korea were generally more reluctant to seek help than their counterparts in the United States. Only 24% of older Korean immigrants in the United States were "willingness to

seek help" versus 14 % of their counterparts in Korea. Therefore, older Korean immigrants in the United States are more likely to seek help than their counterparts in Korea.

Elder Care Values. This variable was measured by attitude toward elder care. Table 8 shows the frequencies and percentages of a 10-item scale of attitude toward elder care. For living arrangement items, over 48% of older Korean immigrants in the United States agreed with the following statement: "Adult children should live together with their elderly parents at the parents' wish" versus 44% of their counterparts in Korea and 50% of the older Korean immigrants agreed with the statement: "It is wrong to place an impaired parent in a nursing home" versus 39% of their counterparts in Korea.

Regarding respecting older adult decision, about 35% of older Korean immigrants in the United States agreed with the following statement: "Elderly parents should make the final decisions on important family matter," compared to 34% of their counterparts in Korea. Moreover, 20% of older Korean immigrants in the United States agreed with the following statement: "Adult children should obey the decisions of their parents even when they think the decisions are bad" versus 25% of their counterparts in Korea.

Regarding caregiving, 41% of older Korean immigrants in the United States agreed with the following statements: "A daughter-in-law should have more responsibilities than married sons to care for the elderly parents" versus 27% of their counterparts in Korea. Furthermore, 66% of older Korean immigrants in the United States agreed with the following statement: "Adult children and their spouses should not express the stress or burden related to caregiving for the elderly parents," versus 43% of their counterparts in Korea.

**Table 8** Elder Care Values (US: N=240 and Korea: N=240)

|    |  |                      |                | US             |                   |                      |                | Korea          |                   |
|----|--|----------------------|----------------|----------------|-------------------|----------------------|----------------|----------------|-------------------|
|    | Statements   | Strongly<br>disagree | Disagree       | Agree          | Strongly<br>agree | Strongly<br>disagree | Disagree       | Agree          | Strongly<br>agree |
| 1  | Adult children should live together with their elderly parents at the parents' wish.   | 4<br>(1.7%)          | 98<br>(40.8%)  | 114<br>(47.5%) | 24<br>(10.0%)     | 25<br>(10.4%)        | 101<br>(42.1%) | 105<br>(43.8%) | 9<br>(3.8%)       |
| 2  | It is wrong to place an impaired parent in a nursing home.   | 3<br>(1.3%)          | 99<br>(41.3%)  | 119<br>(49.6%) | 19<br>(7.9%)      | 29<br>(12.1%)        | 113<br>(47.1%) | 95<br>(39.1%)  | 3<br>(1.3%)       |
| 3  | Elderly parents should make the final decisions on important family matter   | 3<br>(1.3%)          | 148<br>(61.7%) | 83<br>(34.6%)  | 6<br>(2.5%)       | 23<br>(9.6%)         | 126<br>(52.5%) | 81<br>(33.8%)  | 10<br>(4.2%)      |
| 4  | Adult children should obey the decisions of their parents even when they think the decisions are bad.  | 2<br>(0.8%)          | 185<br>(77.1%) | 49<br>(20.4%)  | 4<br>(1.7%)       | 30<br>(12.5%)        | 134<br>(55.8%) | 61<br>(25.4%)  | 15<br>(6.3%)      |
| 5  | Daughter-in-law should have more responsibilities than married sons to care For the elderly parents.   | 2<br>(0.8%)          | 129<br>(53.8%) | 98<br>(40.8%)  | 11<br>(4.6%)      | 33<br>(13.8%)        | 132<br>(55.0%) | 65<br>(27.1%)  | 10<br>(4.2%)      |
| 6  | Adult children and their spouse should not express the stress or burden related to caregiving for the elderly parents.                                   | 1<br>(0.4%)          | 21<br>(8.8%)   | 159<br>(66.3%) | 59<br>(24.6%)     | 25<br>(10.4%)        | 91<br>(37.9%)  | 102<br>(42.5%) | 22<br>(9.2%)      |
| 7  | Adult children should offer money regularly to their elderly parents, regardless of the financial need of parents, as a way of expressing their care     | 0<br>(0.0%)          | 19<br>(7.9%)   | 146<br>(60.8%) | 75<br>(31.3%)     | 9 (3.8%)             | 75<br>(31.1%)  | 134<br>(55.8%) | 22<br>(9.2%)      |
| 8  | for the parents.  Adult children concerned about the well being of their family elderly parents should keep bad family news from their parents.          | 0<br>(0.0%)          | 22<br>(9.2%)   | 141<br>(58.8%) | 77<br>(32.1%)     | 11<br>(4.6%)         | 105<br>(43.8%) | 107<br>(44.6%) | 17<br>(7.1%)      |
| 9  | Adult children and their spouses who live with elderly parents should take of all household chores to ensure that their parents are free from housework. | 0<br>(0.0%)          | 3<br>(1.3%)    | 158<br>(65.8%) | 79<br>(32.9%)     | 14<br>(5.8%)         | 106<br>(44.2%) | 89<br>(37.1%)  | 31<br>(12.9%)     |
| 10 | Adult children who live far away from their elderly parents should call or write to parents regularly, at least once a week.                             | 0<br>(0.0%)          | 3<br>(1.3%)    | 135<br>(56.3%) | 102<br>(42.5%)    | 10<br>(4.2%)         | 43<br>(17.9%)  | 128<br>(53.3%) | 59<br>(24.6%)     |

Over 60% of older Korean immigrants in the United States agreed with the following statement: "Adult children should offer money regularly to their elderly parents, regardless of the financial need of parents, as a way of expressing their care for the parents," compared to 56% of their counterparts in Korea. In addition, 59% of older Korean immigrants in the United States agreed with the following statement: "Adult children concerned about the well being of their family elderly parents should keep bad family news from their parents," versus 45% of their counterparts in Korea. In addition, 56% of older Korean immigrants in the United States agreed with the following statement: "Adult children who live far away from their elderly parents should call or write to parents regularly, at least once a week," versus 53% of their counterparts in Korea.

Two-thirds of older Korean immigrants in the United States (66%) agreed with the following statement: "Adult children and their spouses who live with elderly parents should take of all household chores to ensure that their parents are free from housework," versus 37 % of their counterparts in Korea. In sum, a majority of older Koreans in both countries hold traditional Korean values regarding financial support and frequent contact. In sum, there are also similar patterns in both countries.

## **Research Question 1: Prevalence of Psychological Distress**

Research Question 1 investigated the prevalence of psychological distress among older Korean immigrants in the United States and older Koreans in Korea. To answer the research question, bivariate relationships between each indicator of socio-demographic characteristics and psychological distress were analyzed first. There was a significant difference in the level of psychological distress between older Korean immigrants and older Korean in Korea (Table 9).

**Table 9**Comparison of prevalence of psychological distress in both countries

| Psychological Distress | None       | Mild      | Moderate   | Severe    | Mean  | S.D. |
|------------------------|------------|-----------|------------|-----------|-------|------|
| US                     | 111(46.3%) | 62(25.8%) | 37(15.4%)  | 30(12.5%) | 22.22 | 5.30 |
| Korea                  | 80 (33.3%) | 46(19.2%) | 64(26. 7%) | 50(20.8%) | 23.86 | 6.63 |

Regarding level of psychological distress, 46% of older Korean immigrants in the United States reported "no" psychological distress, 26% reported "mild" psychological distress, 15% reported "moderate" psychological distress, and 13% reported "severe" psychological distress has shown in Table 9 and Figure 3. In contrast, 33% of older Koreans in Korea reported "no" psychological distress, 19% reported "mild" psychological distress, 27% reported "moderate" psychological distress, and 21% reported "severe" psychological distress. Overall, these results suggest that older Koreans in Korea reported higher level of "moderate" and "severe" psychological distress when compared to their counterparts in the United States.

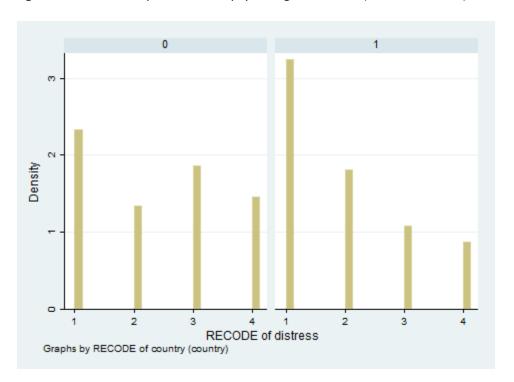


Figure 3. Differences: prevalence of psychological distress (US versus Korea)

United States=1, Korea=0

- 1. Score 10-20=none of psychological distress
- 2. Score 21-24=mild psychological distress
- 3. Score 25-29=moderate psychological distress
- 4. Score 30-50= severe psychological distress

As shown in Table 10, age, income, income resources, financial status, health status, religion, living arrangement (living alone and living spouse), and cognitive and functional limitations are all statistically significantly associated with psychological distress in both countries. However, marital status and educational attainment are statistically significantly associated with psychological distress among older Korean immigrants in the United States, while gender is not significantly associated with psychological distress among older Koreans in Korea.

Table 10
Contingency table of various independent variables with psychological distress (US:N=240 & Korea: N=240)(coded into 4 groups)

|                      |                | ı              | US             |                | Korea           |               |                |               |  |  |
|----------------------|----------------|----------------|----------------|----------------|-----------------|---------------|----------------|---------------|--|--|
| Variables            | None(%)        | Mild(%)        | Moderate(%)    | Severe(%)      | None(%)         | Mild(%)       | Moderate(%)    | Severe(%)     |  |  |
|                      | (score: 10-20) | (score: 21-24) | (score: 25-29) | (score: 30-50) | (score: 10- 20) | (score:21-24) | (score: 25-29) | (score:30-50) |  |  |
|                      | <i>n</i> = 111 | n=62           | n=37           | <i>n</i> =30   | <i>n</i> = 80   | n=46          | <i>n</i> =64   | <i>n</i> =50  |  |  |
| Gender               |                |                |                |                | Gender *        |               |                |               |  |  |
| Male                 | 49.2           | 25.0           | 11.7           | 14.2           | 35.0            | 25.0          | 25.8           | 14.2          |  |  |
| Female               | 43.3           | 26.7           | 19.2           | 10.8           | 31.7            | 13.3          | 27.5           | 27.5          |  |  |
| Age ***              |                |                |                |                | Age *           |               |                |               |  |  |
| 60-64                | 66.0           | 8.0            | 20.0           | 6.0            | 45.7            | 18.6          | 25.7           | 10.0          |  |  |
| 65-69                | 64.3           | 27.1           | 5.7            | 2.9            | 40.0            | 22.0          | 16.0           | 22.0          |  |  |
| 70-74                | 32.9           | 43.8           | 15.1           | 8.2            | 23.9            | 17.9          | 31.3           | 26.9          |  |  |
| 75-79                | 19.1           | 14.9           | 25.5           | 40.4           | 22.6            | 18.9          | 32.1           | 26.4          |  |  |
| Education ***        |                |                |                |                | Education       |               |                |               |  |  |
| Less High            | 21.5           | 41.5           | 18.5           | 18.5           | 30.9            | 21.8          | 30.9           | 16.4          |  |  |
| High                 | 37.4           | 26.5           | 19.3           | 16.9           | 31.4            | 14.3          | 27.1           | 27.1          |  |  |
| College              | 65.8           | 17.1           | 11.8           | 5.3            | 37.7            | 20.8          | 18.9           | 22.6          |  |  |
| Graduate             | 100.0          | 0.0            | 0.0            | 0.0            | 57.1            | 14.3          | 14.3           | 14.3          |  |  |
| Marital Status **    |                |                |                |                | Marital status  |               |                |               |  |  |
| Never married        | 40.0           | 40.0           | 0.0            | 20.0           | 0.0             | 66.7          | 0.0            | 33.3          |  |  |
| Married              | 53.5           | 26.4           | 12.6           | 7.5            | 39.5            | 17.9          | 23.5           | 19.4          |  |  |
| Sep/ divorced        | 28.6           | 21.4           | 25.0           | 25.0           | 17.7            | 23.5          | 23.5           | 35.3          |  |  |
| Widowed              | 24.2           | 24.2           | 24.2           | 27.3           | 22.4            | 19.0          | 37.9           | 20.7          |  |  |
| Health Status **     |                |                |                |                | Health ***      |               |                |               |  |  |
| Very poor            | 0.0            | 0.0            | 28.6           | 71.4           | 0.0             | 30.0          | 40.0           | 30.0          |  |  |
| Poor                 | 17.1           | 29.0           | 35.5           | 18.4           | 14.7            | 19.1          | 39.7           | 26.5          |  |  |
| Fair                 | 55.9           | 33.3           | 4.9            | 5.9            | 39.0            | 20.3          | 22.8           | 17.9          |  |  |
| Good & very good     | 85.4           | 12.5           | 2.1            | 0.0            | 56.4            | 12.8          | 12.8           | 18.0          |  |  |
| Income **            |                |                |                |                | Income ***      |               |                |               |  |  |
| Under \$1,000        | 34.0           | 28.9           | 20.5           | 16.7           | 24.4            | 16.9          | 32.5           | 26.3          |  |  |
| \$1,001-\$1,999      | 67.4           | 23.9           | 4.4            | 4.4            | 34.2            | 34.2          | 19.5           | 12.2          |  |  |
| \$2,000-\$2,999      | 64.0           | 20.0           | 8.0            | 8.0            | 74.2            | 9.7           | 9.7            | 6.5           |  |  |
| \$3,000 & over       | 84.6           | 7.7            | 7.7            | 0.0            | 50.0            | 25.0          | 12.5           | 12.5          |  |  |
| Financial Status *** |                |                |                |                | Financial***    |               |                |               |  |  |
| Very bad             | 7.2            | 0.0            | 35.7           | 57.1           | 9.5             | 4.8           | 23.8           | 61.9          |  |  |
| Bad                  | 31.3           | 26.0           | 26.0           | 16.7           | 9.3             | 20.4          | 42.6           | 27.8          |  |  |
| Fair                 | 55.5           | 32.7           | 6.4            | 5.5            | 57.6            | 21.7          | 13.0           | 7.6           |  |  |
| Good                 | 94.1           | 5.9            | 0.0            | 0.0            | 76.5            | 17.7          | 5.9            | 0.0           |  |  |
| Very good            | 100.0          | 0.0            | 0.0            | 0.0            | 100.0           | 0.0           | 0.0            | 0.0           |  |  |

| Variables              | US                                  |   |   |   | Korea                               |  |  |  |                    |      |      |      |      |        |      |      |      |
|------------------------|-------------------------------------|---|---|---|-------------------------------------|--|--|--|--------------------|------|------|------|------|--------|------|------|------|
|                        | None(%)<br>(score: 10-20)<br>n= 111 | <b>Mild</b> (%)<br>(score: 21-24)<br><i>n</i> =62 | <b>Moderate</b> (%)<br>(score: 25-29)<br>n=37 | <b>Severe</b> (%) (score: 30-50) <i>n</i> =30 | None(%)<br>(score: 10- 20)<br>n= 80 | <b>Mild</b> (%)<br>(score:21-24)<br>n=46 | <b>Moderate</b> (%) (score: 25-29)<br>n=64 | <b>Severe(</b> %)<br>(score:30-50)<br><i>n</i> =50 |                    |      |      |      |      |        |      |      |      |
|                        |                                     |   |   |   |                                     |  |  |  | Living arrangement |      |      |      |      | Living |      |      |      |
|                        |                                     |   |   |   |                                     |  |  |  | Alone(yes)***      | 17.0 | 32.1 | 24.5 | 26.4 | 12.7   | 23.6 | 43.6 | 20.0 |
| Spouse(yes)***         | 56.4                                | 24.0  | 12.3  | 7.3   | 41.9                                | 16.3                                     | 21.3                                       | 20.6   |                    |      |      |      |      |        |      |      |      |
| Children(yes)          | 52.9                                | 27.1  | 12.9  | 7.1   | 39.6                                | 17.8                                     | 20.8                                       | 21.8   |                    |      |      |      |      |        |      |      |      |
| Income sources ***     |                                     |   |   |   | Income                              |  |  |  |                    |      |      |      |      |        |      |      |      |
| Public assistance      | 32.6                                | 30.6  | 19.4  | 17.4  | 24.1                                | 17.2                                     | 26.4                                       | 32.2   |                    |      |      |      |      |        |      |      |      |
| Employment             | 66.7                                | 18.0  | 8.0   | 6.4   | 36.8                                | 19.3                                     | 26.3                                       | 17.5   |                    |      |      |      |      |        |      |      |      |
| Assistance(child)      | 63.6                                | 18.2  | 18.2  | 0.0   | 26.5                                | 25.0                                     | 32.4                                       | 16.2   |                    |      |      |      |      |        |      |      |      |
| Saving or Asset        | 71.4                                | 28.6  | 0.0   | 0.0   | 71.4                                | 10.7                                     | 14.3                                       | 3.6  |                    |      |      |      |      |        |      |      |      |
| Religion **            |                                     |   |   |   | Religion*                           |  |  |  |                    |      |      |      |      |        |      |      |      |
| No religion            | 41.1                                | 19.6  | 23.2  | 16.1  | 20.9                                | 23.3                                     | 37.2                                       | 18.6   |                    |      |      |      |      |        |      |      |      |
| Protestant             | 53.6                                | 22.1  | 14.3  | 10.0  | 34.2                                | 14.5                                     | 24.8                                       | 26.5   |                    |      |      |      |      |        |      |      |      |
| Catholic               | 33.3                                | 48.5  | 6.1   | 12.1  | 48.6                                | 31.4                                     | 14.3                                       | 5.7  |                    |      |      |      |      |        |      |      |      |
| Buddhist               | 0.0                                 | 33.3  | 0.0   | 66.7  | 32.6                                | 18.6                                     | 27.9                                       | 21.0   |                    |      |      |      |      |        |      |      |      |
| Cognitive limit ***    |                                     |   |   |   | Cognitive limit *                   |  |  |  |                    |      |      |      |      |        |      |      |      |
| Yes                    | 13.3                                | 33.3  | 20.0  | 33.3  | 7.1                                 | 21.4                                     | 42.9                                       | 28.6   |                    |      |      |      |      |        |      |      |      |
| No                     | 51.0                                | 24.8  | 14.8  | 9.5   | 36.8                                | 18.9                                     | 24.5                                       | 19.9   |                    |      |      |      |      |        |      |      |      |
| Physical limit ***     |                                     |   |   |   | Physical limit***                   |  |  |  |                    |      |      |      |      |        |      |      |      |
| Yes                    | 7.9                                 | 23.7  | 31.6  | 36.8  | 7.0                                 | 14.0                                     | 41.9                                       | 37.2   |                    |      |      |      |      |        |      |      |      |
| No                     | 53.5                                | 26.2  | 12.4  | 7.9   | 39.1                                | 20.3                                     | 23.4                                       | 17.3   |                    |      |      |      |      |        |      |      |      |
| Inside difficulty ***  |                                     |   |   |   | Inside difficult**                  |  |  |  |                    |      |      |      |      |        |      |      |      |
| Yes                    | 0.0                                 | 7.7   | 30.8  | 61.5  | 11.1                                | 0.0                                      | 22.2                                       | 66.7   |                    |      |      |      |      |        |      |      |      |
| No                     | 48.9                                | 26.9  | 14.5  | 9.7   | 34.2                                | 19.9                                     | 26.8                                       | 19.1   |                    |      |      |      |      |        |      |      |      |
| Outside difficulty *** |                                     |   |   |   | Outside difficult**                 |  |  |  |                    |      |      |      |      |        |      |      |      |
| Yes                    | 8.3                                 | 16.7  | 33.3  | 41.7  | 6.7                                 | 10.0                                     | 33.3                                       | 50.0   |                    |      |      |      |      |        |      |      |      |
| No                     | 50.5                                | 26.9  | 13.4  | 9.3   | 37.1                                | 20.5                                     | 25.2                                       | 16.7   |                    |      |      |      |      |        |      |      |      |
| Length in the US ***   |                                     |   |   |   | N/A                                 | N/A                                      | N/A  | N/A  |                    |      |      |      |      |        |      |      |      |
| 1-10 years             | 0.0                                 | 0.0   | 0.0   | 0.0   |                                     |  |  |  |                    |      |      |      |      |        |      |      |      |
| 11-20 years            | 71.3                                | 17.5  | 5.0   | 6.3   |                                     |  |  |  |                    |      |      |      |      |        |      |      |      |
| 21-30 years            | 39.5                                | 35.8  | 12.8  | 11.9  |                                     |  |  |  |                    |      |      |      |      |        |      |      |      |
| 31 & over              | 21.6                                | 17.7  | 37.3  | 23.5  |                                     |  |  |  |                    |      |      |      |      |        |      |      |      |
| English proficiency*** |                                     |   |   |   | N/A                                 | N/A                                      | N/A  | N/A  |                    |      |      |      |      |        |      |      |      |
| Not at all             | 22.7                                | 43.2  | 11.4  | 22.7  |                                     | •  | •  | •  |                    |      |      |      |      |        |      |      |      |
| Not well               | 42.3                                | 27.5  | 19.7  | 10.6  |                                     |  |  |  |                    |      |      |      |      |        |      |      |      |
| Well                   | 76.9                                | 5.8   | 7.7   | 9.6   |                                     |  |  |  |                    |      |      |      |      |        |      |      |      |
| Very well              | 50.0                                | 50.0  | 0.0   | 0.0   |                                     |  |  |  |                    |      |      |      |      |        |      |      |      |

\*\*\* p < .001, \*\*p < .01, \*p < .05Note: based on Chi-square test of independence

Regarding the demographic variables, age was statistically significantly associated with psychological distress for both older Korean immigrants (p<.05) in the United States and older Koreans in Korea (p<.001). In addition, the level of English proficiency and length of residency in the United States was statistically significantly associated with psychological distress among older Korean immigrants in the United States. The variable of the level of English proficiency and length in the United States was not eligible to be compared in the two groups.

Regarding educational attainment, almost 63% of older Korean immigrants in the United States those with less than high school education reported "no" or "mild" psychological distress, 18% reported "moderate," and 18% reported "severe" psychological distress. By comparison, 53% of their counterparts in Korea reported "no" or "mild," 31% reported "moderate," and 16% reported "severe" psychological distress. About 17% of older Korean immigrants in the United States with the high school reported "severe" psychological distress and over 19% reported "moderate" psychological distress versus over 27% of their counterparts in Korea, with the high school reported "severe" psychological distress and over 27 % reported "moderate" psychological distress.

As for marital status, "severe" psychological distress is reported by those who are separated/divorced (25.0%) and widowed (27.3%) while "moderate" psychological distress is reported by those who are widowed (24.2%) or separated/divorced (25.0%) among older Korean immigrants in the United States. In comparison for older Koreans in Korea, "severe" psychological distress is reported by those who are separated/divorced (35.3%) and widowed (20.7%) while "moderate" psychological distress is reported by those who are widowed (23.5%) or separated/divorced (37.9%).

About 72% of older Korean immigrants in the United States who reported having "very poor" health exbit "severe" psychological distress and 29% of those in "very poor" health have "moderate" psychological distress. Almost 36% of those in "poor" health have "moderate" psychological distress and 18% of those in "poor" health have "severe" psychological distress. In comparison for older Koreans in Korea, about 30% of those in "very poor" health have "severe" psychological distress and 40% of those in "very poor" health have "moderate" psychological distress and 26% of those in "poor" health have "severe" psychological distress and 26% of those in "poor" health have "severe" psychological distress.

