

THE IMPACT OF GENDER AND CULTURAL FACTORS ON THE PATTERNS OF  
ELDER CARE SERVICE UTILIZATION AMONG FAMILY CAREGIVERS OF  
JAPANESE ANCESTRY IN THE STATE OF HAWAI'I

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## ABSTRACT

Various types of elder care services have been developed to accommodate the needs of older adults and caregivers; however, what factors affect service use decisions are mostly unknown, especially among racial/ethnic minority groups.

The purpose of this study was to examine how gender and cultural factors affect elder care service utilization among caregivers of Japanese ancestry in the State of Hawai'i. A 2-stage mixed method design, including quantitative and qualitative approaches, was utilized.

For the quantitative stage, a secondary data analysis was conducted based on a sample of 151 (115 females and 36 males) Japanese caregivers in Hawai'i to examine the impact of caregiver gender on service use patterns. Independent t-test results indicated female caregivers used a greater amount and a wider range of services than their male counterparts. Multiple regression results indicated caregiver gender still remained as a statistically significant predictor of service utilization after controlling for other predictors (e.g., education level and living arrangement).

For the qualitative stage, one-time semi-structured interviews were conducted with 23 Japanese caregivers in Hawai'i to examine the impact of culture on service use patterns. Seven themes emerged in the process of content analysis by using grounded theory. The major qualitative finding was that both cultural and non-cultural factors influenced the service use decision-making, but non-cultural factors (e.g., caregiver's work) were essential determinants of service use.

In practice, social workers need to pay attention to the dyadic relationship between caregivers and care recipients when it comes to service use decision-making. Each culture shapes certain ways to perceive caregiving; therefore, understanding cultural values/beliefs of caregivers

and care recipients helps social workers to suggest appropriate service options. As for future elder care systems, educating male caregivers on elder care services, providing language support for foreign-born caregivers and care recipients, and improving current transportation services are suggested.

## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS .....</b>	<b>iii</b>
<b>ABSTRACT.....</b>	<b>vi</b>
<b>LIST OF TABLES .....</b>	<b>xi</b>
<b>LIST OF FIGURES .....</b>	<b>xii</b>
<b>CHAPTER1: INTRODUCTION.....</b>	<b>1</b>
Statement and Importance of the Problem .....	4
Purpose of the Study .....	6
Research Questions and Hypotheses .....	10
1 <sup>st</sup> Stage: Quantitative Stage.....	10
2 <sup>nd</sup> Stage: Qualitative Stage.....	10
Significance of the Study .....	11
Relevance to Social Work and Social Welfare .....	14
Theoretical Framework .....	16
The Andersen Behavioral Model of Health Services Use.....	16
Social Exchange Theory.....	19
Definition of Terms .....	24
<b>CHAPTER2: LITERATURE REVIEW .....</b>	<b>30</b>
<b>CHAPTER3: METHODOLOGY .....</b>	<b>49</b>
1 <sup>st</sup> Stage: Quantitative Stage .....	49
Protection of Human Subjects .....	49
Participants .....	50
Original Sampling Strategy .....	50
Measures.....	51
Data Collection for the Original Data .....	52
Data Analysis.....	52
Decision on Final Data Analysis Method.....	59
2 <sup>nd</sup> Stage: Qualitative Stage.....	63
Protection of Human Subjects .....	63
Participants .....	64
Measures.....	70

Data Collection .....	72
Data Analysis.....	74
Inter-Rater Reliability.....	77
Role of Researcher .....	79
<b>CHAPTER 4: RESULTS .....</b>	<b>83</b>
1 <sup>st</sup> Stage: Quantitative Stage .....	83
Univariate Analysis: Descriptive Statistics .....	83
Bivariate Analysis: Chi-square tests and Independent t-tests.....	87
Data Transformation.....	93
Bivariate Analysis: Independent t-tests and Pearson correlations.....	95
Multiple Regression Analysis.....	97
Research Questions .....	98
2 <sup>nd</sup> Stage: Qualitative Stage.....	100
Theme 1: Cultural Factors Contributed to the Caregiver’s Perspectives of Caregiving .....	100
Theme 2: Cultural Factors Influenced Decision-Making about Service Use.....	103
Theme 3: Preferences for Professionals .....	107
Theme 4: Non-Cultural Factors Influenced Decision-Making about Service Use.....	109
Theme 5: Service Use Experience by Service Users.....	111
Theme 6: Service Use Perspectives among Non-Service Users .....	113
Theme 7: Suggestions for Future Elder Care Service Systems .....	114
Theoretical Model Based on the Qualitative Results .....	116
Research Questions .....	118
<b>CHAPTER 5: DISCUSSION .....</b>	<b>121</b>
1 <sup>st</sup> Stage: Quantitative Stage .....	121
Gender and Elder Care Service Utilization Patterns .....	121
Other Factors Influenced Elder Care Service Utilization Patterns.....	123
2 <sup>nd</sup> Stage: Qualitative Stage.....	125
Throughout the Caregiving Experience.....	126
The Service Use Decision-Making Stage.....	127
The Service Use Stage.....	131
Combined Discussion: Quantitative and Qualitative Stages.....	134
The Andersen Behavioral Model, Social Exchange Theory, and Present Study Findings ..	134

Gender and Elder Care Service Utilization Patterns .....	135
Role of “Local” Culture in Caregiving and Elder Care Service Utilization Patterns.....	137
Limitations .....	138
Implications for Social Work Practice and Education .....	140
Social Work Practice Implications .....	140
Future Elder Care Service Systems .....	142
Recommendations for Future Public Policies Related to Elder Care.....	145
Suggestions for Future Studies.....	146
Suggestions for Future Methodology .....	146
Suggestions for Future Measures .....	147
Suggestions for Future Qualitative Studies .....	149
Conclusion.....	150
<b>Appendix A: Predictors and Outcome Variable Selected for Quantitative Data Analysis.</b>	<b>152</b>
<b>Appendix B: Qualitative Interview Guide, Demographic Information, and Interview Questions.....</b>	<b>157</b>
<b>Appendix C: Results of Qualitative Data Analysis .....</b>	<b>164</b>
<b>REFERENCES.....</b>	<b>166</b>

## LIST OF TABLES

Table 3.1	Selected Predictors and Outcome Variable Based on the Andersen Model .....	53
Table 3.2	Recoded and Summed Predictors and Outcome Variable .....	55
Table 3.3	Description of the Studied Sample .....	66
Table 3.4	Caregiver Relationship to Care recipient as a Percentage and a Count of the Sample.....	67
Table 3.5	Caregiver Characteristics as a Percentage of the Sample .....	68
Table 3.6	Generation as a Percentage of the Sample .....	69
Table 3.7	Service Utilization by Caregiver Gender.....	69
Table 3.8	Services Used by Service Using Participants as a Count of the Sample .....	70
Table 3.9	An Example of Interview Question Format.....	71
Table 3.10	Grounded Theory Analysis Tools Utilized in the Data Analysis .....	74
Table 3.11	Terms and Definitions in Grounded Theory.....	78
Table 4.1	Caregiver and Care recipient Characteristics I as a Percentage of the Sample .....	84
Table 4.2	Caregiver Stress and Health Conditions .....	85
Table 4.3	Services Used by Caregiver and/or Care recipients as a Percentage of the Sample .....	86
Table 4.4	Caregiver and Care recipient Characteristics II as a Percentage of the Sample .....	88
Table 4.5	Caregiver and Care recipient Characteristics III as a Percentage of the Sample .....	90
Table 4.6	Caregiver Stress by Caregiver Gender.....	91
Table 4.7	Caregiver Physical and Emotional Health Problems and Sleep Interruption as a Percentage of the Sample .....	92
Table 4.8	Descriptive Statistics Before and After Log Transformation on Outcome Variable .....	95
Table 4.9	Statistically Significant Results in Independent t-tests.....	96
Table 4.10	Multiple Regression Results .....	98

## LIST OF FIGURES

Figure 1.1	The Process of the Present 2-Stage Study.....	9
Figure 1.2	The Andersen Behavioral Model of Health Services Use: Individual Determinants of Health Service Utilization.....	23
Figure 3.1	Quantitative Data Analysis Process .....	62
Figure 4.1	Distribution of Original Outcome Variable .....	94
Figure 4.2	Distribution of Transformed Outcome Variable.....	94
Figure 4.3	Theoretical Model: Impact of Cultural and Non-Cultural Factors on Elder Care Service Utilization Patterns .....	120

# CHAPTER 1

## INTRODUCTION

Historically, when elder care services were not available, family played a major role of taking care of older family members at home. Current demographic changes, increased longevity, and environmental changes impacting family caregivers represent potential challenges for elder care in recent years. Also, these challenges are more serious for those states, such as Hawai‘i, where the population of people 65 and over in the State is growing faster than the national average (U.S. Census Bureau, 2011). Over the years, various elder care programs and services have been developed to accommodate the needs of both caregivers and care recipients. However, why some people use services and others do not, and what factors affect such service utilization patterns, are still inconclusive despite previous service utilization studies (Bookwala, Zdaniuk, Burton, Lind, Jackson, & Schulz, 2004; Giunta, Chow, Scharlach, & Dal Santo, 2004; Hong, 2010; Montoro-Rodriguez, Kosloski, & Montgomery, 2003; Scharlach, Giunta, Chow, & Lehning, 2008; Scharlach, Kellam, Ong, Baskin, Goldstein, & Fox, 2006; Toseland, McCallion, Gerber, & Banks, 2002; Young, McCormick, & Vitaliano, 2002a, 2002b). Therefore, it is important and beneficial to reexamine service utilization patterns in order to identify potential factors and barriers affecting service use decision-making.

The State of Hawai‘i is one of the states which has a higher percentage of population aged 65 and over (14.3%) compared to the national average (13.0%) (U.S. Census Bureau, 2011). The older population in Hawai‘i is expected to keep growing since people in Hawai‘i have the longest life expectancy at birth, 81.3 years in 2010, as compared to the national average of 78.9 years (Lewis & Burd-Sharps, 2013). These current demographic changes within the State suggest an even bigger surge in the future older population. In addition, Hawai‘i is a multi-racial,

ethnic, and cultural state and racial/ethnic minorities comprise the majority of the state population, whereas Whites represent the majority in most state populations on the continental U.S. Despite such unique characteristics, elder care service utilization patterns of caregivers with various races/ethnicities are poorly understood. Furthermore, in social work practice, cultural competency and cultural values/beliefs need to be paid attention to when working with different races and ethnicities. However, if the roles of various cultures are not clearly understood, how can social workers work effectively with caregivers and care recipients with various racial/ethnic backgrounds?

Within various races and ethnic minorities in Hawai‘i, the Japanese have made a great contribution to the State economy during the plantation period (Rogers & Izutsu, 1980; Schmitt, 1977) and the development of so-called “local” culture of the State. Japanese (alone or in any combination) in Hawai‘i make up the largest percent of the population (20.9%) of those who are aged 65 and over compared to other racial/ethnic groups (U.S. Census Bureau, 2010a). Hence, studying this single ethnic group, Japanese, may be appropriate to understand their elder service utilization patterns from a Japanese cultural context, and will become an introductory step for studying other ethnic groups in the future.

In addition to the role of culture in elder care service utilization, gender is another potential factor deserving attention due to the increasing numbers of male caregivers. According to the Caregiving in the U.S. study, in the past two decades, the percent of American male caregivers has increased from 25% to 33% (National Alliance for Caregiving [NAC] & AARP, 2009b; Wagner, 1997). Asian American males (48%) engaged in caregiving more than their White (33%) and African American (29%) counterparts (NAC & AARP, 2009a). Hawai‘i also follows this trend, where in 2007, 26.4% of all caregivers in the State were males (Arnsberger &

Lum, 2007). Yet, characteristics of these Hawai‘i male caregivers, their caregiving experiences, and their service utilization are little known. Also, there have been even fewer studies conducted about service utilization among racial/ethnic minority male caregivers in the State (Lum, Sato, & Arnsberger, 2010). Thus, it is critical to include male caregivers in such service utilization studies in order to identify their service needs and barriers preventing them from using services.

Despite a continuing debate of who is responsible for elder care, the majority of care is still provided by informal/unpaid caregivers, such as family members, relatives, or friends (NAC & AARP, 2009b). In Hawai‘i, the concept of “aging in place”—allowing the elderly to remain in their choice of residence for as long as possible—has been emphasized, and elder care related policies are shifting their emphasis from institutional care to home and community-based care approach (AARP, 2011). These changes of the State elder care plan put more pressure on informal/unpaid caregivers to take charge of care for their care recipients. Therefore, public and/or private paid elder care services are needed to supplement the care provided by these caregivers and to support their needs. The purpose of this present study is to examine how and why caregivers of Japanese ancestry in the State of Hawai‘i use or do not use services by focusing on two potential factors, culture and gender. The goals of this study are to add new knowledge of service utilization patterns among Japanese caregivers in the State and to suggest future directions for elder care services to meet the needs of these caregivers and their care recipients.

This dissertation is organized in five chapters. Chapter 1 will present the introduction followed by the statement and importance of the problem, the purpose of the study, research questions and hypotheses, the significance of the study, the relevance to social work and social welfare, the theoretical framework, and the definition of terms. Chapter 2 will present a review

of the literature. Chapter 3 will present the methods of both quantitative and qualitative stages of the study. Chapter 4 will present both the quantitative and qualitative findings. Chapter 5 will present the discussions of the findings, implications for social work practice and education, suggestions for future studies, and conclusion.

### **Statement and Importance of the Problem**

Despite the higher percentage (14.3%) of those aged 65 and over in the State of Hawai‘i than the national average (13.0%; U.S. Census Bureau, 2011), there have been few current Hawai‘i caregiving studies conducted (Arnsberger & Lum, 2007) and even fewer studies (Lum, et al., 2010) targeted on specific racial/ethnic groups in the State, such as Asians. Previous Japanese caregiving studies (Young, et al., 2002a, 2002b) on the continental U.S. have not shown enough empirical evidence to determine the reasons why Japanese caregivers in the State of Hawai‘i use or do not use elder care services, how Japanese female and male caregivers utilize services similarly and differently, and the role, if any, that Japanese culture plays in elder care service utilization.

While various factors determining the use of elder care services have been identified in previous studies, gender is one factor that needs further examination in order to understand the current trend of increasing numbers of male caregivers. As the findings from earlier and limited male caregiver studies of service utilization are inconclusive (Cahill, 2000; Harris, 1993, 1998; McFarland & Sanders, 1999, 2000; Parsons, 1997; Strain & Blandford, 2002), a problem seems to be a lack of literature describing the elder care service utilization among male caregivers. Also, despite a high proportion of Asian American male caregivers (48%) engaged in caregiving compared to their White (33%) and African American (29%) counterparts (NAC & AARP, 2009a), few studies have been conducted on service utilization among specific racial/ethnic

minority male caregivers (Lauderdale & Gallagher-Thompson, 2003; Lum, et al., 2010). Thus, little seems to be known about whether or not there are gender disparities in elder care service utilization.

Culture is another factor that needs to be examined in social work research in order to work effectively with specific populations. Many service utilization studies are quantitative in nature (Bookwala, et al., 2004; Chow, Ross, Cummings, & Lin, 2000; Giunta, et al., 2004; Hong, 2010; Montoro-Rodriguez, et al., 2003; Mui & Burnette, 1994; Scharlach, et al., 2008; Toseland, et al., 2002), and the variable of “ethnicity” tends to be used as a proxy for culture in some of these studies (Chow, et al., 2000; Giunta, et al., 2004; Mui & Burnette, 1994; Scharlach, et al., 2008). However, the practice of grouping individual ethnicities into single “races” obscures the ability to draw conclusions about the influence of culture on elder care service utilization. For example, Asians are often treated as a single homogeneous racial/ethnic group (Chow, et al., 2000; Giunta, et al., 2004; Li, 2004; Scharlach, et al., 2008), and an in-depth understanding of the role of such cultural aspects as values and beliefs in caregiving and service use is generally missing from these studies.

Even though Japanese (alone or in any combination) make up 20.9% of all people in Hawai‘i aged 65 and over (U.S. Census Bureau, 2010a), previous Japanese caregiving studies (Kinoshita & Gallagher-Thompson, 2004; Young, et al., 2002a, 2002b) have been conducted in the continental U.S., such as California, where only 0.7% of the total state population regardless of age was Japanese (alone) in 2010 (U.S. Census Bureau, 2010b). Given the unique immigration and historical contexts of Hawai‘i and the continental U.S., questions can be raised about the applicability of research findings of Japanese caregiving studies on the continental U.S. to the Japanese caregivers in the State of Hawai‘i. One of the unique aspects of the multi-cultural state

of Hawai‘i has been the preservation of cultures of origin observed in the terms being “local” or understanding “local” culture. The “local” identity is an island culture regardless of ethnic background that is both a combination of cultures and one that is unique to Hawai‘i. Under such a unique cultural environment, how Japanese cultural values/beliefs have an impact on caregiving and elder care service utilization is poorly understood.

Considering all the problems presented in this section, this study seeks to identify how the two major factors of gender and culture affect elder care service utilization among Japanese family caregivers in Hawai‘i. The findings of this study may provide a better understanding of their needs in elder care services and to develop social work practice strategies for working with the Japanese population in the State.

### **Purpose of the Study**

The primary purpose of this study is to examine how gender and cultural factors affect the patterns of elder care service utilization among family caregivers of Japanese ancestry in the State of Hawai‘i. This study examines the influence of gender and cultural factors through conducting a 2-stage study that combines quantitative and qualitative approaches to demonstrate who is more likely to use or not use such services, why caregivers use or do not use such services and what role gender, culture and other factors play in determining the service utilization patterns among Japanese family caregivers in Hawai‘i. The process of this 2-stage study is presented in detail in Figure 1.1.

In addition to the primary purpose of this study, there are several additional purposes for each quantitative and qualitative stage. The purpose for the quantitative stage is to examine how gender affects elder care service utilization among family caregivers of Japanese ancestry in Hawai‘i, when controlling for other predictors, such as employment status, living arrangements,

availability of extra informal help, care recipient illness and health conditions, and caregiver stresses (e.g., financial hardship, physical strain, and emotional stress). The selection of other predictors is based on the Andersen Behavioral Model of Health Services Use (Andersen, 1995), which is used as the theoretical framework for this quantitative stage. Previously collected data from the State of Hawai‘i Family Caregiver Needs Assessment (collected in 2007) is used for secondary data analysis in this quantitative stage.

This Hawai‘i dataset was selected because the data were collected from four islands of Hawai‘i (Oahu, Hawai‘i, Maui county, and Kauai) by using a probability sample, which improves the generalizability of the study findings. In other words, the characteristics of the sample may reflect those of the entire study population (Leary, 2008).

The purpose of the qualitative stage is to develop a theoretical model that demonstrates how Japanese cultural factors (e.g., values and beliefs) affect the patterns of elder care service utilization among family caregivers of Japanese ancestry in Hawai‘i. Specific Japanese cultural factors identified in the literature, such as filial piety and the collectivistic family system, are the focus for understanding how these Japanese cultural factors affect the patterns of elder care service utilization. The impact of cultural factors in the service utilization patterns is carefully examined between service users and non-service users.

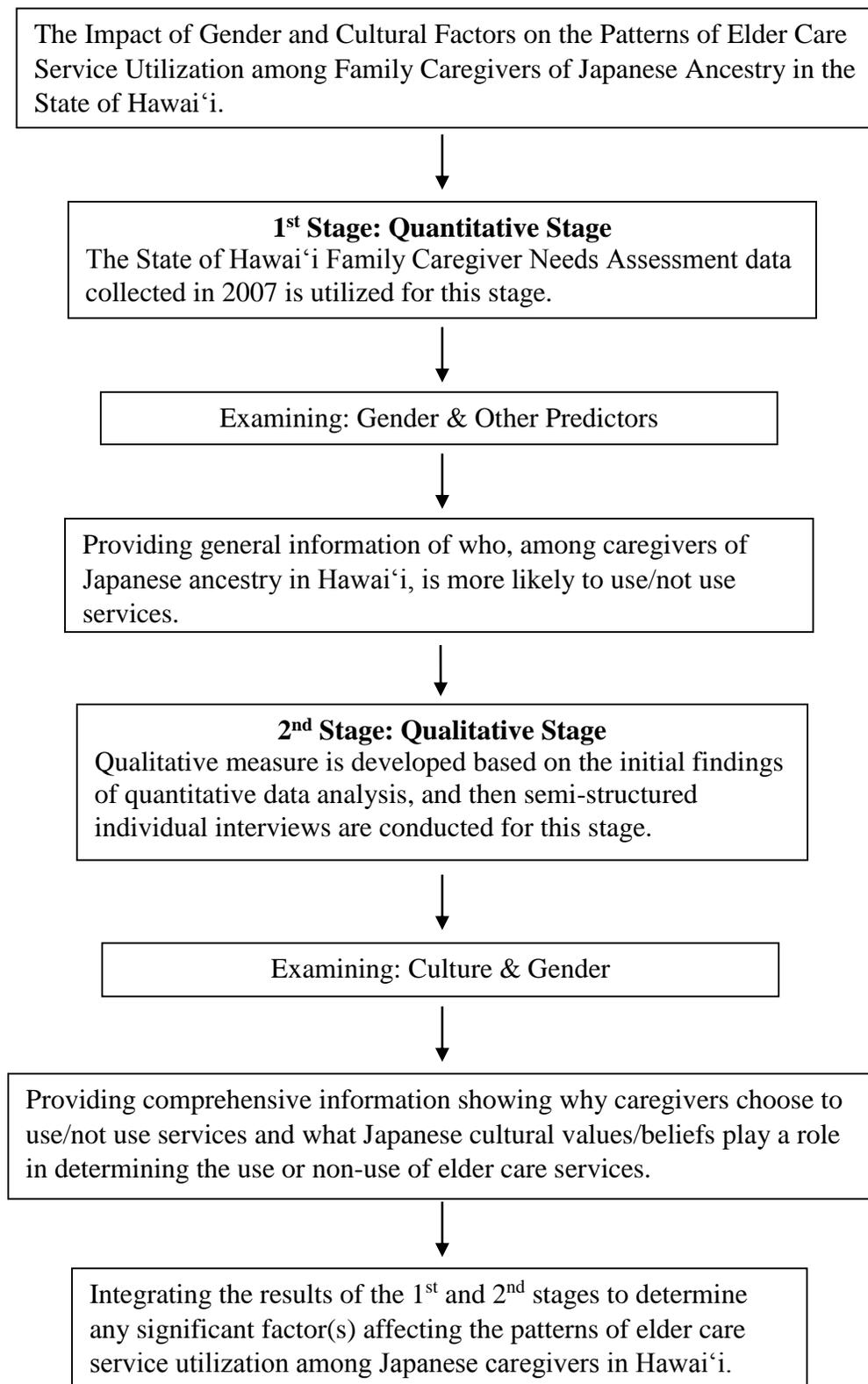
Adding this qualitative stage gives enriched meanings to this study for the following two reasons. First, any variables related to cultural factors are not contained in the Hawai‘i data that is being used for the quantitative stage. Second, the qualitative approach allows a detailed view and an in-depth understanding of individual caregiving and elder care service use experiences. Therefore, the researcher’s role should be “as an active learner who can tell the story from the

participants' view rather than as an "expert" who passes judgment on participants" (Creswell, 1998, p.18).