Severe psychological distress is cognitive limitations (33.3%), physical limitations (36.9%), inside difficulty (61.5%), and outside difficulty (41.7%) among older Korean immigrants in the United States. In contrast for older Koreans in Korea, "severe" psychological distress is cognitive limitations (28.6%), physical limitations (37.2%), inside difficulty (66. 7%), and outside difficulty (50.0%).

Regarding perceived financial status, over 57% of older Korean immigrants in the United States reported "very bad" financial status have "severe" psychological distress and 36% of older Korean immigrants reported "very bad" financial status has "moderate" psychological distress. Over 26% of those in "bad" financial status have "moderate" psychological distress and 17% of those in "bad" financial status have" severe" psychological distress. In comparison for older Koreans in Korea, over 62% of those in "very bad" financial status have "severe" psychological distress and 24% of those in "very bad" financial status have "moderate" psychological distress. Over 43% of those in "bad" financial status have "moderate" psychological distress and 28% of those in "bad" financial status have "moderate" psychological distress and 28% of those in "bad" financial status have "severe" psychological distress.

Regarding monthly income, older Korean immigrants in the United States reported that approximately 17% of those with less than \$1000 income have "severe" psychological distress and 21% have "moderate" psychological distress. In contrast for older Koreans in Korea, over 26% of those with less than \$1000 income has "severe" psychological distress and 33% have "moderate" psychological distress.

As for income sources, older Korean immigrants in the United States reported that those on public assistance reported "severe" psychological distress are those with public assistance (17.4%) and those with "moderate" psychological distress (19.4%). In contrast for older Koreans in Korea, those on public assistance reported "severe" psychological distresses are those with public assistance (32.2%) and those with "moderate" psychological distress (26.4%). Unlike older Korean immigrants in the United States, older Koreans in Korea receive assistance from their adult children (32.4%) reported "moderate" psychological distress and 16% reported "severe" psychological distress.

Regarding religion, older Korean immigrants who have religion, such as Protestant (10.0%), or Catholic (12.1%), tended to experience less "severe" psychological distress than those who were not religious (16.1%) or Buddhist (66.7%). However, this result must be considered caution because the respondents included only eight Buddhists. In contrast for older Koreans in Korea with religion, such as Protestant (26.5%), or Buddhists (20.9%), tended to experience more "severe" psychological distress than those who were not religious (18.6%) or Catholic (5.7%).

Older Korean immigrants in the United States reported that about 23% of those with limited English have "severe" psychological distress while 11% of those reporting "not well" English proficiency have "moderate" psychological distress. In addition, about 24% of those who

have lived in the United States for over 30 years were in "severe" psychological distress and 37 % were in "moderate" psychological distress, while only 6% of those who have lived in the United States for less than 20 years were in "severe" psychological distress.

In sum, the results found that older Korean immigrants in the United States are more likely to have "no" psychological distress than older Koreans in Korea. In addition, older Korean immigrants in the United States have more "mild" psychological distress than older Koreans in Korea. Furthermore, older Koreans in Korea have more "moderate" and "severe" psychological distress than older Korean immigrants in the United States. Therefore, these older Koreans in Korea should be treated by a physician or qualified mental health professional.

# **Research Question 2: The relationship differences**

The survey data analyses involved hierarchal multiple regression. The detailed procedures are described in the following section. Hierarchal regression models are conducted in

**Table 11**Hierarchal regression models tested on an outcome variable (psychological distress)

Outcome variable: psychological distress

|         | Model                       | Equation   |
|---------|-----------------------------|--|
| Model 1 | Demographic factors         | Outcome = $\alpha$ + $\beta$ 1 Gender + $\beta$ 2 Education + $\beta$ 3 Income + |
|         |                             | $\beta4$ overall financial statue + $\beta5$ Marital Status + $\beta6$ Health    |
|         |                             | status   |
| Model 2 | Demographic + functional    | Outcome = $\alpha$ + $\beta$ 1 Gender + $\beta$ 2 Education + $\beta$ 3 Income + |
|         | factors                     | $\beta4$ overall financial statue + $\beta5$ Marital Status + $\beta6$ Health    |
|         |                             | status+ $\beta 8$ cognitive limitation + $\beta 9$ physical limitation           |
| Model 3 | Demographic + functional    | Outcome = $\alpha$ + $\beta$ 1 Gender + $\beta$ 2 Education + $\beta$ 3 Income + |
|         | factors+ moderating factors | $\beta4$ overall financial statue + $\beta5$ Marital Status + $\beta6$ Health    |
|         |                             | status + $\beta$ 8 cognitive limitation + $\beta$ 9 physical limitation          |
|         |                             | + $\beta$ 10 Social support + $\beta$ 11 Social networks + $\beta$ 12Family      |
|         |                             | relationships + β13 Help-seeking behavior  |

The hierarchal regression was conducted in three models (Table 12). In the first step, the six socio-demographic variables (e.g., gender, educational attainment, marital status, health status, income, and overall financial status) for psychological distress as predictors were explored.

**Table 12**Hierarchal regression on psychological distress (US:N=240 and Korea: N=240)

|                                       | US       |        |         |         |         |         |          |         | Korea    |         |          |         |  |  |  |  |  |
|---------------------------------------|----------|--------|---------|---------|---------|---------|----------|---------|----------|---------|----------|---------|--|--|--|--|--|
|                                       | Model 1  |        | Model 2 | Model 2 |         | Model 3 |          | Model 1 |          | Model 2 |          |         |  |  |  |  |  |
| Variables                             | В        | SE     | В       | SE      | В       | SE      | В        | SE      | В        | SE      | В        | SE      |  |  |  |  |  |
| Gender (female)                       |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Male                                  | 0.04     | 0.56   | -0.13   | 0.55    | 0.02    | 0.52    | 0.97     | 0.71    | 0.74     | 0.71    | 0.62     | 0.65    |  |  |  |  |  |
| Education                             |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Above High School                     | -1.74**  | 0.66   | -1.59*  | 0.64    | -1.20*  | 0.61    | -0.27    | 0.86    | 0.11     | 0.84    | 0.46     | 0.79    |  |  |  |  |  |
| Marital Status(never)                 |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Married                               | -0.65    | 0.68   | -0.78   | 0.68    | -0.42   | 0.64    | 0.61     | 0.87    | 0.39     | 0.84    | -0.19    | 0.77    |  |  |  |  |  |
| Health (very poor)                    |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Fair and good                         | -4.51*** | 0.74   | -3.61** | 0.77    | -2.14** | 0.78    | -1.97*   | 0.87    | -1.74*   | 0.86    | -0.61    | 0.80    |  |  |  |  |  |
| Income (under \$1,000)                |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Over \$1000                           | -0.36    | 0.64   | -0.26   | 0.64    | -0.20   | 0.60    | -0.94    | 0.84    | -0.61    | 0.81    | -0.30    | 0.75    |  |  |  |  |  |
| Overall financial status              |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Fair and good                         | -1.66*   | 0.69   | -1.52*  | 0.68    | -0.27   | 0.66    | -6.48*** | 0.79    | -6.58*** | 0.77    | -5.00*** | 0.74    |  |  |  |  |  |
| Cognitive limitation                  |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Yes                                   |          |        | 0.95    | 0.97    | 0.91    | 0.92    |          |         | 4.55***  | 1.09    | 3.79***  | 1.00    |  |  |  |  |  |
| Physical limitation                   |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Yes                                   |          |        | 2.65**  | 0.94    | 2.43**  | 0.92    |          |         | 1.00     | 1.02    | 0.99     | 0.2     |  |  |  |  |  |
| Family relationships                  |          |        |         |         | -0.22** | 0.63    |          |         |          |         | -0.09    | 0.07    |  |  |  |  |  |
| Social support                        |          |        |         |         | -0.1    | 0.01    |          |         |          |         | -0.11*   | 0.04    |  |  |  |  |  |
| Social networks                       |          |        |         |         | -0.00   | 0.08    |          |         |          |         | -0.20**  | 0.07    |  |  |  |  |  |
| Help-seeking behavior                 |          |        |         |         |         |         |          |         |          |         |          |         |  |  |  |  |  |
| Yes                                   |          |        |         |         | 1.65*   | 0.71    |          |         |          |         | -0.85    | 0.92    |  |  |  |  |  |
| R-square                              |          | 0.4078 |         | 0.4468  |         | 0.5830  |          | 0.3464  |          | 0.4013  |          | 0.5220  |  |  |  |  |  |
| Adjusted-R2                           |          | 0.39   |         | 0.43    |         | 0.54    |          | 0.33    |          | 0.38    |          | 0.49    |  |  |  |  |  |
| R-square change                       |          |        |         | 0.039   |         | 0.0912  |          |         |          | 0.0549  |          | 0.1207  |  |  |  |  |  |
| · · · · · · · · · · · · · · · · · · · |          | 22.82  |         | 20.64   |         | 20.25   |          | 17.57   |          | 17.13   |          | 18.99   |  |  |  |  |  |
| df                                    |          | 7, 232 |         | 9, 230  |         | 13, 226 |          | 7, 232  |          | 9, 230  |          | 13, 220 |  |  |  |  |  |

<sup>\*\*\*</sup> *p*< .001, \*\**p*<.01, \**p*<.05

Model 1= Socio-demographic factors; Model 2= Socio-demographic factors and functional limitations; Model 3= Socio-demographic factors, functional limitations, and moderator factors

In the first model of the analysis, the effects of socio-demographic variables on psychological distress as a dependent variable were explored. The first regression included gender, educational attainment, health status, marital status, income, and overall financial status, which were identified as significant variables in a bivariate analysis. These socio-demographic variables yielded a significant regression equation with adjusted R2=0.39, F (7, 232)=22.82, and p < .001. The coefficients for educational attainment (b=-1.74), health status (b=-4.51), and financial status (b=-1.66) were found to be significant variables in the first model. Of the hypothesized socio-demographic relationships, educational attainment, and health status were confirmed in this model. In contrast for older Koreans in Korea, the first regression included gender, health status, income, and overall financial status, which were identified as significant variables in a bivariate analysis with the exception of educational attainment and marital status. These socio-demographic variables yielded a significant regression equation with adjusted R2=0.35, F(7, 232) = 17.57, and p < .001. The coefficient for health status (b=-1.97) and financial status (b=-6.48) were found to be significant variables in the first model. Of the hypothesized socio-demographic relationships, health status was confirmed in this model.

In the second model, the set of variables was expanded to include functional limitations (cognitive and physical impairment), which tested the hypothesis that functional limitations would be positively associated with psychological distress. Physical limitation added much to the explanatory power of the regression and was a statistically significant predictor of psychological distress. In comparision for older Koreans in Korea, functional limitations (cognitive limitation, b=4.55) would be positively associated with psychological distress. Cognitive limitation added much to the explanatory power of the regression and was a statistically significant predictor of psychological distress.

The final model used all the four variables: social support and social networks, family relationships, and help-seeking behavior. This set of variables added an additional 9% of explained variance, a significant increase for a total adjusted R2=0.54, F (13, 226) =20.25 and p< .001. The significant unstandardized regression coefficients (b) in this model were -0.32 for family relationships, -0.1 for social support, -0.0 for social networks, and 1.65 for help-seeking behavior. In this model, overall financial status was no longer a statistically significant variable. In contrast for older Koreans in Korea, this set of variables added an additional 12% of explained variance, a significant increase for a total adjusted R2=0.52, F (13, 226) =18.99 and p< .001. The significant unstandardized regression coefficients (b) in this model were -0.09 for family relationships, -0.11 for social support, -0.20 for social networks, and -0.85 for help-seeking behavior. In this model, health status was no longer a statistically significant variable.

## Research Question 3: Psychological Distress by Moderating Variables (Interation effects)

An analysis of the moderating effects of the relationship between measures of socio-demographic characteristics and moderator variables on psychological distress was conducted. Below, there are the results for:1) psychological distress on socio-demographic characteristics × family relationships, 2) psychological distress on socio-demographic characteristics × social support, 3) psychological distress on socio-demographic characteristics × social networks, and 4) psychological distress on socio-demographic characteristics × help-seeking behavior.

### Psychological Distress on Socio-demographic Characteristics × Family Relationships

Table 13 present the interaction between independent variables and moderator variable. There is not a statistically significant interaction between gender and family relationships on psychological distress (F (27,212) =1.23, df=1, p=.2693) for both older Korean immigrants in the United States and older Koreans in Korea (F (27,212) =1.66, df=1, p=.1984).

The interaction between education and family relationships on psychological distress was not a statistically significant (F (27,212) =1.48, df=3, p=.2212) among older Korean immigrants in the United States, whereas it was statistically significant (F (27,212) =2.91, df=3, p<.05) in their counterparts in Korea. Therefore, family relationships is a moderator variable among older Koreans in Korea. There is a statistically significant interaction effect (Figure 4).

No significant interaction was found between the health status and family relationships on psychological distress for both older Korean immigrants in the United States (F (27, 212) =1.55, df=3, p=.2017) and older Koreans in Korea (F (27, 212) =0.20, df=3, p=.8944).

Table 13 Psychological distress by moderating variables (family relationship)(US:N=240 & Korea: N=240)

|                                    |       |      | U:    | 5  |      |        | Korea               |      |       |    |      |        |  |
|------------------------------------|-------|------|-------|----|------|--------|---------------------|------|-------|----|------|--------|--|
| Psychological Distress             | В     | SE   | p>ltl | df | F    | p>F    | В                   | SE   | p>ltl | df | F    | p>F    |  |
| Gender                             | 3.69  | 3.62 | 0.309 |    |      |        | -6.58               | 5.93 | 0.268 |    |      |        |  |
| Family relationship                | 0.07  | 1.44 | 0.960 |    |      |        | -1.30               | 2.74 | 0.636 |    |      |        |  |
| Gender× family relationship        |       |      |       | 1  | 1.23 | 0.2693 | Gender×family       |      |       | 1  | 1.66 | 0.1984 |  |
| Male                               | -1.10 | 0.91 | 0.269 |    |      |        | 0.18                | 014  | 0.198 |    |      |        |  |
| Education × family relationship    |       |      |       | 3  | 1.48 | 0.2212 | Education × family* |      |       | 3  | 2.91 | 0.0355 |  |
| High school                        | -0.05 | 0.15 | 0.763 |    |      |        | -0.38               | 0.18 | 0.070 |    |      |        |  |
| College                            | 0.09  | 0.19 | 0.638 |    |      |        | -0.53*              | 0.21 | 0.012 |    |      |        |  |
| Graduate                           | 0.45  | 0.27 | 0.099 |    |      |        | 0.20                | 0.39 | 0.616 |    |      |        |  |
| Health status× family relationship |       |      |       | 3  | 1.55 | 0.2017 | Health×family       |      |       | 3  | 0.20 | 0.8944 |  |
| Poor                               | 0.34  | 1.30 | 0.796 |    |      |        | 0.13                | 0.40 | 0.742 |    |      |        |  |
| Fair                               | -0.06 | 1.27 | 0.963 |    |      |        | 0.09                | 0.38 | 0.983 |    |      |        |  |
| Good & very good                   | 0.66  | 1.27 | 0.956 |    |      |        | -0.01               | 0.41 | 0.996 |    |      |        |  |
| Marital status × family            |       |      |       | 3  | 2.27 | 0.0811 | Marital×family      |      |       | 3  | 0.71 | 0.5499 |  |
| relationship                       | 0.20  | 0.65 | 0.763 |    |      |        | 0.02                | 2.74 | 0.722 |    |      |        |  |
| Married                            | -0.20 | 0.65 | 0.763 |    |      |        | 0.93                | 2.71 | 0.732 |    |      |        |  |
| Sep/divorced                       | -0.29 | 0.67 | 0.664 |    |      |        | 0.96                | 2.73 | 0.752 |    |      |        |  |
| Widowed                            | -0.67 | 0.66 | 0.312 |    |      |        | 0.67                | 2.73 | 0.807 |    |      |        |  |
| Income× family relationship        |       |      |       | 3  | 0.06 | 0.9809 | Income×family       |      |       | 3  | 0.98 | 0.4012 |  |
| \$1,001-\$ 1,999                   | 0.32  | 0.15 | 0.827 |    |      |        | 0.32                | 0.22 | 0.150 |    |      |        |  |
| \$ 2,000-\$2,999                   | 0.50  | 0.15 | 0.740 |    |      |        | 0.11                | 0.19 | 0.573 |    |      |        |  |
| \$ 3,000 & over                    | 0.06  | 0.16 | 0.711 |    |      |        | -0.58               | 0.70 | 0.427 |    |      |        |  |

F=(27, 212)=12.88

R-squared=0.62 \*\*\* p< 0.001, \*\*p<0.01, \*p<0.05

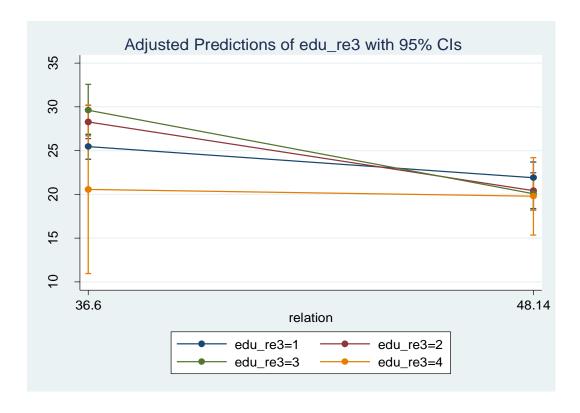
F=(27, 212)=4.56

R-squared=0.37 \*\*\* p< 0.001, \*\*p<0.01, \*p<0.05

In addition, the interaction between marital status and family relationships on psychological distress was not statistically significant among older Korean immigrants in the Unired States (F(27,212) = 2.27, df=3, p=.0811) as well as older Koreans in Korea (F(27,212) = 0.71, df=3, p=.5499). The interaction between marital status and family relationships on psychological distress was also not statistically significant for both conturies.

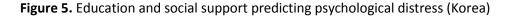
The interaction between income and family relationship on psychological distress was not statistically significant for both older Korean immigrants in the United States (F (27,212) =0.06, df=3, p=.9809) and older Koreans in Korea (F (27,212) =0.98, df=3, p=.4012). Family relationships is not a moderator variable, as there is no a statistically significant interaction effect for both countries. Therefore, family relationships are should be understood as an independent variable.





### Psychological Distress on Socio-demographic Characteristics × Social Support

Table 14 presents the interaction between independent variables and moderator variable. There is no statistically significant interaction between gender and social support on psychological distress (F (27,212) =1.34, df=1, p=.2478) among older Korean immigrants in the Unite States in the United States as well as older Koreans in Korea (F (27,212) =0.92, df=1, p=.3397). In addition, the interaction between education and social support on psychological distress was not statistically significant (F (27,212) =1.28, df=3, p=0.2821) among older Korean immigrants in the United States. In contrast, the interaction between education and social support on psychological distress was statistically significant among older Koreans in Korea (F (27,212) =3.29, df=3, p<.05). Therefore, family relationships is a moderator variable, as there is statistically significant interaction effect among older Koreans in Korea (Figure 5).



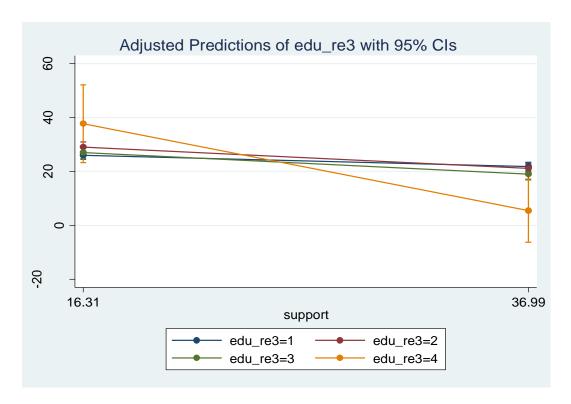


Table 14 Psychological distress by moderating variables (social support)( US:N=240 & Korea: N=240)

|                                 | US    |      |       |    |      |        | Korea              |      |       |    |      |        |
|---------------------------------|-------|------|-------|----|------|--------|--------------------|------|-------|----|------|--------|
| Psychological Distress          | В     | SE   | p>ltl | df | F    | p>F    | В                  | SE   | p>ltl | df | F    | p>F    |
| Gender                          | 1.19  | 1.68 | 0.479 |    |      |        | -0.95              | 2.04 | 0.641 |    |      |        |
| Social support                  | 0.61  | 0.61 | 0.320 |    |      |        | 0.22               | 0.65 | 0.734 |    |      |        |
| Gender× Social support          |       |      |       | 1  | 1.34 | 0.2478 | Gender× support    |      |       | 1  | 0.92 | 0.3397 |
| Male                            | -0.09 | 0.08 | 0.248 |    |      |        | 0.07               | 0.73 | 0.340 |    |      |        |
| Education× Social support       |       |      |       | 3  | 1.28 | 0.2821 | Education×support* |      |       | 3  | 3.29 | 0.0217 |
| High school                     | -0.15 | 0.12 | 0.218 |    |      |        | -0.16              | 0.09 | 0.080 |    |      |        |
| College                         | -0.09 | 0.13 | 0.460 |    |      |        | -0.21*             | 0.10 | 0.028 |    |      |        |
| Graduate                        | 0.15  | 0.21 | 0.498 |    |      |        | -1.35*             | 0.58 | 0.020 |    |      |        |
| Health status× Social support   |       |      |       | 3  | 0.58 | 0.6261 | Health ×support    |      |       | 3  | 0.89 | 0.4497 |
| Poor                            | -0.22 | 0.42 | 0.595 |    |      |        | -0.25              | 0.38 | 0.514 |    |      |        |
| Fair                            | -0.34 | 0.42 | 0.415 |    |      |        | -0.10              | 0.38 | 0.791 |    |      |        |
| Good & very good                | -0.24 | 0.43 | 0.574 |    |      |        | -0.16              | 0.38 | 0.679 |    |      |        |
| Marital status × Social support |       |      |       | 3  | 0.57 | 0.6351 | Marital×support    |      |       | 3  | 0.49 | 0.6929 |
| Married                         | -0.41 | 0.45 | 0.361 |    |      |        | -0.37              | 0.64 | 0.563 |    |      |        |
| Sep/divorced                    | -0.56 | 0.50 | 0.260 |    |      |        | -0.21              | 0.66 | 0.748 |    |      |        |
| Widowed                         | -0.52 | 0.47 | 0.277 |    |      |        | -0.31              | 0.64 | 0.630 |    |      |        |
| Income× Social support          |       |      |       | 3  | 0.27 | 0.8493 | Income×support     |      |       | 3  | 2.08 | 0.1035 |
| \$1,001-\$ 1,999                | -0.07 | 0.15 | 0.910 |    |      |        | 0.26*              | 0.11 | 0.014 |    |      |        |
| \$ 2,000-\$2,999                | 0.73  | 0.13 | 0.563 |    |      |        | 0.11               | 0.10 | 0.264 |    |      |        |
| \$ 3,000 & over                 | 0.03  | 0.14 | 0.808 |    |      |        | 0.09               | 0.18 | 0.614 |    |      |        |

F=(27, 212)=12.51 R-squared=0.61 \*\*\* p< 0.001, \*\*p<0.01, \*p<0.05 F=(27, 212)=4.56 R-squared=0.37

There was not a statistically significant interaction between health status and social support on psychological distress (F (27, 212) =0.58, df=3, p= .6261) for both older Korean immigrants in the United States and older Koreans in Korea (F (27, 212) =0.89, df=3, p= .4497).