Three social work practice and research implications would be expected as a result of this study. First, the results of this study would suggest whether or not developing gender and/or culturally sensitive services would be helpful in supporting family caregivers of Japanese ancestry in Hawai'i. Second, this study would suggest a social work practice model which would provide strategies for working with this particular population of family caregivers in Hawai'i. Third, the results of this study would contribute to the identification of future directions for elder care services, caregiver support, and/or for developing appropriate public policies.

Figure 1.1

*The Process of the Present 2-Stage Study*



## **Research Questions and Hypotheses**

Gender and cultural factors are the focus of this study in order to answer the substantial question: how do gender, culture, and/or other factors affect the patterns of elder care service utilization among family caregivers of Japanese ancestry in the State of Hawai‘i? Research questions and research hypotheses for each of the quantitative and qualitative stages is presented as follows:

### **1<sup>st</sup> Stage: Quantitative Stage**

**Research question 1.** Does caregiver participant gender affect the utilization of elder care services among family caregivers of Japanese ancestry in the State of Hawai‘i?

**Research question 1 hypothesis.** Male caregivers of Japanese ancestry in Hawai‘i are more likely to use elder care services than their female counterparts.

**Research question 2.** Do such differences remain even after controlling for other predictors (e.g., extra informal help, care recipient illnesses and health conditions, caregiver stresses, and island) among the studied population?

**Research question 2 hypothesis.** Even when including other predictors suggested by the Andersen model, gender will still remain a significant predictor for service utilization among the studied population.

### **2<sup>nd</sup> Stage: Qualitative Stage**

**Research question 1.** How do cultural factors (e.g., Japanese cultural values, beliefs, norms, and attitudes) affect the patterns of elder care service utilization among family caregivers of Japanese ancestry in the State of Hawai‘i?

**Research question 1a.** If there are any differences, how does gender affect the patterns of elder care service utilization among the studied population?

**Research hypothesis.** Testing hypotheses is not a purpose for the qualitative stage of this study; therefore, no hypotheses are stated for the qualitative research questions.

### **Significance of the Study**

Due to methodological issues, such as sampling strategy and measures, there is limited knowledge of why some caregivers use or do not use services and what factors affect the service utilization patterns. Even considering the increasing demands on family caregivers in general, most factors that contribute to elder care service utilization are still poorly understood, especially in Hawai‘i. Therefore, this present study helps to fill the gaps in previous caregiving and service utilization studies and brings new knowledge of the current family caregiving and elder care service use situations in the State of Hawai‘i.

There are several reasons for selecting the Japanese caregivers for this present study. Japanese were the largest Asian ethnic group until World War II (Tamura, 2001). Their culture has become embedded into many aspects of the cultures of the State and has influenced the development of what is now called “local” culture in the State. In recent years, Japanese have the largest population of those aged 65 and over in the State (U.S. Census Bureau, 2010a); therefore, selecting Japanese caregivers for this present study is beneficial to understand their caregiving experiences and needs in elder care services. Examining the Japanese population may be the first step to improving social work practice in the State, and the results of this study may lead to future studies of other ethnic groups.

Previous caregiving studies have occasionally focused on racial/ethnic minority groups (Chow, et al., 2000; Giunta, et al., 2004; Scharlach, et al., 2006; Scharlach, et al., 2008; Siefert, Williams, Dowd, Chappel-Aiken, & McCorkle, 2008). However, due to issues of too small sample sizes, they often have had to combine different ethnic groups (e.g., Japanese, Chinese,

and Filipino) into one racial group. Combining Asians into a single racial/ethnic group (Chow, et al., 2000; Giunta, et al., 2004; Li, 2004; Scharlach, et al., 2008) resulted in the cultural characteristics of Asian/Asian American caregivers in different Asian ethnic groups being treated in a homogenized fashion. In addition, combining a wide range of income and education levels among the various Asian groups might lead to misinterpreting different characteristics and needs of these caregivers (Chow, et al., 2000; Giunta, et al., 2004; Li, 2004; Scharlach, et al., 2008). Furthermore, implementing culturally sensitive social services and programs often has been suggested in previous caregiving studies (Giunta, et al., 2004; Li, 2004; Scharlach, et al., 2006; Scharlach, et al., 2008). However, in order to implement such culturally sensitive social services and programs, the meanings of “cultural” and “ethnic” sensitivity need to be identified as they relate to the characteristics that vary from group to group. Therefore, it is critical to study ethnic groups individually in order to have an in-depth understanding of what potential factors (e.g., socioeconomic and cultural values and beliefs) may impact the caregiving experiences and the patterns of elder care services utilized by each group.

In the previous literature, there has been the assumption that ethnicity can be used as a predictor of cultural behaviors. This assumption is problematic because it may lead persons to miss certain significant cultural aspects and subtle nuances of caregiving experiences (Chow, et al., 2000; Giunta, et al., 2004; Scharlach, et al., 2008). For instance, some characteristics (e.g., being more aggressive, assertive, and social) among Japanese Americans on the continental U.S. are less often observed in Japanese Americans in Hawai‘i (Fugita & O’Brien, 1991). Therefore, cultural factors, such as values, beliefs, norms, traditions, generation, and the levels of assimilation and acculturation, need to be examined to have a better understanding of Japan-born and Japanese American caregivers in different cultural contexts in the U.S. In other words,

examining the within-group differences are just as important as studying between-group differences.

In addition to concerns about culturally sensitive service delivery, the recent increase in the number of caregivers, particularly male caregivers, calls for more attention to understanding their caregiving experiences, situations, and service needs. Although studies on male caregiving have been conducted during the past decades, the majority of studies have been either qualitative studies (Harris, 1993, 1998, Harris & Long, 1998, 1999; Harris, Long, & Fujii, 1998; Lauderdale & Gallagher-Thompson, 2003; McFarland & Sanders, 1999, 2000; Parsons, 1997; Russell, 2004; 2007; Sanders, 2007; Sanders & Power, 2009) or, if quantitative or mixed methods studies, have relied on fairly small sample sizes, ranging from 26 to 155 male caregivers (Cahill, 2000; Lum, et al., 2010). According to the Caregiving in the U.S. (NAC & AARP, 2009a), almost half (48%) of the Asian American caregivers were males. Despite this fact, the majority of previous male caregiving studies have been conducted primarily among White male caregivers (Harris, 1993, 1998; Russell, 2007; Sanders & Power, 2009) where the fact of disparities in research is critical. Additionally, the assumption that caregiving is a female role still exists, especially among minority ethnic groups, which may result in less attention given to the subjects by researchers. Thus, studies of male caregiving among racial/ethnic minority groups, such as Asian groups, are needed to provide a more balanced picture in research. Furthermore, limitations of such previous male caregiver research may result in male caregivers not receiving needed public attention, and thereby may delay the development of interventions and policy implementations in their support service to meet their needs.

This present study helps to fill the gaps in previous caregiving studies with consideration given to sampling issues and methodology selection. Also, focusing on Japanese caregivers in

Hawai'i and the impact of gender and cultural factors on elder care service utilization may bring new knowledge of their caregiving and current elder care service use situations, improve social work practice, and suggest future elder care systems in the State of Hawai'i.

### **Relevance to Social Work and Social Welfare**

Social Workers encompass the roles of direct social work practice with clients, change at the community level, and that of conducting research. Social Work ethical principles are based on its core values (e.g., service, social justice, and competence) (National Association of Social Workers [NASW], 2008), which need to be carried on when conducting research in the field. The relevance of the present study to social work and social welfare is addressed by using social work's ethical principles and core values in this section. As the Code of Ethics of the NASW (2008) specifies cultural competence and social diversity, "Social workers should understand culture and its function in human behavior and society, recognizing the strengths that exist in all cultures" (NASW, 2008, 1.05). Since Hawai'i is a multi-ethnic/cultural state, consideration of culture is an essential aspect in social work practice and research. The first step of achieving the goal may be having a better understanding of how cultural factors (e.g., values, beliefs, and norms) play a role in caregiving in different ethnic groups in the State. Hence, focusing on a single ethnic group of Japanese caregivers in this present study is relevant to understand Japanese culture and its function in caregiving and elder care service use experiences. Selecting a single ethnic group, in this case those of Japanese ancestry, also may provide recommendations for developing culturally sensitive or appropriate services to meet the needs of that particular group.

The core value of the fields of social work and social welfare is the enhancement of the well-being of individuals and their quality of life (NASW, 2008). Since multiple individuals are

involved in caregiving for the elderly, the well-being of both caregivers and their care recipients should be equally promoted, and their needs should be recognized in providing services for maintaining their well-being. Also, there may be a reciprocal relationship that results in both the well-being of care recipients and the well-being of their caregivers. In other words, if a care recipient has poor physical health, his/her caregiver may need to provide more care that, in turn, affects the caregiver's well-being. Although this present study focuses on caregivers, some characteristics of care recipients (e.g., living arrangement and care recipient illness and health conditions) are included in data analysis for both stages. Considering the inclusion of both caregivers and care recipient characteristics in this study may provide for better social work practice strategies to enhance the well-being and quality of life of all individuals who involved in the caregiving situation.

Both practitioners and researchers in the fields of social work and social welfare also need to pay attention to persons who are in underserved populations. One social worker role is to recognize unheard voices, and to integrate these voices into practice. Most previous caregiving studies in the U.S. have been conducted in English; therefore, older adults and family caregivers who are not able to communicate in English are normally excluded from these studies (Chow, et al., 2000; Li, 2004). Since 30.2% of those aged 60 and over in the State of Hawai'i speak a language other than English at home (as cited in Executive Office on Aging & Hawai'i State Department of Health, 2013), language becomes a barrier when conducting research studies. Another underserved population would be those caregivers who have not received any services. Due to sampling issues in research studies, these non-service using caregivers tend to have been excluded from previous studies. The exclusion of these underserved populations in previous caregiving studies limits the understanding of their needs in elder care and reasons why they do

not use services. Including these underserved populations in this present study will promote equity and social justice for all people.

The findings of this present caregiver study of a specific ethnic group (caregivers of Japanese ancestry in Hawai‘i) aim to demonstrate their needs and the meaning of culturally sensitive or appropriate in elder care services and social work practices. The study would also become a model for examining the needs of different ethnic groups in future studies.

### **Theoretical Framework**

The Andersen Behavioral Model of Health Services Use (Andersen, 1968, 1995; Andersen & Newman, 1973) and Social Exchange Theory (Homans, 1964, 1974) are used as theoretical frameworks for different purposes in the quantitative and qualitative stages of this present study.

#### **The Andersen Behavioral Model of Health Services Use**

The initial Behavioral Model of Health Services Use (Andersen, 1968; Andersen & Newman, 1973) was developed in the late 1960s to understand why families use health services. Thus, Andersen (1968, 1995) originally focused on the family as the unit of analysis because an individual health services use would be determined by a function of social and economic demographic characteristics of the family, as a unit. However, later Andersen shifted to the individual as the unit of analysis “because of the difficulty of developing measures at the family level that take into account the potential heterogeneity of family members” (Andersen, 1995, p. 1).

The Andersen model has been utilized in previous literature to both predict and explain the use of health services by examining people’s predisposing characteristics, enabling resources, and perceived need (Figure 1.2). The model suggests that “people’s use of health services is a

function of their predisposition to use services, factors which enable or impede use, and their need for care” (Andersen, 1995, p.1). Although this model was originally developed to predict and explain the use of health services, researchers have frequently used it to predict and explain elder care services use by older adults and/or their caregivers (Bookwala, et al, 2004; Casado, vanVulpen, & Davis, 2010; Giunta, et al., 2004; Hong, 2010; Kosloski, Montgomery, & Karner, 1999; Montoro-Rodriguez, et al., 2003; Mui & Burnette, 1994; Scharlach, et al., 2008; Toseland, et al., 2002).

After Andersen shifted the unit of analysis from the family to the individual, the term “individual determinants” was used in the model for predicting and explaining health service utilization (Andersen & Newman, 1973). There are three categories of individual determinants. First, the predisposing component refers to the fact that “[s]ome individuals have a propensity to use services more than other individuals, where propensity toward use can be predicted by individual characteristics which exist prior to the onset of specific episodes of illness” (Andersen & Newman, 1973, p.108). Age, gender, ethnicity, and attitudes toward health services are examples of the predisposing component. Second, the enabling component refers to individual access to health service resources. Income, health care coverage, and region of the country are examples of the enabling component. Third, the need (illness level) component refers to how an “individual or his family must perceive illness or the probability of its occurrence for the use of health service to take place” (Andersen & Newman, 1973, p.109). Any conditions of an individual’s disability, symptoms, or diagnoses are considered when determining need (illness level) component.

For this present study, this Andersen model (Figure 1.2) is used as a guide when selecting relevant predictors from the data of the State of Hawai‘i Family Caregiver Needs Assessment

collected in 2007 to include in the quantitative data analysis, in addition to the researcher's interest in the predictor of gender. Selected predictors represent three categories (e.g., predisposing, enabling, and need components) in the Andersen model to explore the elder care service utilization among Japan-born and Japanese American family caregivers in Hawai'i.

The Andersen model has been used both to predict and to explain the use of health services by examining various predictors/characteristics of *individuals*; therefore, the model has certain limitations when used in this present caregiving study. For caregiving situations, *at least two individuals* (caregivers and care recipients) are involved, and the predictors of service utilization often vary according to the various characteristics and experiences of the care recipients, caregivers, and/or the relationship between care recipients and caregivers. The predictors introduced in the Andersen model do not take into consideration the nature of the relationship between care recipients and caregivers, and give little or no attention to those cultural factors that may influence decision-making about service utilization. Therefore, a second theoretical framework is necessary for explaining the use of the services and the relationship between care recipients and caregivers in particular cultural contexts, such as the Japanese culture. For these reasons, Social Exchange Theory is used for this present study as the second theoretical framework in order to fill the gaps of the limitations seen in the Andersen model. In other words, Social Exchange Theory was used as a necessary theoretical orientation to analyze the data and to explain how the relationship between care recipients and caregivers determines the patterns of elder care service utilization, whether or not to use services, in a Japanese cultural context.

## **Social Exchange Theory**

Social Exchange Theory (Homans, 1964, 1974) provides the other theoretical framework and is particularly useful for interpreting the findings of this study. Social Exchange Theory has been commonly used in the previous caregiving literature to explain the impact on caregivers of caregiving responsibilities and situations where mutual exchanges in the form of dyadic relationships occur between caregivers and care recipients (Hus & Shyu, 2003; Raschick & Ingersoll-Dayton, 2004; Walker & Allen, 1991). The following three concepts from Social Exchange Theory are most relevant for this present study. They are: (a) rewards, (b) costs, and (c) reciprocity. The first two concepts, rewards and costs, are used as measureable outcomes or consequences of caregiving experiences. The concept of reciprocity is used to examine and explain the situations of interdependence in dyadic relationships and mutual exchanges in the caregiving context. Reciprocity seems to be a particularly salient concept in Asian/Asian American caregiver studies because reciprocity has been traditionally a motivational or cultural value for persons of Asian ancestry to take on the caregiving role for spousal and parental care (Harris, et al., 1998; Hsu & Shyu, 2003; Ishibashi, 2002; Ito, 2006).

Social Exchange Theory, as a theoretical framework, also enables the development of testable hypotheses about the relationship between the three concepts (rewards, costs, and reciprocity) in exchange situations, and then to explain why, in a Japanese cultural context, some caregivers use or do not use services. In the quantitative stage, caregiver gender would be the primary variable of interest. Therefore, variables that may reflect the concepts of rewards, costs, and reciprocity will be closely compared for male and female caregivers in examining and explaining any similarities and/or differences that are found in the quantitative outcomes.

These three concepts (rewards, costs, and reciprocity) may be treated as essential to an explanation and analysis of the impacts of the patterns of elder care service utilization among family caregivers of Japanese ancestry in the State of Hawai‘i. The first concept of “rewards” is defined as desired or pleasing outcomes/consequences that follow a person’s behavior and that increase the probability that the person will continue to perform similar behavior in the future under the same or similar circumstances. A behavior can be said to be “rewarded” if it continues to recur and continues to result in the same or similar pleasing/desires outcomes/consequences (Homans, 1974). For example, when caregivers, who work outside the home use elder care services, they are able to earn income and have some time off from caregiving responsibilities. In this case, earning income and having some time off are the examples of “rewards” as desired outcomes that follow a caregiver’s behavior of using elder care services. That particular behavior of service use by caregivers will be rewarding if it continues to result in the same or similar desired outcomes.

The second concept of “costs” is defined as aversive or painful outcomes/consequences that follow a person’s behavior and that decrease the probability that the person will continue that behavior and/or will increase the probability that the person will attempt to produce behavior that will reduce, remove, or avoid those results or consequences in the future. If any recurring behavior successfully reduces, removes, or avoids painful or aversive outcomes/consequences, the probability of the person will perform those behaviors under the same of similar circumstances in the future will increase (Homans, 1974; Skinner, 1974). A recurring behavior that continues to reduce, remove or avoid aversive or painful outcomes/consequences can be said to be “rewarded” if it continues to reduce, remove, or avoid those aversive or painful outcomes/consequences. For example, Japanese caregivers tend to avoid utilizing elder care

services because they are conscious about how their actions or behaviors are seen by others (e.g., *sekentei*). Receiving another's criticism or negative comment may be an example of a "cost" for caregivers as painful outcomes that follow a caregiver's behavior for using elder care services. Therefore, caregivers will continue *not using services* in order to avoid criticism from others.

Thibaut & Kelley (1959) described a theory of social exchange that emphasizes individual pursuit of positive outcomes through interactions in dyadic relationships when the goal is to minimize costs while maximizing rewards. In particular, caregivers in collectivistic cultures (such as in much of Asia) tend to be socialized to a commitment to fulfilling certain caregiving responsibilities. Individuals in such situations often feel rewarded by their actions in spite of what appear to be high costs (Pyke & Bengtson, 1996).