The interaction between marital status and social support on psychological distress was not statistically significant (F (27,212) =0.57, df=3, p= .6351) among older Korean immigrants in the United States as well as older Koreans in Korea (F (27,212) =0.49, df=3, p= .6929). The interaction between income and social support on psychological distress was not statistically significant (F (27,212) =0.27, df=3, p= .8493) for both older Korean immigrants in the United States and older Koreans in Korea (F (27,212) =2.08, df=3, p= .1035). Social support is not a moderator variable, as there is no statistically significant interaction effect.

### Psychological Distress on Socio-demographic Characteristics × Social Networks

Table 15 presents the interaction between independent variables and moderator variable. There is not a statistically significant interaction between gender and social networks on psychological distress for both older Korean immigrants in the United States (F (27,212) =3.38, df=1, p= .0672) and older Korens in Korea (F (27,212) =0.05, df=1, p= .8166). Therefore social networks is not a moderator variable, but rather social networks is should be understood as an independent variable. However, the interaction between education and social networks on psychological distress was statistically significant for both older Korean immigrants in the United States (F (27,212) =3.58, df=3, p< .05) and older Koreans in Korea (F (27,212) =3.39, df=3, p< .05). Therefore, social networks are a moderator variable in both countries. There is statistically significant interaction effect.

**Table 15**Psychological distress by moderating variables (social network)(US:N=240 & Korea: N=240)

|                                | US    |      |       |    |      |        | Korea             |      |       |    |      |        |
|--------------------------------|-------|------|-------|----|------|--------|-------------------|------|-------|----|------|--------|
| Psychological Distress         | В     | SE   | p>ltl | df | F    | p>F    | В                 | SE   | p>ltl | df | F    | p>F    |
| Gender                         | 2.21  | 1.61 | 0.174 |    |      |        | 0.34              | 2.23 | 0.878 |    |      |        |
| Social network                 | -0.86 | 1.32 | 0.524 |    |      |        | -0.42             | 0.73 | 0.561 |    |      |        |
| Gender ×Social network         |       |      |       | 1  | 3.38 | 0.0672 | Gender×network    |      |       | 1  | 0.05 | 0.8166 |
| Male                           | -0.21 | 0.11 | 0.067 |    |      |        | 0.03              | 0.12 | 0.817 |    |      |        |
| Education × Social network*    |       |      |       | 3  | 3.58 | 0.0147 | Education×netwok* |      |       | 3  | 3.39 | 0.0189 |
| High school**                  | -0.44 | 0.16 | 0.007 |    |      |        | -0.15             | 0.13 | 0.331 |    |      |        |
| College*                       | -0.38 | 0.18 | 0.034 |    |      |        | -0.21             | 0.13 | 0.078 |    |      |        |
| Graduate                       | 0.09  | 0.30 | 0.763 |    |      |        | 1.03*             | 0.42 | 0.025 |    |      |        |
| Health status ×Social network  |       |      |       | 3  | 0.51 | 0.6783 | Health ×network   |      |       | 3  | 1.25 | 0.2943 |
| Poor                           | -0.36 | 1.18 | 0.758 |    |      |        | -0.06             | 0.46 | 0.893 |    |      |        |
| Fair                           | -0.56 | 1.18 | 0.632 |    |      |        | 0.14              | 0.47 | 0.750 |    |      |        |
| Good & very good               | -0.48 | 1.16 | 0.676 |    |      |        | -0.19             | 0.47 | 0.695 |    |      |        |
| Marital status ×Social network |       |      |       | 3  | 2.37 | 0.0720 | Marital× network  |      |       | 3  | 0.75 | 0.5206 |
| Married*                       | 1.61  | 0.70 | 0.023 |    |      |        | -0.00             | 0.81 | 0.999 |    |      |        |
| Sep/divorced*                  | 1.63  | 0.72 | 0.024 |    |      |        | -0.26             | 0.87 | 0.770 |    |      |        |
| Widowed                        | 1.31  | 0.72 | 0.070 |    |      |        | 0.17              | 0.93 | 0.835 |    |      |        |
| Income× Social network         |       |      |       | 3  | 0.42 | 0.7397 | Income× network   |      |       | 3  | 0.06 | 0.9820 |
| \$1,001-\$ 1,999               | 0.10  | 0.14 | 0.465 |    |      |        | 0.06              | 0.19 | 0.730 |    |      |        |
| \$ 2,000-\$2,999               | -0.06 | 0.19 | 0.738 |    |      |        | 0.03              | 0.22 | 0.876 |    |      |        |
| \$ 3,000 & over                | -0.14 | 0.24 | 0.559 |    |      |        | -0.04             | 0.30 | 0.889 |    |      |        |

F=(27, 212)=12.77 R-squared=0.62 \*\*\* p< 0.001, \*\*p<0.01, \*p<0.05 F=(27, 212)=5.26 R-squared=0.40 \*\*\* p< 0.001, \*\*p<0.01, \*p<0.05

Figure 6. Education and social networks predicting psychological distress (US)

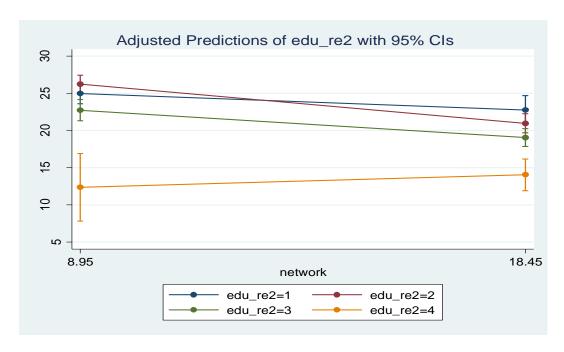
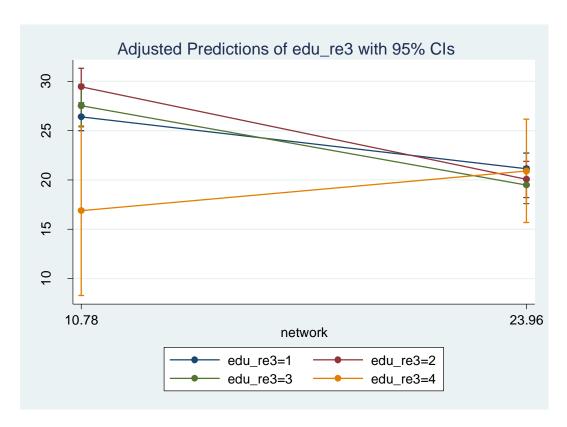
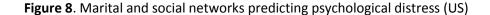
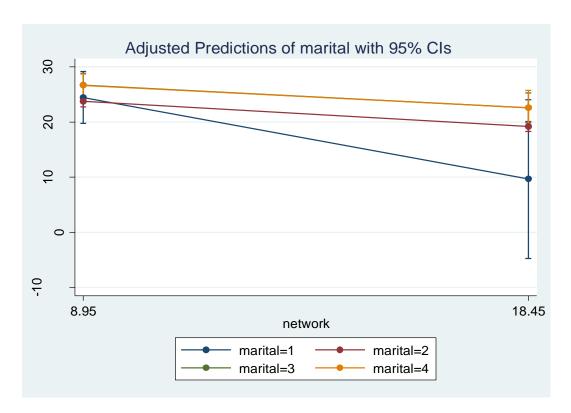


Figure 7. Education and social networks predicting psychological distress (Korea)



There was no significant interaction between health status and social networks on psychological distress among older Korean immigrants in the United States (F (27, 212) =0.51, df=3, p= .2017) as well as older Koreans in Korea (F (27, 212) =1.25, df=3, p= .2943). In addition, the interaction between marital status and social networks on psychological distress was not statistically significant for both older Korean immigrants in the United States (F(27,212) =2.37, df=3, p= .0720) and older Koreans in Korea (F (27,212) =0.75, df=3, p= .5206).





The interaction between income and social networks on psychological distress was also not statistically significant among older Korean immigrants in the United States (F (27,212) =0.42, df=3, p= .7397) as well as older Koreans in Korea (F (27,212) =0.42, df=3, p=0.9820). Social networks are not a moderator variable, as there is no statistically significant interaction effect in both countries.

### Psychological Distress on Socio-demographic Characteristics × Help-seeking Behavior

Table 16 presents the interaction between independent variables and moderator variable. There is not a statistically significant interaction between gender and help-seeking on psychological distress for both older Korean immigrants in the United States (F (26,213) =0.40, df=1, p= .5277) and older Koreans in Korea (F (26,213) =1.25, df=1, p= .2650); therefore help-seeking is not a moderator variable. In addition, There was no significant interaction between health status and help-seeking on psychological distress among older Korean immigrants in the United States (F (26,213) =1.06, df=3, p= .3687) as well as older Koreans in Korea (F (26,213) =0.60, df=3, df=4, df=4,

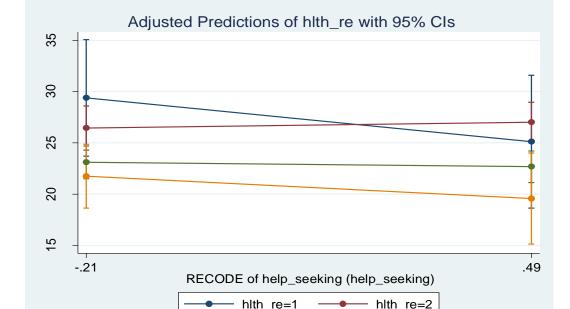


Figure 9. Health status and help-seeking behavior (Korea)

The interaction between marital status and help-seeking behavior on psychological distress was not statistically significant for both older Korean immigrants in the United States (F (26,213) =0.35, df=3, p= .7887) and older Koreans in Korea (F (26,213) =0.81, df=3, p= .4885).

hlth\_re=3

hlth\_re=4

Table 16
Psychological distress by moderating variables (Help-seeking behavior)(US:N=240 & Korea:N=240)

|                               | US    |      |       |     |      |        | Korea              |       |       |     |      |        |
|-------------------------------|-------|------|-------|-----|------|--------|--------------------|-------|-------|-----|------|--------|
| Psychological Distress        | В     | SE   | p>ltl | df  | F    | p>F    | В                  | SE    | p>ltl | df  | F    | p>F    |
| Gender                        | -0.30 | 0.58 | 0.607 |     |      |        | 1.17               | 0.88  | 0.182 |     |      |        |
| Help-seeking                  | 2.40  | 5.70 | 0.675 |     |      |        | -14.82             | 10.17 | 0.147 |     |      |        |
|                               |       |      |       | 1   | 0.40 | 0.5277 | Gender×help-seek   |       |       | 1   | 1.25 | 0.2650 |
| Gender× Help-seeking          |       |      |       |     |      |        |                    |       |       |     |      |        |
| Male                          | 0.82  | 1.30 | 0.528 |     |      |        | -2.97              | 2.66  | 0.265 |     |      |        |
| Education × Help-seeking      |       |      |       | N/A |      |        | Education×helpseek |       |       | N/A |      |        |
| High school                   | -2.69 | 1.42 | 0.059 |     |      |        | -1.59*             | 5.10  | 0.044 |     |      |        |
| College                       | -2.26 | 1.81 | 0.214 |     |      |        | -3.00              | 3.77  | 0.351 |     |      |        |
| Graduate                      | 0     |      |       |     |      |        | 0                  | 0     | 0.573 |     |      |        |
| Health status× Help-seeking   |       |      |       | 3   | 1.06 | 0.3687 | Health×helpseek    |       |       | 3   | 0.60 | 0.6157 |
| Poor                          | 3.30  | 4.01 | 0.411 |     |      |        | 8.67               | 7.11  | 0.224 |     |      |        |
| Fair                          | 5.60  | 4.36 | 0.201 |     |      |        | 7.66               | 7.34  | 0.077 |     |      |        |
| Good & very good              | 6.34  | 4.53 | 0.163 |     |      |        | 4.64*              | 8.14  | 0.026 |     |      |        |
| Marital status × Help-seeking |       |      |       | 3   | 0.35 | 0.7887 | Marital×helpseek   |       |       | 3   | 0.81 | 0.4885 |
| Married                       | -3.32 | 4.21 | 0.431 |     |      |        | 9.99               | 8.12  | 0.221 |     |      |        |
| Sep/divorced                  | -1.68 | 4.84 | 0.729 |     |      |        | 16.63              | 10.70 | 0.122 |     |      |        |
| Widowed                       | -3.03 | 4.35 | 0.487 |     |      |        | 10.33              | 8.48  | 0.224 |     |      |        |
| Income× Help-seeking          |       |      |       | 3   | 0.81 | 0.4913 | Income×helpseek    |       |       | 3   | 1.10 | 0.3494 |
| \$1,001-\$ 1,999              | -1.58 | 2.62 | 0.545 |     |      |        | -4.70              | 4.18  | 0.262 |     |      |        |
| \$ 2,000-\$2,999              | -2.09 | 2.46 | 0.396 |     |      |        | 3.48               | 4.15  | 0.404 |     |      |        |
| \$ 3,000 & over               | 4.15  | 4.09 | 0.312 |     |      |        | 2.22               | 5.55  | 0.690 |     |      |        |

F=(26, 213)=11.94 R-squared=0.59

\*\*\* p< 0.001, \*\*p<0.01, \*p<0.05

F=(26, 213)=2.55 R-squared=0.24

\*\*\* p< 0.001, \*\*p<0.01, \*p<0.05

The interaction between income and help-seeking behavior on psychological distress was also not statistically significant for older Korean immigrants in the United States (F (26,213) =0.81, df=3, p= .4913) and older Koreans in Korea (F (26,213) =1.10, df=3, p= .3494). Help-seeking behavior is not a moderator variable, as there is no statistically significant interaction effect.

#### **Summary**

In Chapter 5, the results of the comparison of psychological distress between older Korean immigrants in the United States and older Koreans in Korea indicated that there were significant differences. The results suggest that older Koreans in Korea reported higher levels of "moderate" and "severe" psychological distress, compared to their counterparts in the United States. In addition, the research question examined the interaction effects of the relationship between socio-demographic characteristics and moderating variables on psychological distress. The moderating variables, buffering the level of psychological distress, significantly differ between older Korean immigrants in the United States and older Koreans in Korea. Family relationships, help-seeking behavior, and social networks are statistically significant interaction effects for older Koreans in Korea, while social support and social networks are statistically significant interaction effects for older Korean immigrants in the United States. Psychological distress was moderated by family relationships, help-seeking behavior, and social networks among older Koreans in Korea and older Koran immigrants in the United States.

Furthermore, by comparing the results of hierarchical multiple regressions for older Koreans in Korea, health status and financial status were found to have significant effects on psychological distress. In addition, education and physical impairment, family relationships, and help-seeking behavior were found to have significant effects on psychological distress among

only older Korean immigrants in the United States while, cognitive impairment, social support, and social networks were found to have significant effects on psychological distress among only older Koreans in Korea. These finding will be discussed in the next chapter with implications for social work and practitioners.

#### **CHAPTER 6: DISCUSSION AND CONCLUSIONS**

This chapter provides an overview of the study and discussion of the findings in this study with possible explanations. This study explored various correlates and potential predictors of psychological distress between older Korean immigrants in the United States and older Koreans in Korea. The prevalence of psychological distress was measured by the Kessler Psychological Distress Scale (Kessler et al., 2002). It examined whether there was a relationship between psychological distress and socio-demographic factors among older Koreans in the United States as compared to in Korea. Hence, the subsequent research questions explored: 1) the prevalence of psychological distress, 2) the most important factors and relationship between socio-demographic factors and psychological distress, and 3) relationships between sociodemographic characteristics and psychological distress moderated by individual difference variables (e.g., moderating variables: social support and social networks, family relationships, and help-seeking). This study hypothesized that negative socio-demographic characteristics (including low educational attainment; poor health status; low income; overall insecure financial statue) may lead to higher psychological distress. This study also hypothesized that higher social support and greater social networks would be related to lower levels of psychological distress.

#### **Major Findings**

1. This study found that the prevalence of "severe" psychological distress was significantly different between older Korean immigrants in the United States (reporting 13%) and older Koreans in Korea (reporting 21%). This result suggests that older Koreans in Korea reported higher level of "severe" psychological distress when compared to their counterparts in the United States.

- 2. Health status was significantly associated with experiencing psychological distress in both countries. For example, fair and good health status was significantly associated with less likelihood of experiencing psychological distress in both countries.
- Income was not significantly associated with experiencing psychological distress in both countries.
- 4. Overall financial status was significantly associated with experiencing psychological distress in both countries.
- 5. The moderating variables, buffering the level of psychological distress, significantly differ between older Korean immigrants in the United States and older Koreans in Korea. Family relationships, help-seeking behavior, and social networks are statistically significant interaction effects for older Koreans in Korea, while social support and social networks are statistically significant interaction effects for older Korean immigrants in the United States.
- 6. Hierarchical multiple regression revealed that there were no significant associations between social support, social networks, and psychological distress among older Korean immigrants in the United States.
- 7. Hierarchical multiple regression revealed that there were significant associations between family relationships and help-seeking behavior and psychological distress among older Korean immigrants in the United States, while there were no significant associations among older Koreans in Korea.
- 8. Hierarchical multiple regression revealed that there were significant associations between social support and social networks and psychological distress among older Koreans in

Korea, while there were not significant associations among older Korean immigrants in the United States.

Research Question 1: Does the prevalence of psychological distress differ between older Koreans in Korea versus older Koreans in the United States?

This study revealed that the prevalence of severe psychological distress was significantly different in the two samples with older Korean immigrants in the United States reporting 13% and older Korans in Korea reporting 21%. In particular, the prevalence of psychological distress in the Unites States sample was higher than other previous studies of older Korean immigrants that found a prevalence of psychological distress. This indicates that the total prevalence of psychological distress of this current sample was considerably higher (13%) than in previous studies: 3.9 % (Chang & Moon, 2016).

This finding was consistent with previous studies that significant prevalence of depressive symptoms in older Korean immigrants was ranged from 13% to 18% depending on the screening tools (Kim et al., 2010; Oh et al., 2002; Shin et al., 2007). In addition, older Korean immigrants in the United States are also found to have a high rate of psychological distress compared with other populations in the United States (Chang & Moon, 2016). One possible explanation for this result may be that older Korean immigrants are psychologically vulnerable because immigration is a stressful process regardless of length of the residence. They are the first generation and have limited English proficiency and limited social supports.

Studies on psychological distress among older Koreans in Korea reported consistently a high rate of psychological distress compared to other populations (Jeon et al., 2007). This finding was also consisten with those from previous studies that indicate the prevalence of psychological distress in older Koreans has ranged from 15% to 25% (Jeon et al., 2007).

Consistent with previous comparative studies, older Koreans in Korea in the present study also reported relatively higher prevalence of psychological distress than older Korean immigrants in the United States. Therefore, the prevalence of psychological distress between older Korean immigrants in the United States and older Koreans in Korea was significantly different.

Research Question 2: What is the relationship between socio-demographic factors (e.g., gender, educational attainment, marital status, income, health status, and overall financial statues) and psychological distress in older Koreans in Korea and in the United States? How do the relationships differ between these two groups?

A regression analysis was conducted to examine associations between socio-demographic characteristics and psychological distress. In the regression model, health status was the most salient predictor of psychological distress among both older Korean immigrants in the United States and older Koreans in Korea. A strong association between poor health status and psychological distress in older Koreans has been captured in both countries. For example, those with fair and good health status (b=-4.51) were less likely to experience psychological distress than those with poor health status. In addition, among older Koreans in Korea, those with fair and good health status (b=-1.94) were less likely to experience psychological distress.

Indeed, poor health status increases the risk for psychological distress not only for older Korean immigrants in the Unites States but also for older Koreans in Korea. This finding was consistent with studies by Chang & Moon (2016) and Lee et al. (2005), which reported that that those who had poor health status also experienced severe psychological distress. As discussed above, those who were in poor health status have a higher likelihood of experiencing psychological distress in both countries. Results from the regression analysis indicated that

health status was the most important predictor of psychological distress among older Koreans in both countries.

In addition, significant relationships were found between functional limitations (e.g., cognitive and physical) and psychological distress. The condition of functional limitations in older Koreans created a considerable strain and presented continuing challenges to managing of daily living and social activities. Previous studies report that the presence of functional limitations contribute to psychological distress as well as suicidal ideation later in life (Ahn & Kim, 2015; Conwell et al., 2010; Park, Cho, &Moon, 2010). This study supports the hypothesis that functional limitations were associated with psychological distress, thereby hampering the psychological well-being of older Korean immigrants in the United States.

Educational attainment was also an important predictor of psychological distress in older Korean immigrants in the United States. The level of education was significantly associated with experience of psychological distress among older Korean immigrants in the United States. For example, those with education level were above high school less likely to experience psychological distress (b=-1.74) than those with an education below high school level. Education was identified as a significant determinant of psychological distress among older Korean immigrants in the United States. Those who have attained a higher level of educational attainment show lower psychological distress. This finding is in accordance with previous studies, which identified education as one of the major determinants of psychological distress for older Koreans in the United States (Chang & Moon, 2016; Lee et al., 2005).

One possible explanation for this finding is that educational attainment is an important resource in itself; it plays a critical role in wellbeing and influences employment, income, and financial status. It is possible that a higher education level may protect against strain and/or

hardship, and that it helps people to generate other resources that may improve emotional well-being. Previous studies have shown that increased educational attainment may have a protective effect in preventing severe psychological distress (Chang & Moon, 2016; Lee et al., 2005). Thus, level of education appeared to be a contributing factor to psychological distress outcomes among older Korean immigrants in the United States.

Overall financial status was also significantly associated with experiencing psychological distress in both countries. Those with fair and good financial status were less likely to experience psychological distress (b=-1.66) among older Korean immigrants in the United States and those with fair and good financial status were less likely to experience psychological distress (b=-6.48) among older Koreans in Korea. There are a number of possible reasons why these relationships were significant. First, it is possible that having good financial status relieves psychological distress. Further, good financial status may have the capacity to protect older adults from challenges in stressful life events. Poverty can greatly increase older adults' risk of encountering paychological distress compared to those who do not live in poverty. Older adults are economically disadvantaged and consequently experience persistent psychological distress, consistent with stressors associated with financial strain.

There were also predominately differences in income source. Sixty percent of older Korean immigrants living in the United States received public assistance whereas 36% of older Koreans in Korea received public assistance. Additionally, 8% of the older Korean immigrants living in the United States receive assistance from adult children whereas one forths of older Koreans in Korea (26.7%) report receiving assistance from adult children. Family is a source of support and care for Korean people; in a traditional Korean family, adult children provide a considerable amount of emotional and monetary support to their older parents (Moon & Cho,

2015). These differences in socio-demographic characteristics imply that the life styles between the two conturies are different, which may necessitate different strategies for coping with psychological distress.

One interesting finding in this study was that older Koreans in both countries are extensively involved in religious affiliations (75% for older Korean immigrants and 82% for older Koreans in Korea). The majority of older Koreans participate religious affiliations. Religion was shown to affect the level of psychological distress in bivariate analysis. However, religion was not a statistically significant predictor of psychological distress in the multiple regression models.

In sum, among socio-demographic characteristics, health status, functional limitations, educational attainment, and overall financial status were identified as significant predictors of psychological distress among older Korean immigrants in the United States. These same socio-demographic characteristics were also identified as significant predictors of psychological distress among older Koreans in Korea. Psychological distress was thus correlated with health status, educational attainment, and financial status. However, factors such as gender, income, marital status, and religion were not identified as statistically significant predictors of psychological distress among older Korean immigrants in the United States and older Koreans in Korea.

Research Question 3: Are relationships between socio-demographic characteristics and psychological distress moderated by resources variables (e.g., social support and social networks, family relationships, and help-seeking behaviors)? Do moderating Variables differ between older Koreans in Korea and in the United States?

Given the research question, the following hypotheses: The effect of socio-demographic characteristics on psychological distress will be affected by the following moderating variables:

1) the negative effects of socio-demographic characteristics on psychological distress will be buffered in those with greater social support and social networks, 2) the negative effects of socio-demographic characteristics on psychological distress will be buffered in those with closer family relationships, and 3) the negative effects of socio-demographic characteristics on psychological distress will be buffered in those with more active help-seeking behaviors.

Regarding the correlation between demographic variables and psychological distress, there were negative and significant correlations in both groups. For Korean immigrants in the United States, educational attainment, health status, and overall financial status were statistically significant. Moreover, for the additional variables in this group, family relationships were negatively correlated to psychological distress (b=-0.22) but help-seeking behavior was positively correlated to psychological distress (b=1.65) in regression. However, there were no statistically significant relationships between the variable of gender (b=0.04) and income (b=0.36) and psychological distress in this group.

Also, for older Koreans living in Korea, both health status and overall financial status were negatively correlated to psychological distress. Moreover, the additional variables in this group-social supports, and social network- were negatively correlated to psychological distress. However, there was no statistically significant relationship between gender and income and psychological distress in this group.

Results from the second research question support the hypothesis that moderator variables (e.g., social support, social networks, family relationships, and help-seeking behavior) are related to psychological distress among older Korean immigrants in the United States.

Findings support the hypothesis that measures of moderating variables are related to the likelihood of experiencing psychological distress. For example, social support was statistically significantly associated with psychological distress as  $X^2$  (72) =1.78, p<.001. Additionally, results from the second research question partially support the hypothesis that social support, social networks, and family relationships are related to psychological distress among older Koreans in Korea.

However, findings do not support the hypothesis that measures of moderating variables are related to the likelihood of experiencing psychological distress. There are a number of possible explanations for why these relationships were not significant. First, it is possible that help-seeking is not significantly associated with psychological distress and may not be buffered in psychological distress because of a strong reluctance to seek help among older Koreans in Korean society. Further, the most common reasons for not seeking help are related to fear and shame about mental illness. A specific reason for not seeking help for psychological distress may be related to fear of stigmatization by the community if the individual admitted to having mental health problem. This often leads to individuals and families being secretive about mental illness, instead of seeking help. Specifically, older Korean immigrants in the United States and older Koreans in Korea recognize that is associated with negative stigma and discrimination. In addition, cultural beliefs about mental illness greatly influence older Korean immigrants' helpseeking behaviors and delay in receiving Western psychological treatment (Bernstein, 2007). Moreover, the stigmatization of mental health problems and the cultural value of shame among older Koreans contribute to the denial and failure to recognize symptoms of mental health problems (Moon & Cho, 2012). These negative responses can exacerbate issues of underutilization of help for mental health related services. In addition to fear and shame, Shin

(2002) stated that the major reason that Koreans delay or do not seek help for mental health concerns is that Koreans and Korean immigrants' view depression as a state of imbalance.

Regarding other study variables, social support and social networks significantly contributed to interaction effect for older Koreans living in Korea. Family relationships and helpseeking behavior had a significant interaction effect among older Korean immigrants in the United States. This result was also reflected in the results of the hierarchal multiple regressions in the research question. Both older Koreans in Korea and in the United States are impacted by socio-demographic variables when it comes to the level of psychological distress, and each variable itself significantly explains the level of psychological distress. In both countries, older Koreans are sensitive to socio-demographic characteristics as predictors of stress that may impact the developing psychological distress. To conclude, family relationships and help-seeking behavior moderated the effect of life stress on psychological distress among older Korean immigrants in the United States. Therefore, the negative effects of socio-demographic characteristics on psychological distress were buffered in those with greater family relationships and help-seeking behavior among older Korean immigrants in the United States. In addition, the negative effects of socio-demographic characteristics on psychological distress were buffered in those with greater social support and social networks with older Koreans in Korea.

#### **Strengths and Limitations**

#### **Strengths**

This study has several notable strengths. First, this study employed a cross-cultural study; it is meaningful to compare the socio-demographic characteristics of the two samples. There was a significant difference in the types of marital status between older Korean immigrants in the United States and older Koreans in Korea. Psychological distress has been recognized as a

growing social concern that affects individuals, families, and society at large. This study will provide significant and useful information for professionals in the field of social work who are working with Koreans both in Korea and the United States. There is a lack of comparative research focusing on the prevalence predicting and comparisons of psychological distress older Korean immigrants in the United States and their counterpart in Korea. This study compares the experiences of older Koreans living in Korea and older Korean immigrants living in the United States.

Second, one of the most recent scales of psychological distress are the Kessler Psychological Distress with 10 items specifically designed to assess psychological distress in population survey (Kessler et al., 2002). This variable was measured using the Kessler Psychological Distress Scale (Kessler et al., 2002) designed to maximize the ability to identify cases of serious psychological distress. The Kessler Psychological Distress Scale can be valid and reliable screening tools of psychological distress. This scale was developed as a brief and accurate psychological distress scale for serious mental health problems in the Substance Abuse and Mental Health Services Administration National Household Survey on Drug Abuse in the United States. Older adults who have limited cognitive capacities may have difficulty understanding long questionnaires, which could reduce the likelihood of obtaining valid responses to the items in this population. However, the applicability and utility of this measure for assessments within older Koreans has not sufficiently been explored. Therefore, The Kessler Psychological Distress Scale is an appropriate screening measure for those two groups.

Third, this study provides an understanding of the relationship between sociodemographic characteristics and psychological distress. This study builds on our understanding of a wide range of negative socio-demographic characteristics and gives greater attention to the role adverse demographic factors play in psychological distress. Moreover, this is the first time that a comparative study has been used to understand psychological distress among older Koreans in both countries and, therefore, the findings of this study will be generable.

Finally, findings build on prior research on social support and social networks as stress coping buffer, adding a much-needed understanding of how stressors and different types of resources may lead to psychological distress outcomes in particular. Prior to this study, the stress coping model had not been used to understand the link between negative socio-demographic characteristics, resources (e.g., social support and networks, family relationships, and help-seeking behavior), and psychological distress outcomes.

#### Limitations

There are several limitations to note for the quantitative analysis that might inhibit the overall generalizability for these findings. First, the use of a convenience sample places limitations on the generalizability of these findings. Therefore, an inherent limitation of this study lies in the primary data collection itself. In the future, a large and representative survey of older Koreans needs to examine the prevalence of psychological distress among older Korean immigrants and older Koreans in Korea. A representative sample would more accurately reflect a large population.

Second, considering that self-reporting of psychological distress may carry stigma especially among older Koreans in both countries. It s possible an unknown number of older Koreans in both countries might have underreported their psychological distress. For example, some participants may not share their actual experience of psychological distress because they do not feel comfortable revealing their personal problems to others, even though in the anonymous data collection.

Third, because this primary data is cross-sectional, it is difficult to establish a causal relationship between variables. Future studies should employ a longitudinal design, including data about individuals' social context from adolescence through older adulthood to allow for an analysis of the effects of negative socio-demographic characteristics, social support, social network, family relationship, and help-seeking behavior, and psychological distress.

There is a limitation associated with the nature of a self-administered survey, in terms of over or under reporting scores. Some questions on the survey asked participants to answer private questions, so they may not have given honest answers due to the traditional Korean culture of saving face. Specifically, saving face is important to most of older Koreans in both countries. It often prevents older Koreans from help-seeking behaviors.

There is also another limitation of this study, in terms of the reliability of participants' responses. Because two groups in both countries studied older, some of them experience difficulty focusing on a task for long period of time. Therefore, the total number of questions may have been too many for respondents to answer with complete concentration and accuracy.

### **Implications for Social Work Practice and Policy in the United States**

This study provides some implications for social welfare practice and policy in the United States for those working with the populations of older Korean immigrants in the field of mental health. First, practitioners should be aware of the high prevalence of psychological distress among older Korean immigrants in the United States. Exploring older Korean immigrants' level of psychological distress would help practitioners understand the relationship between negative socio-demographic characteristics and psychological distress.

The results of this study suggest that Koreans are more likely to express psychological distress in terms of physical symptoms. Practitioners should be aware of psychological distress

and other related somatic expressions. Specifically, when practitioners working with older Korean immigrants check physical symptoms (such as headache or insomnia), they should also check for psychological distress because older Korean immigrants prefer to avoid using psychiatric expressions. Therefore, this finding suggests the need for further investigation into the nature of physical health and mental health. Furthermore, mental health problems are often associated with physical illness (Chang & Moon, 2016). Older Korean immigrants in the United States prefer to report physical problems rather than emotional illness to avoid shame. The relationship between health-related factors and psychological distress suggests the need for a collaborative effort between mental health professionals and physical health professionals in order to provide better treatment (Moon & Cho, 2012). Therefore, clinicians and service professionals should regularly screen and assess these older Koreans for psychological distress, which is often expressed in somatic complaints (somatization) among older Korean immigrants (Moon & Cho, 2012). This finding suggests the practitioners need to pay attention to improving cultural understanding when dealing with poor health and psychological distress and then discuss those resources to help patients function within stressful situations such as poor health in mental health treatment. In order to develop an effective mental health system, practitioners need to incorporate a systematic monitoring system and support a public campaign to reduce prejudice regarding the mentally ill.

Further, social work practitioners and policy analysts should understand psychological distress within the social environment and cultural backgrounds. Recent immigrants are at particularly high risk of psychological distress, and who may be unaware of mental health services in their community; therefore they are often untreated before the onset of severe psychological distress (Kim et al., 2005). In addition, attention must be paid to the barriers to

accessing appropriate mental health services in Korean communities as well as to Korean culture, which plays a role in how individuals perceive and express their psychological distress. The discussion of mental health problems in older Korean immigrant communities is challenging and seriously complicated by cultural factors. Furthermore, psychological distress in the Korean immigrant community often goes unrecognized for a number of reasons, including cultural factors. It is important to engage in culturally-competent care among older Korean immigrants to provide better mental health care services. More research about the nature of psychological distress in this culture is necessary to adequately and appropriately address this situation among older Koreans and ethnic/racial immigrants' older groups and to develop more programs to deal with the phenomenon of psychological distress among Korean immigrant communities.

As mentioned earlier, the significance of family relationships and help-seeking behavior with regard to psychological distress indicates that mental health practitioners should view older Korean immigrants' psychological distress in the broad context of the family relationships and should include their family members in the process of receiving mental health services.

Additionally, social support reduces distress (Moon & Cho, 2012). Social work practitioners should encourage the older Korean immigrants to utilize community-based social program and social services to reduce psychological distress.

Finally, social work practitioners should, when treating older Korean immigrants, seek to identify/diagnose symptoms of psychological distress before the onset of "severe" psychological distress. Recent immigrants are at a particularly high risk for developing psychological distress, which often goes untreated. Further, social work practitioners should monitor early symptoms of psychological distress and implementing effective efforts to prevent severe psychological distress among older Korean immigrants in the United States.

This study suggests the need for developing more culturally effective mental health services and outreach programs to increase mental health among older Korean immigrants in the United States. Especially, without a thorough understanding of Korean culture, practitioners will not be able to provide effective treatment. Practitioners must consider health-related factors, social support, and cultural differences when providing community services.

### Implications for Social Work Practice and Policy in Korea

This study also provides some implications for mental health policy and practitioners in Korea. First, social work practitioners should be aware of the prevalence of psychological distress among older Koreans in Korea. Regression in this study indicated that overall financial status is an important predictor of psychological distress among older Koreans. Many older Koreans in Korea face a higher risk of financial difficulty (e.g., lack of public assistance) compared with older Koreans immigrants; this is often due to lack of job opportunities, and thus, lack of economic resources to support themselves and their families. Because they are forced to retire from their job in their early 50s, and then, may have insecure jobs, consequently, dependency to their adult children increases. For older Koreans in Korea, public assistance includes limited supportive long-term facilities, public health care centers, and welfare centers. In addition, older Koreans in both countries with psychological distress may report their physical health problems and cognitive limitations. Older Koreans in both countries generally deny their mental health illness due to their cultural understanding of mental health and stigma. It is important to pay attention to their somatic complaints because the disclosure of physical symptoms can serve as a means for reporting psychological distress. Therefore, social work practitioners should pay attention to somatic complaints and minimize social stigma around mental illness. At present, the Korean mental health system needs to make considerable

improvements in order to become a more developed and effective system (Yoon, 2013). For example, the average waiting time for mental hospitals is much longer, and the proportion of involuntary admissions in mental hospitals is much higher compared to their counterparts in the United States. There have not been effective public education and awareness campaigns on mental health so far in Korea. The past several attempts were not coordinated with other areas related to mental health and were not supported by public campaign professionals.

This study explored the effect of family relationships and help-seeking behaviors on psychological distress among older Koreans in Korea. Family relationships and help-seeking behaviors were found to moderate the relationship between negative socio-demographic characteristics and psychological distress among older Koreans in Korea. Social support and social networks were found to moderate the relationship between negative socio-demographic characteristics and psychological distress among older Koreans in Korea. This finding has important implications for treatment of psychological distress in older Koreans in Korea. For example, promoting opportunities for contacting and receiving social support may be useful as stress buffering resources (effect) for those at higher risk of psychological distress. Overall results from this study lend some support to the hypothesis of a protective effect of social support and social network. Therefore, practitioners should be aware that coping resources, including social support and social networks, buffers psychological distress among older Koreans in Korea.

This study that examined the stress-buffering effect model hypothesized that social support and social networks would moderate the negative effects of life stress on psychological distress. Results suggested a possible buffering effect of social support on psychological distress; therefore, social networks can be employed as channels to provide older Koreans with health information. However, family relationship and help-seeking behavior were not statistically

significant among older Koreans in Korea. This result has important implications for the treatment of psychological distress in older Koreans in Korea. The rapid decrease of family support and provision of available health and social care services to older Koreans are urgent issues that need to be addressed.

This present study aids in understanding the family relationships and help-seeking behavior for older Koreans. Poor family relationships for older Koreans seemed to be very stressful experiences regardless of the fact that they had more diverse structures for help than their counterparts. Closeness of family relationships with their adult children is a significantly buffering resource among older Koreans. Similarly, filial piety was found to be a significant factor in lowering level of depressive symptoms (Jang et al. 2006; Moon & Cho, 2012). Then, practitioners could try to find more effective coping strategies for older Koreans in order to decrease their level of psychological distress.

Coping resource variables (e.g., social support and social networks, family relationships, and help-seeking behavior) had a significant impact on the level of psychological distress among older Koreans in Korea. The association between social support and social network and psychological distress is consistent with previous studies (Min et al., 2005; Han et al., 2007). This result has the implication that older Koreans still expect to utilize social support from their adult children and relatives. This study finding provided more specificity in the relationship between social support and psychological distress. The Korean government and mental health facilities need to search for appropriate policies surrounding medical reform, pension, and retirement benefits. Given low socio-economic status of older Koreans in Korea, the government needs to be proactive in creating social policy aimed at protecting this population from psychological distress.

### **Direction for the Future Study**

The findings from this dissertation suggest several possible avenues for future studies. When considering some of the limitations of the current study, additional studies are needed to develop comprehensive data across diverse ethnic groups. First, the Kessler Psychological Distress Scale development should be conducted in order to accurately measure psychological distress, to differentiate it from other mental disorders like major depressive symptoms. To date, most of the previous studies used long questionnaire screening tools with older adults. Future studies should consider improved measures of mental health outcomes for older adults. Future studies should also employ the Kessler Distress Scale to detect older adults' mental problems in older adults. This measurement has been translated into different diverse languages and as a vital motering tool to measeure non-specific aspects of psychological distress. Psychological distress has been defined using a variety of indicators, leading to an inability to compare relationships across studies.

In addition, this study conducted a cross-sectional study at one point to see relationship between negative stressful events as causal factors and psychological distress as a result.

Therefore, future studies should incorporate the whole process of psychological distress with a longitudinal study as well as qualitative study. Moreover, when experiencing psychological distress, it takes a long time for psychological distress processing to manifest due to cultural barriers. Many older Koreans feel forced to hide their negative emotions until the conditions are severe and no longer manageable without professional help.

In addition, although there is an agreement that psychological distress is mainly experienced among older Koreans in both countries, other groups with a variation of age, gender, and culture should be examined (include other age levels, such as adolescent and adults). For

instance, older adults in psychological distress also face many stressful situations from their interpersonal relationships, in addition to their roles at home and in society, and consequently, there is a report that their psychological distress is also extensively high because older Koreans was faster growing group in both countries. Future studies can also include oldest older Koreans (over 80 years). In addition, South Korea is aging faster than other industrialized nations, thus there exists a need to understand how best to respond to the challenges and opportunities of growing older. In particular, Korean societies are faced with unprecedented challenges of dealing with mental health issues. Due to a strong cultural stigma and myth that mental health problems result from personal failure, depression has been under-recognized by health care professionals and remained untreated. Therefore, it will be meaningful to study psychological distress with various age groups.

This study demonstrates that those who receive social support are more likely to buffer psychological distress compared to those not having such social support and network, among older Koreans in Korea. In addition, further research could develop a greater understanding of why social support from family members and friends may not be launching these older Korean immigrants in the United States to emotional well-being to the extent that would be expected, and what role receiving social support and social networks plays in the older adults' well-being and future ability to live healthier in mental health.

#### **APPENDICE**

#### APPENDIX A: PSYCHOLOGICAL DISTRESS (K 10 SCALE)

For each question please circle or check appropriate number. (1=none of the time, 2= little of the time, 3=some of the time, 4=most of the time, 5=all of the time)

- 1. During the past 30 days, about how often did you feel tired out for no good reason?
- 2. During the past 30 days, about how often did you feel nervous?
- 3. During the past 30 days, about how often did you feel so nervous that nothing could calm you down?
- 4. During the past 30 days, about how often did you feel hopeless?
- 5. During the past 30 days, about how often did you feel restless or fidgety?
- 6. During the past 30 days, about how often did you feel so restless you could not sit still?
- 7. During the past 30 days, about how often did you feel depressed?
- 8. During the past 30 days, about how often did you feel that everything was an effort?
- 9. During the past 30 days, about how often did you feel so sad that nothing could cheer you up?
- 10. During the past 30 days, about how often did you feel worthless?

# APPENDIX B: TELEPHONE PRESENTATION SCRIPT FOR ADMINISTRATORS OR LEADERS (ENGLISH)

#### Hello.

Please allow me to introduce myself. My name is Miya Chang, a doctoral student in the Department of Social Welfare at University of California, Los Angeles (UCLA). I am calling you today to introduce the research I am conducting for my doctoral dissertation and to invite you to participate in the study. The study is entitled, "correlates and determinants of psychological distress between older Koreans in Korea and in the United States: A comparative study."

As you may know, issues of psychological distress become serious in older Koreans, but very little research has been done in this area. We hope that the findings from this study can contribute to our understanding about the nature of the problem of psychological distress and also produce useful information to develop Korean culture-specific prevention and intervention programs and public to reduce psychological distress.

For this study, a self-administered questionnaire survey (paper-pencil) will be conducted in about 500 older Koreans who are aged between 60 and 79, currently living in Los Angeles County, Seoul, or Daegu. It will take approximately 50 minutes to complete the questionnaire. The participants' names will not be asked and any information that will be obtained in connection with this research will remain strictly confidential. In other words, all of the participants' answers and their identities are anonymous. In order to express appreciation of research participation, the participants will receive \$5.00 cash for their commitment in this study.

I would like to ask for permission to use your site as a survey location and personally contact your organization's older Korean members. I would also ask your help to set up the best date and time to attend a group meeting to do a survey and to randomly approach people individually or attend a group meeting. Your organization's participation in the research is completely voluntary and you have the right to refuse to participate in the study. However, your participation would be greatly helpful for the research.

Then, would you like to participate in the study? [IF YES, MAKE AN APPOINTMENT WITH HIM/HER TO DISCUSS ABOUT DETAILED PURPOSES AND PROCEDURE OF THE RESEARCH OR TO CONDUCT A SURVEY]

# [IF NO, RESPECT HIS/HER DECISION AND APPRECIATE HIS/HER TIME AND CONSIDERATION ON THE RESEARCH]

If you have any further questions regarding the study after this phone conversation, you can contact me by phone at (213) 200-7753 or via email at miyachang@ ucla.edu. You can also contact my faculty advisor, Ailee Moon, Ph.D., Associate Professor, UCLA Department of Social Welfare at (310) 825-6219, or via email at aileem @ ucla.edu.

#### APPENDIX C: ANNOUNCEMENT ABOUT SELF SCREEN (ENGLISH)

Hello, I am Miya Chang, and a doctoral student in the Department of Social Welfare at University of California, Los Angeles (UCLA). I am currently conducting a research study entitled, "A comparative study: correlates and determinants of psychological distress between older Koreans in Korea and in the United States." This research aims to examine factors contributing to older Koreans' experience of psychological distress. I am here today to recruit older Koreans who may be interested in participating in this study. The study is for older Koreans who (1) are aged between 60 and 79 and (2) are currently living in Los Angeles County, Seoul, or Daegu.

For this study, a total of 500 eligible older Koreans will be asked to fill out a questionnaire, containing a series of questions regarding their well-being, family relationships, cultural ties, social network, socio- demographic characteristics, and immigration background. The participants' names will not be asked and any information that will be obtained in connection with this research will remain strictly confidential.

In order to express appreciation to research participants, the participants will be compensated receive \$5.00 for the participation. It will take approximately 50 minutes to complete the questionnaire.

Would you like to ask any questions regarding the study? [ANSWER QUESTIONS]

Then, would you be interested in participating in this study? [IF YES, CONTINUE WITH THE FOLLOWING QUESTIONS.]

[IF NO, RESPECT HIS DECISION AND APPRECIATE HIS TIME AND CONSIDERATION ON THE RESEARCH.]

Now, I would like to ask you a few questions to find out if you are eligible to participate in the study.

| Q1. Do you identify yourself as older Yes | er Korean or older Korean immigrant?   |
|---|--|
|   | 2 [Read Comment A]                     |
| Q2. How old are you now?                  |  |
| Less than 60 years or older the           | han 791[Read Comment A]                |
| 60 years old or older, but les            | s than802 [Ask Q3]                     |
| Q3. Are you currently living in the I     | Los Angeles County or Seoul, or Daegu? |
| Yes, I am                                 | 1 [Read Comment B]                     |
| No, I am not                              | 2 [Read Comment A]                     |

### Comment A:

Thank you very much for your willingness to participate in this study. Unfortunately, you are not eligible to participate in this study. I appreciate your time and consideration.

**Comment B:** Thank you very much for your agreement to participate in this study. You are eligible to participate in this study. You will be given a package of research instruments including an information sheet and a survey questionnaire.

UCLA IRB #16-001931

## APPENDIX D: RESEARCH INFORMATION SHEET (ENGLISH) RESEARCH INVITATION AND INFORMATION LETTER

Dear Potential Research Participants,

I am Miya Chang, a doctoral student in the Department of Social Welfare at the University of California, Los Angeles. I am currently working on a dissertation examining the prevalence and predictors of psychological distress in older Koreans. You are asked to participate in this study because you identify yourself as an older Korean, are aged between 60 and 79, and are currently living in Los Angeles County, Seoul, or Daegu. We understand how valuable your time is. If you agree to participate in the study, we will compensate you with \$5.00 cash as a token of our appreciation.

The purpose of the study is to examine how socio-demographic characteristics related to psychological distress in older Koreans. We hope that the results from the study will assist with developing prevention and intervention strategies more Korean culture-specific in the Korean community, eventually helping to reduce the urgent problem of psychological distress in this population.