The concept of "reciprocity" is often most obvious in previous caregiving studies among Asian/Asian American caregivers and found in both spousal and parental care (Harris, et al., 1998; Hsu & Shyu, 2003; Ishibashi, 2002; Ito, 2006). A dyadic relationship, especially between elderly parents and their adult children, is characterized by mutual exchanges in caregiving contexts. That dyadic relationship is often emphasized in Asian cultures. For example, traditionally in Japanese culture, co-resident adult children have the responsibility for providing care when their elderly parents become frail or ill (Webb, 2002). Japanese eldest sons most often are responsible for the caregiving of their elderly parents. In return, they usually inherit most of their parents' property and wealth. Another similar motivation is the belief that caregiving is an act of repayment to elder parents, which has been found as a reason for assuming the caregiving role (Sung, 1995). Adult children "payback" the care that they have received in childhood by caring for their elderly parents, and in that way, the adult children balance mutual exchange through that action. This feeling of obligation may reward caregivers and encourage them not to

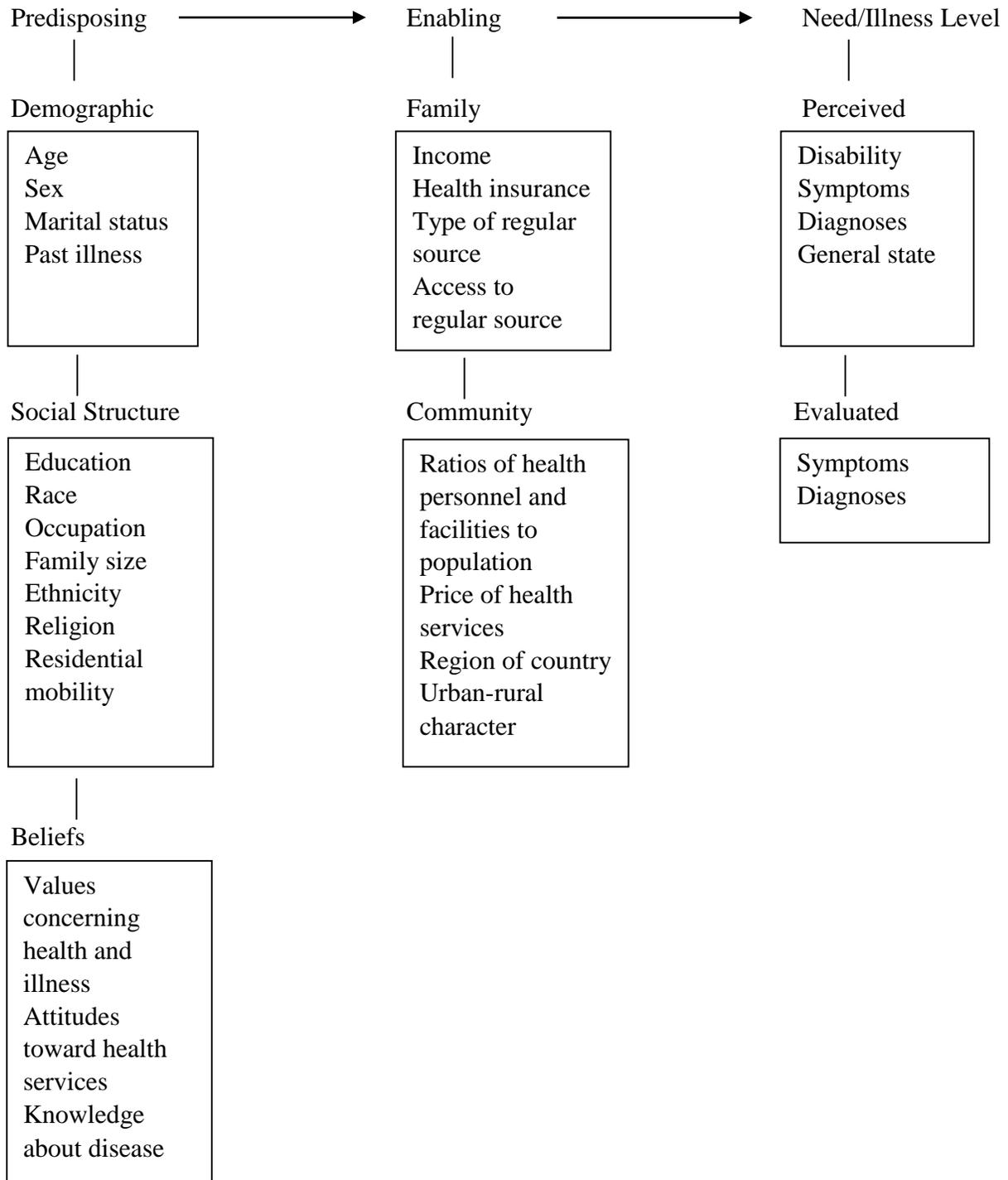
use services. In these cases, caregivers may take care of their parents without using any services as a way to payback their parents. However, not all caregivers are able to provide all the care that their parents need. Therefore, for these caregivers who use services or pay for the services to meet the needs of their parents, this may be perceived as their way to payback their parents.

The Andersen Behavioral Model of Health Services Use and Social Exchange Theory are used as theoretical frameworks for this study, though the purposes of using the theoretical framework would be different in each quantitative and qualitative stage. For the quantitative stage, the Andersen model is used to select potential predictors from the State of Hawai'i Family Caregiver Needs Assessment data collected in 2007. Also, the Andersen model guides to predict and explain how certain predictors affect the elder care service utilization. For the qualitative stage, grounded theory, which is a specific qualitative methodology, is going to be used.

According to Glaser and Strauss (as cited in Corbin & Strauss, 2008), one of the purposes of grounded theory is to build theory from data. Therefore, using existing theories to test variables is not a purpose of grounded theory. Instead, researcher attempts to generate or discover a theoretical model or a theory inductively from the data collected in the qualitative stage of this study. However, the Andersen model and Social Exchange Theory still inform the qualitative stage for different purposes. The Andersen model and Social Exchange Theory would be used to develop interview questions for the qualitative stage and to provide a better understanding of cultural factors in caregiving experiences and in service utilization. Also, the theoretical frameworks would be used as a guide for discussing findings of the qualitative stage and linking them to findings from the quantitative stage.

Figure 1.2

*The Andersen Behavioral Model of Health Services Use: Individual Determinants of Health Service Utilization (Andersen, 1995; Andersen & Newman, 1973)*



## **Definition of Terms**

The following terms are used frequently in this present study. In order to avoid confusion or misunderstanding, definitions for the following terms are described below:

### **Activities of Daily Living (ADLs)**

ADLs refer to “everyday tasks related to personal care usually performed for oneself in the course of a normal day, including bathing, dressing, grooming, eating, walking, taking medications, and other personal care activities” (Family Caregiver Alliance, 2014).

### **Care recipient**

Care recipient is defined as a person who fulfills the following criteria. These criteria are used in the State of Hawai‘i Family Caregiver Needs Assessment conducted in 2007 (Arnsberger & Lum, 2007).

1. Care recipient is defined as a person who is age 60 and older at the time of the data collection and cared for by family caregiver(s).
2. A person who needs help currently or has needed help during the past two years with ADLs and/or IADLs.
3. A person who fulfills the criteria (1) and (2), but may not be a Japanese/Japan-born or a Japanese American for the present study.

### **Care recipient Health Conditions**

Care recipient and health conditions are operationally defined as different illnesses and health conditions (13 conditions) that care recipients have. The definition is used in the State of Hawai‘i Family Caregiver Needs Assessment conducted in 2007 (Arnsberger & Lum, 2007).

Examples of illness and health conditions are: arthritis, high blood pressure, diabetes, blindness,

cancer, stroke, mental health problems (e.g., depression), severe memory problems (e.g., dementia), and behavior problems (e.g., being irritable, verbally aggressive).

### **Caregiver**

Caregiver is “a person who provides direct care (as for children, elderly people, or the chronically ill)” (Caregiver, n.d.).

### **Caregiver Stress**

Caregiver stress is operationally defined as 3 types of strains (e.g., financial hardship, physical strain, and emotional stress) that caregivers suffer.

### **Cultural Factors**

Cultural factors in this study are operationally defined as certain observed common Japanese cultural values, beliefs, norms, and/or attitudes appearing in caregiving contexts (e.g., filial piety and *sekentei*).

### **Elder Care Services**

Elder care services include various support services provided for caregivers and/or care recipients in the State of Hawai‘i. These services may be provided through private, non-profit, for-profit agencies and organizations. The Senior Information & Assistance Handbook (Elderly Affairs Division, 2012) and the Aging and Disability Resource Center (ADRC) website (Aging and Disability Resource Center [ADRC] Hawai‘i, 2015a) were used as guides to define “elder care services” for the present study. Some examples of elder care services are: home delivered and congregate meals (e.g., Meals on Wheels), adult day care, transportation (e.g., The Handi-Van), caregiver support groups, personal care, nursing services, hospice services, respite services, health maintenance (e.g., exercise programs), case management, senior centers, and public assistance (e.g., Medicaid).

## **Extra Informal Help**

Extra informal help is operationally defined as when a caregiver is unable to help his/her care recipient, there is someone (non-paid) who can do the things the caregiver does. The definition is used in the State of Hawai‘i Family Caregiver Needs Assessment conducted in 2007 (Arnsberger & Lum, 2007).

## **Family Caregiver**

Family caregiver in this study is defined as a person who fulfills the following criteria. These criteria are used in the State of Hawai‘i Family Caregiver Needs Assessment conducted in 2007 (Arnsberger & Lum, 2007).

1. A person who provides any type of care or assistance for persons(s) age 60 and older at the time of the data collection or has provided care within the past two years prior to the data collection.
2. A person who is/was unpaid.
3. A person who provides care for family member(s) and/or relative(s) (e.g., mother/father, grandmother/father, aunt/uncle, sibling, and in-laws). Friend(s) are excluded in the present study.
4. This particular criterion is added to the present study. For the quantitative stage, any person, who identifies his/her main ethnicity as Japanese is selected. For the qualitative stage, a person who identifies him/herself as only Japanese is selected.

## **Family (Informal) Caregiver**

“Any relative, partner, friend or neighbor who has a significant personal relationship with, and provides a broad range of assistance for, an older person or an adult with a chronic

or disabling condition. These individuals may be primary or secondary caregivers and live with, or separately from, the person receiving care” (Family Caregiver Alliance, 2014).

### **Filial Piety/Xiao (Confucianism)**

Filial piety is defined as “xiao, Wade-Giles romanization hsiao (Chinese: “filial piety”), Japanese kō, in Confucianism, the attitude of obedience, devotion, and care toward one’s parents and elder family members that is the basis of individual moral conduct and social harmony. *Xiao* consists in putting the needs of parents and family elders over self, spouse, and children, deferring to parents’ judgment, and observing toward them the prescribed behavioral proprieties” (Xiao, 2015).

### **Formal Caregiver**

“Formal caregiver is a provider associated with a formal service system, whether a paid worker or a volunteer” (Family Caregiver Alliance, 2014).

### **Gender**

The terms “gender” and “sex” are often treated the same in common nomenclature although scientists have divided these into two. World Health Organization (2015) defines “gender” as the “socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate for men and women.” “Sex” is defined as the “biological and physiological characteristics that demine men and women” (World Health Organization, 2015). According to the World Health Organization definition, “sex” should be used in this study. However, the researcher selected the term “gender” for this study due to the familiarity and cultural sensitivity of Japanese research participants with the term. This is also the most common term used in current caregiving studies.

## **Home and Community Based Services**

Home and community based services are the types of services that: “are intended to help older adults maintain wellness, independence and safety, to assist those who cannot live at home without assistance from family and/or formal services and to support family caregivers” (ADRC Hawai‘i, 2015b). Some of the examples of home and community based services are: adult day care, caregiver support groups, case management, home delivered meals, personal care, transportation, and recreational, leisure, physical, and fitness activities. “Specific services and training vary among workers and agencies. So does cost. Typically, Medicare doesn't pay for home care. Many of these services have eligibility requirements such being 60 years old or older” (ADRC Hawai‘i, 2015b).

## **Instrumental Activities of Daily Living (IADLs)**

IADLs refer to “activities related to independent living, such as preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, and using a telephone” (Family Caregiver Alliance, 2014).

## **Japanese/Japan-born Research Participant**

For this present study, a person who identifies his/her dominant ancestry as Japanese and who was born in Japan.

## **Japanese American/the U.S.-born Research Participant**

For this present study, person who identifies his/her dominant ancestry as Japanese and who was born in the United States.

## ***Sekentei***

*Sekentei* is a Japanese term, which is defined as “social appearance, reputation, or dignity in the community or public” (Asai & Kameoka, 2005, p. 114).

### **Service Utilization Patterns**

For the present study, the term “patterns” refers to two forms of elder care service use. One form is where caregivers and/or care recipients use at least one community service. The other form is where neither caregivers nor care recipients use community services at all.

### **Unpaid Caregiver**

Unpaid caregiver is “an unpaid individual (a spouse, partner, family member, friend, or neighbor) involved in assisting others with activities of daily living and/or medical tasks” (Family Caregiver Alliance, 2014).

## CHAPTER 2

### LITERATURE REVIEW

#### Demographic Changes

Nationally, 13.0% of the U.S. total population was 65 and over in 2010 (U.S. Census Bureau, 2011), and that number is expected to grow to 21.0% by 2030 (Colby & Ortman, 2015). This increase in the elderly population is even faster for the State of Hawai‘i, where 14.3% of the total State population was 65 and over in 2010 (U.S. Census Bureau, 2011). People in Hawai‘i also have the longest life expectancy at birth, 81.3 years in 2010, as compared to the national average of 78.9% years (Lewis & Burd-Sharps, 2013). Additionally, almost one third (30.3%) of the Hawai‘i households have individuals who are 65 and over (U.S. Census Bureau, 2010c), compared to the national average of 24.9% (U.S. Census Bureau, 2010d). These current demographic trends suggest an even bigger surge in the future elderly population of Hawai‘i.

According to the 2010 U.S. census data, the Asian population was one of the fastest growing racial/ethnic groups in the country (U.S. Census Bureau, 2010e, 2012a). Regardless of age, the Asian population already had increased by 43.3% between 2000 and 2010, whereas the White population had only increased by 5.7% (U.S. Census Bureau, 2010e, 2012a). The projection for growth in the Asian population is that it will more than double from 15.9 million in 2012 to 34.4 million in 2060 (U.S. Census Bureau, 2012a). This rapid growth in the Asian population will have a critical impact upon the State of Hawai‘i, where Asians (race alone or in any combinations) already made up 57.4% of that 2010 State’s total population (Department of Business, Economic Development & Tourism, 2011). Within the Asian (race alone) population in Hawai‘i, regardless of age, Filipino (14.5%) and Japanese (13.6%) were the two most numerous groups in 2010 (Department of Business, Economic Development & Tourism, 2011).

In terms of age groups, the Japanese (alone or in any combinations) had the largest number of elderly in the population (20.9%) in 2010 of all other Asian ethnic groups (U.S. Census Bureau, 2010a). Despite this high elderly population of Japanese, few studies related to elderly issues have been conducted for that particular Japanese group in the State.

### **Impacts of Longevity: Prevalence of Chronic Illnesses and Cognitive Impairments among Older Adults**

One of the consequences of increased life expectancy is that people tend to experience higher incidences of chronic illnesses, such as diabetes, heart disease, stroke, and cognitive impairments in later life (West, Cole, Goodkind, & He, 2014). Nationally, among the population of 65 and over in 2008, 7.8% of persons had no chronic illness, 50.9% had one or two, and 41.3% had three or four such illnesses (Hung, Ross, Boockvar, & Siu, 2011). Especially, prevalent in this group were cases of arthritis, hypertension, and diabetes, all of which had increased from 1998 to 2008 (Hung, et al., 2011). Heart disease is another common chronic health condition among older adults, and more males, especially aged 85 and over, suffer from this disease (Schoenborn & Heyman, 2009). According to Schoenborn and Heyman (2009), 47.3% of males age 85 and over had heart disease compared with 37.2% of their female counterparts. One of the leading causes of long-term disability is stroke (American Heart Association, 2010). The prevalence of stroke is high among people over age 65. Almost three quarters of all strokes occur among that population, and the risk of stroke is more than double every 10 years after age 55.

In addition to physical chronic illnesses, cognitive impairment is a serious concern. One of the common cognitive impairments is Alzheimer's disease. It is estimated that five million people aged 65 and over live with Alzheimer's disease in the U.S., this will increase to 16

million by 2050 (Alzheimer's Association, 2014). Advanced age is one of the risk factors for developing Alzheimer's disease. One in nine of those aged 65 and over, and one in three of those aged 85 and over suffer from various degrees of the disease (Alzheimer's Association, 2014).

These chronic illnesses and cognitive impairments cause disabilities, which lead to difficulties in the activities of daily living (ADLs) and the instrumental activities of daily living (IADLs) in daily life (West, et al., 2014). Of those aged 65 and over, 38.6% were reported to have had one or more of these disabilities. In particular, 72.6% of those aged 85 and over had experienced at least one disability. According to the 2010 American Community Survey, for those aged 65 and over, the two most frequently reported difficulties in daily function were walking or climbing stairs (25.8%) and doing errands alone (18.5%; West, et al., 2014).

As described above, the longer people live, the more they are likely to experience chronic illness and cognitive impairment. Since the population of those aged 85 and over, referred to as the "oldest-old," is the fastest growing segment of the U.S. population (Brookmeyer, Evans, Hebert, Langa, Heeringa, Plassman, & Kukull, 2011), more people are likely to live longer with these physical and cognitive conditions. Moreover, these conditions can limit their independence and require of them some level of assistance in their daily functioning (e.g., ADLs and IADLs). Increased longevity presents potential challenges and an increasing demand for long-term care and caregiving.

### **Contribution of Informal/Unpaid Caregivers in Elder Care**

In 2009, it was estimated that at least 43.5 million caregivers (age 18 and older) provided unpaid care to an adult family member, relative, or friend (age 50 years and older) (NAC & AARP, 2009b). That estimate suggests that 19% of all adults in the U.S. are engaged in caregiving, and that 54% of them are age 50 years and older (NAC & AARP, 2009b). These

caregivers are called either “informal or unpaid” caregivers. On average, these informal/unpaid caregivers provided care for 19 hours per week, and their caregiving “career” was for four years. Nationally, the estimated value of the contribution of such informal/unpaid family caregivers was nearly \$450 billion in 2009, growing by \$75 billion more in 2007 (Feinberg, Reinhard, Houser, & Choula, 2011). Hawai‘i households in 2007, 26.1% had at least one person who provided care for someone age 60 years and older (Arnsberger & Lum, 2007). The economic value of this caregiving effort provided by informal/unpaid caregivers in the State was estimated at about \$2 billion in 2009, up from \$1.45 billion in 2007 (AARP, 2011). National and local contributions of informal/unpaid caregivers make it possible for older adults to remain living in their home community, and represent substantial savings in American long-term care costs (Feinberg, et al., 2011).

### **Changes in Environment that Impact Family Caregivers**

Family caregiving is not a new phenomenon; families have always played a major role in caregiving for the elderly. However, the environment encompassing family caregivers has changed over the years for various reasons. For example, the increasing number of women who participate in the labor force outside the home (U.S. Department of Labor, 2011) has limited their time to engage in informal caregiving. This suggests that, increasingly, caregiving will no longer be solely a female role. In the U.S. in 2009, almost one third (33%) of caregivers were males (NAC & AARP, 2009b). Ethnically, more Asian American males (48%) were engaged in caregiving compared to their White counterparts (33%) (NAC & AARP, 2009a). This means Asian American male caregivers actively engage in caregiving.

Nursing homes used to be the last resort for elder care. Now, however, only 3.1% of those aged 65 and older reside in a nursing home in 2010 as compared to 4.5% in 2000 (as cited

in West, et al., 2014). That means more elderly persons continue to remain at home in their home community, where they will receive care or assistance from either family members or paid service providers.

Out of necessity, a majority of caregivers have to play multiple roles simultaneously, such as caregiving for both their children and elderly parents while working outside the home. About 74% of all caregivers were employed in 2009, and 68% of them had to make some work accommodations due to their caregiving responsibilities (NAC & AARP, 2009b). Some common work accommodations by these employed caregivers were going in late, leaving early, and taking time off. Since family size has declined, there are fewer siblings or family members available to provide care for their older family members or relatives.

### **The Older Americans Act and Home and Community-Based Services**

The Older Americans Act was enacted in 1965 in order to support older adults for living independently at home or in the community for as long as possible (National Association of Area Agencies on Aging, 2015). As a result of the Older Americans Act, federal, state, and local organizational infrastructures were developed in order to deliver a wide range of home and community-based services to older adults and their caregivers (National Association of Area Agencies on Aging, 2015). Therefore, the Older Americans Act, Title III (Grant for State and Community Programs on Aging) is directly related to the delivery of home and community-based services (Administration for Community Living, n.d.). Examples of these services are: Information and referral, in-home care, transportation, home-delivered meals, and caregiver support. In the State of Hawai‘i, “Kupuna Care” is a state funded program for delivering these services to those who aged 60 and older with one or more problems, such as ADLs and/or IADLs (ADRC Hawai‘i, 2015c). Also, the Aging and Disability Resource Center (ADRC) is a one-stop

center providing a wide range of information related to elder care, so that both older adults and caregivers can find the long-term care service options available in the State. The ADRC is available in every county of the State of Hawai‘i (Hawai‘i, Honolulu, Kauai, and Maui) either by virtual or face to face services (ADRC Hawai‘i, 2015a).

While the demand for such home and community-based services is increasing, it was reported in December 2008 that 70% of the states were anticipating severe budget cuts in services for older adults and persons with disabilities (National Association of State Units on Aging, 2009). Hawai‘i was no exception. Since the State of Hawai‘i has been shifting its emphasis from institutional care to an “aging in place” care approach (AARP, 2011), it is essential that both older adults and their caregivers utilize publicly funded and/or privately provided elder care services in order to meet both their needs and to continue living at home or in the community of their choice.

### **Elder Care Service Utilization**

**Service utilization patterns among racial/ethnic minority groups.** Over the years, various elder care services have developed to meet the needs of older adults, caregivers, or both. Although service utilization studies comparing diverse racial/ethnic groups have been conducted, the utilization of elder care services vary among such groups and their findings are inconclusive. According to previous studies, racial/ethnic minority caregivers tend to provide significantly more constant, intensive, and higher levels of care than their White counterparts (Fredriksen-Goldsen & Farwell, 2005; Giunta, et al., 2004; Navaie-Waliser, Feldman, Gould, Levine, Kuerbis, & Donelan, 2001). In previous studies, underutilization of formal support services by racial/ethnic minority caregivers is often reported (Chow, et al., 2000; Dilworth-Anderson & Gibson, 2002; Giunta, et al., 2004; Li, 2004; Scharlach, et al., 2006). Also, in another

racially/ethnically diverse caregiver study, while reporting a higher level of unmet need, racial/ethnic minority caregivers did not show that increased need necessarily resulted in higher levels of service utilization (Scharlach, et al., 2008). In the same study, even within the same ethnic background, the U.S. born Latino respondents used more caregiver services than their foreign-born Latino counterparts. In contrast, one study found that caregivers from African American, Latino, Asian, and Pacific Island populations consistently expressed a greater need for, and more often used, formal support services (Tennstedt & Chang, 1998).