If you agree to participate in this study, you will be asked to fill out a questionnaire. You may make a choice as to whether the surveys in Korean or in the English language. The questionnaire contains a series of questions regarding your opinion about your well-being. It further contains a series of questions to assess your social support and social network, family relationships, sociodemographic characteristics, and immigration background. It will take approximately 50 minutes to complete the questionnaire.

The researcher will be present at the site while you complete the questionnaire so you can feel free to ask any questions about the study and the survey. After completing the survey, you can simply place your questionnaire in a manila envelope at a designated location at the site. If you wish to complete the question at a more convenient time and location, you will be given a postage-paid stamped envelope with the researcher's return mailing address and can put the completed questionnaire in the envelope and mail it at your earliest convenience.

It is not expected that the study questions in the questionnaire will cause long term discomforts; however, given the sensitive nature of the study topic, you may experience some discomfort. If this is the case, you may refuse any questions you don't want to answer and refuse to participate in the study.

You will not directly benefit from your participation in the research. Your participation in this study will make a great contribution to understanding the topic of psychological distress especially among older minority groups. You will also become aware of what agencies are available in the community and how you can gain access to those services. The information from this study will help professionals and policy makers understanding the problem of psychological distress in minority communities, identifying services needs, and developing appropriate intervention and public policies for psychological distress.

The researcher will take special precautions to ensure the confidentiality and anonymity of any information that is obtained in connection with this study. Your name will not be asked and your answers will be put into a computer with answers from other participants like you so that you will not be identifiable. Only ID numbers without any reference to personal identifying information will be used for data entry purposes. In other words, all of your answers and your identity are anonymous.

Your participation in this research is completely voluntary. You may at any time refuse to answer any questions or withdraw from the study.

### Payment for participation

As appreciation for your participation in this study, you will receive payment of \$5.00 for your time commitment. You will be given the payment at the end of the survey. Although you refuse to answer some questions or decide to withdraw from the study in the middle of the survey, you will be paid for your participation in the study.

If you have any questions or concerns about the research, please feel free to contact the principal investigator, Miya Chang or her faculty advisor, Ailee Moon, Ph.D. Miya Chang's phone number is (213) 200-7753 and her email address is miyachang@ucla.edu. Professor Ailee Moon's phone number is (310) 825-6219 and her email address is aleem@ucla.edu.

If you have questions regarding your rights as a research subject, contact the Office for Protection of Research Subjects, 11000 Kinross Ave. Box 951694, Los Angeles, CA 90095-1694, (310) 825-8714.

I deeply appreciate your time and cooperation.

Miya Chang, M.A, M.Div., & M.S.W. Principal Investigator

IRB #16-001931

#### APPENDIX E: VERBAL ADVERTISEMENT PRESENTATION SCRIPT

VERBAL ADVERTISEMENT PRESENTATION SCRIPT FOR PROSPECTIVE SUBJECT Hi senior members, how are you today?

My name is Miya Chang. I am a doctoral student at University of California, Los Angeles (UCLA) School of Public Affairs, Department of Social Welfare. I am working for my dissertation project.

I am here today to recruit research participants for the research of psychological distress of older Koreans. As you may know, the issues of psychological distress become serious in the Korean society. This mental health study has relatively little been done. I hope that the findings from this study can contribute to our understanding about the predictors of psychological distress and produce useful information to develop Korean cultural prevention and prevention program, and public policies. For this study, survey will be conducted for 480 older Koreans and older Korean immigrants residing in Los Angeles County, Seoul, or Daegu in Korea.

If you volunteer to participate in this study, I would like to ask you some initial questions in order to decide your eligibility for research participation. After conforming your eligibility status, I will set up survey schedule. In order to express appreciation of your participation in this study, you will receive payment of \$ 5.00 after survey. The survey will take about 50 minutes. It is not expected that the study questions provided to you will cause discomfort but you may experience some discomfort. If such is the case, you may refuse to answer any questions you do not want to answer.

Your participation in the study is completely voluntary and your willingness or refusal to participate has no relationship to your receipt of services. Your refusal will not jeopardize any service receipt from the agency that you are currently attending. In addition, you will not directly benefit from the research participation. In addition, you have the right to refuse participate or to withdraw from the study at any time and this will not cause any problem.

I understand how precious you time is. However, your help will be greatly appreciated because this study will contribute to the understanding of how older Koreans in both countries(in Korea and in the United States) experience of psychological distress and will generate useful information to develop more effective social work practices and policies for the problem of psychological distress.

Would you like to ask any question regarding this study?[ANSWER QUESTIONS] Would you be interested in participating in this study?

[IF YES, PROCEED "CONSENT SCRIPT TO SCREEN FOR RESEARCH" AND SCREEN THE SUBJECT UNSING "SCREENER." FOR ELIGIBLE SUBJECT, SET UP SURVEY SCHEDULE]

[IF NO, RESPECT HIS/HER DECISION AND APPRECIATE HIS/HER TIME AND CONSIDERATION ON THE RESEARCH]

If you have any questions, please contact me by phone (213-200-7753) or email (<a href="miyachang@ucla.edu">miyachang@ucla.edu</a>). You can also contact my academic advisor, Ailee Moon, Ph.D., Associate Professor, UCLA Department of Social Welfare, at 310-825-6219, or email <a href="mileem@ucla.edu">aileem@ucla.edu</a>.

Thank you for your participation.

### **Seeking Research Participants**

#### **Study Description**

Psychological distress detrimentally affects older adults' social well-being. Existing data indicates that psychological distress is a rapidly growing and pervasive social problem especially among older adults in South Korea as well as older Korean immigrants in the United States. Psychological distress is found to be a risk factor for older adult's death, suicide, and older adult's long-term care facilitates placement, indicating a serious challenge to individual's health and well-being, and the nation's public health care cost. This study seeks to produce more information to be utilized in understanding correlates and determinants of psychological distress, which is necessary for more culturally competent social work practice. This study seeks to explore factors contributing to older Koreans' experience of psychological distress.

Your expert input will offer crucial empirical information about what factors significantly impact the differences and similarities of psychological distress between older Koreans and older Korean immigrants in the United States.

#### **Eligibility**

- 1) If you live anywhere in Los Angeles County, Seoul, or Daegu
- 2) born in Korea
- 3) immigrated to the United States
- 4) 60 years old or older, but less than 80 years
- 5) identify yourself as Korean

Correlates and Determinants of Psychological Distress between Older Koreans in South Korea and older Korean immigrants in the United States: A Comparative Study

Contact info: Miya Chang, a doctoral candidate at UCLA Department of Social Welfare, at 213-200-7753or <a href="miyachang@ucla.edu">miyachang@ucla.edu</a>. The researcher will describe the study in greater detail **Payment** 

Participants are paid \$5.00 in cash at the end of the survey.

## APPENDIX G: QUESTIONNAIRE

### Part A: Background

For each of the following questions, Please complete the following background questionnaire. All of the information you provide will be kept confidential and will only be used as aggregate data to provide general characteristics.

| A 1). Gender: (check the box) ☐ 1. Female ☐ 2. Male   |   |
|---|---|
| A2) How old are you?  | AGE:  |
| A 3) what is the highest level of ed □1. Less than high school graduate □2. High school graduate □3. 2-year college graduate □4. 4-year college graduate □5. Above graduate | ucation you have completed? (Check the box) duate |
| A 4) How would you rate your hea □1. Very Poor □2. Poor □3. Fair □4. good □5. Very good   | lth status? (check the box)                       |
| A5) Marital status: (check the box) ☐ 1. Single (never married) ☐ 2. Married ☐ 3. Divorced/Separated ☐ 4. Widowed ☐ 5. Other (living with someon                            |   |
| A6) Who do you live with?( □ 1. Living alone □ 2. Spouse □ 3. Son □ 4. Daughter □ 5. Son-in-law □ 6. Daughter-in-law  | (check all that apply)                            |

| A 7) Your average monthly gross income (before tax) is:                         |
|---|
| □ 1. Below \$ 1,000   |
| □ 2. Between \$ 1,001 -\$ 1,999   |
| □ 3. Between \$ 2,000-\$ 2,999  |
| □ 4. Between \$ 3,000-\$ 3,999  |
| □ 5. Between \$ 4,000-\$ 4,999  |
| A 8) What would you say about your overall financial situation? (Check the box) |
| □1. Very bad  |
| <b>□</b> 2. Bad   |
| □3. Fair  |
| □4. Good  |
| □ 5. Very good  |
| A 9) what are your sources of income? (check the box all sources of income)     |
| ☐ 1 Public Assistance (SSI, Social Security)                                    |
| □2 Employment(wage/salary)  |
| □3Assistance from adult children  |
| □4Assistance from relatives   |
| □5Savings (own assets/ property/ landlord)                                      |
| A 10) Are you currently living in:  |
| □1. Your own house or condominium   |
| □2. Rented house or condominium   |
| □3. Government subsidized senior citizen apartment                              |
| ☐ 4. Unsubsidized apartment (in private housing market)                         |
| □ 5. Rented rooms in other's home   |
| A11) Your religion is   |
| ☐ 1. I have no religion   |
| □2. Protestant  |
| □3. Catholic  |
| □4. Buddhist  |
| □ 5. Other(specify: )   |
| A 12) Do you have any difficulty learning, remembering, or concentrating?       |
| □1. Yes   |
| □2. No  |

| A 13) Do you have any a condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying? |
|---|
| □1. Yes   |
| □2. No  |
| A14) Any difficulty dressing, bathing, or getting around inside the home?  □ 1. Yes □ 2. No   |
| A15) Any difficulty going outside the home alone to shop or visit a doctor's office?  □ 1. Yes □ 2. No  |
| A16) How many years have you lived in the United States? [Only older Korean immigrants] (Years:)  |
| A17) How well do you speak English? [Only older Korean immigrants]  |
| □ 1. Not at all   |
| □2. Not well  |
| □3. Well  |
| $\Box A$ Very well  |

### Part B: Psychological Distress Scale (K 10 scale)

For each question please circle or check appropriate number.

(1=none of the time, 2= little of the time, 3=some of the time, 4=most of the time, 5=all of the time)

|     | Statement  | none<br>of | little<br>of | some<br>of | most<br>of | All<br>of |
|-----|--|------------|--------------|------------|------------|-----------|
|     |  | the        | the          | the        | the        | the       |
|     |  | time       | time         | time       | time       | time      |
| B1  | During the past 30 days, about how often did you feel tired out for no good reason?                | 1          | 2            | 3          | 4          | 5         |
| B2  | During the past 30 days, about how often did you feel nervous?                                     | 1          | 2            | 3          | 4          | 5         |
| В3  | During the past 30 days, about how often did you feel so nervous that nothing could calm you down? | 1          | 2            | 3          | 4          | 5         |
| B4  | During the past 30 days, about how often did you feel hopeless?                                    | 1          | 2            | 3          | 4          | 5         |
| B5  | During the past 30 days, about how often did you feel restless or fidgety?                         | 1          | 2            | 3          | 4          | 5         |
| B6  | During the past 30 days, about how often did you feel so restless you could not sit still?         | 1          | 2            | 3          | 4          | 5         |
| В7  | During the past 30 days, about how often did you feel depressed?                                   | 1          | 2            | 3          | 4          | 5         |
| В8  | During the past 30 days, about how often did you feel that everything was an effort?               | 1          | 2            | 3          | 4          | 5         |
| B9  | During the past 30 days, about how often did you feel so sad that nothing could cheer you up?      | 1          | 2            | 3          | 4          | 5         |
| B10 | During the past 30 days, about how often did you feel worthless?                                   | 1          | 2            | 3          | 4          | 5         |

### Part C: Social Support Network (Lubben Scale -6)

I would like know about your social networks with family member (relatives) and friends. For each question please circle or check appropriate number.

| C 1) How many <u>relatives</u> do you see or hear from at least once a month? |
|---|
| ☐ 1. No one   |
| □ 2. One  |
| □ 3. Two  |
| ☐ 4. Three or Four  |
| □ 5. Five thru eight  |
| ☐ 6. Nine or more   |

|      | ) How many <u>relatives</u> do you feel at ease with that you can talk about private matters? |
|------|---|
|      | 1. No one   |
|      | 2. One  |
|      | 3. Two  |
|      | 4. Three or Four  |
|      | 5. Five thru eight  |
|      | 6. Nine or more   |
| C 3) | How many <u>relatives</u> do you feel close to such that you could call on them for help?     |
|      | 1. No one   |
|      | 2. One  |
|      | 3. Two  |
|      | 4. Three or Four  |
|      | 5. Five thru eight  |
|      | 6. Nine or more   |
| C 4) | How many <u>friends</u> do you see or hear from at least once a month?                        |
|      | 1. No one   |
|      | 2. One  |
|      | 3. Two  |
|      | 4. Three or Four  |
|      | 5. Five thru eight  |
|      | 6. Nine or more   |
| C 5) | How many <u>friends</u> do you feel at ease with that you can talk about private matters?     |
|      | 1. No one   |
|      | 2. One  |
|      | 3. Two  |
|      | 4. Three or Four  |
|      | 5. Five thru eight  |
|      | 6. Nine or more   |
| C 6) | How many <u>friends</u> do you feel close to such that you could call on them for help?       |
|      | 1. No one   |
|      | 2. One  |
|      | 3. Two  |
|      | 4. Three or Four  |
|      | 5. Five thru eight  |
|      | 6. Nine or more   |

## Part D: Perceived level of Social Support

In this section, I would like to ask your opinion about your social support from your family members, neighbors, and friends. Please check how often someone available to provide each of the following support.

(1=Seldom, 2=Sometimes. 3=Often, 4=Very open, 5=Always)

|     | Statement   | Seldom | Some times | Often | Very<br>open | Always |
|-----|---|--------|------------|-------|--------------|--------|
| D1  | How often is someone available to give you good advice about a crisis?                            | 1      | 2          | 3     | 4            | 5      |
| D2  | How often is someone available to take you to the doctor if you needed it?                        | 1      | 2          | 3     | 4            | 5      |
| D 3 | How often is someone available to have a good time with?  | 1      | 2          | 3     | 4            | 5      |
| D 4 | How often is someone available to confide in or talk about yourself or your problems?             | 1      | 2          | 3     | 4            | 5      |
| D 5 | How often is someone available who shows you love and affection?                                  | 1      | 2          | 3     | 4            | 5      |
| D 6 | How often is someone available to prepare your meals if you were unable to do it yourself?        | 1      | 2          | 3     | 4            | 5      |
| D 7 | How often is someone available to help you with daily chores if you were sick?                    | 1      | 2          | 3     | 4            | 5      |
| D 8 | How often is someone available to share your most private worries and fears with?                 | 1      | 2          | 3     | 4            | 5      |
| D 9 | How often is someone available to turn for suggestions about how to deal with a personal problem? | 1      | 2          | 3     | 4            | 5      |
| D10 | How often is someone available to love and make you feel wanted?                                  | 1      | 2          | 3     | 4            | 5      |

## Part E: Acculturation (A) Attitude toward Elder Care

In this section, I would like to ask your opinion about care for older adults. Please check whether you strongly disagree, disagree, agree, and strongly disagree.

|         | Statement   | Strongly disagree | Disagree | Agree | Strongly agree |
|---------|---|-------------------|----------|-------|----------------|
| E1      | Adult children should live together with their elderly parents at the parents' wish.  | 1                 | 2        | 3     | 4              |
| E2      | It is wrong to place an impaired parent in a nursing home.  | 1                 | 2        | 3     | 4              |
| E3      | It is wrong to place an impaired parent in a nursing home.  | 1                 | 2        | 3     | 4              |
| E4      | Adult children should obey the decisions of their parents even when they think the decisions are bad.   | 1                 | 2        | 3     | 4              |
| E5      | Daughter-in-law should have more responsibilities than married sons to care for the elderly parents   | 1                 | 2        | 3     | 4              |
| E6      | Adult children and their spouses should not express the stress or burden related to caregiving for the elderly parents  | 1                 | 2        | 3     | 4              |
| E7      | Adult children should offer money regularly to<br>their elderly parents, regardless of the financial<br>need of parents, as a way of expressing their<br>care for the parents | 1                 | 2        | 3     | 4              |
| E8      | Adult children concerned about the well being of their family elderly parents should keep bad family news from their parents.   | 1                 | 2        | 3     | 4              |
| E9      | Adult children and their spouses who live with elderly parents should take of all household chores to ensure that their parents are free from housework.                      | 1                 | 2        | 3     | 4              |
| E1<br>0 | Adult children who live far away from their elderly parents should call or write to parents regularly, at least once a week.  | 1                 | 2        | 3     | 4              |

| Acculturation(B) [Only older Korean immigrants]  Please read the questions below. Check the number of the response that best fits your situation.  E11). In general, what language do you read and speak?  ☐ 1. Only Korean language  ☐ 2. More Korean language than English  ☐ 3. Both equally  ☐ 4. More English than Korean language  ☐ 5. Only English |
|--|
| E12). In what languages are the TV programs you usually watch?  ☐ 1. Only Korean language  ☐ 2. More Korean language than English  ☐ 3. Both equally  ☐ 4. More English than Korean language  ☐ 5. Only English  |
| E13). In what languages are the radio programs you usually listen to?  ☐ 1. Only Korean language ☐ 2. More Korean language than English ☐ 3. Both equally ☐ 4. More English than Korean language ☐ 5. Only English   |
| E14). In what languages are the newspapers you usually read?  ☐ 1. Only Korean language  ☐ 2. More Korean language than English  ☐ 3. Both equally  ☐ 4. More English than Korean language  ☐ 5. Only English  |
| E15). Your close friends are:  ☐ 1. All Koreans or Korean Americans ☐ 2. More Koreans or Korean Americans than Americans ☐ 3. About half and half ☐ 4. More Americans than Koreans or Korean Americans ☐ 5. All Americans  |
| E16) The persons you visit or who visit you are:  ☐ 1. All Koreans or Korean Americans ☐ 2. More Koreans or Korean Americans than Americans ☐ 3. About half and half ☐ 4. More Americans than Koreans or Korean Americans ☐ 5. All Americans   |

| thinking?   |
|---|
| ☐ 1. Prefer Korean way a lot  |
| ☐ 2. Prefer Korean way, but not a lot   |
| ☐ 3. No preference  |
| ☐ 4. Prefer American way, but not a lot   |
| ☐ 5. Prefer American way a lot  |
| E18). Generally speaking, do you prefer the Korean way of life or American way of life? |
| ☐ 1. Prefer Korean way a lot  |
| ☐ 2. Prefer Korean way, but not a lot   |
| ☐ 3. No preference  |
| ☐ 4. Prefer American way, but not a lot   |
| ☐ 5. Prefer American way a lot  |

### **Part F: Family Relationships Scale**

In this section, I would like to ask your opinion about your family relationship. For each question please circle or check appropriate number.

(1 = very much, 2 = much, 3 = somewhat, 4 = slightly, 5 = not at all)

|     |  | Very | Much | Some | slight | not at |
|-----|--|------|------|------|--------|--------|
|     |  | much |      | what | ly     | all    |
| F1  | I do frequently discuss something with my adult children.      | 1    | 2    | 3    | 4      | 5      |
| F2  | I think my adult children understand me.                       | 1    | 2    | 3    | 4      | 5      |
| F3  | I can exchange confidences with my adult children.             | 1    | 2    | 3    | 4      | 5      |
| F4  | My adult children tend to approve my opinions.                 | 1    | 2    | 3    | 4      | 5      |
| F5  | My adult children dislike taking my advice.                    | 1    | 2    | 3    | 4      | 5      |
| F6  | I feel I am a useless parent.                                  | 1    | 2    | 3    | 4      | 5      |
| F7  | I feel guilty to my adult children as I get older.             | 1    | 2    | 3    | 4      | 5      |
| F8  | I feel I am unconvincing my adult children.                    | 1    | 2    | 3    | 4      | 5      |
| F9  | I am a meaningful being in my home even if I get older.        | 1    | 2    | 3    | 4      | 5      |
| F10 | My adult children disregard my taking share in family matters. | 1    | 2    | 3    | 4      | 5      |
| F11 | I feel I am alienated from my adult children.                  | 1    | 2    | 3    | 4      | 5      |
| F12 | It is inconvenient for me to live with my adult children.      | 1    | 2    | 3    | 4      | 5      |
| F13 | I feel my adult children are content with my being a parent.   | 1    | 2    | 3    | 4      | 5      |

FR1. What would you say about your family relationships (e.g., spouse, child, child-in-law)? (Check the box)

- ☐1. Very bad
- **□**2. Bad
- □3. Fair
- **□**4. Good
- □5. Very good

## **Part G: Help Seeking Behaviors**

For each of the following items, please check the answer that best describes your experiences with psychological distress.

| G1. Did you seek help for your psychological distress?  |
|---|
| ☐ 1. Yes (if yes please go to 1-1)<br>☐ 2. No(if no please go to 1-2)   |
| G1-1) If yes, where/whom would you be most likely to ask or call for help?  |
| <ul> <li>□ 1. Family member/Relatives (e.g., spouse, child, child-in-law)</li> <li>□ 2. Friends</li> <li>□ 3. Church minister/pastor</li> <li>□ 4. Psychiatrist/Psychologist</li> <li>□ 5. Social Worker</li> <li>□ 6. Doctor</li> <li>□ 7. Other( )</li> </ul>   |
| G1-2) If no, would you tell me why? Do you have any specific reason(s) for not seeking help for the situation? (What is the MAIN REASON you are no longer receiving treatment?)  1. Got better/no longer needed 2. Not getting better 3. Wanted to handle problem on own 4. Had bad experiences with treatment 5. Lack of time/transportation 6. Too expensive 7. Insurance does not cover 8. not feel comfortable talking with a professional about my personal problems 9. concerned about what would happen if someone found out I had a problem. 10. a hard time getting an appointment |
|   |

Thank you for completing this questionnaire!

#### APPENDIX H: SERVICES AND RESOURCES

If you are or you know someone experience severe psychological distress, call the following service centers to seek professional help.

### **Counseling Centers**

- Korean American Family Service Center 3727 West 6th St. Suite 320 Los Angeles, CA 90020 (213)389-6755
- 2. Korean Community Services 1050 South Brookhurst Road Fullerton, CA 92833 (714) 449-1339
- 3. The Center for the Pacific Asian Family, Inc.

(800) 339-3940

(800) 978-3600

(323) 653-4042

### APPENDICE (Korean)

### APPENDIX A1: PSYCHOLOGICAL DISTRESS 심리적 고통. 정신적인 고충

- 1. 지난 한달 동안, 아무이유없이 피곤하다고 느낀 경우가 있었습니까?
- 2. 지난 한달 동안, 신경이 예민했던 날은 얼마나 됩니까?
- 3. 지난 한달 동안, 신경이 너무 예민해서 귀하를 안정시킬 수 있는 것이 아무것도 없다고 느낀적이 얼마나 됩니까?
- 4. 지난 한달 동안, 희망이 없다고 느낀 경우가 있었습니까?
- 5. 지난 한달 동안, 안절부절 못하거나 조바심을 냈던 적은 얼마나 됩니까?
- 6. 지난 한달 동안, 안절부절 못하거나 조바심을 내서 가만히 앉아 있을 수 없다고 느낀적이 얼마나됩니까?
- 7. 지난 한달 동안, 우울했던적이 얼마나 됩니까?
- 8. 지난 한달 동안, 매사가 힘들다고 느낀적은 얼마나 됩니까?
- 9. 지난 한달 동안, 우울하여 기운을 북돋을수 있는 것이 아무것도 없다고 느끼신적이 얼마나 됩니까?
- 10. 지난 한달 동안, 자신을 가치 없는 사람처럼 느끼신적은 얼마나 됩니까?

# APPENDIX B1: TELEPHONE PRESENTATION SCRIPT FOR ADMINISTRATORS OR LEADERS (KOREAN)

안녕하십니까? 저는 UCLA 사회복지학과 박사과정에 다니는 장 미야 입니다. 제가 오늘 전화를 드리는 것은 저의 박사과정 논문에 대해 소개드리고 귀하께서 본 연구에 참여해주실 것을 부탁드리고자 합니다. 제연구의 제목은 "심리적 고통에 영향을 미치는 요인들과 상관관계를 한국에 사는 한국노인과 미국에 사는한인 노인이민자에 관한 비교연구"에 관해 박사논문을 쓰고 있습니다.

귀하께서 아시다시피 한인 사회에서 심리적 고통에 대한 이슈는 심각한 문제이지만 이 분야에 관한 연구는 미진한 상태입니다. 본 연구의 결과들은 심리적 고통에 대한 본질을 이해하고 더욱 효과적인 개입과 예방책을 개발하는데 도움을 주어 궁극적으로는 한인 사회에서 일어나는 심리적고통에 대해서 한국문화에 맞는 프로그램과 심리적인 고통을 줄이는데 도움을 줄것을 기대합니다.

본 연구는 설문지 조사로 500 명의 한국 노인분으로 로스앤젤레스 카운티나, 서울, 또는 대구에 거주하고 나이가 60 세 이상 79 세 미만인 분만 설문지에 참여하실 수 입니다. 설문지를 작성하는데는 약 50 분 정도 걸릴것 입니다. 본 연구 참여자들의 이름은 묻지 않을 것이며, 본 연구에 관련해서 얻는 모든 정보는 비밀유지가 될 것입니다. 즉 모든 참여자들의 응답과 신분에 대해 익명성이 보장됩니다. 참여자들의 소중한 시간에 감사하는 마음으로 설문에 참여해주시는 분들께 5 불을 드립니다.

본 연구에 참여하실것을 결정하시면 귀하의 기관의 노인분들에게 설문지를 작성하실수 있도록 해 주실것을 요청드립니다. 또한 귀하기관에서 진행하는 모임에 참여하거나 또는 회원들과 임위적으로 만나 설문지를 작성할 수 있는 가장 적절한 날짜와 시간을 정해주실것을 요청드립니다.귀하의 본 연구에 대한 참여는 전적으로 자발적입니다. 귀하께서는 어떤 질문에 답을 하지 않으셔도 되며 언제든지 본 연구에 참여하지 않을 결정을 하실 권리가 있습니다.

본 연구에 참여해주시겠습니까?

[ 만약 허락하면, 본 연구의 자세한 목적과 절차를 설명하거나 또는 설문지를 작성하실수 있는 약속을 정한다]

[민약 허락하지 않는다면, 본 연구에 대해 고려해주고 시간을 내어 주신것에 대해 감사를 드립니다] 이 전화통화 후에 본 연구에 대해 질문이 있으시면, 연구조사자인 장 미야 또는 지도교수인 문 애리교수에게 연락주십시요. 장 미야의 전화번호는 213-200-7753 이고, 이 메일 주소는 miyachang@ucla.edu입니다. 문 애리 교수의 전화번호는 310-825-6219 이고 이 메일 주소는 aileem@ucla.edu입니다.

UCLA IRB #16-001931

### APPENDIX C1: ANNOUNCEMENT ABOUT SELF SCREEN (KOREAN) 참여 자격에 관한 안내문

안녕하십니까? 저는 UCLA 사회복지학과 박사과정에 재학중인 장 미야 입니다. 저는 현재 한국에 사는 노인들과 미국에 사는 한국노인들에 대한 심리적 고통과 상관관계와 결정 요인에 대한 비교연구 대한 박사논문을 쓰고 있습니다. 본 연구의 목적은 어떤 요소가 한국노인들이 경험하고 있는 심리적 고통에 영향을 주는지에 대한 특성을 조사하는 연구입니다.저는 오늘 본 연구 참여에 관심이 있으신 한인 노인들을 모시고자 합니다. 본 연구는 나이가 60 세 이상이고 79 세까지이며 한국에서 태어나신 분으로 로스엔젤스, 서울, 또는 대구에 거주하는 노인분들을 대상으로 하고 있습니다.

본 연구에 참여하 실수 있는 약 500 여분의 한국노인들분께 설문지에 답을 하실 것입니다. 설문지에는 참여자들의 가족관계, 문화적 관련, 사회적 지원망, 사회 인구학적, 그리고 이민정보등을 묻는 질문들이 포함되어 있습니다. 본 연구 참여자들의 이름은 묻지 않을 것이며, 본 연구에 관련해서 얻는 모든 정보는 철저하게 비밀유지가 될 것입니다. 참여자들의 소중한 시간에 감사하는 마음으로 설문에 참여해 주시는 분들께 5 불을 드립니다. 설문지를 작성하는데는 약 50 분 정도 걸릴 것입니다.

본 연구에 관한 질문이 있으십니까? [질문에 답한다.]

본 연구 참여에 관심이 있으십니까?

[만약 관심이 있으시다면 다음의 질문들을 계속해서 한다.]

[만약 관심이 없다면, 그 분들의 결정을 존중하고, 시간을 내어주신것에 감사를 표한다.]

그럼, 본 연구에 참여하실 수 있는지를 알기위해 몇 가지 질문을 드리겠습니다.

| 질문 1. 귀하는 한국인 또는 한국인 교포이십니가? 예  |
|---|
| 질문 2. 귀하의 현재 나이는 몇 살 입니까? 60 세 미만이거나 79 세 이상  |
| 질문 3. 귀하는 현재 로스엔젤스 카운티, 서울, 또는 대구에 거주하고 계십니까?<br>예1[Comment B 를 읽는다.]<br>아니요2[Comment A 를 읽는다.] |

#### Comment A:

본 연구에 참여에 응해 주셔서 감사드립니다. 그러나 귀하께서는 본 연구 참여 대상자에 해당되지 않습니다. 참여를 고려해 주시고 시간을 내 주셔서 진심으로 감사드립니다.

#### Comment B:

본 연구 참여에 동의 해 주신것을 감사들립니다. 귀하께서는 본 연구에 참여하실 수가 있으십니다. 연구 조사 참여 안내문과 작성하실 질문지를 드리겠습니다.

UCLA IRB #16-001931

#### APPENDIX D1: RESEARCH INFORMATION SHEET (KOREAN)

연구조사 참여 안내문

안녕하십니까? 저는 UCLA 사회복지학과 박사과정에 재학중인 장 미야 입니다. 현재 한인들의 심리적고통에 대한 예측요소와 발생율을 연구하는 박사논문을 쓰고 있습니다. 로스앤젤레스, 서울, 또는 대구에 거주하고 나이가 60 세 이상 79 세 이신 한인들을 대상으로 하는 본 연구에 참여해 주실것을 부탁드립니다. 귀하의 소중한 시간에 감사하는 마음으로 설문에 참여해 주시는 분들께 5 불을 드립니다.

본 연구의 목적은 사회인구학적인 특성이 한인들의 심리적 고통과 연관되어 있는지 조사하고자 합니다. 본 연구의 결과들은 구체적인 한국문화적인 개입과 예방책을 개발하는데 도움주고, 궁극적으로는 한인들이 경험하는 정신적인 고통을 줄이는 노력에 도움을 줄 것으로 기대합니다.

본 연구에 참여하실 것을 결정하시면, 설문지에 답을 하시게 됩니다. 귀하의 편의에 따라 한국어나 영어로 된 실문지를 선택하실 수 있습니다. 설문지에는 여러분의 건강과 행복(well-being)관한 질문이 포함되어 있습니다. 또한 귀하의 설문지에는 참여자들의 가족관계, 문화적 관련, 사회적 지원망, 사회 인구학적, 그리고 이민정보등을 묻는 질문들이 포함되어 있습니다. 설문지를 작성하는데는 약 50 분 정도 걸릴 것입니다. 설문지의 작성을 마치신 후에는, 완성된 설문지를 지정된 장소에 놓여진 봉투에 넣어주시거나, 제공된 반송봉투에 넣어 빠른 시일내에 가까운 우체통에 넣어 주시면 됩니다.

설문지에 있는 질문들은 오랜기간의 불편함을 야기하지는 않을 것이라 생각합니다만, 본 연구의 주제가 민감한 점으로 보아 귀하께서 약간의 불편함을 겪으실지도 모릅니다. 만약 귀하께서 대답을 하시고 싶지 않는 질문들이 있다면 답하지 않으셔도 됩니다. 또한, 언제든지 본 연구에 참여하지 않을 결정을 하실 권리가 있습니다. 귀하의 본 연구에 대한 참여는 전적으로 자발적인 것입니다.

귀하께서 본 연구에 참여하시면 정신 건강에 대한 지식을 얻을 수 있고, 귀하의 가족, 이웃, 그리고 한인사회에서 일어나는 정신건강에 대처할 수 있는 도움을 받을 수 있으며, 한인 사회에서 제공하고 있는 정신적인 고통과 관련된 봉사 기관들에 대한 정보를 얻게 될 것입니다. 본 연구와 관련하여 수집된 모든 정보에 대해서는 철저하게 익명성과 비밀보장이 됩니다. 본 연구는 귀하의 이름을 묻지 않고 귀하의 응답은 다른 참여자들의 응답과 함께 컴퓨터에 입력되어 개별적으로 드러나지 않을 것입니다. 오직 컴퓨터 자료 입력을 위한 아이디 번호만이 사용될 것입니다.

본 연구에 대해 질문이 있으시면, 연구조사자인 장 미야 또는 지도교수인 문 애리 교수에게 연락주십시요. 장 미야의 전화번호는 213-200-7753 이고, 이 메일 주소는 <u>miyachang@ucla.edu</u> 입니다. 문 애리 교수의 전화번호는 310-825-6219 이고 이 메일 주소는 aileem@ucla.edu 입니다.

본 연구 참여자로서의 권리에 대한 질문이 있으시면, UCLA 의 연구 참여자 보호실 (Office for protection of research Subjects)로 문의 하십시오. 전화번호는 310-825-8714 이고, 주소는 11000 Kinross Ave. Box 951694, Los Angeles, CA 90095 입니다.

귀하께서 이 설문조사에 꼭 참여해 주실 것을 다시한번 간곡하게 부탁드립니다. 귀하의 협조에 진심으로 감사드립니다.

연구조사자 장 미야 올림

UCLA IRB #16-001931

## APPENDIX G1 :설문지 Part A: 사회 경제적 배경에 대한 질문 A1) 귀하의 성별은 무엇입니까? □1. 여자 □2. 남자 A2) 귀하의 나이는 몇살이십니까? ( 살 ) A3) 교육배경은 어떻게 되십니까? □1. 고등학교 졸업미만 □2. 고등학교 졸업 □3. 전문대학 졸업 □4. 대학교 졸업 □5. 대학원 졸업 A4) 귀하의 전반적인 건강상태는 어떠하십니까? □1. 매우 나쁘다 □2. 나쁘다 □3. 보통이다 □4. 좋다 □5. 아주 좋다 A5) 귀하의 현재 결혼상태는 어떠하십니까? □1. 혼자/ 결혼해 본적 없다 □2. 결혼 □3. 별거/이혼 □4. 사별 □5. 기타() A6) 귀하의 현재 주거상태는 어떻게 되십니까?(해당되시는 것 모두 체크해 주세요) □1. \_\_\_\_ 혼자 살고 있음 □2. \_\_\_\_배우자

□3. \_\_\_\_아들. □4. \_\_\_\_딸 □5.\_\_\_사위 □7. \_\_\_\_손자녀 □8. \_\_\_\_기타

| A12) 귀하는 배우고, 기억하는것, 또는 집중하는데 문제가 있으십니까?<br>□1. 있다                          |
|---|
| □2. 없다  |
| A13) 귀하는 걷거나 계간을 오르거나, 들고 옮기는데 신체적 제한이 있으십니까?  □1. 있다 □2. 없다                |
| A14) 귀하는 혼자 옷입고, 목욕하고 집안에 다니는데 어려움이 있으십니까? □1. 있다 □2. 없다                    |
| A15) 귀하는 혼자 집밖에 나가셔서 의사를 방문하거나 샤핑을 가시는데 어려움이 있으십니까? ☐1. 있다 ☐2. 없다           |
| A16) 몇 년동안 미국에서 사셨읍니까?(미국 이민자만 대답)<br>(기간 년)                                |
| A17) 영어구사 능력은 좋으십니까?(미국 이민자만 대답) □1. 전혀 못한다 □2. 못하는 편이다. □1. 잘한다 □2. 아주 잘한다 |
| <b>니</b> Z. 약구 일인역  |

### Part B: 심리적 고통. 정신적인 고충

|     | Statement   | 전혀없다 | 약간 | 때때로 | 대부분 | 항상있다 |
|-----|---|------|----|-----|-----|------|
| B1  | 지난 한달 동안, 아무이유없이 피곤하다고<br>느낀 경우가 있었습니까?                             | 1    | 2  | 3   | 4   | 5    |
| B2  | 지난 한달 동안, 신경이 예민했던 날은<br>얼마나 됩니까?                                   | 1    | 2  | 3   | 4   | 5    |
| В3  | 지난 한달 동안, 신경이 너무 예민해서<br>귀하를 안정시킬 수 있는 것이 아무것도<br>없다고 느낀적이 얼마나 됩니까? | 1    | 2  | 3   | 4   | 5    |
| B4  | 지난 한달 동안, 희망이 없다고 느낀 경우가<br>있었습니까?                                  | 1    | 2  | 3   | 4   | 5    |
| B5  | 지난 한달 동안, 안절부절 못하거나 조바심을<br>냈던적은 얼마나 됩니까?                           | 1    | 2  | 3   | 4   | 5    |
| В6  | 지난 한달 동안,안절부절 못하거나 조바심을<br>내서 가만히 앉아 있을 수 없다고 느낀적이<br>얼마나 됩니까?      | 1    | 2  | 3   | 4   | 5    |
| В7  | 지난 한달 동안, 우울했던적이 얼마나<br>됩니까?  | 1    | 2  | 3   | 4   | 5    |
| В8  | 지난 한달 동안,매사가 힘들다고 느낀적은<br>얼마나 됩니까?                                  | 1    | 2  | 3   | 4   | 5    |
| В9  | 지난 한달 동안, 우울하여 기운을 북돋을수<br>있는 것이 아무것도 없다고 느끼신적이<br>얼마나 됩니까?         | 1    | 2  | 3   | 4   | 5    |
| B10 | 지난 한달 동안, 자신을 가치 없는 사람처럼<br>느끼신적은 얼마나 됩니까?                          | 1    | 2  | 3   | 4   | 5    |

#### Part C: 사회지원망

다음 질문에 대해 해당하는 번호에 동그라미(0)나 체크표(v)를 해주시기 바랍니다.

C1)귀하께서 적어도 한달에 한번 만나시거나 전화통화 하는 <u>친척분</u>이 몇 명 있읍니까?

- □ 1. 없다
- □ 2. 한명
- □ 3. 2명
- □ 4. 3명 또는 4명
- □ 5. 5명 또는 8명
- □ 6. 9명 이상

C2)귀하께서 마음을 터 놓고 사적인 이야기를 나눌 친척분이 몇 명 있읍니까?

- □ 1. 없다
- □ 2. 한명
- □ 3. 2명
- □ 4. 3 명 또는 4 명
- □ 5. 5명 또는 8명
- □ 6. 9명이상

| C3) 도움이 필요할때 ☐ 1. 없다 ☐ 2. 한명 ☐ 3. 2명 ☐ 4. 3명 또는 4명 ☐ 5. 5명 또는 8명 ☐ 6. 9명 이상             | 전화하여 노움을 부탁할 만큼 진문이 있는 <u>진적문</u> 이 몇 명 있읍니까? |
|---|---|
| C4) 귀하께서 적어도 ☐ 1. 없다 ☐ 2. 한명 ☐ 3. 2명 ☐ 4. 3명 또는 4명 ☐ 5. 5명 또는 8명 ☐ 6. 9명 이상             | 한달에 한번 만나시거나 전화통화 하는 <u>친구분</u> 이 몇 명 있읍니까?   |
| C5) 귀하께서 마음을<br>□1. 없다<br>□2. 한명<br>□3. 2명<br>□4. 3명 또는 4명<br>□5. 5명 또는 8명<br>□6. 9명 이상 | 터 놓고 사적인 이야기를 나눌 <u>친구분</u> 이 몇 명 있읍니까?       |
| C6) 도움이 필요할때 ☐1. 없다 ☐2. 한명 ☐3. 2명 ☐4. 3명 또는 4명 ☐5. 5명 또는 8명 ☐6. 9명 이상                   | 전화하여 도움을 부탁할 만큼 친분이 있는 <u>친구분</u> 이 몇 명 있읍니까? |

### Part D: 사회지원의 가용성

귀하의 사회적 지원 즉 가족, 이웃, 그리고 친구들로 부터의 사회적 지원에 관한 질문입니다.귀하께서 다음의 각각의 지원에 도움을 줄 수 있는 분들을 얼마나 이용할 수 있는지 말씀해 주십시요.

(1=Seldom, 2=Sometimes. 3=Often, 4=Very open, 5=Always)

|     | Statement   | 거의<br>받을수 | 가끔<br>있다 | 종종<br>있다 | 아주<br>종종 | 항상<br>있다 |
|-----|---|-----------|----------|----------|----------|----------|
|     |   | 없다        | // /     | 294 1    | 있다       | 294 1    |
| D1  | 위험에 처했을때, 좋은 조언을 줄수 있는 분들의                            | 1         | 2        | 3        | 4        | 5        |
|     | 도움을 얼마나 자주 받을 수 있습니까?                                 | 1         | 2        | 3        | 7        | <i>J</i> |
| D2  | 필요시에 귀하를 의사에게 데려가 줄 분들의                               | 1         | 2        | 3        | 4        | 5        |
|     | 도움을 얼마나 자주 받을 수 있습니까?                                 |           |          |          |          | _        |
| D 3 | 귀하가 좋은 시간을 가질수 있는 분들과 얼마나                             | 1         | 2        | 3        | 4        | 5        |
|     | 자주 교류를 가질수 있습니까?                                      |           |          |          |          | _        |
| D 4 | 귀하가 가지고 있는 문제나 또는 개인적인 문제에                            |           |          |          |          |          |
|     | 대해서 마음을 터 놓고 신뢰하며 대화를 나눌 수                            | 1         | 2        | 3        | 4        | 5        |
|     | 있는 분들의 도움을 얼마나 자주 받을 수<br>있습니까?                       |           |          |          |          |          |
| D 5 |   |           |          |          |          |          |
| D 3 | 위하에게 사장이다 에정을 모어갈 두 있는 분들기<br>  도움을 얼마나 자주 받을 수 있습니까? | 1         | 2        | 3        | 4        | 5        |
| D 6 | 귀하께서 식사를 준비할 수 없는 상황에 있을때,                            |           |          |          |          |          |
|     | 귀하의 식사를 준비해 줄 분들의도움을 얼마나                              | 1         | 2        | 3        | 4        | 5        |
|     | 자주 받을 수 있습니까?   |           |          |          |          |          |
| D 7 | 귀하가 몸이 아플때, 귀하의 일상들을 도와줄수                             |           |          |          |          |          |
|     | 있는 분들의 도움을 얼마나 자주 받을 수                                | 1         | 2        | 3        | 4        | 5        |
|     | 있습니까?   |           |          |          |          |          |
| D 8 | 귀하의 가장 큰 걱정거리나 두려움들을 나눌수                              |           |          |          |          |          |
|     | 있는 분들의 도움을 얼마나 자주 받을 수                                | 1         | 2        | 3        | 4        | 5        |
|     | 있습니까?   |           |          |          |          |          |
| D 9 | 귀하의 개인적인 문제에 대해서 어떻게                                  |           |          |          |          |          |
|     | 처리할것인가를 상의하고 조언을 줄 분들로부터                              | 1         | 2        | 3        | 4        | 5        |
|     | 얼마나 자주 도움을 받을 수 있습니까?                                 |           |          |          |          |          |
| D10 | 귀하를 꼭 필요한 사람들이라고 여기게 만들거나                             |           |          |          |          | _        |
|     | 또는 사랑해 줄 수 있는 분들로부터 도움을 얼마나                           | 1         | 2        | 3        | 4        | 5        |
|     | 자주 받을 수 있습니까?   |           |          |          |          |          |

#### **Part E: 문화변용** (A) 노인부양에 대한 태도 [Older Korean in Korea]

노인부양에 대해 귀하의 의견을 듣고 싶습니다. 각 문항의 내용에 대해 귀하의 견해가 "매우 동의하지 않는다", "동의하지 않는다", "동의한다", "매우 동의한다". 이 중에서 어디에 해당된다고 생각하십니까?

|     | 문항들   | 매우동의<br>하지<br>않는다 | 동의하지<br>않는다 | 동의한다 | 매우<br>동의<br>한다 |
|-----|---|-------------------|-------------|------|----------------|
| E1  | 성인 자녀는 부모님의 소원이라면 노부모와 함께<br>살아야 한다.                                | 1                 | 2           | 3    | 4              |
| E2  | 몸이 불편한 부모를 요양원에 계시도록 하는 것은<br>잘못이다.                                 | 1                 | 2           | 3    | 4              |
| E3  | 연로하신부모님이 중요한 가정문제에 관해<br>최종결정을 내려야 한다.                              | 1                 | 2           | 3    | 4              |
| E4  | 성인 자녀는 부모님의 생각이 옳지 않을때도<br>부모님의 결정을 따라야 한다.                         | 1                 | 2           | 3    | 4              |
| E5  | 며느리는 연로하신 부모님을 모시는데 아들보다 더<br>큰 책임을 가져야 한다.                         | 1                 | 2           | 3    | 4              |
| E6  | 성인 자녀와 그 배우자는연로하신 부모님을 돌보는<br>일을 스트레스나 부담에 대해 표현하지 않아야 한다.          | 1                 | 2           | 3    | 4              |
| E7  | 성인 자녀들은 부모님의 경제적 상태와 상관없이<br>부모님에 대한 관심의 표현으로 정기적인 용돈을<br>드려야 한다.   | 1                 | 2           | 3    | 4              |
| E8  | 연로하신 부모님의 안녕을 걱정하는 자녀는 좋지<br>않은 가족 소식을 부모에게 알리지 않아야 한다.             | 1                 | 2           | 3    | 4              |
| E9  | 연로하신 부모와 함께 사는 성인자녀와 그 배우자는<br>부모님이 집안일에 신경 쓰지 않도록 모든 집안일을<br>해야한다. | 1                 | 2           | 3    | 4              |
| E10 | 부모님과 멀리 떨어져사는 성인자녀는 적어도<br>일주일에 한번은 정기적으로 부모님께 전화하거나<br>연락해야한다.     | 1                 | 2           | 3    | 4              |

### Acculturation (B)문화변용(미국에 사는 노인이민자만)

| F11) 귀 | 하느 3 | 스크 어 | L 0 | 러어근 | 이고 | 마하시 | 111 | 77]-9 |
|--------|------|------|-----|-----|----|-----|-----|-------|

- □ 1. 한국어만
- □ 2. 영어보다 한국어를 더 많이
- □ 3. 한국어와 영어를 똑같이
- □ 4. 한국어 보다 영어를 더 많이
- □ 5. 영어만

E12) 귀하께서 주로 보시는 텔레비젼 프로그램은?