### **Various Predictors Influenced Service Utilization**

#### **Demographics and socioeconomic characteristics of caregivers and care recipients.**

Various demographics and socioeconomic characteristics of both caregivers and care recipients have been examined in previous studies whether or not there are any associations to service utilization patterns. One of the predictors is the age of older adults. There is a positive association between the increasing age of older adults and the increasing usage of formal services (Kosloski, et al., 1999; Mui & Burnette, 1994; Scharlach, et al., 2008). Marital status of caregivers is another common predictor that affects the service use patterns. It is reported that spousal caregivers are more likely to use formal services than any other types of caregivers (e.g., parental caregivers) because those spousal caregivers tend to be in older age (Hong, 2010; Toseland, et al., 2002).

Current informal/unpaid caregivers often play multiple roles, such as working outside the home and providing care. Hong (2010) found that employed caregivers tend to use multiple formal services to fulfill their responsibilities at work and at home. Kosloski, et al. (1999) examined the relationship between the status of caregiver's employment, either part-time or full-time, and service utilization. They found that, overall, their employed caregiver respondents used

more services than their non-employed counterparts. Furthermore, those full-time employed caregivers were more likely to use day care programs.

The living arrangements of older adults vary. The majority of them live with their caregivers or other individuals, but some live alone. Those older adults who live alone use more in-home or other types of services than those older adults who live with others (Mui & Burnette, 1994; Toseland, et al., 2002). Geographical location of older adults and/or caregiver often relates to the availability of informal and formal support, and the findings of previous studies are mixed. A study concluded that care recipients who lived in a rural area are multiple service users (Hong, 2010). In contrast, one study conducted by Scharlach, et al. (2006) concluded that those caregivers who lived in rural areas were more likely to rely on their informal help, such as other family members or relatives. A rural male caregiver study found that those male caregivers who resided in rural communities tend to rely on informal supports by non-family members because their children or relatives did not live close enough to provide assistance for them (Sanders, 2007). According to Butler and Kaye (as cited in Sanders, 2007), one of the reasons why caregivers living in rural communities have a high dependency on informal supports is a lack of social services in rural communities.

Caregivers' education level is associated with service use in somewhat contradicting ways. Most previous studies indicate that caregivers who have higher education level are more likely to use formal services (Bookwala, et al., 2004; Hong, 2010; Scharlach, et al., 2008; Toseland, et al., 2002). Conversely, Miller and Mukherjee (1999) found that those caregivers with less education tend to have confidence in the social service system. The education level of caregivers is also related to the level of knowledge about available formal services in the community. Toseland et al. (2002) discussed how caregivers with higher education levels tended

to have knowledge of community services and to know-how to access such services. Other studies further explained that those caregivers who have high knowledge of community services tended to prepare and plan for future long-term care options (Miller & Mukherjee, 1999; Young, et al., 2002a).

One of the considerations of service use decision-making is finances, or how to pay for formal services. Since older adults or caregivers who have higher income levels have more financial resources to pay for such services (Hong, 2010; Kemper, 1992; Mui & Burnette, 1994), they are more likely to use services when needed. In contrast, many racial/ethnic minority caregivers experience financial strain which prevents them from accessing formal services (Fredriksen-Goldsen & Farwell, 2005; Giunta, et al., 2004; Scharlach, et al., 2008). For those who cannot afford to pay for formal services, Medicaid is one resource to access such services (Hong, 2010).

**Political factors.** There are also political factors that may create disparities in the availability and the use of elder care services. Sometimes underutilization of services among racial/ethnic minority caregivers is misinterpreted when actually their needs are being met or it is found that they have enough informal support by other family members or relatives. Often certain ethnic groups are given less attention than others. For example, Daniels (1990) and Kitano (1993) (as cited in Hikoyeda, Mukoyama, Liou, & Masterson, 2006) discussed how Japanese Americans have been labeled as a “model minority” and are perceived to assimilate well into dominant American society. Because of that perception, Japanese Americans may not be seen to need culturally sensitive services.

**Health and mental conditions of caregivers and care recipients.** Both health conditions of caregivers and care recipients have an impact on the decision to use services.

Various caregiver stresses (e.g., physical, mental, and emotional strain) have been measured in previous studies to examine the association between caregivers' physical and mental health conditions and service use (Bookwala, et al., 2004; Hong, 2010; Scharlach, et al., 2008; Toseland, et al., 2002). These previous studies suggest that those caregivers, who experience mental health problems (e.g., depression), physical strain, and emotional distress, are more likely to accept services to meet their needs.

Very often, these caregiving stresses are related to the changes in care recipient health and mental conditions, which increase care demands. Those caregivers who provide more intensive care because of limited performance of care recipients in ADLs and/or IADLs are more likely to use formal services (Bookwala, et al., 2004; Ho, Weitzman, Cui, & Levkoff, 2000; Hong, 2010; Kemper, 1992; Kosloski et al., 1999; Navaie-Waliser et al., 2001; Scharlach, et al., 2008). Mui and Burnette (1994) found that older adults who have more physical illnesses are more likely to use in-home services. In addition to the illnesses and the limitations of physical functioning, Hong (2010) discovered that the cognitive impairment of care recipients (e.g., dementia) is a predictor of formal service use.

### **Potential Barriers to Service Utilization**

**Cultural factors.** Factors related to cultural values, beliefs, norms, and/or attitudes may play a major role and impact the decision of whether or not racial/ethnic minority older adults or caregivers will use formal support services and programs. In many Asian cultures, caregiving is seen as a family responsibility, and family caregivers try to follow the cultural norms or to respect the value of filial piety. Thus, caregivers tend to perceive their caregiving role as their duty or obligation. So they often report that they try to avoid using services or asking for help because of feelings of shame or guilt (Dilworth-Anderson & Gibson, 2002; Winslow, 2003). Li

(2004) also found that Asian American caregivers felt “too proud to accept services.” Low income minority elderly are often reluctant to receive services because of their predisposed negative attitudes toward service use (Yeatts, Crow, & Folts, 1992). Another common reason for the underutilization of formal services is that either caregiver or care recipient does not want outsiders coming into their home to provide services because of privacy issues (Casado, et al., 2010; Li, 2004). Scharlach, et al. (2006) found that many Asian caregivers did not trust outside family members (e.g., service providers) to take care of their care recipients. When taking into account these cultural considerations, racial/ethnic minority caregivers tend to rely on informal helpers (e.g., other family members, relatives, or friends) instead of using formal services (Anngela-Cole & Hilton, 2009; Dilworth-Anderson & Gibson., 2002; Giunta, et al., 2004; Kemper 1992; Kosloski, Montgomery, & Youngbauer, 2001; Kinoshita & Gallagher-Thompson, 2004; Mui & Burnette, 1994; Scharlach, et al., 2006; Strain & Blandford, 2002).

One of the main reasons minority older adults and caregivers do not rely on formal services is a lack of culturally-appropriate/sensitive services (Dilworth-Anderson & Gibson, 2002; Li, 2004; Scharlach, et al., 2006; Scharlach, et al., 2008; Yeatts, et al., 1992). In such studies, the two most common complaints are that meal programs (e.g., Meals-on-Wheels) do not provide culturally appropriate food, and that support services are not provided in their native language. In particular, the issue of language applies to those who are the first generation immigrants (called the *Issei* among Japanese immigrants) or who are foreign born (Young, et al., 2002b). Another reason is if service providers or other service users have different racial/ethnic backgrounds, minority older adults or caregivers are less likely to use formal services, such as adult day care programs (Giunta, et al., 2004; Yeatts, et al., 1992; Young, et al., 2002b). Young, et al. (2002b) found that Japanese Americans emphasized the importance of the quality of care

and staff. Serving traditional Japanese meals and having a Japanese-speaking staff were also found to be highly valued by elderly Japanese persons. Finally, a perception of poor service quality is frequently reported by minorities as a reason why they are reluctant to use formal services (Giunta, et al., 2004; Li, 2004; Winslow, 2003; Young, et al., 2002b).

### **Service Needs for Foreign-Born Caregivers and Care recipients**

As described above, a lack of culturally-appropriate/sensitive services is a barrier especially for immigrant (foreign-born) caregivers and care recipients. New immigrants arrive in the U.S. each year (Camarota, 2011; U.S. Census Bureau, 2012b), and these foreign-born individuals often struggle with adjusting to the new American culture. In particular, these foreign-born immigrants, considered as the 1<sup>st</sup> generation of a given ancestry, tend to follow their native cultural values, beliefs, and customs, even after they immigrated to the U.S. For instance, the 1<sup>st</sup> generation of Japanese in the U.S., *the Issei*, tended to follow Japanese cultural practices rather than Western cultural practices (Manaster, Rhodes, Marcus, & Chan, 1998). The *Issei*, especially on the continental U.S., often struggle with language barriers to obtain information or social services. Therefore, in the 1960's and 1970's, community-based long-term care services and nursing facilities for the 1<sup>st</sup> generation of Japanese in the U.S., the *Issei*, were developed in Los Angeles, San Francisco, and Seattle to meet their needs (Keiro Senior HealthCare, n.d.; Kimochi, n.d.; Young, et al., 2002b). The needs of the second generation or beyond of Japanese may not be the same as the *Issei*, since the second or third generation more likely to reflect the dominant American culture (Manaster, et al., 1998). This may apply to other racial/ethnic minority groups as well. Since most service utilization studies have been conducted in English, foreign-born caregivers and care recipients have language barriers to be included in such studies. Therefore, the needs of such foreign-born caregivers and care recipients are little known.

## Gender and Caregiving

Even in contemporary society, some social roles are still identified by gender. For example, there is the traditional belief that caregiving is a woman's role, despite the increasing number of male caregivers. In the past two decades, the number of American male caregivers has increased from 25% to 33% (NAC & AARP, 2009b; Wagner, 1997), and it will continue to grow due to increasing longevity and the demand for elder care. Hawai'i also follows this trend. In 2007, almost one-fourth of all caregivers in the State were males (Arnsberger & Lum, 2007). Although the contribution of these male caregivers is little acknowledged in public, understanding the caregiving experience of male caregivers is as important as that of female caregivers. There are some differences in the caregiving roles of males and females, and these are discussed as follows: (a) Men as Caregivers; and (b) Women as Caregivers.

**Men as caregivers.** Male caregivers tend to use problem solving approaches to caregiving that buffer them from the more negative emotional effects of caregiving (Connell, 1995; Harris, 1993, 1998; Kaye & Applegate, 1990; McFarland & Sanders, 1999; Twigg & Atkin, 1994). In other words, male caregivers pay attention to *problems* in their caregiving situation and try to find *solutions* to make their caregiving situation easier rather becoming paralyzed by their emotional responses to caregiving. For example, if a male caregiver does not know how to cook, he may contact the Meals-on-Wheels programs or may hire a homecare worker to cook for his care recipient rather than being disappointed by his own lack of caregiving skills. Thus, males take caregiving almost like a job to be dealt with (Harris, 1993; McFarland & Sanders, 1999) in order to avoid emotional distress. Russell (2004, 2007) also addresses the feelings of isolation and loneliness that are often experienced by male caregivers, and how these feelings can cause stress and become a burden for them.

Compared to female caregivers, male caregivers especially have a difficult time providing personal care, such as bathing (Harris; 1998; McFarland & Sanders, 1999, 2000; NAC & AARP, 2009b; Parsons, 1997; Sanders & Power, 2009). Sheehy (2010) states that male caregivers are only half as likely as their sisters or wives to assist with bathing. A study also shows that 40% of male caregivers are likely to use outside personal care services to meet the needs of care recipients (Ginzler, 2010). Since males usually are not socialized to provide such personal care tasks, they prefer that others perform them (Harris, et al., 1998; Sugiura, Ito, Kutsumi, & Mikami, 2009; Zhan, 2004). Thus, the literature suggests that males are more likely than are females to seek help and support from both formal and informal sources (Cahill, 2000; Russell, 2004; Stoller & Cutler, 1992). Other studies also suggest that males tend to use formal services more openly and effectively (Harris, et al., 1998; Ishibashi, 2002; Ito, 2006; Tsukada & Saito, 2006) because they are more likely to pay attention to their own health (Ishibashi, 2002). However, Coe and Neufeld (1999) found that male caregivers were both less likely to report their unmet needs and to ask for formal assistance. McFarland and Sanders (1999) also discovered that male caregivers were not comfortable with accepting community services because accepting such services imply an admission of weakness and failure to fulfill their caregiving roles.

One salient issue is the number of employed male caregivers (who are employed outside the home). The majority (82%) of these male caregivers, who had to balance both outside work and caregiving (NAC & AARP, 2009b), often faced conflict with their employers. Employers often do not understand or accept the fact of growing numbers of male caregivers, which violates a social norm of women as caregivers (Gandel, 2009; Harris & Long, 1999). Employed male caregivers hesitated to request time off for their caregiving responsibilities because they were afraid of being seen as “weak” persons or less committed to their work (Ginzler, 2010). As a

result, younger male caregivers tend to give up promotion opportunities because of their caregiving responsibilities (Harris & Long, 1999; Harris et al., 1998). In a Japanese study, when a single Japanese son became a primary caregiver for his parent(s), he was more likely to give up his full-time job to accommodate his caregiving responsibilities (Taira, Goto, Ogasawara, Okamura, Maeguchi, & Asai, 2009). For male caregivers, the workplace was not only a place to work, but also an essential resource for social support (Russell, 2004, 2007). Therefore, male caregivers who took an early retirement not only lost their jobs, but also experienced social isolation.

Among male caregivers, husbands and sons seem to take their caregiving roles in quite different ways. When husbands became caregivers for their spouses, they were open to change household routines, and learned basic household and caregiving skills, usually associated with female roles (Hilton, Crawford, & Tarko, 2000; McFarland & Sanders, 1999). In contrast, sons often viewed their caregiving roles as that of being a secondary caregiver or as a member of a caregiving team, managing with others, rather than being the primary provider of care (Harris & Long, 1999; Stoller, 1990).

**Women as caregivers.** Family roles used to be divided clearly by gender (Sodei, 1995). The husband worked outside the home as breadwinner and the wife stayed at home as full-time homemaker. Under that historical/traditional family system, caregiving for children and the elderly became a woman's responsibility. However, in recent years, the majority of women in the U.S. began to play multiple roles by working a full or part-time job outside the home when also providing caregiving (NAC & AARP, 2009b). These middle-aged women are the so-called the "sandwich generation," because they take care of both their children and their elderly parents at the same time (Hooyman & Kiyak, 2002).

Approximately, 70% of American females were employed caregivers in 2009 (NAC & AARP, 2009b). Dunham and Dietz (2003) state that employed women are concerned about balancing between their jobs and their caregiving responsibilities. These employed women sometimes have to move to new jobs to allow them to have more flexible work hours, so that they can fulfill their multiple roles. They also search for care options, such as asking other family members to help or by utilizing community services, in order that they might play the expected multiple roles. These findings also relate to female caregivers in Japan. In collectivistic society, when it comes to a career choice, Japanese women tend to choose caregiving responsibilities over their own career goals (Hashizume, 2010). Those female caregivers working outside the home often feel guilty, oppressed, and ashamed when they put their career and/or personal life before certain traditional gender role responsibilities, such as housework and caregiving.

The most salient gender differences in elder care are the types of caregiving tasks provided for care recipients. While females are more likely to provide hands-on types of care (e.g., bathing, toileting, and dressing) (MetLife Mature Market Institute, 2003; NAC & AARP, 2009b), males tend to provide more instrumental tasks (e.g., helping with finances and arranging for care) (NAC & AARP, 2009b). According to previous caregiver studies, female caregivers provide more assistance with both ADLs and IADLs than do their male counterparts (Lee, Dwyer, & Coward, 1993; Sugiura, et al., 2009). Since female caregivers engage in such care tasks that require physical labor and that are burdensome, they experience a greater care burden than do male caregivers (Miller & Cafasso, 1992; Zhan, 2005). In addition to being physical burdensome, these tasks also cause female caregivers to experience a higher level of depression than is experienced by their male counterparts (Sugiura, et al., 2009). Overall, female caregivers report a deterioration in health as a result of the care responsibility, compared to male caregivers

(Almberg, Jansson, Grafström, & Winblad, 1998). As women see the caregiving role as a natural role, they tend to strive to provide care often above and beyond their physical capabilities (Ishibashi, 2002). However, despite experiencing such physical and mental strain, research suggests that female caregivers are less likely to use the elder care services used by their male counterparts (Sugiura, et al., 2009).

### **Cultural Factors Influenced Family Caregiving**

**Asian cultural values, beliefs, and norms.** Given all the current changes in the environment impacting caregivers, racial/ethnic minority caregivers in particular are challenged when following their traditional cultural values, beliefs, and norms as they provide care for their elderly family members. Specifically, among Asian Americans, the intergenerational caregiving tradition is strong, and the cultural value of ‘filial piety’—where adult children assume responsibility for their aging parents—is expected (Harris & Long, 1999). The cultural value of filial piety comes from Confucianism with its origin in China (Tanabe, n.d.; Xiao, 2015). Dilworth-Anderson and Gibson (2002) found that Chinese American caregivers emphasize the cultural value of filial piety and the harmony in the family. Such Asian cultural values typically interpret the caregiving role in terms of the filial obligation to provide care for older family members, and thereby demonstrating respect for the elder’s worthiness and authority (Sung, 1998). Because of the high recognition of such cultural values and norms, racial/ethnic minority caregivers have a limited use of available formal services in order to fulfil their caregiving responsibilities (Giunta, et al., 2004; Scharlach, et al., 2006).

**Uniquely Japanese cultural concepts.** The Japanese culture is considered as “shame culture” compared with western cultures such as that of the U.S., which are considered as “guilt culture” (Abe, 1997; Benedict, 1989). Benedict (1989) further discusses that “[t]rue shame

cultures rely on external sanctions for good behavior, not, as true guilt cultures do, on an internalized conviction of sin. Shame is a reaction to other people's criticism" (p. 223). In this sense, when a Japanese person fails to show appropriate behaviors as defined by Japanese cultural standards or social rules, or fails to fulfill his/her duty or obligation at work, that is considered as "*haji* [shame]" (Abe, 1997; Benedict, 1989). Thus, the Japanese are generally very conscious about how they appear in public and how they are perceived by others. As applied to the caregiving situation, Japanese caregivers hesitate to use services where they might be seen as failing to fulfill their duty or obligation to provide proper care for their care recipients.

"*Sekentei*" is another unique Japanese cultural concept as well as "shame." *Sekentei* is defined as "social appearance, reputation, or dignity in the community or public" (Asai & Kameoka, 2005, p.114). Japanese people are very conscious about how their behaviors are judged by others. For instance, relatives or neighbors are watching to see how well the family cares for their elderly parents (Momose & Asahara, 1996). Because of *sekentei*, family issues are normally kept in the family, and Japanese are not comfortable asking for help outside the family (Hirayama, 1987). Asai and Kameoka (2005) found that *sekentei* encourages the underutilization of social services among Japanese family caregivers.

**Japanese and "local" identity in the State of Hawai'i.** Japanese have a long history of immigration to the State of Hawai'i, and in 1868, the first 148 Japanese immigrants arrived in the kingdom (Schmitt, 1977). These Japanese people immigrated to the State as contract laborers for the plantations for work and economic opportunities (Okamura, 2014; Tanabe, n.d.). Especially, the Hawaiian sugar industry boom brought many Japanese to the State (Tanabe, n.d.). In 1910, the Territory of Hawai'i had four times as many Japanese as the continental U.S. According to

Lind (as cited in Okamura, 2014), the Japanese population continued to grow, and in 1920 Japanese were 43% of the Hawai‘i population.

Given this demographic situation, Japanese who immigrated to Hawai‘i had quite different cultural experience than those Japanese immigrated to the continental U.S. One of the salient differences is the development of the “local” identity in Hawai‘i. As Okamura (1994) stated, the historical origins of “local” identity occurred during pre-World War II period. And the “local” identity among Hawai‘i residents was strengthened during worker strikes on sugar plantations and economic and tourism development in 1960s (Okamura, 1994). Since historically Hawai‘i has been influenced by external sources of power and control economically and politically, people in Hawai‘i needed to distinguish themselves from tourists or other outsiders coming to the State. Being “local” is one way to keep their identity. Okamura (1994) states:

The designation *Local* continues to represent the shared identity of people in Hawai‘i who have an appreciation of and a commitment to the islands and their peoples, cultures, and ways of life, which are perceived as being threatened by external forces of development and change (p. 174).

The existing literature suggests that examining the patterns of elder care service utilization among racial/ethnic minority groups is important for understanding how various factors impact the service use decision. It may also suggest how important it is to select family caregivers of Japanese ancestry in the State of Hawai‘i for this present study. With such considerations of the Chapter 1 and the Chapter 2, the presentation of this present study’s methodology will follow.

## **CHAPTER 3**

### **METHODOLOGY**

A mixed methods strategy using quantitative and qualitative data was employed for this study. This was important for two reasons. First, triangulation using multiple methods increases the credibility of a study (Patton, 2002). Second, the quantitative data did not include any variables measuring cultural values/beliefs. Therefore, the main purpose of adding the qualitative stage was to include interview questions examining the relationship between cultural factors and the patterns of service utilization. Therefore, for this present study, using a mixed methods strategy provided a better understanding of how gender and culture factors affect the patterns of elder care service utilization among family caregivers of Japanese ancestry in the State of Hawai‘i. Each quantitative and qualitative stage is described separately in this method section.