- □ 1. 한국어만
- □ 2. 영어보다 한국어를 더 많이
- □ 3. 한국어와 영어를 똑같이
- □ 4. 한국어 보다 영어를 더 많이
- □ 5. 영어만

- E13) 귀하께서 주로 보시는 라디오 프로그램은?
  - □ 1. 한국어만
  - □ 2. 영어보다 한국어를 더 많이
  - □ 3. 한국어와 영어를 똑같이
  - □ 4. 한국어 보다 영어를 더 많이
  - □ 5. 영어만
- E14) 귀하께서 주로 읽는 신문은?
  - □ 1. 한국어만
  - □ 2. 영어보다 한국어를 더 많이
  - □ 3. 한국어와 영어를 똑같이
  - □ 4. 한국어 보다 영어를 더 많이
  - □ 5. 영어만
- E15) 귀하의 가까운 친구들은?
  - □ 1. 모두 한국인이거나 한국계 미국인
  - □ 2. 미국인보다 한국인 혹은 한국계 미국인이 더 많다
  - □ 3. 반반이다
  - □ 4. 한국인 혹은 한국계 미국인보다 미국인이 더 많다
  - □ 5. 모두 미국인이다
- E16) 귀하께서 방문하거나 귀하를 방문하는 사람은?
  - □1. 모두 한국인이거나 한국계 미국인
  - □2. 미국인보다 한국인 혹은 한국계 미국인이 더 많다
  - □3. 반반이다
  - □4. 한국인 혹은 한국계 미국인보다 미국인이 더 많다
  - □ 5. 모두 미국인이다
- E17) 귀하께서 한국인의 문화적 가치와 규범에 익숙하십니까?
  - □1. 매우 익숙하다
  - □2. 익숙한 편이다
  - □3. 익숙하지 않는 편이다
  - □4. 매우 익숙하지 않다
- E18) 일반적으로 말했을때, 귀하께서 한국식 사고방식을 선호하십니까? 아니면 미국식 사고방식을 선호하십니까?
  - □1. 한국식을 아주 선호
  - □2. 한국식을 약간 더 선호
  - □3. 미국식을 약간 더 선호
  - □4. 미국식을 매우 선호

## Part F:가족 관계

여러분의 가족관계에 대한의견을 여쭙고자 합니다. 각 질문에 적합한 번호를 체크하시오.

|     | 문항들                               | 아주 | 많이 | 어느 | 약간 | 전혀 |
|-----|-----------------------------------|----|----|----|----|----|
|     |                                   | 많이 |    | 정도 |    | 없다 |
| F1  | 나는 자주 나의 자녀들과 뭐든지 이야기 한다.         | 1  | 2  | 3  | 4  | 5  |
| F2  | 나는 나의 자식들이 나를 이해한다고 생각한다.         | 1  | 2  | 3  | 4  | 5  |
| F3  | 나는 나의 자녀들과 비밀을 교환할 수 있다.          | 1  | 2  | 3  | 4  | 5  |
| F4  | 나의 자녀들은 나의 의견을 인정해준다.             | 1  | 2  | 3  | 4  | 5  |
| F5  | 나의 자녀들은 내 조언을 받아들이기 싫어한다.         | 1  | 2  | 3  | 4  | 5  |
| F6  | 나는 쓸모없는 부모라 생각한다.                 | 1  | 2  | 3  | 4  | 5  |
| F7  | 나는 내가 늙었다는것이 내 자녀에게 죄책감을<br>느낀다.  | 1  | 2  | 3  | 4  | 5  |
| F8  | 나는 내 자녀에게 설득력이없는 사람이라<br>생각한다.    | 1  | 2  | 3  | 4  | 5  |
| F9  | 비록 내가 늙었지만 내 집에서 의미있는<br>존재이다.    | 1  | 2  | 3  | 4  | 5  |
| F10 | 나의 성인자녀가 내가 가족문제에<br>공유하는것에 무시한다. | 1  | 2  | 3  | 4  | 5  |
| F11 | 나는나의 성인자녀들로 부터 소외되었다고<br>느낀다.     | 1  | 2  | 3  | 4  | 5  |
| F12 | 나의 성인 자녀와 함께 사는 것이 불편하다.          | 1  | 2  | 3  | 4  | 5  |
| F13 | 나는 나의 성인 자녀의 부모가 된것에<br>만족을한다.    | 1  | 2  | 3  | 4  | 5  |

FR1. 귀하의 가족관계는 어떠하십니까? (e.g., spouse, child, child-in-law)? (Check the box)

- □1. 매우 나쁘다
- □2. 나쁘다
- □3. 보통이다
- □4. 좋다
- □5. 매우 좋다

### Part G:도움요청 행위

다음의 질문중에 대해 귀하의 생각과 일치하는 번호에 동그라미(0 )나 체크(√)표 해 주시시기 바랍니다. (만약 귀하가 정신적인 고통을 경험하셨다면)

| G1. 귀하의 정신적인 고통에 대해서 도움 요청행위를 했습니까?  |
|--|
| □ 1. 예(만약 "예 "이면 1-1 으로 가셔서 질문에 답하시기 바랍니다)<br>□ 2.아니요(만약 "아니오"이면 1-2 으로 가셔서 질문에 답하시기 바랍니다)   |
| G1-1) (만약 "예 "이면 )어디/누구에게 도움을 요청하시겠습니까?  |
| □ 1. 가족/ 친척 (예, 남편/부인, 자녀, 손. 자녀) □ 2. 친구들 □ 3. 친구들 □ 4. 정신과 의사나 심리학자 □ 5. 사회사업가 □ 6. 의사 □ 7. 기타 ( )   |
| G1-2) (만약 "아니오"이면 ), 왜 도움 요청을/치료를 하지 않는 이유는 무엇입니까?  □ 1. 좋아지거나/ 더 이상 필요하지 않아서 □ 2. 좋아지지 않아서 □ 3. 혼자 힘으로 해결 할 수 있어서 □ 4. 치료의 나쁜 경험때문에 □ 5. 시간/교통이 없어서 □ 6. 너무 비싸서 □ 7. 보험이 커버되지 않아서 □ 8. 나의 개인적인 문제를 전문가에게 이야기하기 불편해서 |
| □ 9. 내문제를 누군가 다른 사람이 알까 걱정<br>□ 10. 약속 잡기가 힘들때   |

질문지를 완성해주셔서 감사합니다.

## APPENDIX H1: Services and Resources (Korean)

## **Counseling Centers**

1. 한인가정 상담소 3727 West 6th St. Suite 320 Los Angeles, CA 90020 (213)389-6755

2. 한인 커뮤니티 서비스 1050 South Brookhurst Road Fullerton, CA 92833 (714) 449-1339

3. 아태 아시안 가족 상담 센타 (800) 339-3940 (800) 978-3600 (323) 653-4042

## References

- Abe-Kim, J., Takeuchi, D., Hong, S., Zane, N., Sue, S., Spencer, S., Appel, H., Nicdao, & Alegria, M.(2007). Use of mental health-related services among immigrant and U.S. born Asian Americans: Results from the National Latino and Asian American study.

  \*\*American Journal of Public Health, 97(1), 91-98.
- Ahn, J. (2012). An analysis on the explanatory model for suicidal ideation among older Korean immigrants in the US: mediating effects of depression and moderation effects of age.

  \*Korean Journal Family Social Work, 38, 257-290.
- Ahn, J., & Kim, B. J. (2015). The relationships between functional limitation, depression, suicidal ideation, and coping in older Korean immigrants. *Journal Immigrant Minority Health*, 17, 1643-1653. doi 10.1007/s10903-015-0204-2
- Aiba, M., Matsui, Y., Kikkawa, T., Matsumoto, T., & Tachimori, H. (2011). Factors influencing suicidal ideation among Japanese adults: from the national survey by the Cabinet Office.
- Ali, S. (2014). Identification and Approach to Treatment of Mental Health Disorders in Asian American Populations. In *The Massachusetts General Hospital Textbook on Diversity* and Cultural Sensitivity in Mental Health (pp. 31-59). Springer New York.
- Akutsu, P. D., Castillo, E. D., & Snowden, L. R. (2007). Differential referral patterns to ethnicspecificand mainstream mental health programs for four Asian American groups.

  \*American Journal of Orthopsychiatry, 77(1), 95-103.
- Akutsu, P. D., & Chu, J. P. (2006). Clinical problems that initiate professional help-seeking behaviors from asian americans. *Professional Psychology: Research and Practice*, *37*(4), 407.

- Akutsu, P. D., Tsuru, G. K., & Chu, J. P. (2004). Predictors of nonattendance of intake appointments among five Asian American client groups. *Journal of Consulting and Clinical Psychology*, 72(5), 891.
- American Psychiatric Association, & American Psychiatric Association (2000). DSM-IV-TR:

  Diagnostic and statistical manual of mental disorders, text revision. Washington, DC:

  American Psychiatric Association, 75.
- Ayres, M. M., & Woodtli, A.(2001). Concept analysis: abuse of ageing caregivers by elderly care recipients. *Journal of advanced nursing*, 35(3), 326-334.
- Babbie, E. (2004). The Practice of Social Research, Wadsworth, Thomson Learning Inc. *Belmont,*CA.
- Barbui, C., & Tansella, M. (2009). Suicide prevention strategies and mental disorders. *Epidemiologia Psichiatria Sociale*, 18(3), 169-171.
- Beekman, A. T., Geerlings, S. W., Deeg, D. J., Smit, J. H., Schoevers, R. S., de Beurs, E., Braam, A.W., Brenda, W. J., & Tilburg, W. (2002). The natural history of late-life depression: a 6-year prospective study in the community. *Archives of general psychiatry*, *59*(7), 605-611.
- Behere, P. B., Das, A., Yadav, P. B., & Behere, A. P.(2013). Religion and mental health. *Indian Journal of Psychiatry*, 55 (6), 187-194.
- Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International journal of intercultural relations*, 29(6), 697-712.
- Bernstein, K. S.(2007). Mental health issues among urban Korean-American immigrants. *Journal of Transcultural Nursing*, 18, 175-180.

- Bernstein, K. S., Park, S. Y., Shin, J., Cho, S., & Park, Y.(2011). Acculturation, discrimination and depressive symptoms among Korean immigrants in New York City. *Community mental health journal*, 47(1), 24-34. doi:10.1007/s10597-009-9261-0
- Boey, K.W.(2001). Contribution of Chronic Life Strain to Mental Health Status of Chinese Older Adults. *Journal of Gerontological Social Work* 35(1), 39-52.
- Centore, A. J., & Clinton, T. (2008). Benefits of religion on recovery from relationship problems.

  The role of religion in Marriage and Family Counseling, 181-196.
- Cha, S. E.(2007). Marital status of elderly: does it really matter for health? *Journal of the Korean Gerontological Society*, 27(2), 371-392, (in Korean).
- Charlson, T. D., & Peterson, E.W.(2002). Medical comorbidity and late life depression: What is known and what are the unmet needs? *Biological Psychiatry*, 52, 226-235.
- Chan, A., Malhotra, C., Malhotra, R. & Ostbye, T.(2011). Living arrangements, social networks ans depressive symptoms among older men and women in Singapore. *International Journal of Geriatric Psychiatry*, *6*, 630-636.
- Chang, M., & Moon, A. (2016). Correlates and Predictors of Psychological Distress Among

  Older Asian Immigrants in California. *Journal of gerontological social work*, 59(2), 77
  97. doi:10.1080/01634372.2016.1140694
- Chittleborough, C. R., Winefield, H., Gill, T. K., Koster, C., & Taylor, A. W.(2011). Age differences in associations between psychological distress and chronic conditions.

  International journal of public health, 56(1), 71-80.
- Chiriboga, D.A., Black, S.A., Aranda, M., & Markides, K.(2002). Stress and depressive symptoms among Mexican American elders. *Journal of Gerontology: Psychological Sciences*. 57B(6), 559-568. doi:10.1093/geronb/57.6

- Choi, J., Miller, A., & Wilbur, J.(2009). Acculturation and depressive symptoms in Korean immigrant women. *Journal of Immigrant and Minority Health*, *11*(1), 13-19.
- Cho, J., Choi, E. K., Kim, S. Y., Shin, D. W., Cho, B. L., Kim, C. H., ... & Park, J. H.(2013).

  Association between cancer stigma and depression among cancer survivors: a nationwide survey in Korea. *Psycho-Oncology*, 22(10), 2372-2378
- Cho, S., Park, S. Y., Bernstein, K. S., Roh, S., & Jeon, G. S.(2015). Socio-demographic and health behavioral correlates of depressive symptoms among Korean Americans.

  Community mental health journal, 51(4), 414-423.
- Cole, M.G., & Dendukuri, N.(2004). Feasibility and effectiveness of brief interventions to prevent depression in older subject: A systematic review. *International Journal of Geriatric Psychiatry*, 19, 1019-1020.
- Cohen, S., Janicki-Deverts, D., & Miller, G. E.(2007). Psychological stress and disease. *Jama*, 298(14), 1685-1687.
- Cohen, F. L. (1979). Lazarus, R. S. (1979). Coping with the stresses of illness. *Health psychology: A handbook*, 217-254.
- Conwell, Y., Duberstein, P. R., & Caine, E. D.(2002). Risk factors for suicide in later life. *Biological Psychiatry*, 52(3). 193-204. doi: 10.1016/S0006-3223(02)01347-1
- Conwell, Y., Duberstein, P. R., Hirsch, J. K., Conner, K. R., Eberly, S., & Caine, E. D.(2010).

  Health status and suicide in the second half of life. *International Journal of Geriatric Psychiatry*, 25, 371–379.doi.org/10.1002/gps.2348
- Conwell, Y., & Thompson, C.(2008). Suicidal behavior in elders. *Psychiatric Clinics of North America*, 31(2), 333-356.

- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E.(2003). Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research*, 209-240.
- Cummings, J. R., & Druss, B. G.(2011). Racial/ethnic differences in mental health services use among adolescents with major depression, *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(2), 160-170.
- Djernes, J. K.(2006). Prevalence and predictors of depression in populations of elderly: A review.

  \*\*Acta Paychiatrica Scandinavica, 113(5), 372-387.
- Endler, N. S., & Parker, J. D.(1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, *58*(5), 844-854.doi:10.1037/0022-3514.58.5.844
- Fan, R. (2007). Which care? Whose responsibility? And why family? A Confucian account of long-term care for the elderly. *Journal of Medicine and Philosophy*, *32*(5), 495-517.
- Fowler, M.(2009). Refactoring: improving the design of existing code. Pearson Education India.
- Folkman, S.(1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, 46, 839-852.
- Folkman, S., & Lazarus, R.(1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21, 219-239.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J.(1986). Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes. *Journal of personality and social psychology*, 50(5), 992.

- Gibler, K. M., & Lee, E. (2005). The impact of economic, demographic, and cultural changes on preference for independent living arrangements and seniors housing in South Korea. *Journal of Housing for the Elderly*, 19 (2), 87-106.
- González, H.M., Haan, M.N., &Hinton, L. (2001). Acculturation and the prevalence of depression in older Mexican Americans: Baseline results of the Sacramento Area Latino Study on Aging. *Journal of the American Geriatrics Society*, 49, 948-953.
- Han, H. R., Kim, M., Lee, H. B., Pistulka, G., & Kim, K. B.(2007). Correlates of depression in the Korean American elderly: Focusing on personal resources of social support. *Journal* of Cultural Gerontology, 22, 115-127.
- Han, B., Kott, P. S., Hughes, A., McKeon, R., Blanco, C., & Compton, W. M.(2016a).
  Estimating the rates of deaths by suicide among adults who attempt suicide in the United
  States. *Journal of Psychiatric Research*, 77, 125-133.
  doi:10.1016/j.jpsychires.2016.03.002
- Han, K. M., Won, E., Paik, J. W., Lee, M. S., Lee, H. W., & Ham, B. J. (2016 b). Mental health service use in adults with suicidal ideation within a nationally representative sample of the Korean population. *Journal of Affective Disorders*, 193, 339-347.
- Har, J., & Carr, D.(2005). The effect of parent-child geographic proximity on widowed parents' psychological adjustment and social integration. *Research on Aging*, 27(5), 578-610.
- Hooyman, N. R., & Kiyak, H. A. (2005). Social Gerontorology.
- Hovey, J. (2000). Acculturative stress, depression, and suicidal ideation among Central American immigration, *Suicide and Life-Threatening Behavior 30*, 125-139.

- Hovey, J. D., Kim, S. E., & Seligman, L. D.(2006). The influences of cultural values, ethnic identity, and language use on the mental health of Korean American college students. *The Journal of Psychology*, 140(5), 499-511.
- Hwang, W., Chen, C., Takeuchi, D. T., Myers, H. F., & Siddarth, P.(2005). Age of first onset major depression in Chinese Americans. *Cultural Diversity and Ethnic minority*\*Psychology, 11(1), 16-27.
- Hyun, K. J. (2001). Socio cultural change and traditional values: Confucian values among Koreans and Korean Americans. *International Journal of Intercultural Relations*, 25(2), 203-229.
- Ina, K., Hayashi, T., Nomura, H., Ishitsuka, A., Hirai, H., & Iguchi, A.(2011). Depression, quality of life (QoL) and will to live of community-dwelling postmenopausal women in three Asian countries: Korea, China and Japan. *Archives of gerontology and geriatrics*, 53(1), 8-12.doi: 10.1016/j.archger.2010.05.010.
- Inman, A. G., & Yeh, C. J. (2007). Asian American stress and coping. In F. T. Leong, A., Ebreo,L. Kinoshita, A. G. Inman, L. H. Yang, & M. Fu (Eds.), *Handbook of Asian American*psychology (2nd ed., pp. 323-338). London: Sage.
- Jang, S. I., Bae, H. C., Shin, J., Jang, S. Y., Hong, S., Han, K. T., & Park, E. C. (2016). The effect of suicide attempts on suicide ideation by family members in fast developed country, Korea. *Comprehensive Psychiatry*.
- Jang, Y., Chiriboga, D. A., & Okazaki, S. (2009). Attitudes toward mental health services: Agegroup differences in Korean American adults. *Aging and Mental Health*, *13*(1), 127-134.

- Jang, Y., & Chiriboga, D. A. (2009). Living in a different world: Acculturative stress amongKorean American elders. *Journal of Gerontology: Psychological Sciences*, 65B(1), 14-21.doi:10.1093/geronb/gbp019
- Jang, Y., & Chiriboga, D. A. (2011). Social activity and depressive symptoms in Korean American older adults: The conditioning role of acculturation. *Journal of Aging and Health*, 23(5), 767-781.
- Jang, Y., Chiriboga, D.A., Kim, K., & Rhew, S. (2010). Perceived Discrimination in Older Korean Americans, Asian American Journal of Psychology, 1 (2), 129-135. doi: 10.1037/a0019967
- Jang, Y., Kim, G., & Chiriboga, D. A. (2005). Acculturation and manifestation of depressive symptoms among Korean-American older adults. *Aging & Mental Health*, 9, 500-507. doi:10.1080/13607860500193021
- Jang, Y., Kim, G., & Chiriboga, D. A. (2006). Health perception and depressive symptoms among older Korean Americans. *Journal of Cross-Cultural Gerontology*, 21(3-4), 91-102. doi: 10.1007/s10823-006-9026-y
- Jang, Y., Kim, G., & Chiriboga, D. A. (2011). Gender differences in depressive symptoms among older Korean American immigrants. *Social work in public health*, 26(1), 96-109.
- Jang, Y., Kwag, K. H., & Chiriboga, D. A.(2010). Not saying I am happy does not mean I am not: Cultural influences on responses to positive affect items in the CES-D. *Journal of Gerontology Series B: Psychological Sciences and Social Sciences*, 65(6), 684–690.
- Jang, S. N., Kawachi, I., Chang, J., Boo, K., Shin, H. G., Lee, H., & Cho, S. I. (2009). Marital status, gender, and depression: analysis of the baseline survey of the Korean Longitudinal

- Study of Ageing (KLoSA). *Social Science & Medicine*, *69*(11), 1608-1615. doi:10.1016/j.socscimed.2009.09.007
- Jang, Y., Roh, S., & Chiriboga, D. A. (2014). The impact of acculturation on depressive symptoms: A comparison of older Korean Americans in two areas. *Asian American Journal of Psychology*, 5(3), 200.
- Jang, Y., Kim, G., Hansen, L., & Chiriboga, D. A. (2007). Attitudes of older Korean Americans toward mental health services. *Journal of the American Geriatrics* Society, 55(4), 616-620. doi: 10.1111/j.1532-5415.2007.01125.x
- Jang, Y., Park, N. S., Yoon, H.Y., Ko, J. E., Jung, H., & Chiriboga, D. A.(2016). Mental health literacy in religious leaders: a qualitative study of Korean American Clergy. *Health and Social Care in the Community*. doi: 10.1111/hsc.12316
- Jang, Y., Small, B. J., & Haley, W. E. (2001). Cross-cultural comparability of the Geriatric Depression Scale: comparison between older Koreans and older Americans. *Aging & Mental Health*, 5(1), 31-37.
- Jeon, G.S., Jang, S. N., Rhee, S. J., Kawachi, I., & Cho, S. I. (2007). Gender differences in correlates of mental health among elderly Koreans. *Journals of Gerontology Series B* \_ *Psychological Sciences and Social Sciences*, 62(5), S323-S329.
- Jeon, H. J., Lee, J. Y., Lee, Y. M., Hong, J. P., Won, S. H., Cho, S. J., Kim, J. Y., Chang, S. M., Lee, D., Lee, H. W., & Cho, M. J. (2010). Life time prevalence and correlates of suicidal ideation, plan, and single and multiple attempts in a Korean nationwide study. *Journal of Nervous Mental Disease*, 198,643-646.

- Ji, P., & Duan, C. (2006). The relationship among acculturation, acculturation stress, and depression for a Korean and a Korean American sample. Asian Journal of Counseling. Special Issue: Youth Counseling, 13(2), 235-270.
- Jung, S. H. (2005). The socioeconomic burden of suicide and depression in Korea. Seoul, Korea:
  National Center for Mental Health Research and Education.
- Kaplan, M. S., McFarland, B. H., Huguet, N., & Newsom, J. T.(2007). Physical illness, functional limitations, and suicide risk: a population-based study. *The American Journal of Orthopsychiatry*, 77(1), 56-60.
- Kang, S., Domanski, M. D., & Moon, S. S. (2009). Ethnic enclave resources and predictors of depression among Arizona's Korean immigrant elders. *Journal of Gerontological Social Work*, 52(5), 489-502.
- Keum, M. J. (2003). Difference of counseling expectation between therapist and client and correlation of cultural difference. *The Korean Journal of Counseling and Psychotherapy*, 14, 529-546.
- Kessler, R. C., Andrews, G., Colpec, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L. T., Walters, E. E., Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalence and trends in non-specific psychological distress. *Psychological Medicine*, 32, 959-976.doi:10.1017/S0033291702006074
- Kim, J. (2010). Neighborhood disadvantage and mental health: The role of neighborhood disorder and social relationships. *Social Science Research*, 39(2), 260-271.
- Kim, M. T. (2002). Measuring depression in Korean Americans: Development of the Kim depression scale for Korean Americans. *Journal of Transcultural Nursing*, 13(2), 109-117.

- Kim, H. S., & Kim, H. S. (2008). Risk factors for suicide attempts among Korean adolescents. *Child Psychiatry & Human Development*, 39(3), 221-235.
- Kim, H. J., Park, E., Storr, C. L., Tran, K., & Juon, H. S. (2015). Depression among Asian-American Adults in the Community: Systematic Review and Meta-Analysis. *PloS one*, *10*(6), e0127760.
- Kim, M.T., Han, H. R., Shin, H. S., Kim, K. B., & Lee, H. B.(2005). Factors associated with depression: Experience of immigrant populations: A study of Korean immigrants.

  \*Archives of Psychiatric Nursing, 19(5), 217-225.
- Kim, B. J., & Ahn, J. (2014). Factors that influence suicidal ideation among elderly Korean immigrants: focus on diatheses and stressors. *Aging Mental Health*, 18(5), 619-627.
- Kim, E., Seo, K., & Cain, K. C. (2010). Bi-dimensional acculturation and cultural response set in CES-D among Korean immigrants. *Issues in Mental Health Nursing*, *31*(9), 576-583.
- Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist*, 63, 518-526.
- Kirmayer, L. J., Narasiah, L., Munoz, M., Rashid, M., Ryder, A. G., Guzder, J., ... & Pottie, K. (2011). Common mental health problems in immigrants and refugees: general approach in primary care. *Canadian Medical Association Journal*, *183*(12), E959-E967.
- Korea Institute for Health and Social Affairs (KIHASA). (2010). *Analysis and Projection of Changes in the Lives of Elderly Koreans*. Seoul, South Korea: Lee, Y., Chung, K., Yeom, J., Oh, Y., Yoo, H., & Lee, E.
- Koenig, H. G. (2009). Research on religion, spirituality, and mental health, *The Canadian Journal of Psychiatry*, *54*(5), 283-291.

- Koenig, H. G. (2008). Concerns about measuring "spirituality" in research. *The Journal of nervous and mental disease*, 196(5), 349-355.
- Koenig, H. G. (2007). Religion and depression in older medical inpatients. *The American Journal of Geriatric Psychiatry*, 15, 282-291.
- Koenig, H. G. (2006). Religion, spirituality and aging.
- Koenig, H. G., McCullough, M. E., & Larson, D. B. (2001). *Handbook of religion and health*:

  Oxford University Press. *New York*.
- Korean National Statistics. (2006). Statistics for the elderly. Daejeon, Korea.
- Korea National Statistical Office, (2000, 2008, 2014).
- Korea Development Institute (2006). *Census 2006: Employed person by industry*. Seoul, Korea: Statistical Publication Div., NSO
- Kothari, C. R. (2004). Research methodology: Methods and techniques. New Age International.
- Kraaij, V., Arensman, E., & Spinhoven, P. (2002). Negative life events and depression in elderly persons a meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57(1), P87-P94.
- Kuo, B. C. H., Chong, V., & Joseph, J.(2008). Depression and its psychosocial correlates among older Asian immigrants in North America, *Journal of Aging and Health*, 20(6), 615-652.doi: 10.1177/0898264308321001
- Kuo, B. C. H. & Guan, J.(2006). Sociocultural predictors of depression for Chinese immigrant elderly in Canada: Acculturation, relationship with adult children, social support, and perceived services barriers. In D. Zinga (Ed.), *Navigating multiculturalism: Negotiating change* (pp. 373-392). Newcastle upon Tyne: Cambridge Scholars Publishing.

- Lai, D. W. L. (2003). Measuring depression of elderly Chinese Americans: A replication study.

  Home Health Care Service Quarterly, 22, 65-85.
- Lai, D. W. L. (2004). Depression among elderly Chinese-Canadian immigrants from Mainland China. *Chinese Medical Journal*, *117*, 677-683.
- Lai, D. W. L., & Surood, S. (2008). Predictors of depression in aging South Asian Canadians, *Journal of Cross-Cultural Gerontology*, 23, 57-75. doi: 10.1007/s10823-007-9051-5.
- Lazarus, R., & Folkman, S. (1984). Stress, Appraisal, and Coping, New York: Springer
- Lazarus, R., & Folkman, S. (1986). Stress processes and depressive symptomatology. *Journal of Abnormal Psychology*, 95(2), 107-113.
- Lee, J. (2015). Hwabyung and depressive symptoms among Korean immigrants. *Social Work in Mental Health*, *13*(2), 159-185.
- Lee, K. H. (2010). *Help-seeking behaviors by Korean Americans with depression or anxiety*.

  University of Illinois at Chicago, Health Sciences Center.
- Lee, H. B., Hanner, J. A., Cho, S. J., Han, H. R., & Kim, M. T. (2008). Improving access to mental health services for Korean American immigrants: Moving toward a community partnership between religious and mental health services. *Psychiatry Investigation*, *5*(1), 14-20.
- Lee, Y. M. (2007). Immigration experience among elderly Korean immigrants. *Journal of Psychiatric and Mental Health Nursing*, 14 (4), 403-410.
- Lee, Y. M. & Holm, K.(2011). Family Relationships and Depression among Elderly Korean Immigrants. *International Scholarly Research Network Nursing*, 2011. doi:10.5402/2011/429249

- Lee, J.(2015). Hwabyung and Depressive Symptoms among Korean Immigrants Hwabyung and Depressive Symptoms among Korean Immigrants. *Social Work in Mental Health*, *13*(2), 159-185. doi:10.1080/15332985.2013.812538
- Lee, E. O. (2007). Religion and spirituality as predictors of well-being among Chinese American and Korean Americano older adults. *Journal of Religion, Spirituality & Aging, 19*(3), 77-100.
- Lee, H. Y., Moon, A., & Knight., B. (2005). Depression among Elderly Korean immigrants:

  Exploring socio-cultural factors. *Journal of Ethnic and Cultural Diversity in Social Work,*13(4),1-26.
- Lee, K. H., & Yoon, D. P. (2011). Factors influencing the general well-being of low-income Korean immigrant elders. *Social work*, *56*(3), 269-279.
- Leong, F. T. L., & Lau, A. S. L. (2001). Barriers to providing effective mental health services to Asian Americans. *Mental Health Services Research*, *3*(4), 201-214.
- Leung, P., Cheung, M., & Cheung, A.(2010). Vietnamese Americans and Depression: A Health and Mental Health Concern. *Social Work in Mental Health*, 8(6), 526-42.
- Leung, P., Cheung, M., Kao, D., & Gulati, A. C. (2015). Prevalence and predictors of depression in the older Asian Americans in Houston. *International Social Work, 1*(15), doi:10.1177/0020872815574130.
- Lin, X., Bryant, C., Boldero, J., & Dow, B. (2015). Older Chinese immigrants' relationships with their children: A literature review from a solidarity–conflict perspective. *The Gerontologist*, 55(6), 990-1005.

- Lubben, J. E., & Gironda, M. W. (2003). Centrality of social ties to the health and wellbeing of older adults. In B. Berkman & L. K. Harooytan (Eds.), *Social work and health care in an aging world* (pp. 319-350). New York: Springer.
- Lubben, J., Blozik, E., Gillmann, G., Iliffe, S., Von Renteln Kruse, W., Beck, J. C., & Stuck, A.
  E. (2006). Performance of an abbreviated version of the Lubben Social Network Scale among three European community-dwelling older adult populations. *The Gerontologist*, 46(4), 503-513.
- Malley-Morrison, K., You, H. S., & Mills, R. B. (2000). Young adult attachment styles and perceptions of elder abuse: A cross-cultural study. *Journal of cross-cultural gerontology*, 15(3), 163-184.
- Martin, G., & Martin, B. V.(1991). *Research with Hispanic Population*. Applied social research methods series, 23, Newbury Park: Sage Publication.
- Miller, A. M., Sorokin, O., Wang, E., Feetham, S., Choi, M., & Wilbur, J. (2006). Acculturation, social alienation, and depressed mood in midlife women from the former Soviet Union.

  \*Research in nursing & health, 29(2), 134-146.
- Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist*, *58*, 24-35.
- Min, P. G., & Kim, J. H. (Eds.). (2002). *Religion in Asian America: Building Faith Communities*.

  Lanham: Alta Mira.
- Ministry of Health and Welfare, Korea Institute for Health and Social Affairs (KIHASA, 2010)
- Min, J.W., & Lee, S.H.(2015). Validation of the K6/K10 scales of psychological distress and their optimal cutoff scores for older Koreans, *The International Journal of Aging*, 80(3), 264-282. doi: 10.1177/0091415015590316

- Min, J.W., & Moon, A.(2015).Older Asian Americans. In B. Berkman(Eds.). (2015), *Handbook of Social Work in Health and Aging* (pp. 515-526). Oxford: Oxford University Press.
- Min, J. W., Moon, A., & Lubben, J. E. (2005). Determinants of psychological distress overtime among older Korean immigrants and non-Hispanic White elders: Evidence from atwowave panel studies. *Aging & Mental Health*, *9*, 210-222. doi:10.1080/13607860500090011
- Mirowsky, J., & Ross, C. E.(2002). Measurement for a human science. *Journal of Health and Social Behavior*, 43(2). 152-170.
- Moon, A. (2000). Perceptions of elder abuse among various cultural groups: Similarities and differences. *Generations*, 24(2), 75.
- Moon, A., & Cho, I. (2012). Psychology of Asian American older adults: Status, challenges, and strengths. E. C. Chang, C. A. Downey (Eds.), *Handbook of Race and Development in Mental Health*, 189-206. doi: 10.1007/978-1-4614-0424-8\_11
- Mui, A. C. (2000). Stress, coping, and depression among elderly Korean immigrants. *Journal of Human Behavior in the Social Environment*, *3*(3-4), 281-299.
- Mui, A., & Kang, S.K.(2006). Acculturation stress and depression among Asian immigrant elders. *Social Work*, *51*(3), 243-255.doi:10.1093/sw/51.3.243
- Mulvaney-Day, N. E., Alegria, M., & Sribny, W. (2007). Social cohesion, social support, andhealth among Latinos in the United States. *Social Science and Medicine*, 64(2), 477-495.
- Nelson-Becker, H. (2005). Religion and coping in older adults: A social work perspective. *Journal of Gerontological Social Work*, 45(1-2), 51-67.

- Noh, S., & Kaspar, V.(2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. *American Journal of Public Health*, 93, 232-238.
- Noh, S., Kaspar, V., & Wickrama, K. A. S.(2007). Overt and subtle racial discrimination and mental health: Preliminary findings for Korean immigrants. *American Journal of Public Health*, 97(7), 1269-1274.
- Oh, E. H., Kim, M. D., & Hong, S. C. (2009). The effect of the traditional living arrangement,

  Anpakkori, on depressive symptoms in elderly people residing on Jeju Island. *Psychiatry Investigation*, 6, 131-140.
- Oh, D. H., Park, J. H., Lee, H. Y., Kim, S. A., Choi, B. Y., & Nam, J. H. (2015). Association between living arrangements and depressive symptoms among older women and men in South Korea. *Social psychiatry and psychiatric epidemiology*, *50*(1), 133-141. doi:10.1007/s00127-014-0904-2
- Oh, D.H., Kim, S. A., Lee, H.Y., Seo, J.Y., Choi, B.Y., & Nam, J. H. (2013). Prevalence and correlates of depressive symptoms in Korean adults: results of a 2009 Korean community health survey. *Journal of Korean Medical Science*, 28(1), 128-135. doi: 10.3346/jkms.2013.28.1.128.
- Oh, Y., Koeske, G.F., & Sales, E. (2002). Acculturation, stress, and depressive symptoms among Korean immigrants in the United States. *The Journal of Social Psychology*, *142*(4), 511-526.doi: 10.1080/00224540209603915
- Oquendo, M. A., & Mann, J. J. (2008). Suicidal behavior: a developmental perspective. *The Psychiatric clinics of North America*, 31(2), 13-16.

- Organisation for Economic Co-operation and Development. (2008) .OECD Health Data 2008: Statistics and Indicators for 30 Countries. Washington (DC):OECD Publishing.
- Pan, A., Franco, O. H., Wang, Y.-f., Yu, Z.-j., Ye, X.-w., & Lin, X. (2008). Prevalence and geographic disparity of depressive symptoms among middle-aged and elderly in China. *Journal of Affective Disorders*, 105(1-3), 167-175.
- Park, C.L. (2005). Religion as a Meaning-Making Framework in Coping with Life Stress. *Journal of Social Issues*, 61(4), 707-729.
- Park, C. L. (2007). Religiousness/spirituality and health: A meaning systems perspective. *Journal of behavioral medicine*, 30(4), 319-328.
- Park, H., & Choi, J. (2015). Long-term trends in living alone among Korean adults: age, gender, and educational differences. *Demographic Research*, 32, 1177-1208.
- Park, N. S., Jang, Y., Lee, B. S., Haley, W. E., & Chiriboga, D. A. (2013). The mediating role of loneliness in the relation between social engagement and depressive symptoms among older Korean Americans: Do men and women differ? *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 68, 193-201. doi:10.1093/geronb/gbs062
- Park, N. S., Jang, Y., Lee, B. S., & Chiriboga, D. A.(2015). The relation between living alone and depressive symptoms in older Korean Americans: do feelings of loneliness mediate?.

  \*Aging & mental health\*, 1-9.
- Park, J. H., & Kim, K.W.(2012). A review of the epidemiology of depression in Korea. *Journal of the Korean Medical Association*, 54(4), 362-369.
- Park, Y. J., Kim, H. S., Kang, H. C., & Kim, J. W. (2001). A survey of hwa-byung in middle-age Korean women. *Journal of Transcultural Nursing*, 12(2), 115-122.

- Park, Y. J., Kim, H. S., Schwartz-Barcott, D., & Kim, J. W. (2002). The conceptual structure of hwa-byung in middle-aged Korean women. *Health Care for Women International*, 23(4), 389-397.
- Park, J. H., Kim, K.W., Kim, M.H, Kim, M.D., Kim, B.J., Kim, S.K., et al.(2012). A nationwide survey on the prevalence and risk factors of late life depression in South Korea. *Journal of Affective Disorders*, *138*, 34-40. doi: 10.1016/j.jad.2011.12.038
- Park, H.S., Schepp, K.G., Jang, E.H., & Koo, H.Y.(2006). Predictors of suicidal ideation among high school students by gender in South Korea. *Journal of School Health* 76,181-188.
- Park, J.I., Hong, J.P., Park, S., & Cho, M.J.(2012). The relationship between religion and mental disorders in a Korean population. *Psychiatry Investigation*, *9*(1), 29-35. doi: 10.4306/pi.2012.9.1.29
- Park, K. S., Phua, V., McNally, J., & Sun, R. (2005). Diversity and structure of intergenerational relationships: Elderly parent–adult child relations in Korea. *Journal of cross-cultural gerontology*, 20(4), 285-305.
- Park, J.I., Han, M., Kim, M.S., Yoon, M.S., Ko, S.H., Cho, H.C., & Chung, Y.C. (2014).

  Predictors of suicidal ideation in older individuals receiving home-care services.

  International Journal Geriatric Psychiatry, 29, 367-376. doi:10.1002/gps.4012.
- Park, S. M., Cho, S. I., & Moon, S. S. (2010). Factors associated with suicidal ideation: role of emotional and instrumental support. *Journal of Psychosomatic Research*, 69(4), 389-397. doi: 10.1016/j.jpsychores.2010.03.002
- Park, J. H., Lee, J. J., Lee, S. B., Huh, Y., Choi, E. A., & Youn, J. C. (2010). Prevalence of major depressive disorder and minor depressive disorder in an elderly Korean population:

- Results from the Korean Longitudinal Study on Health and Aging (KLoSHA). *Journal of Affective Disorders*, 125(1-3). 234-40. doi: 10.1016/j.jad.2010.02.109
- Park, W. (2009). Acculturative stress and mental health among Korean adolescences in the United States. *Journal of Human Behavior in the Social Environment*, 19, 626-634.
- Park, S., & Bernstein, K.S.(2008). Depression and Korean American immigrants. *Archives of Psychiatric Nursing*, 22 (1), 12-19.
- Parker, J. D., & Endler, N. S. (1996). Coping and defense: A historical overview.
- Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of health and social behavior*, 2-21.
- Raymo, J. M., Kikuzawa, S., Liang, J., & Kobayashi, E. (2008). Family structure and well-being at older ages in Japan. *Journal of Population Research*, 25(3), 379-400.
- Richards, M., Shipley, B., Fuhrer, R., & Wadsworth, M. (2004). Cognitive ability in childhood and cognitive decline in mid-life: Longitudinal birth cohort study. *British Medical Journal*, 328, 552. doi:10.1136/bmj.37972.513819.EE
- Ridner, S. H. (2004). Psychological distress: concept analysis. *Journal of advanced nursing*, 45(5), 536-545.
- Roh, S., Jang, Y., Chiriboga, D. A., Kwag, K. H., Cho, S., & Bernstein, K. (2011). Perceived neighborhood environment affecting physical and mental health: A study of Korean American older adults in New York City. *Journal of Immigrant and Minority Health*, 13(6), 1005-1012.
- Russell, D., & Taylor, J. (2009). Living alone and depressive symptoms: the influence of gender, physical disability, and social support among Hispanic and non-Hispanic older adults.

- The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 64(1), 95-104.
- Ryan, A. S., Mui, A. C., & Cross, P. (2003). Asian American elders in New York City: A study to assess health, social needs, quality of life and quality of care. *New York: Asian American Federation of New York*.
- Schomerus, G., Matschinger, H., & Angermeyer, M. C. (2009). The stigma of psychiatric treatment and help-seeking intentions for depression. *European archives of psychiatry and clinical neuroscience*, 259(5), 298-306.
- Scharlach, A.E., Kellam, R., Ong, N., & Goldstein, C.(2006). Cultural attitudes and caregiver service use. *Journal of Gerontological Social Work, 47*(1-2), 133-156. doi: 10.1300/J083v47n01\_09
- Sharpe, D. L. (2008). Economic status of older Asians in the United States. *Journal of Family and Economic Issues*, 29(4), 570-583.
- Sherbourne, C. D., & Stewart, A. L. (1991). The MOS Social Support Survey. *Social Science & Medicine*, 32, 705-714.
- Shin, J. (2014). Living independently as an ethnic minority elder: A relational perspective on the issues of aging and ethnic minorities. *American Journal of Community Psychology*, *53*, 433 -446. doi:10.1007/s10464-014- 9650-6
- Shin, J. K.(2002). Help-seeking behaviors by Korean immigrants for depression. *Issues in Mental Health Nursing*, 23, 461-476. doi:10.1080/01612840290052640
- Shin, J.Y., D'Antonio, E., Son, H., Kim, S.A., & Park, Y.(2011). Bullying and discrimination experiences among Korean-American adolescents. *Journal of Adolescence*, *34*(5), 873-883.

- Shin, M. K., Choe, M. A., Kim, J., & Jeon, M.Y.(2010). Depressive symptoms in community-dwelling elderly Korean immigrants and elderly Koreans, *Research Gerontological Nursing*, *3*, 1-8.
- Shin, H., Han, H., & Kim, M. (2007). Predictors of psychological well-being amongst Korean immigrants to the United States: A structured interview survey. *International Journal of Nursing Studies*, 44(3), 415-426.
- Shin, S. H., & Sok, S. R. (2012). A comparison of the factors influencing life satisfaction between Korean older people living with family and living alone. *International nursing* review, 59(2), 252-258.
- Society for the Study of Korean Women's Society, (2001).
- Soonthornchaiya, R., & Dancy, B. L. (2006). Perceptions of depression among elderly Thai immigrants. *Issues in Mental Health Nursing*, 27(6), 681-698.
- Southwick, S. M., Sippel, L., Krystal, J., Charney, D., Mayes, L., & Pietrzak, R. (2016). Why are some individuals more resilient than others: the role of social support? *World Psychiatry*, 15(1), 77-79.doi:10.1002/wps.20282
- Stewart, W.F., Ricci, J.A., Chee, E., Hahn, S.R., & Morganstein, D.(2003). Cost of lost productive work time among US workers with depression. *The Journal of the American Medical Association*, 289(23), 3135-3144.
- Stokes, S. C., Thompson, L. W., Murphy, S., & Gallagher-Thompson, D. (2001). Screening for depression in immigrant Chinese-American elders: Results of a pilot study. *Journal of Gerontological Social Work*, 36, 27-44.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2013). Results

- from the 2012 National Survey on Drug Use and Health: Mental health findings NSDUH Series H-47. Rockville, MD: Author.
- Taqui, A. M., Itrat, A., Qidwai, W., & Qadri, Z. (2007). Depression in the elderly: Does family system play a role? A cross-sectional study. *Bio Medical Central Psychiatry*, 7(1), 1.
- Tepper, L., Rogers, S.A., Coleman, E.M., & Malony, H. N.(2001). The prevalence of religious coping among persons with persistent mental illness. *Psychiatric Services* 52, 660-665.
- Tirrito, T., & Choi, G. (2004). Faith organizations and ethnically diverse elders: A community action model. *Journal of Religious Gerontology*, *16*(1-2), 123-142.
- U.S. Census Bureau (2010). An Aging Nation: The older population in the United States,
  Populations Estimates and Projections, Current population reports by Ortman, J.M.,
  Velkoff, V.A., & Hogan, H. May 2014. P. 25-1140.
  https://www.census.gov/prod/2014pubs/p25-1140.pdf
- US Census Bureau (2010). The Asian Population: 2010, 2010 Census Briefs, issued March 2012, p.3. from https://www.census.gov/prod/cen2010/briefs/c2010br-11.pdf
- Xia, Y. R., Do, K. A., & Xie, X. (2013). The adjustment of Asian American families to the US context: The ecology of strengths and stress. In *Handbook of marriage and the family* (pp. 705-722). Springer US.
- Yoon, G., & Song, D.(1991). Aging perceived conflicts in relationships with their offspring as a function of age, gender, cohabitation status, and marital status. *Journal of Social Psychology*, 132, 299-305.
- Yoon, H. S. (2013). Korea: Balancing economic growth and social protection for older adults. *The Gerontologist*, gnt018.

- Van Der Horst, R.K., & McLaren, S. (2005). Social relationships as predictors of depression and suicidal ideation in older adults. *Aging and Mental Health*, 9(6), 517-525.
- Zhang, W., & Ta, V. M. (2009). Social connections, immigration-related factors, and self-rated physical and mental health among Asian Americans. *Social Science and Medicine*, 68, 2104-2112.
- Wang, H., Chen, K., Pan, Y., Jing, F., & Liu, H. (2013). Associations and impact factors between living arrangements and functional disability among older Chinese adults. *PLoS One*, 8(1), e53879.
- Watari, K., & Gatz, M. (2004). Pathways to care for Alzheimer's disease among Korean Americans. *Cultural Diversity and Ethnic Minority Psychology*, *10*(1), 23-38.
- Wheaton, B. (1999). Social stress. In *Handbook of the sociology of mental health* (pp. 277-300). Springer US.
- Wong, S.T., Yoo, G. J., & Stewart, A. L. (2007). An empirical evaluation of social support and psychological well-being in older Chinese and Korean immigrants. *Ethnicity & Health*, 12(1), 43-67. doi:10.1080/13557850600824104
- Wilmoth, J. (2012). A demographic profile of older immigrants. *Public Policy and Aging Report*, 22(2). 8-11.
- Wu, B. Tran, T.V., & Amjad, Q. A. (2004). Chronic Illness and Depression among Chinese Elderly Immigrants. *The Journal of Gerontological Social Work, 43*(2/3), 79-95. doi:10.1300/J083v43n02\_06
- Weissman, J., Pratt, L. A., Miller, E. A., & Parker, J. D. (2015). Serious psychological distress among adults: United States, 2009-2013. *NCHS data brief*, 203.