#### **1<sup>st</sup> Stage: Quantitative Stage**

##### **Protection of Human Subjects**

For the quantitative stage of the present study, a secondary data analysis was conducted by using the State of Hawai‘i Family Caregiver Needs Assessment data collected in the fall of 2007 (Arnsberger & Lum, 2007). Prior to submitting an application for University of Hawai‘i Human Studies Program for the quantitative stage of the present study, the following two steps were taken by the researcher. First, a request letter for using the data set was sent to Hawai‘i State Senator Les Ihara Jr. on December 15, 2011. Permission to use the data was granted to the researcher by the Senator on December 19, 2011. Second, in January, 2012, an electronic copy of the data set was obtained from Pamela Arnsberger, Ph.D, who conducted the initial data analysis of the State of Hawai‘i Family Caregiver Needs Assessment data in 2007.

Application for exempt status for Human Studies Research for this quantitative stage was reviewed by University of Hawai‘i Human Studies Program committees, and was granted an exemption (CHS #20450) on August 22, 2012.

## **Participants**

**Eligibility criteria.** The original eligibility criteria for caregiver participants and their care recipient(s) for the State of Hawai‘i Family Caregiver Needs Assessment were:

1. Caregivers who provided care or assistance for their care recipient(s) age 60 or older.
2. Caregivers who provided any type of care or assistance at the time of the data collection or had provided care within the past two years prior to the data collection.
3. Caregivers were unpaid.
4. Care recipient(s) who needed help or had needed help with at least some type of assistance with activities of daily living (ADLs) and/or instrumental activities of daily living (IADLs).

In addition to these original eligibility criteria for caregiver research participants, three criteria were added to select the sample for this quantitative stage:

5. Caregivers who identified their main ethnicity as Japanese were selected.
6. Caregivers’ relationships to their care recipient(s) were only limited to family members and relatives.
7. Care recipient(s) who lived in residential care facilities (e.g., retirement community, care home, group home, assisted living facility, and nursing home) were excluded.

## **Original Sampling Strategy**

A probability sampling method, a random digit dialing strategy, was used to collect the State of Hawai‘i Family Caregiver Needs Assessment data in 2007 (Arnsberger & Lum, 2007).

For the original data, a total of 2,259 calls were made in order to identify 600 research participants who met the original eligibility criteria presented in the previous eligibility criteria section. Of these 600 participants, 171 caregiver participants identified their main ethnicity as Japanese (131 female and 40 male caregivers). Of these 171 eligible Japanese research participants, 20 participants were excluded for the following reasons: Caregivers provided care for friends (2 females) and care recipients stayed in retirement community, care homes, or nursing homes (14 females and 4 males). Therefore, 151 research participants (115 females and 36 males) met all the eligibility criteria and made up of the sample used in the quantitative data analysis.

## **Measures**

The original instrument was developed in 2001 by researchers at the University of California at Berkeley and the University of California at San Francisco as a part of a national data collection effort. Then the instrument was modified for the State of Hawai‘i Family Caregiver Needs Assessment survey (Arnsberger & Lum, 2007; Lum, et al., 2010). Additional items (e.g., cost of caregiving, service use preferences, and public policy to support caregivers) were added into the modified Hawai‘i survey (Arnsberger & Lum, 2007). The State of Hawai‘i Family Caregiver Needs Assessment contains 152 items and covers the following seven domains: (a) Caregiver and care recipient demographic information (18 items); (b) Care recipient’s ADL and IADL functions and illnesses, and health conditions (31 items); (c) Community service utilization (34 items); (d) Care/tasks provided by caregiver and paid/unpaid support (34 items); (e) Caregiver’s physical, mental and financial stresses (5 items); (f) Caregiver’s employment status and benefits provided by employers (8 items); and (g) Opinions about government program options for supporting caregivers (22 items). Any information

regarding the validity and reliability of the instrument of this Hawai‘i Family Caregiver Needs Assessment were not reported in a state report (Arnsberger & Lum, 2007) or any other resources.

For this present study, only certain items from six domains (a) through (f) were selected. The criteria for the selections of domains and items were based on the Andersen Behavioral Model (Andersen & Newman, 1973), which was used as a theoretical framework for this quantitative stage (see Chapter 1). Details on item selection are provided below.

### **Data Collection for the Original Study**

The telephone survey was conducted by Pacific Research and Planning Associates. The data was collected in fall of 2007, and a total of 2,259 phone calls were made in order to identify 600 research participants (Arnsberger & Lum, 2007). Other information regarding the data, such as incentive, data collection procedures, were not available.

### **Data Analysis**

**Selection of predictors and outcome variable.** The Andersen Behavioral Model (Andersen & Newman, 1973) was used as a guide to select variables for data analysis from the State of Hawai‘i Family Caregiver Needs Assessment data. The Andersen model only consists of individual determinants of health service utilization. However, for this present study, the researcher selected variables from the Hawai‘i assessment data including both caregiver and care recipient determinants. For this data analysis, 13 predictors and one outcome variable were selected. All these predictors and the outcome variable are summarized in Table 3.1.

Table 3.1

*Selected Predictors and Outcome Variable Based on the Andersen Model*

Andersen Model Individual Determinants		Hawai'i Family Caregiver Needs Assessment Survey Items
<b>Predictors</b>		
Predisposing	Demographic	CG age CG gender CG marital status CG relationship to CR
	Social structure	CG education level CG employment status CR living arrangement
Enabling	Family	Household income Extra informal help
	Community	Island
Need	Perceived	CG stress (financial, physical, & emotional stresses) CG sleep interruption
	Evaluated	CR health conditions
<b>Outcome Variable</b>		
Service utilization		

*Note.* CG = caregiver; CR = care recipient.

SPSS version 21 was used for the data analysis. For the first step in the preliminary analysis, the raw data ( $n = 151$ ) were used to conduct frequencies of 13 predictors and one outcome variable to check for missing values. In the raw data, many of these predictors and the outcome variable contained the response choices of both “don’t know” and “refused” (meaning “refused to answer this question”). These two response choices were treated as “missing data” for the further data analysis in this quantitative stage.

Recoding procedures for the variables presented in Table 3.1 were employed as the second step, and these variables were either recoded into dichotomous variables or continuous variables as summed scores of survey items. The decision on why these variables were only recoded into dichotomous variables (two categories) was as follows: When multiple regression is performed, any predictors that have more than three categories need to be dummy coded (Field,

2009). Thus, any dummy coded categories are treated as additional variables in the multiple regression analysis. The number of variables included in the multiple regression model are determined by the sample size (Field, 2009). Therefore, dummy coded categories limit of the number of variables permitted in the multiple regression model, especially when the sample size is small ( $n = 151$ ). In order to maximize statistical power, the researcher decided to only dichotomize certain predictors.

Table 3.2 presents how each variable was recoded or summed, also Appendix A presents more details of how original response categories were recoded into dichotomous or summed variables. The categorical variables were recoded into dichotomous variables based on the results of cumulative percent or percentiles in the frequencies of each category of the variables.

Table 3.2

*Recoded and Summed Predictors and Outcome Variable*

<b>Predictors</b>	Original level of measurement	Original #s of categories	Recoded #s of categories
CG age	Continuous		2 (dichotomized)
CG gender	Categorical	3	2 (dichotomized)
CG marital status	Categorical	7	2 (dichotomized)
CG relationship to CR	Categorical	12	2 (dichotomized)
CG education level	Categorical	8	2 (dichotomized)
CG employment status	Categorical	3	2 (dichotomized)
CR living arrangement	Categorical	9	2 (dichotomized)
Household income	Categorical	17	2 (dichotomized)
Extra informal help	Categorical	4	2 (dichotomized)
Island	Categorical	4	2 (dichotomized)
CG stress	3 items 5-point Likert scale each	7	Continuous (Summed scores from 3 items)
CG sleep interruption	Categorical	4	2 (dichotomized)
CR health conditions	Categorical (13 items)	4 each	Continuous (Summed scores from 13 items)
<b>Outcome Variable</b>			
Service utilization	Categorical (16 items)	4 each	Continuous (Summed scores from 16 items)

*Note.* CG = caregiver; CR = care recipient.

**Predictors**

**Age.** Originally, caregiver age was recorded by whole years (a continuous variable), but it was recoded into two categories: (a) age between 22 and 59 years old or (b) age between 60 and 89 years old.

**Gender.** Gender originally had three categories, but was recoded into two: (a) male or (b) female.

**Caregiver marital status.** Caregiver marital status originally had seven categories, but was recoded into two: (a) married or (b) all other statuses.

**Relationship to care recipient.** Caregiver relationship to care recipient had originally 12 categories, but was recoded into two: (a) parental relationship or (b) all other relationships.

**Caregiver education level.** Caregiver education level originally had 8 categories, but was recoded into two: (a) up to some college or (b) college graduate (4 years) or higher.

**Caregiver employment status.** Caregiver employment status originally had three categories, but was recoded into two: (a) yes (currently employed) or (b) no (not currently employed).

**Care recipient living arrangement.** Care recipient living arrangement had originally 9 categories, but was recoded into two: (a) live alone or (b) all other living arrangements.

**Household income.** Household income had originally 17 categories, but was recoded into two: (a) less than \$29,999 or (b) \$30,000 and above.

**Extra informal help.** Extra informal help refers to when caregiver are not able to provide care for their care recipients for some reasons (e.g., have to work), there is someone (informal non-paid help) who can provide that care for them. Extra informal help had originally four categories, but was recoded into two: (a) yes (extra informal help was available) or (b) no (extra informal help was not available).

**Island.** The variable “island” originally had four categories that reflected the four main counties in Hawai‘i, but was recoded into two: (a) Oahu or (b) all other islands (Hawai‘i, Maui county, and Kauai).

**Caregiver sleep interruption.** Sleep interruption refers to whether or not the caregiver experienced any sleep interruption during the past week as a result of their caregiving. Caregiver sleep interruption originally had four categories, but was recoded into two: (a) yes (reported having sleep interruption problems) or (b) no (did not report having sleep interruption problems).

## **Calculating Total Scores/Numbers for Survey Items**

**Caregiver stress.** Caregiver stress was comprised of 3 original questions related to three separate types of stressors (financial hardship, physical strain and emotional stress) with a 5-point Likert scale that asked how stressful each of these potential stressors was to the caregiver. Instead of treating these three items separately, total scores of three items were summed and treated as a continuous variable for further data analysis. Originally, each item had seven categories, but were recoded into five, 1 – not stressful and 5 – most stressful, and two categories, “don’t know” and “refused” were treated as “missing data.” Then the total scores of three items were calculated, with the total scores ranging between 3 and 15 ( $\alpha = .721$ ).

**Care recipient health conditions.** One survey question asked about care recipient health conditions. A list of 13 illnesses and health conditions were read to caregiver participants (e.g., arthritis, heart disease or high blood pressure, diabetes, blindness, mental health problems, severe memory problems, or dementia, and behavior problems) and asked if their care recipients have any of these illness and health conditions. Originally, each item had four categories, they were recoded into two: (a) yes (have illness or health condition) or (b) no (do not have illness or health condition). Then, scores of each item were summed and treated as a continuous variable for the further analysis. The range of total scores was between 1 and 7. The reliability for the summed 13 items was not employed because each item measured different illnesses or health conditions.

## **Outcome Variable**

**Service utilization.** One outcome variable in this study was considered to represent “service utilization.” In the original Hawai‘i survey, there was a list of 16 different community services that caregivers or care recipients might utilize, such as adult day services, transportation, and personal care services. Originally, each service had four categories, which were recoded into

two: (a) yes (used services) or (b) no (did not use services). Then the total number of services used was calculated from these 16 individual items and treated as a continuous variable for further analysis. The range of total number of services used was between 0 and 10. The reliability for the summed 16 items was not employed because each item measured different types of services.

Following the first two steps of recoding and cleaning data, the third step, univariate analysis (frequencies for categorical variables and descriptives for continuous variables) was employed. In the process of the exploring the univariate analysis, the researcher checked skewness, kurtosis, and histogram on the outcome variable (“service utilization” – the total number of services used). The skewness value of 1.13 and histogram (a clustering of scores was right-hand side of a graph) indicated the scores on the outcome variable were positively skewed. Therefore, data transformation on the outcome variable was employed. According to the guidelines for data transformation suggested by Field (2009), Howell (2010), and Tabachnick & Fidell (2007), logarithmic ( $\log_{10}$ ) transformation was an appropriate method to be used. However, the outcome variable contained 0 values; therefore,  $\log(X + C)$  was used. In this case, C (a constant) was 1. As a result of the  $\log_{10}$  transformation, the skewness values was -.066 and the variance values were changed from 5.923 to .089. This transformed outcome variable was used for further data analysis, such as bivariate statistics and multiple regression.

Following the univariate analysis, bivariate statistics (Chi-square, Independent t-tests and Pearson correlations) were employed to test the relationship between the transformed outcome variable (the total number of services used) and 13 selected predictors in Table 3.1. Results of the bivariate analyses identified nine statistically significant predictors were then used in the final multiple regression model.

Before performing multiple regression, four assumptions for using parametric data (normality of data, homogeneity of variance, at least interval level of data, and independence of participants) (Field, 2009) were checked. Based on the bivariate analysis, multiple regression was employed to predict the relationship between nine predictors and one transformed outcome variable. Yet, sample size was an issue in the multiple regression model. The sample size was originally 151; however, it went down to 87 in the multiple regression analysis. One predictor, household income, caused the reduced sample size because of 31 missing data points. Therefore, the researcher decided to exclude the household income predictor for further data analysis. Without the household income predictor, the sample size was 110 in the multiple regression model. Field (2009) suggests the formula for determining the multiple regression sample size is  $50 + 8k$  ( $k$  – refers to the number of predictors). Therefore, the final sample size of the data for this present study was  $n = 110$ , which was close enough sample size according to the Field's formula, which would suggest an optimal  $n = 114$ . In the final multiple regression model, the relationship between eight predictors (gender, education level, living arrangement, extra informal help, caregiver stress, sleep interruption, care recipient health conditions, and island) and the outcome variable (the total number of services used) was examined. Multicollinearity diagnostics of the final model were also conducted to check the values of tolerance and the variance inflation factor (VIF) on these eight predictors. The whole data analysis process for this quantitative stage is presented in Figure 3.1.

### **Decision on Final Data Analysis Method**

Initially, the researcher was planning to conduct binary logistic regression because that statistical method was suitable for answering two research questions for this quantitative stage. However, multiple regression was selected for the following reasons:

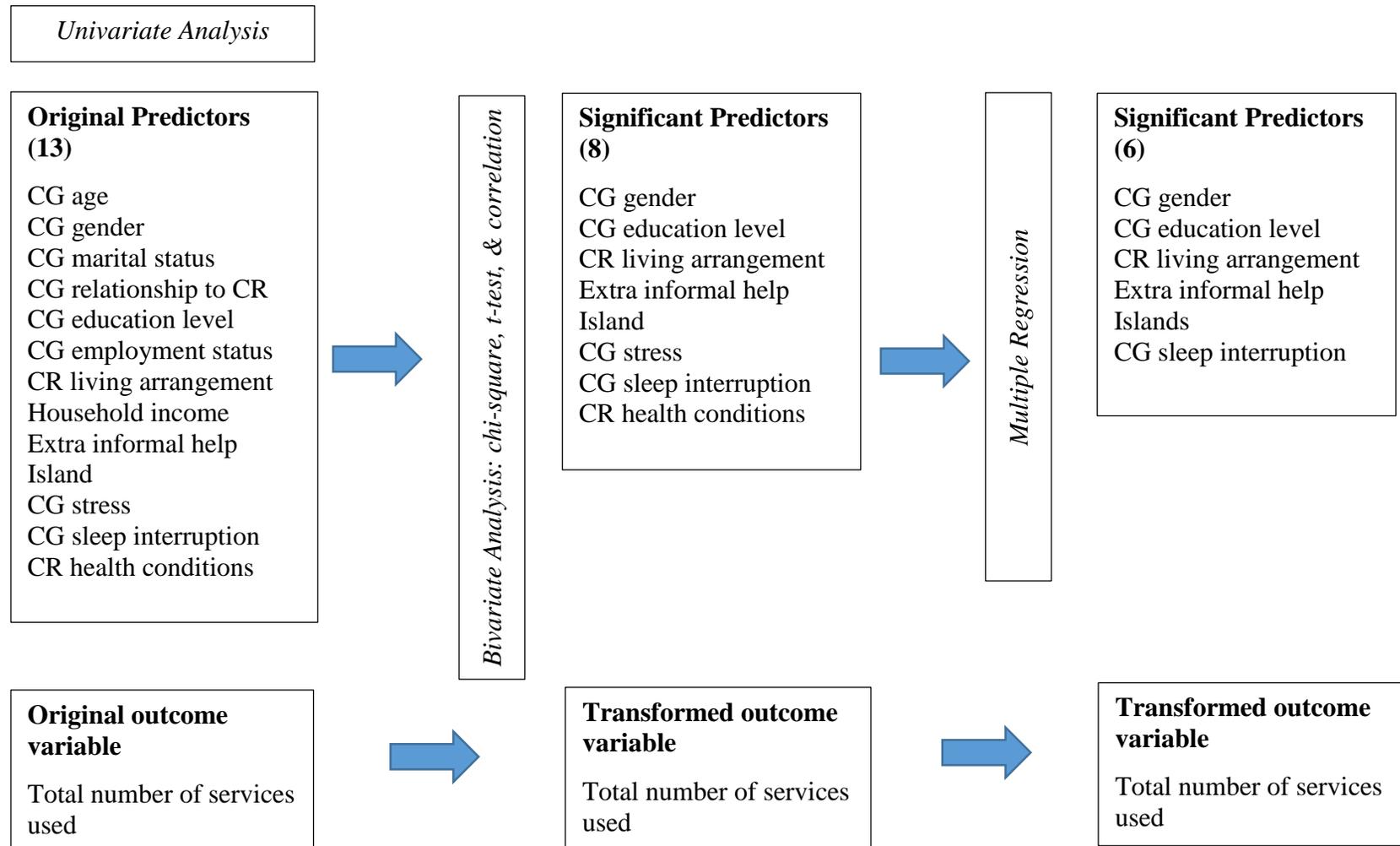
1. There were sample size issues found in the univariate analysis (frequencies). The frequency results of a dichotomized service use outcome variable (yes or no) indicated that the sample was  $n = 121$  because of 30 missing data. Within the sample of 121, 81% ( $n = 98$ ) of them used at least one service (service users) and only 19% ( $n = 23$ ) of them did not use any services (non-service users). The univariate analysis results suggest that such a small sized sample of non-service users might affect bivariate analysis, such as chi-square test.
2. For the next step, chi-square tests (bivariate analysis) were conducted to test the relationship between a dichotomized “service utilization” outcome variable and 11 dichotomized predictors (gender, age, marital status, relationship to care recipient, education level, employment status, living arrangement, household income, extra informal help, sleep interruption, and island). Field (2009) suggests when using the chi-square test, the expected frequencies in each cell must be greater than 5; therefore, small samples cause problems when performing the chi-square test. For this present study, the results of chi-square indicated that frequencies of at least one cell in three dichotomized predictors (household income, sleep interruption, and island) was less than 5. Furthermore, even one of the cells had only 5 male research participants. The original male sample size was 36; however, the sample size in the chi-square test was 26 because of 10 missing data. These results indicated the violation of assumptions and resulted in a loss of statistical power for performing chi-square analysis.
3. For the third step, another bivariate analysis, independent t-tests, was conducted between two continuous predictors (care recipient health conditions and caregiver stress) and the dichotomized “service utilization” outcome variable. The results of all bivariate statistical

tests (Chi-square tests and Independent t-tests) indicated that only three predictors were statistically significant (care recipient living arrangement, education level, and caregiver stress). The main predictor for this quantitative stage of gender *was not* a statistically significant predictor in the chi-square test.

The first two reasons above suggest that the sample size issues of certain predictors and the violation of assumptions resulted in a loss of statistical power for performing chi-square analysis. The third reason suggests that only limited numbers of predictors used for binary logistic might limit the prediction of how the Andersen model works for the present sample. Therefore, for these three reasons, the researcher selected multiple regression as a statistical test for the final quantitative analysis.

Figure 3.1

*Quantitative Data Analysis Process*



## **2<sup>nd</sup> Stage: Qualitative Stage**

The qualitative stage was conducted as the second stage of this present study in order to answer one primary research question and one sub-research question. The primary research question is: How do cultural factors affect the patterns of elder care service utilization among family caregivers of Japanese ancestry in the State of Hawai‘i? The sub-research question is: If there is any, how does gender affects the patterns of elder care service utilization among the studied population? Adding this qualitative stage was appropriate for two reasons. One was that none of the survey questions that examined cultural factors in the patterns of service utilization were included in the quantitative data. The other was that, as Corbin and Strauss (2008) state, “qualitative research allows researchers to get at the inner experience of participants, to determine how meanings are formed through and in culture, and to discover rather than test variables” (p. 12). Therefore, in addition to testing certain predictors in the quantitative stage, the data from conducting individual interviews in the qualitative stage would provide a greater in-depth understanding of service utilization patterns in the studied population.

### **Protection of Human Subjects**

An application for the protection of human subjects for this qualitative stage was submitted separately to the University of Hawai‘i Committee on Human Studies Program as an added component to the initial IRB exempt application of the quantitative stage of the study (granted as CHS #20450). The following documents therefore were submitted to the Human Studies Program: an application for exempt status for human subjects research, an interview guide, the interview questions, a demographic information sheet, a consent form to participate in this study, and the flyer for recruiting potential research participants. All of these documents, except the application for human subjects protection, were translated into Japanese in order to

accommodate the Japanese speaking research participants. The translated documents were reviewed by a professor from the East Asian Languages and Literatures department to check for the accuracy of the translation from English to Japanese. Then, revision of the documents when needed was made before submitting them to the Human Studies Program. This qualitative stage of the study was granted an exemption (CHS #20450) on December 7, 2012.

## **Participants**

**Eligibility criteria.** In addition to the original eligibility criteria of the State of Hawai‘i Family Caregiver Needs Assessment used in the quantitative stage of the study, the following criteria were added to this qualitative stage of the study:

1. If multiple caregivers were involved in a caregiving situation, the caregiver who provided the most care would be selected.
2. Caregivers who either used services or did not use services at the time of recruitment.
3. Care recipients who were not institutionalized (e.g., nursing home, care home, or other forms of care facilities).
4. Caregivers who identified themselves as either Japan-born or U.S. born persons of Japanese ancestry.

**Sampling strategy.** Two non-probability sampling methods, non-random purposeful sampling and snowball sampling, were employed to select the 23 research participants by contacting two non-profit organizations in Honolulu (Catholic Charities and Project Dana), one for-profit adult day care program in Honolulu, and by using researcher’s own personal contacts.

The researcher contacted representatives from these two organizations and one adult day care program in order to explain the purpose and procedures of this qualitative stage. Initially, all three agreed to help the researcher recruit potential research participants; however, later, the

administrator of the adult day care program declined because of “increased management duties.” A social worker at Catholic Charities posted the recruitment flyer at the Lanakila Multi-Purpose Center, and also contacted potential research participants by phone. The potential research participants then contacted the researcher. An administrator at Project Dana first contacted potential research participants to get their permission to provide their contact information to the researcher, and then the administrator gave the researcher a list of potential research participants to contact.

The researcher contacted these potential research participants from the two organizations either by phone or via email. At initial contact, the researcher reviewed the eligibility criteria with each potential research participant to make sure that they were eligible to participate in this qualitative stage of the study. A total of 21 potential research participants met the entire eligibility criteria. Two potential participants did not meet the criteria (3) above. Their care recipients were institutionalized. However, these two were included in this qualitative stage for the following reasons: Because at the time that these two potential research participants contacted the researcher was between 4 and 5 months after the institutionalization. Despite the current institutional setting for their care recipients, these potential research participants had already cared for their family members between 10 and 15 years prior to placing them in an assisted living facility or a care home, where they continue to visit them. Therefore, these two caregivers were included in the qualitative stage. However, when they were interviewed, the researcher clarified with them that their responses should be limited to their caregiving experiences prior to the institutionalization.

**Characteristics of participants.** Although the initial plan was to recruit only 20 research participants, a total of 23 caregiver participants were recruited for this qualitative stage. The

description of the sample for this qualitative stage is summarized in Table 3.3. As for their service use status, 57.0% ( $n = 13$ ) were service users and 43.0% ( $n = 10$ ) were non-service users. Service users were defined as participants who were currently using at least one service at the time of their interview. Non-service users were defined as participants who were not using any services at the time of their interview. Of the caregiver participants, 57.0% ( $n = 13$ ) were females and 43.0% ( $n = 10$ ) were males.

Table 3.3

*Description of the Studied Sample*

	Service users ( $n = 13$ )	Non-service users ( $n = 10$ )
Female ( $n = 13$ )	9	4
Male ( $n = 10$ )	4	6

Three of the participants were Japan-born and the rest were Japanese Americans who were at least 2<sup>nd</sup> generation, also called the *Nisei*. The three Japan-born participants were all females, two of whom used services and one who did not at the time of their interviews. As for the care recipients, four of them were Japan-born, 18 of them were Japanese Americans, and one was of Chinese ancestry.

The mean age of the 23 caregiver participants was 69.78 years old, and the age range was between 52 and 90 years old. The mean age for both genders was very similar. The mean age of male participants was 70.60 years old (range: between 52 to 90 years old). The mean age of female participants was 69.15 years old (range: between 35 and 88 years old). The mean age of care recipients was 88.43 years old and the age range was between 65 and 100 years old.

The average length of time as a caregiver for their current caregiving situations was 7.54 years (range: between 1 and 20 years). Male research participants (8.15 years) had a little longer caregiving career than that of their female counterparts (7.01 years).

The caregiver’s relationship to the care recipient is presented in Table 3.4. Almost half of the 23 participants (52.2%) cared for a parent, especially a mother (43.5%).

Table 3.4

*Caregiver Relationship to Care recipient as a Percentage and a Count of the Sample*

Relationship	Percentage	Count ( <i>n</i> = 23)
Husband	21.7	5
Wife	13.0	3
Father	8.7	2
Mother	43.5	10
Sister-in-law	8.7	2
Mother-in-law	4.3	1

As for a care recipient’s living arrangement, the majority (73.9%) of care recipients were living with their caregivers, and the rest (26.1%) were living alone in their home or apartment. Nearly 70% of caregiver participants were married. The majority of them (78.2%) had completed college or beyond, and nearly 70% had a household income was \$40,000 and over. Their caregiver characteristics are presented in Table 3.5.

Table 3.5

*Caregiver Characteristics as a Percentage of the Sample (n = 23)*

Characteristic	Percentage
Care recipient living arrangement	
Live with caregiver	73.9
Live alone	26.1
Caregiver marital status	
Married	69.6
Widowed	13.0
Never married	13.0
Other	4.3
Caregiver education level	
Less than high school	4.3
High school graduate	8.7
Community college/technical school graduate	8.7
College graduate – 4 years	65.2
Post graduate	13.0
Caregiver household income	
Less than \$20,000	13.0
Between \$20,000 – \$39,999	17.4
\$40,000 and over	69.6

The generation of both the caregivers and the care recipients is presented in Table 3.6. For one case, a female participant considered herself as a 1<sup>st</sup> generation Japanese because she was born in Japan. However, her father was also born in Japan (considered as 1<sup>st</sup> generation Japanese) and her mother was a 2<sup>nd</sup> generation immigrant, so the researcher considered the female participant as at least 2<sup>nd</sup> generation. For another case, a female participant was considered as 4<sup>th</sup> generation from her father's family side of immigration history. But she considered herself more as 3<sup>rd</sup> generation because she said she fit well with the characteristics observed in 3<sup>rd</sup> generation persons rather than 4<sup>th</sup> generation Japanese. Most of caregiver participants (60.9%) were 3<sup>rd</sup> generation Japanese, and half of their care recipients (52.2%) were 2<sup>nd</sup> generation Japanese.

Table 3.6

*Generation as a Percentage of the Sample*

Generation	Caregivers ( <i>n</i> = 23)	Care recipients ( <i>n</i> = 23)
1 <sup>st</sup> generation	13.0	17.4
2 <sup>nd</sup> generation	21.7	52.2
3 <sup>rd</sup> generation	60.9	30.4
4 <sup>th</sup> generation	4.3	

The description of service utilization among *service using participants* (*n* = 13) is presented in Table 3.7. On average, regardless of gender, they used 2.15 services (range: between 1 and 4 services). As for any gender difference, female participants used more services (2.33) than their male counterparts (1.75).

Table 3.7

*Service Utilization by Caregiver Gender*

Gender	<i>N</i>	<i>M</i>	<i>SD</i>
Female	9	2.33	1.00
Male	4	1.75	0.50

The three most commonly used elder care services by these service using participants were caregiver support groups, bathing or personal care services, and companion/respice services (visitation by volunteers). The frequency of services used by the service using participants is presented in Table 3.8.

Table 3.8

*Services Used by Service Using Participants as a Count of the Sample  
(n = 13)*

Types of services	Count
Counseling or support service (support groups)	4
Bathing or personal care services	4
Companion/ respite services	4
Adult day services	3
Transportation	3
Home delivered meals	2
Light cleaning, shopping, or cooking services	2
End of life services	2
Any other services	2
Health maintenance services	1
Senior center (e.g., recreational classes)	1

### Measures

The researcher developed the interview questions, the demographic information sheet, and the interview guide for the qualitative stage, which all were based on the findings of the initial quantitative data analysis, the Andersen Behavioral Model of Health Services Use, Social Exchange Theory, and material from the literature review. These documents are presented in detail in Appendix B. These instruments were originally developed in English, and then translated into Japanese for potential Japanese speaking research participants. The translated instruments were reviewed by a professor of the East Asian Languages and Literatures department to check the accuracy of the instrument.

**Interview questions.** The interview questions covered eight domains related to Japanese cultural values/beliefs (e.g., filial piety and *sekentei*) in the contexts of caregiving experiences and elder care service utilization patterns. Each interview question also consisted of some sub-questions and areas for probing to help facilitate the course of the interviews. An example of this interview question format is presented in Table 3.9:

Table 3.9

*An Example of Interview Question Format*

Interview question 1	Would you please describe your caregiving experiences?
Sub-question 1b	What are the challenges you have encountered in your caregiving experience?
Probe area	Gender – What are the challenges of being a male/female caregiver?

There were a total of eight interview questions. Some of these questions were asked for both service using and non-service using participants. Other questions were asked specifically to either service users or non-service users. These eight interview questions are described as follows along with the entire interview questions with sub-questions and probe areas that are presented in Appendix B.

The first three interview questions were asked to *both service users and non-service users*:

1. Would you please describe your caregiving experiences?
2. What were your reasons for becoming a caregiver for this family member(s)? What motivated you to become a caregiver for this family member(s)?
3. In your opinion, (in general) who should be responsible to take care of elderly family member(s)?

The fourth and fifth questions were asked to *only service users*:

4. Why did you start using service(s)? What was the process to start using service(s)?
5. Would you describe your experience(s) of using the service(s)?

The sixth and seventh questions were asked to *only non-service users*:

6. Why don't you use the available services?
7. How do you manage your caregiving responsibilities/tasks without using any available elder care service(s)?

The eighth question was asked to *both service users and non-service users*:

8. How do you take care of your family member(s) differently if you are not Japanese /Japanese American? This particular question was only asked when no cultural factors (e.g., values, beliefs and norms) were discussed or mentioned in any of previous interview questions.

Two pilot interviews were conducted using one Japanese American female participant and one Japanese American male participant. Based on their responses and feedback, some sub-questions were added to clarify the main interview questions. Since the researcher did not make any major changes for these eight interview questions, the two pilot interviews were included in the data analysis for this qualitative stage.

### **Data Collection**

The researcher conducted a one-time semi-structured individual interview for each of the 23 research participants. The interview locations, varied by participants, which were either requested by the research participant or suggested by the researcher (e.g., Lanakila Multi-Purpose Senior Center, Project Dana office, Moiliili Hongwanji temple, coffee shops, and participants' houses).

Before each interview, the researcher went over the purpose of study, the amount of time needed to complete the interview, and then provided and collected a written consent form from each research participant. The researcher also collected, the demographic information (e.g., caregiver's age, gender, generation, employment status, relationship to care recipient, care-recipient's living arrangement, etc.), before each interview.

With each research participant's permission, the researcher audio recorded the 23 interviews for the data analysis. Also, with their permission, the researcher took notes during

each interview for data accuracy. For the research participants who preferred to have their interviews in Japanese, the researcher explained the data collection procedures in Japanese.

For one of the research participants, the researcher conducted a second interview to clarify her earlier responses. Three interviews were conducted in Japanese with the rest done in English. These 23 interviews were conducted between January 2013 and November 2013. Each interview lasted between 52 and 110 minutes. On one occasion, a daughter and her father both identified themselves as primary caregivers for a family member. Each of the interview responses was included in the data analysis. However, the researcher counted them as one caregiver participant because the father made so few comments. Fourteen research participants had past caregiving experiences prior to their current caregiving situation. During the course of these 14 interviews, they also shared their past caregiving experiences as well as their current ones. Some of their past caregiving experience was also included in the data analysis. As mentioned in the eligibility criteria section, two caregiver research participants whose care recipients were institutionalized at the time of recruitment were included; however, their responses focused on their caregiving experience prior to the recent institutionalization.

At the completion of each interview, a copy of the research consent form and a \$10.00 gift certificate from Longs Drugs with a thank you note was given to each research participant. After the completion of the dissertation, the researcher plans to send a copy of the results of this qualitative stage back to each participant to acknowledge their contributions of time and effort, in spite of all their caregiving responsibilities during the time of the interviews.

## Data Analysis

Using grounded theory analytic tools, the researcher conducted a content analysis of the transcripts (also called “the data”). The following analytic tools introduced by Corbin and Strauss (2008) were used to analyze the data: making comparisons (constant comparisons), looking at language, looking at the expressed emotions, looking for any negative cases, and in-vivo codes. The definition for each of these analytic tools is cited from Corbin and Strauss (2008, pp. 65-84) and is presented in Table 3.10.

Table 3.10

### *Grounded Theory Analytic Tools Utilized in the Data Analysis*

Analytic Tools	Definition
Making comparisons (Constant comparisons)	[E]ach incident in the data is compared with other incidents for similarities and differences (p. 73).
Looking at language	Language is often rich and very descriptive and worth paying attention to, because it can provide considerable insight into the people we [researcher] are studying and where they [respondents] are coming from (p. 82).
Looking at emotions that are expressed	When doing analysis it is important not to overlook expressed emotions and feelings, because they are part of context and often follow and/or are associated with action or inaction. Emotions and feelings cue the analysts as to the meaning of events and to persons (pp. 82-83).
Looking for the negative case	The negative case is a case that does not fit the pattern. It is the exception to the action/interaction/emotional response of others being studied (p. 84).
In-Vivo Codes	Concepts using the actual words of research participants rather than being named by the analyst (p. 65).

After each interview, the researcher transcribed verbatim each audio recorded interview into a text file, and then sorted the text files by interview questions. All 23 audio recorded interviews were transcribed by the researcher. Three interviews, conducted in Japanese, were transcribed verbatim into Japanese. The researcher translated these Japanese transcripts into English only when the quotes were used in the results section of the present study.

After completion of all 23 interviews, the researcher began the data analysis. There were four steps in this data analysis. The qualitative data analysis software NVivo 10 was used for the data analysis. Commonly used terms and definitions in grounded theory data analysis, as introduced in Corbin and Strauss (2008), are provided in Table 3.11. For the first step, the researcher began with “open coding.” Open coding is defined as “[b]reaking data apart and [then] delineating concepts to stand for blocks of raw data” (Corbin & Strauss, 2008, p. 195). The researcher read each transcript line by line, paying attention to each research participant’s words, phrases or sentences related to Japanese cultural values and beliefs, caregiving experience, and service utilization. All 23 transcripts were then coded by the eight main interview questions and some sub-questions. In the coding process, the researcher determined some comments by the research participants could appropriately be coded into multiple concepts. For example, a comment such as “I am not comfortable in asking for help” was coded under two different concepts, such as “generation” and “upbringing.” As a result of the open coding process, 52 substantive concepts emerged (e.g., family responsibility, “local” culture, support at work, service experiences, knowledge of services). The list of these 52 concepts is presented in Appendix C.

“Axial coding” followed as the second step in the data analysis. Axial coding is the relating of concepts to each other (Corbin & Strauss, 2008). The researcher examined each of 52 concepts, which emerged from the open coding process, for contexts based on conditions, situations, and issues that the research participants had experienced in their caregiving and service use. The specific interview questions and sub-questions, for either service users or non-service users, were continuously coded question by question in the axial coding process. Therefore, the same category names were used for these codes. As a result of examining the connections between these 52 concepts, 25 categories emerged (e.g., “cultural factors related to service utilization patterns” and “not comfortable with strangers in the house”). The list of these 25 categories are presented in Appendix C. Of these 25 categories, any categories that did not relate to caregiving experiences or service utilization patterns for this qualitative stage (e.g., generation and various rewards on caregivers through caregiving), were not included for the next selective coding process.

In the third step, “selective coding” was employed to build a “story” that connected the categories that had emerged in the process of axial coding (Creswell, 1998). The whole coding process continued until the researcher had reached the point where there were no new concepts, categories or themes that emerged from the data. This is labeled “saturation” in grounded theory (Corbin & Strauss, 2008). As a result of the selective coding, seven themes emerged and are presented in Appendix C.

After the selective coding, the researcher sorted the research participants’ comments by service use patterns/status (service users and non-service users) and by their gender (male and female)—themes to further examine any differences among them.

In the final step of the data analysis, based on the emergent “story” from each of the seven themes, the researcher had generated as a theoretical model to demonstrate how cultural and non-cultural factors have an impact on elder care service utilization patterns and caregiving experience. This theoretical model is presented in Figure 4.3.

### **Inter-Rater Reliability**

Patton (2002) states that “[q]ualitative inquiry, because the human being is the instrument of data collection, requires that the investigator carefully reflect on, deal with, and report potential sources of bias and error” (p. 51). Although the primary researcher of this study was aware of potential biases and errors in the process of data collection and data analysis, the trustworthiness of the findings needed to be checked to establish the reliability of the findings. The primary researcher asked a secondary researcher, who was familiar with qualitative methodology, to review the final codes (including concepts, categories, and themes) and to check the accuracy and consistency of the findings of the qualitative stage. Three transcripts (one for a non-service using female, one for a non-service using male, and one for a service using male), which were 13% of the total 23 transcripts, were reviewed. First, the secondary researcher read each transcript and wrote down common concepts or categories that emerged from the process. Second, after she finished the coding process, she compared the list of concepts and categories, found by the primary researcher, with her findings. The secondary researcher developed a list of these concepts and categories, which were matched with the primary researcher’s list. Finally, the primary researcher calculated an inter-rater reliability based on the consistency between the two researchers. Two concepts for each transcript were not matched; however, the inter-rater reliability was still 80.0%, which ensured the trustworthiness of the data analysis and the findings.

Table 3.11

*Terms and Definitions in Grounded Theory*

Term	Definition
Analytic Tools	Thinking techniques used by the analysts to facilitative the coding process.
Axial Coding	The act of relating concepts/categories to each other.
Categories/Themes	Higher-level concepts under which analysts group lower-level concepts according to shared properties. Categories are sometime referred to as themes. They present relevant phenomena and enable the analyst to reduce and combine data.
Codes	Names given to the concepts derived through coding.
Coding	Deriving and developing concepts from data.
Concepts	Words that stand for ideas contained in data. Concepts are interpretations, the products of analysis.
Grounded Theory	A specific methodology developed by Glaser and Strauss (1967) for the purpose of building theory from data.
In-Vivo Codes	Concepts using the actual words of research participants rather than being named by the analyst.
Open Coding	Breaking data apart and delineating concepts to stand for blocks of raw data.
Reflexivity	A way of emphasizing the importance of self-awareness, political/cultural consciousness, and ownership of one's perspective.
Saturation	Saturation is usually explained in terms of "when no new data are emerging."
Selective Coding	Building with a "story" that connects the categories.

*Note.* Sources from Corbin & Strauss, 2008; Creswell, 1998; Patton, 2002.

## **Role of Researcher**

In a qualitative study, “reflexivity” is one of the more important considerations during the collecting of and analyzing of the data (Corbin & Strauss, 2008; Patton, 2002). Patton (2002) describes “reflexivity” as “a way of emphasizing the importance of self-awareness, political/cultural consciousness, and ownership of one’s perspective” (p. 64). For instance, a researcher’s feelings, responses, or reactions may influence a research participant during an interview. Therefore, researchers need to be aware of their own biases, assumptions, and experiences which might influence during the data collection and analysis. In this section, the researcher discusses her own “reflexivity” experience during the data collection and analysis in this qualitative stage. Also, the researcher suggests how to minimize bias and assumptions when they arise. Since the researcher discusses her role as a researcher, “I” is used in the rest of this “Role of Researcher” section.

At the professional and personal levels, I have worked with older adults and their family caregivers in different settings, including the ethnically diverse communities, found in California and Hawai‘i. Personally, I became a caregiver for my mother in 2013 while I was conducting interviews for this present study. At the academic level, I was involved in research on family caregiving in Hawai‘i, and reviewed the literature on caregiving related issues. These practical, personal, and academic experiences gave me a better understanding of family caregivers from various backgrounds, and the influence of ethnicity, gender, and culture. At the same time, I noted potential bias and assumptions that might have influenced me during the data collection and analysis. This bias and assumptions are: (a) Prior contacts with research participants; (b) Being a Japan-born researcher; (c) Being a caregiver; (d) Being a female researcher; and (e) Degree of English language proficiency. I describe each one of these issues and explain my

attempts to minimize their effects during the data collection and analysis for this qualitative stage of the present study.

**Prior contacts with research participants.** For the qualitative stage, I recruited research participants from two non-profit organizations and through personal contacts. Even though I used different sources for the recruitment, I knew seven of these research participants prior to my interviewing them. These prior contacts had the potential for generating certain unintended consequences during the interviews. Some of these participants might have been more comfortable sharing their caregiving experiences because they knew me. Others might have been more apprehensive about sharing their experiences because they might have thought that I might not keep their stories confidential. Confidentiality becomes an issue when a person lives in a small Hawai'i community. To relieve them of this concern, before they signed a research consent form, I explained that all the information would be kept confidential, that pseudonyms (fake names) when used in the findings, and all personal data would be destroyed at the completion of the study. I hoped that they might then feel safe to share their stories with me without reservation.

**Being a Japan-born researcher.** Being a Japan-born researcher was an advantage at the qualitative stage because I had a better understanding of some of critical issues (e.g., language barriers and service quality) that three Japan-born research participants were facing in service utilization. Conversely, some of the research participants might have assumed that I understood them better because of being a Japanese national. For instance, a Japan-born female participant made the generalization about what Japanese women do, such as “as Japanese women do this.” I asked her to elaborate on what she meant by “Japanese women do this” to avoid my misinterpreting of her comment. For Japanese American research participants, when they used

some Japanese words in the interviews, such as “*oya-ko-ko*” [filial piety], I made certain that both the participants and I had a common understanding of the meaning of such words in the particular context. However, because the researcher and research participants had the same ethnic background of being Japanese, it might have heightened the sensitivity of certain issues (such as questions about income) during interviews. In Japanese culture, people usually avoid asking questions about such things as income, because such questions are considered very personal. Therefore, for the demographic information inquiry, I used three categories (“under \$20,000, between \$20,000” and “\$40,000, \$40,000 and over”), instead of asking them for a single amount of their household income. A couple of research participants hesitated to respond to this income question by asking, “Do I really need to answer this question?” For these cases, I told them that they could skip any questions for which they were uncomfortable answering.

**Being a caregiver.** On some occasions, upon learning that I am a caregiver myself, it helped the research participants to become more open in sharing their stories with me. I also connected better with some persons because I understood what they had experienced during their caregiving experiences. At the same time, I tried not to become so immersed in their caregiving situations, that I sacrificed the objectivity needed especially during the process of data analysis. When I summarized the findings for each theme, I usually used direct quotes from research participants in order to verify the findings and to avoid any misinterpretation of their responses.

**Being a female researcher.** Being a female researcher, I might not have been as sensitive to or have missed some gender based nuances of male caregiving experience. When male research participants used the words, such as “we” and “normal,” I asked them to elaborate their responses in order to avoid misinterpretation. In addition, when I asked male research participants about their comfort level when providing personal care (e.g., bathing or toileting) to

their female care recipients, some of the second generation research participants hesitated to answer the question. In Japanese culture, such private matters are normally kept within the family. Therefore, when I had such reactions from male research participants, I did not press for further comments.

**Degree of English Language Proficiency.** Since English is not my native language, I encountered some English language issues while I was conducting interviews and transcribing them. Sometimes the interview questions were not clear or were misunderstood by the research participants. When this occurred, I either rephrased the interview questions or provided some examples, so that they might better understand them. At other times, I did not understand some English idioms or slang (e.g., guilt trip, chickenshit) in the interviews, I clarified the meaning of those words with the research participants. Also, when I was not able to transcribe some of medical or technical terms (e.g., mild cognitive impairment with associated behavior and sleep disorder, uterine prolapse) either I used a dictionary or inquired with native English speakers to be certain that I had transcribed and understood them correctly. Using an audio recorder for all the interviews helped me to more accurately transcribe the data. In the results section, I used quotes from the research participants in order to verify the findings and minimize any misinterpretation of the data analysis. Moreover, the whole method and results sections of qualitative stage were reviewed by my chairperson, committee members, and a personal friend of whom I requested feedback in order to be certain that everything in these sections were clearly understood by them.

## CHAPTER 4

### RESULTS

#### 1<sup>st</sup> Stage: Quantitative Stage

##### Univariate Analysis: Descriptive Statistics

Descriptive statistics were conducted on predictors and the outcome variable selected from the Andersen model. For these univariate analyses, data from 151 caregiver participants (115 females and 36 males), who met study criteria for this quantitative stage of the present study, were utilized.

**Predictors.** The mean age of 147 (4 missing) caregiver participants was 59.4 years old ( $SD = 14.51$ ). As for caregiver gender, 76.2% were females ( $n = 115$ ) and 23.8% were males ( $n = 36$ ). Almost half (49.7%) of caregiver participants were employed while they cared for their care recipients. Of those employed caregivers, 83.0% of them had full-time jobs and 17.0% of them had part-time jobs. Various caregiver and care recipient characteristics, marital status, relationship to care recipient, education level, care recipient living arrangement, and household income, are presented in Table 4.1.

The majority of 147 caregiver participant (75.5%) responded that if they were unable to help their care recipient, they had someone else who would do the things they did. A total of 151 caregiver participants were selected from four islands: Oahu (56.3%), Hawai'i (10.6%), Maui county (10.6%), and Kauai (22.5%).

Table 4.1

*Caregiver and Care recipient Characteristics I as a Percentage of the Sample*

CG marital status ( $n = 122$ )	
Married	67.2
Living with partner	4.9
Divorced	4.9
Widowed	4.9
Never married	18.0
CG relationship to CR ( $n = 151$ )	
Spouse	19.2
Father	29.8
Mother	33.8
Grandfather	1.3
Grandmother	6.0
Brother	1.3
Sister	2.0
Uncle	3.3
Other	3.3
CG education level ( $n = 151$ )	
Less than high school	4.0
High school graduate	9.3
Some community college/technical school	14.6
Community college/technical school graduate	10.6
Some college (4 year)	10.6
College graduate (4 year)	24.2
Post graduate	23.8
CR living arrangement ( $n = 151$ )	
Alone in their own home/apartment	38.4
With caregiver only	35.1
With spouse or partner only	4.0
In the home/apartment of another family member or friend	22.5
Household income ( $n = 120$ )	
Less than \$20,000	12.5
\$20,000 - \$29,999	33.3
\$30,000 - \$39,999	20.0
\$40,000 - \$49,999	18.3
\$50,000 - \$59,999	3.3
\$60,000 - \$69,999	5.0
\$70,000 - \$79,999	0.0
\$80,000 - \$89,999	1.7
\$90,000 - \$99,999	0.8
\$100,000 - \$119,999	0.0
\$120,000 and over	5.0

*Note.* Due to missing data, separate sample sizes ( $n$ ) were reported for each variable.

**Caregiver stress and health conditions.** Three types of caregiver stresses (financial hardship, physical strain, and emotional stress) were measured. The total score of these three caregiver stresses added together was created as a new predictor (called “caregiver stress”) for the data analysis for this quantitative stage. The mean score of “caregiver stress” was 7.99, and the scores were ranged between 3 and 15. The results of these caregiver stresses are presented in Table 4.2

Table 4.2

*Caregiver Stress and Health Conditions*

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Std. Error</i>	<i>Variance</i>
Financial hardship	146	2.21	1.41	0.12	1.99
Physical strain	148	2.82	1.35	0.11	1.83
Emotional stress	148	3.01	1.50	0.12	2.24
Caregiver stress	146	7.99	3.40		11.55

In addition to these caregiver stresses, their physical or mental health problems and sleep interruption were also measured. As for the physical or mental health problems, caregiver participants were asked whether or not they suffered any physical or mental health problems as a result of their caregiving. Of 144 caregiver recipients, 7.6% of them reported that they suffered physical problems, 2.8% of them suffered mental problems, and 14.6% of them suffered both physical and mental health problems. Surprisingly, the majority (75.0%) of respondents suffered neither physical nor mental problems. Another survey question was whether or not caregivers experienced any sleep interruption during the past week as a result of their caregiving. Of 145 caregiver participants, 35.2% of them had interrupted sleep, and 64.8% of them did not.

**Care recipient health conditions.** A list of 13 illnesses and health conditions were read to caregiver participants and asked if their care recipients has any of these illness and health

conditions. Of 144 caregiver participants, on the average, their care recipient had 3.70 ( $SD = 1.71$ ) illnesses or health conditions, and the range of the condition was between 1 and 7.

**Outcome variable “service utilization”.** Descriptive analysis of the outcome variable “service utilization” was conducted in two different ways. First, the total number of services used was examined. The mean number of services used by caregiver participants ( $n = 121$ ) was 2.61 ( $SD = 2.43$ ), ranged between 0 and 10. The three most used services by these caregiver participants were: public assistance (53.7%), such as Medicaid, nursing services (31.1%), and end of life services (25.3%). The services used by caregivers and/or care recipients as a percentage of the sample is presented in Table 4.3. In addition, the total number of services used was also dichotomized into 2 categories (“used services” or “did not use any services”). Of those 121 caregiver participants, 81.0% of them used at least one service, and only 19.0% of them did not use any services at all.

Table 4.3

*Services Used by Caregivers and/or Care recipients as a Percentage of the Sample*

Types of services	Used
Home delivered meals ( $n = 148$ )	19.6
Adult day services ( $n = 147$ )	20.4
Transportation ( $n = 151$ )	16.6
Counseling or support service ( $n = 151$ )	7.9
Bathing or personal care services ( $n = 151$ )	18.5
Nursing services ( $n = 151$ )	31.1
Light cleaning, shopping, or cooking services ( $n = 151$ )	6.6
Heavy cleaning or yard work services ( $n = 148$ )	6.8
Companion/respite services ( $n = 151$ )	9.3
Health maintenance services ( $n = 151$ )	21.9
Case management ( $n = 148$ )	25.0
Public assistance ( $n = 147$ )	53.7
Training on how to assist ( $n = 151$ )	21.2
Legal rights and obligations ( $n = 144$ )	22.2
Financial services or advice ( $n = 140$ )	4.3
End of life services ( $n = 146$ )	25.3

## **Bivariate Analysis: Chi-square tests and Independent t-tests**

**Between predictors and gender.** Bivariate analyses using Chi-square tests, Independent t-tests, and Pearson correlations were conducted on predictors as well as three additional items related to caregivers (length of caregiving, caregiver physical and emotional problems, and primary caregiver information) on caregiver gender. For these bivariate analyses, the Hawai'i data (Arnsberger & Lum, 2007) from 151 caregiver participants (115 females and 36 males) were utilized. Because caregiver gender is the main variable of interest, the results of these analyses are presented by caregiver gender.

The mean age of 147 (4 missing) caregiver participants was 59.4 years old (female:  $M = 58.9$ , male:  $M = 60.8$ ). The mean age for males and females was similar, but the age range was much wider for female participants (range: between 22 and 89 years old) than their male counterparts (range: between 46 and 86 years old). Overall, the age for males and females was not statistically significant,  $t(145) = .69$ ,  $p = .49$  (two-tailed).

Characteristics of caregivers and care recipients in the sample are presented in Table 4.4. The majority of male caregiver participants were married, while a little over one-fifth of the female caregivers had never been married. Most were caring for parents, and a higher percentage of females were caring for spouses compared to their male counterparts. A Chi-square test indicated a significant association between gender and caregiver relationship to care recipient,  $\chi^2(8, n = 151) = 23.48$ ,  $p = .003$ ,  $\phi = .39$ . As for education level, both genders in the sample were well-educated with high percentages of post graduate education. Also, the results of a Chi-square test indicated that there was a significant association between gender and caregiver education level,  $\chi^2(6, n = 151) = 14.26$ ,  $p = .03$ ,  $\phi = .31$ .

Table 4.4

*Caregiver and Care recipient Characteristics II as a Percentage of the Sample*

Characteristic	Female ( <i>n</i> = 115)	Male ( <i>n</i> = 36)
CG gender ( <i>n</i> = 151)	76.2	23.8
CG marital status ( <i>n</i> = 122)		
Married	60.4	87.1
Living with partner	4.4	6.5
Divorced	6.6	0.0
Widowed	6.6	0.0
Never married	22.0	6.5
CG relationship to CR ( <i>n</i> = 151)		
Spouse	20.9	13.9
Father	29.6	30.6
Mother	35.7	27.8
Grandfather	0.0	5.6
Grandmother	7.8	0.0
Brother	1.7	0.0
Sister	1.7	2.8
Uncle	1.7	8.3
Other (in-laws)	0.9	11.1
CG education level ( <i>n</i> = 151)		
Less than high school	3.5	5.6
High school graduate	9.6	8.3
Some community college/technical school	13.9	16.7
Community college/technical school graduate	7.8	19.4
Some college (4 year)	12.2	5.6
College graduate (4 years)	33.0	8.3
Post graduate	20.0	36.1

*Note.* Due to missing data, separate sample sizes (*n*) were reported for each variable.

\*CG = caregiver; CR = care recipient.

Further characteristics of caregivers and care recipients are presented in Table 4.5. As for employment status, a higher percentage of male caregiver participants (69.4%) were employed than their female counterparts (43.5%). Regardless of caregiver gender, the most common living arrangement for care recipients was living alone or living only with their caregivers. The household income was very similar between female and male caregiver participants. The most common range was \$20,000 - \$49,999. Most of both female and male caregivers had been caregiving between 1 and 5 years. A greater number of male than female participants had been

caregiving for 6 to 10 years. A Chi-square test indicated a significant association between gender and length of caregiving,  $\chi^2 (4, n = 151) = 10.47, p = .03, \text{phi} = .26$ . Both genders had high percentages of extra informal help available to them. Although the majority of the sample was drawn from the island of Oahu for both genders, male caregivers from Oahu were over-represented among males. A Chi-square test indicated a significant association between gender and island residence,  $\chi^2 (3, n = 151) = 8.28, p = .04, \text{phi} = .23$ .

Table 4.5

*Caregiver and Care recipient Characteristics III as a Percentage of the Sample*

Characteristic	Female ( <i>n</i> = 115)	Male ( <i>n</i> = 36)
Employment status ( <i>n</i> = 151)		
Currently employed	43.5	69.4
Currently not employed	56.5	30.6
CR living arrangement ( <i>n</i> = 151)		
Alone	38.3	38.9
With CG only	36.5	30.6
With spouse or partner only	4.3	2.8
In the home/apartment of another family member	20.9	27.8
Household income ( <i>n</i> = 120)		
Less than \$20,000	15.2	3.6
\$20,000 – \$29,999	31.6	39.2
\$30,000 – \$39,999	18.5	25.0
\$40,000 – \$49,999	18.5	17.9
\$50,000 – \$99,999	9.8	14.3
\$100,000 – \$119,999	0.0	0.0
\$120,000 and over	6.5	0.0
Length of caregiving ( <i>n</i> = 151)		
Less than 6 months	4.3	13.9
6 – 12 months	24.3	5.6
1 – 5 years	44.3	44.4
6 – 10 years	19.1	30.6
Over 10 years	7.8	5.6
Extra informal help ( <i>n</i> = 147)		
Yes	76.5	71.9
No	23.5	28.1
Island ( <i>n</i> = 151)		
Oahu	51.3	72.2
Hawai‘i	13.9	0.0
Maui county	12.2	5.6
Kauai	22.6	22.2

*Note.* Due to missing data, separate sample sizes (*n*) were reported for each variable.

Independent t-tests were conducted to compare the mean scores of three different types of caregiver stressors (financial hardship, physical strain, and emotional stress) and one total score of these three stressors (called “caregiver stress”) for males and females. As Table 4.6 indicates,

overall, male caregiver participants had higher stress levels than their female counterparts, except for physical strain. However, none of these independent t-tests were statistically significant.

Table 4.6

*Caregiver Stress by Caregiver Gender*

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Std. Error</i>
Financial hardship				
Female	110	2.12	1.34	0.13
Male	36	2.50	1.60	0.27
Physical strain				
Female	112	2.92	1.43	0.14
Male	36	2.53	1.06	0.18
Emotional stress				
Female	112	2.93	1.52	0.14
Male	36	3.25	1.42	0.24
Caregiver stress				
Female	110	7.89	3.40	0.33
Male	36	8.28	3.41	0.57

*Note.* A 5-point Likert scale (1 – not stressful, 5 – most stressful) was used to measure for each stress condition.

In addition to three caregiver’s stress-related survey items, Chi-square tests were conducted on caregivers’ physical and emotional problems and sleep interruption. Nearly one-fifth of females suffered from both physical and mental health problems compared to none of the males. A Chi-square test indicated a significant association between gender and caregivers’ physical and emotional problems,  $\chi^2(3, n = 144) = 9.36, p = .03, \text{phi} = .26$ . However, the majority of caregiver participants overall reported that they had neither health nor emotional problems. A higher percentage of male caregiver participants reported having interrupted sleep compared to their female counterparts. The result was not statistically significant. These results are presented in Table 4.7.

Table 4.7

*Caregiver Physical and Emotional Health Problems and Sleep Interruption as a Percentage of the Sample*

	Female	Male
Physical or mental health problems ( <i>n</i> = 144)		
Yes, physical health problem	7.3	8.8
Yes, mental health problem	3.6	0.0
Yes, both health problems	19.1	0.0
Neither	70.0	91.2
Sleep interruption ( <i>n</i> = 145)		
Yes	32.1	44.4
No	67.9	55.6

One of the survey questions asked caregiver participants was whether or not their care recipients had any illnesses and health conditions on the list of 13 conditions. An Independent t-test was conducted to compare the mean scores of care recipients' health conditions for male and female caregivers. Care recipients' illnesses and health conditions were similar for both male ( $M = 3.59$ ) and female ( $M = 3.74$ ) caregivers. Regardless of gender, their care recipients had an average of 4 illnesses and health conditions. The result of the t-test was not statistically significant.

One survey question asked about who the caregiver considered to be the person who provided the most care for their care recipient. A Chi-square test indicated a significant association between gender and primary caregiving information,  $\chi^2 (4, n = 151) = 13.05, p = .01, \phi = .29$ . Almost half of female caregiver participants responded that they themselves provided most of the care for their care recipients. In contrast, the responses of male research participants divided almost equally into three categories: self (30.6%), other relative (33.3%) and other shared relative (30.6%). The category of "other shared relative" referred to male caregivers shared their caregiving responsibilities with other relative(s). In other words, more male

caregivers in this sample had extra informal help from relative(s) than did their female counterparts.

**Between the outcome variable and gender.** The outcome variable of “service utilization” was measured in two different ways by using Independent t-test and Chi-square test. First, the total number of services used was examined for both genders. The result of the t-test indicated statistically significant,  $t(107.58) = -4.27, p = .01$  (two-tailed). Female caregiver participants ( $M = 2.92, SD = 2.62$ ) used almost twice as many types of services as their male counterparts ( $M = 1.50, SD = .99$ ). The number of services used by female caregivers was ranged between 0 and 10, which was a much wider range than male caregivers (0 and 3) in this study sample.

The variable of the total number of services used was also dichotomized into 2 categories (“used services” or “did not use any services”), and here was no significance difference between female and male caregiver participants (female – 81.1%, male – 80.8%) on a Chi-square test. In other words, regardless of gender, most caregiver participants utilized at least one service. And, female caregiver participants used more different types of services or a wider range of services than did their male counterparts.

### **Data Transformation**

Before performing further bivariate statistical tests, the data was explored to check assumptions for parametric tests (normality of data, homogeneity of variance, at least interval level of data, and independence of participants) (Field, 2009). As a result of this process, the sampling distribution on the outcome variable (the total number of services used) was found *not* to be normally distributed (violated “normality” assumption for parametric tests) (Field, 2009), and the distribution was positively skewed (skewness = 1.126). The histogram of the distribution

is presented in Figure 4.1. In addition, when the initial independent t-test was performed, another assumption (homogeneity of variance) was also violated based on the Levene's test in the t-test results. Therefore, as Field (2009), Howell (2001) and Tabachnick & Fidell (2007) recommend, logarithmic (log) transformations were performed so statistical significance could be determined with parametric tests, independent-means t-test.

Field (2009) states that the values of skewness and kurtosis should be zero in a normal distribution. Thus, the value of skewness is close to zero is better in terms of the normal distribution guideline. The skewness of the log-transformed number of services variable was -.066 (the original skewness value was 1.13), within an acceptable range (Field, 2009). The histogram of the transformed outcome variable is presented in Figure 4.2. Descriptive statistics of before and after the log transformation on the outcome variable are presented in Table 4.8. The transformed outcome variable was used in further data analysis.

Figure 4.1

*Distribution of Original Outcome Variable*

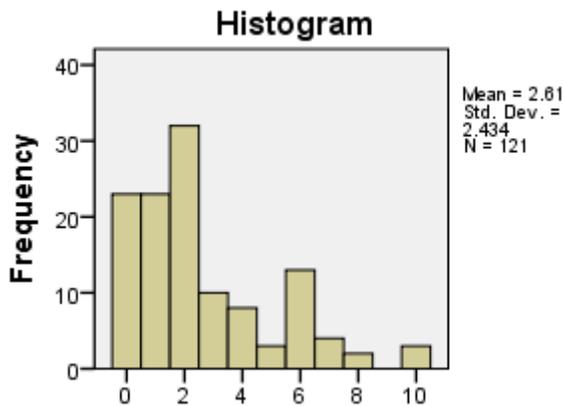


Figure 4.2

*Distribution of Transformed Outcome Variable*

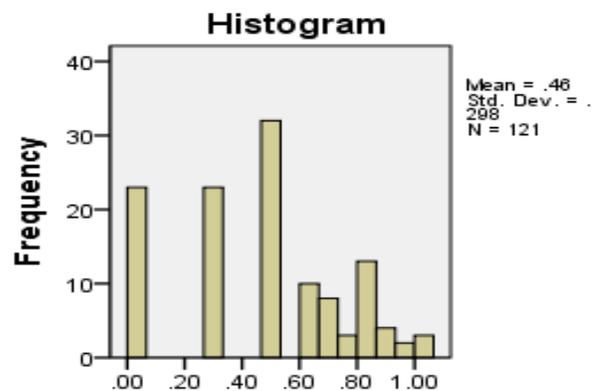


Table 4.8

*Descriptive Statistics Before and After Log Transformation on Outcome Variable*

	Before	After
Mean	2.61	0.46
Median	2.00	0.48
Variance	5.92	0.09
Std. Deviation	2.43	0.30
Skewness	1.13	-0.07
Stand. Error of Skewness	0.22	0.22
Kurtosis	0.71	-0.84
Stand. Error of Kurtosis	0.44	0.44

**Bivariate Analysis: Independent t-tests and Pearson correlations**

**Between predictors and the outcome variable “service utilization.”** Independent t-tests and Pearson correlations were utilized for the bivariate analysis to test the relationship between the transformed outcome variable (the total number of services used) and 13 selected predictors presented in Table 3.1 in the Method section. Eleven independent t-tests were performed between the transformed outcome variable and 11 dichotomous predictors (gender, age, marital status, relationship to care recipient, education level, employment status, living arrangement, household income, extra informal help, sleep interruption, and island). There were seven statistically significant predictors as a result of independent t-tests. These results are presented in Table 4.9. T-values, degrees of freedom, and significant levels were noted by the results of independent t-tests using the transformed outcome variable.

As for reporting the results used by the transformed data, Howell (2010) states that “it is important to recognize that conclusions that you draw on transformed data do not always transfer neatly to the original measurements” (p.337). Howell recommends that reporting means in the units of the untransformed scale is legitimate. Therefore, the values of the means and standard

deviations of each predictor were presented using the non-transformed outcome variable because the non-transformed results provide more meaningful interpretations.

Table 4.9

*Statistically Significant Results in Independent T-tests*

Predictor	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>Sig.</i>
Gender						
female	95	2.92	2.62	-2.57	60.86	.013
male	26	1.50	0.99			
Education level						
up to some college	59	3.19	2.84	2.30	119	.023
above college graduate	62	2.06	1.84			
Living arrangement						
live alone	44	3.25	2.34	-2.33	119	.022
all others	77	2.25	2.42			
Household income						
less than \$29,999	52	3.27	2.75	2.48	96	.015
\$30,000 and over	46	2.04	1.84			
Extra informal help						
yes	81	3.01	2.23	-3.94	115	.001
no	36	1.78	2.78			
Sleep interruption						
yes	42	3.98	2.92	-4.37	116	.001
no	76	1.92	1.79			
Island						
Oahu	64	1.92	2.62	5.52	105.54	.001
all others	57	3.39	1.95			

Two Pearson correlations were conducted between the transformed outcome variable and two continuous predictors (caregiver stresses and care recipient health conditions). Both of these two predictors were statistically significant. There was a strong positive correlation between the transformed outcome variable (the total number of services used) and care recipient health conditions,  $r = .22$ ,  $n = 116$ ,  $p = .02$ ,  $p < .05$ . This means the high number of care recipient health conditions is associated with the high number of services used. Also, there was a strong positive correlation between the transformed outcome variable (the total number of services used) and

caregiver stress,  $r = .34$ ,  $n = 116$ ,  $p = .01$ ,  $p < .01$ . This means that increased caregiver stress is associated with the higher number of services used.

Results of bivariate analyses indicated that nine significant predictors (7 dichotomous and 2 continuous predictors) should be used for the multiple regression analysis. However, as mentioned in the method section, there was a great deal of missing data on the “household income” predictor. If the predictor were included, the sample size was  $n = 87$ . If household income was not included, then the sample size was  $n = 110$  in the final multiple regression model. Therefore, the household income predictor was excluded for the final multiple regression model, and a total of eight predictors were entered in the final multiple regression model. The detail results of bivariate analysis and multiple regression are presented by each research question for this quantitative stage.

### **Multiple Regression Analysis**

Standard multiple regression (Field, 2009; Pallant, 2007) was performed to examine whether a particular predictor, gender, was still related to the transformed outcome variable (the total number of services used) when other predictors were included in the model. As a result of bivariate analyses, eight predictors and the transformed outcome variable were entered into a final multiple regression model. The analyses are presented in Figure 3.1. After conducting multiple regression, the correlation table in the SPSS output was checked to make sure that there was no multicollinearity. All the correlation coefficients were less than .70 ( $r > .90$ , Field, 2009, p. 233). That indicates no multicollinearity; therefore, these eight predictors were retained in the final multiple regression model.

The eight predictors included to predict the total number of services used by participants produced a statistically significant model,  $F(8, 101) = 17.25$ ,  $p < .001$ . The adjusted  $R^2$  was .577,

which indicates that 58% of variance in the total number of services used was explained by the eight predictors in the model. The beta coefficients are presented in Table 4.10. Six predictors (gender, care recipient living arrangement, extra informal help, sleep interruptions, education level, and island) were statistically significant predictors for the total number of services used.

Table 4.10

*Multiple Regression Results*

Andersen model	Predictors	<i>B (Std. Err.)</i>	<i>Exp (B)</i>	<i>t</i>	<i>Sig.</i>
Predisposing	Gender	0.17 (0.05)	0.23	3.21	.002
<b>CONTROLS</b>					
Predisposing	Education level	-0.14 (0.05)	-0.23	- 3.00	.003
Predisposing	Living arrangement	0.16 (0.05)	0.26	3.37	.001
Enabling	Extra informal help	0.21 (0.05)	0.33	4.49	.001
Enabling	Island	-0.15 (0.05)	-0.26	- 3.29	.001
Need	CG stress	0.01 (0.01)	0.15	1.69	.095
Need	Sleep interruption	0.18 (0.06)	0.28	2.94	.004
Need	CR health conditions	0.02 (0.01)	0.12	1.77	.079
	(Constant)	0.04 (0.09)		0.46	.645

\*CG = caregiver, CR = care recipient.

Multicollinearity was checked by the values of VIF and Tolerance, in the coefficients table in the SPSS output, for each predictor. Based on the guideline provided in Field (2009), all VIF values were below 10 and Tolerance values were above .2. The results concluded that there was no collinearity in the data.

**Research Questions**

**Research Question 1:** Does caregiver participant gender affect the utilization of elder care services among family caregivers of Japanese ancestry in the State of Hawai‘i?

**Hypothesis for question 1.** Male caregivers of Japanese ancestry in Hawai‘i are more likely to use elder care services than their female counterparts.

As for the Research Question 1, an independent t-test was performed to compare the mean score on the (log transformed) total number of services used for caregiver gender. There

was a statistically significant difference between the total number of services used for female caregivers,  $M = .49$ ,  $SD = .31$ , and male caregivers  $M = .36$ ,  $SD = .20$ ;  $t(60.86) = -2.57$ ,  $p = .013$  (two-tailed). The effect size,  $r = .31$ , was medium effect according to Field (2009, p. 57).

Based on the results in Table 4.9, to answer to the Research Question 1, the factor of gender *did affect* the utilization of elder care services among family caregivers of Japanese ancestry in the State of Hawai‘i. However, the hypothesis for the Research Question 1 was rejected. Male caregivers of Japanese ancestry in Hawai‘i *were less likely to use* elder care services than their female counterparts. According to the mean values in Table 4.9, females ( $M = 2.92$ ) used twice as many services as males ( $M = 1.50$ ). Females also had a wider range of services used, between 0 and 10, compared to their male counterparts, ranging between 0 and 3.

**Research Question 2:** Do such difference remain even after controlling for other predictors (e.g., extra informal help, care recipient illnesses and health conditions, caregiver stresses, and island) among the studied population?

**Hypothesis for question 2.** Even when including other predictors suggested by the Andersen model, gender will still remain a significant predictor for service utilization among the studied population.

Based on standard multiple regression analysis, the eight predictors included to predict total number of services used by participants produced a statistically significant model,  $F(8, 101) = 17.25$ ,  $p < .001$ . The adjusted  $R^2$  was .577, which indicates that 58% of variance in the total number of services used was explained by the eight predictors in the model. The results are presented in Table 4.10 above. Six predictors (gender, care recipient living arrangement, extra informal help, sleep interruptions, education level, and island) were statistically significant predictors for the total number of services used. Based on these results in order to answer the

Research Question 2, *the predictor of gender still remained statistically significant* after controlling for other predictors among the studied population. Therefore, the hypothesis for the Research Question 2 was not rejected.

### **2<sup>nd</sup> Stage: Qualitative Stage**

Seven themes emerged from the narratives of 23 research participants during the course of the interviews: (a) Cultural factors contributed to the caregiver's perspectives of caregiving; (b) Cultural factors influenced decision-making about service use; (c) Preferences for professionals; (d) Non-cultural factors influenced decision-making about service use; (e) Service use experience by service users; (f) Service use perspectives among non-service users; and (g) Suggestions for future elder care service systems. Since the primary focus of this qualitative phase was the cultural factors affecting the patterns of service utilization, the results were described by comparing the two groups, the service users ( $n = 13$ ) and non-service users ( $n = 10$ ). The secondary factor of the caregiver's gender (female,  $n = 13$ ; male,  $n = 10$ ) is only discussed when there were actual gender differences in the patterns of service utilization and the presence of different themes. Thus, the results section of this qualitative stage was written for service use status and gender. Instead of using words such as "a few" and "majority," the exact number or percentage of the participants is used as much as possible for any numeric clarification in this section.

#### **Theme 1: Cultural Factors Contributed to the Caregiver's Perspectives of Caregiving**

There were two subthemes under this theme: family responsibility and filial piety in the process of caregiving experiences.

**Family responsibility.** In the course of 23 interviews, research participants frequently expressed the value of a family role in caregiving. Fifteen of them (7 service users and 8 non-

service users) perceived caregiving as a family responsibility. This means that non-service users (8 out of 10) expressed a stronger perception of a family responsibility than did service users (7 out of 13). For example, a non-service user, Ms. T, noted, “*Japanese are very family oriented, yeah, and strong family relations ... The belief is that ... you should care for your elders, grandparents, spouse, and family members*” (Mr. T, 10/22/13). Two participants (1 service user and 1 non-service user) also described “family caregiving” as a “local” cultural value. One non-service user, Mr. N, was born and raised in Hawai‘i. His view of family caregiving was:

*I think maybe like ... maybe being Japanese ... even maybe being raised here, in Hawai‘i, if you come from a family, you know, a “local” family, more tend to take care of the elderly than if you are to be somewhere on the mainland, yeah (Mr. N, 9/16/13).*

One of the possible reasons why research participants had a strong perception of a family responsibility can be explained by their upbringing, such as having watched caregiving done by other family member(s) as they were growing up. A service user, Ms. O, watched her mother took care of her parents. Because of that experience, she anticipated that she herself might take care of her mother someday. Therefore, she came back to Hawai‘i after she graduated from a college on the continental U.S. Ms. O shared her experience as,

*... after they passed on, my mother's parents came, so I saw this caregiving a long, long time. I don't remember my mother was ever telling me, "Oh, when I am old, you have to take care of me or you have to come back from school to take care of me." I don't verbally remember, but somehow ... I guess taking care of family is a part of my upbringing (Ms. O, 10/2/13).*

One of the common characteristics of caregiving experiences among the research participants was having a strong family support system. Every participant except one male non-service using participant stated that family supports were available if they needed help. Although only primary caregivers were selected for the present study, two non-service using female caregivers described their experiences as a “shared” caregiving. Ms. A, a non-service user, shared her caregiving with

her sister and two daughters. Ms. A stated, *“I am very lucky in a sense that caregiving is shared. I am very lucky that my daughters are willing to do it”* (Ms. A, 1/11/13). Another non-service user, Ms. S, received help from her husband and four sons. Ms. S said,

*I have to rely on my second son to prepare lunch for her [mother] and my husband has to do dinner, and the third son makes her go to sleep. If I have to do everything by myself, I am dead already. I will go crazy* (Ms. S, 10/19/13).

**Filial piety.** The second Japanese cultural value shared by research participants was filial piety. Parental caregiving participants respected the value of filial piety and tried to apply it to their caregiving experience. As Japanese American participants said the word, “filial piety” in Japanese, the value of filial piety has been embedded in Japanese and “local” cultures in Hawai‘i. Ms. A had taken care of other family members (e.g., husband, mother, mother-in-law, and sister-in-law) in the past prior to her current caregiving of her father. She shared why she decided to take care of her father:

*“Oya-ko-ko” [filial piety] notion ... that what we are supposed to do and we are supposed to keep him happy ... a sort of that “oya-ko-ko” a kind of notion. You know it is so embedded now. My parents were not primary caregivers for grandparents or anything like that. So we did not have our model. It was just a notion. That is something that we do. So we do it as long as it is possible* (Ms. A, 1/11/13).

As Ms. A shared, the value of “filial piety” became a motivational reason for some research participants to start and continue providing care for their care recipients regardless of whether or not they used services.

Interestingly, in terms of the perceptions of caregiving responsibility, research participants currently using services had stronger feelings of obligation and duty than did non-service using research participants. As for gender differences, more female than male participants took their caregiving role as a duty or an obligation. A service user, Ms. C, and her father have taken care of her mother for 15 years. Ms. C noted, *“Duty. Because you have to do*

*what you have to, yeah. It's duty. You should do it, so"* (Ms. C, 8/11/13). Another service user, Ms. D, has three siblings, but she felt obligated as the oldest one. Ms. D said, *"I have to [be a caregiver for her mother]. I have to. It's my obligation. That's the way I feel. I feel it's my obligation. I owe it to her. This is what I feel, so I do it"* (Ms. D, 10/28/13).

Thirteen participants (8 service users and 5 non-service users) out of 23 took their current caregiving role as a payback or an opportunity to give back to their parent(s), and female participants felt especially strong about this. A non-service user, Ms. R, was born in Japan and lived in Hawai'i for 35 years. She has taken care of both of her Japan-born parents for 1.5 years. She shared her story about her childhood and explained how that experience motivated her to become a caregiver for her parents. She said,

*Since I suffered from asthma in my childhood, I missed school a lot. So I had a personal tutor at home. My parents were always there for me. That is why they are very special to me. Without them, I won't be here today. So I always felt that I am going to bring my parents to Hawai'i to take care of them until the end (Ms. R, 10/10/13).*

Another non-service user, Mr. N, has taken care of his mother for 20 years. He also saw his current caregiving as a payback opportunity to his mother. He said,

*I think it is okay. Because they [parents] did so much for me when I was growing up, you know. They sacrificed sending me to school, a college, so it's in return, yeah ... full circle. She [mother] helped me out when I was young. I help her out now (Mr. N, 9/16/13).*

## **Theme 2: Cultural Factors Influenced Decision-Making about Service Use**

Japanese cultural values/beliefs also influenced the decision whether to use or not use services. The following cultural values/beliefs were mentioned in the interviews by both service users and non-service users: (a) Care recipient didn't want to use services; (b) Shame in asking for help; (c) Not being comfortable with strangers in the house; (d) Language barriers; and (e) Manageable caregiving situation with family support.

The biggest difference between service users and non-service users was how care recipients perceived or accepted services. The majority of non-service users (7 out of 10) shared that a main reason why they did not use services was that their care recipients did not want to have services or refused to accept them. In contrast, a majority of service users (9 out of 13) said that their care recipients accepted using services. Based on the differences, the perspectives of care recipients might have been a key to their service use decisions. For example, even the caregivers who wanted to use services for their care recipients, sometimes a refusal by the care recipient became a barrier for service use. Mr. P was a non-service user at the time of the interview. He tried to set up home care services for his parents before, but they refused and stopped the services. He said,

*In a way ... we went through the experiment, we tried to get someone from outside to help, but that didn't work. So my wife had to do that ... we cannot rely on outside because they [parents] wouldn't accept it. I think because parents refuse [to use services]. I think that is the big reason [for them not to use services] (Mr. P, 10/5/13).*

In contrast, a service user, Ms. O, encouraged her husband to go to a day care program for socialization. First, he was reluctant to accept the service, but he changed his attitude once he started going to the day care program. Ms. O said, *“He enjoyed going to the day care. He buys candies and takes them to the day care. He looks forward to going there” (Ms. O, 10/2/13).*

As described in Theme 1, in Japanese culture, caregiving is perceived as a family responsibility. For some research participants, they and/or their care recipients felt “shame” in asking for help outside family. This was particularly the case for older generation (2<sup>nd</sup> generation) research participants. The feeling was that family issues needed to be kept within the family because of the potential for shame, which appeared to be cultural. Ms. C considered that his father was also a primary caregiver for her mother. He is a 2<sup>nd</sup> generation Japanese. Mr. C, a

service user, said, “*Basically, it’s [caregiving] a family problem. So we try to solve [this family problem] within the family ... I don’t want to depend on others ... You don’t pass on your problems to somebody else. It’s a shame, yeah*” (Ms. C’s father, 8/11/13). A non-service user, Mr. T, was afraid of how others would perceive him if he started using elder care services. Mr. T shared his concern as follows:

*I guess a part of the Oriental culture is that sometimes ... kind of a shame to ask for help, yeah. I think that is a part of “Oriental” culture. You try to manage on your own, which we try to do now ... Yeah, that’s [also] part of it [being afraid of criticism from others if I use service(s)], how they perceive me (Mr. T, 10/22/13).*

This cultural concept of shame also emerged when another question asked about how comfortable the participants felt in asking for help. Fourteen out of 23 participants (7 service users and 7 non-service users) rated themselves as either “mostly comfortable” or “very comfortable” in asking for help. An interesting finding emerged from among the four female service users. Even though they were using services, they rated themselves as “not comfortable at all” in asking for help. A service user, Ms. D, was not comfortable in asking for help either from other family members or from the outside family members. Her two siblings and her husband supported her, but she would rather want to take care of her mother by herself. She shared her feeling:

*I am not comfortable. I mean outside of the family. Even the family, [Ms. D’s brother name], I am not comfortable asking. I rather do it myself. Even with the general agencies, I am not comfortable ... I have to do it myself (Ms. D, 10/28/13).*

Another factor related to Japanese cultural values/beliefs affected the service use decision-making was “not being comfortable with strangers in the house.” Half of the 23 research participants (7 service users and 5 non-service users) mentioned that neither they nor their care recipients were comfortable with strangers in their house. All the values, already stated

above in Theme 2, closely related to this particular notion. Since caregiving was considered as a family responsibility, as described in Theme 1, research participants and/or their care recipients were not comfortable with strangers (e.g., care workers) coming into their homes to provide care. In particular, research participants were concerned about two potential issues: If someone outside the family comes to provide services to their care recipients, that would disturb privacy and create security issues. A non-service user, Ms. J, has taken care of her sister-in-law for 15 years. Her sister-in-law lived alone, and she was not comfortable with strangers coming into her house. Ms. J said, “*One thing, she [sister-in-law] didn't like people [whom] she didn't know coming to her house because she was living alone, right. Anybody she didn't know*” (Ms. J, 9/9/13).

In the cases where either caregivers or care recipients or both were born in Japan, language became an important cultural factor in service use decision-making. Ms. R, a Japan-born female caregiver (a non-service user), shared her preference for having services provided in her own language:

*I know most of available services in the community. But I cannot use them for my parents because of language. If the services are not provided in Japanese, I cannot use them for my parents. They have to be provided in Japanese. I would like to attend caregiver training for myself, but it has to be also provided in Japanese (Ms. R, 10/10/13).*

Another non-service user was Mr. H, a 2<sup>nd</sup> generation Japanese, whose mother was a 1<sup>st</sup> generation Japanese born and raised in Japan. He had not used any services for her yet, but he shared his service preferences for his mother. He said,

*“Socially, well, the number one [issue] is language. She is not comfortable with English, she is not a type [of person] to go out and fit in with non-Japanese and in English world. As I said earlier, she doesn't feel comfortable going to a day care because everybody speaks English, no one speaks Japanese” (Mr. H, 9/4/13).*

One particular reason why *non-service users* did not use any services at the time of their interviews was that their caregiving situation was manageable with extra family help. Nine out of

ten non-service users stated that extra family help was available when they needed it. A non-service user, Mr. H, had not used any services for his mother because he had extra help from his wife and siblings. Mr. H said, “*Not only [do caregiving] by myself. My wife and I, my sister, my brother who live close by. Because we are able to manage with, especially the help of my sister*” (Mr. H, 9/4/13). Another non-service user, Ms. A, has had a shared caregiving with her sister and her daughter, and she explained how that extra help helped her without using any outside services. Ms. A said, “*I have support among my little nest of my daughters. If I did not have that shared caregiving, support, social services would come in a lot of faster*” (Ms. A, 1/11/13).

### **Theme 3: Preferences for Professionals**

In Theme 3, in addition to cultural factors, non-cultural factors were also found in caregiver preferences for professionals working in the elder care service field (e.g., social workers, nurses, and care workers). Therefore, this Theme 3 was separated from Theme 2, which included all cultural factors affecting service utilization patterns.

The importance of working with professionals of the same ethnic background was asked of both service users and non-service users in the course of the interviews. For service users, their responses were split almost in half. Six out of 13 responded that it was important to have professionals with a Japanese background. A service user, Mr. W, selected for his mother an adult day care run by a “local” Japanese couple. He said a professional of Japanese background was helpful for his mother. He shared his opinion:

*I think they [professionals with the same cultural background] can relate to you better. If you come from different culture, how you can relate to your feelings about caregiving like that. I think it's different. For my mom, she is more comfortable with Japanese, I think (Mr. W, 11/29/13).*

A service user, Ms. I, took care of her mother-in-law—and both of them were born in Japan. For them, professionals who speak Japanese would be an important criterion for selection because of

communication issues. Ms. I's stated professional preferences for her and her mother-in-law were:

*[Before using hospice service], I chose a day care run by Japanese for my mother-in-law because their staff speak Japanese. [After her mother-in-law was in hospice care], as I heard that there are some Japanese speaking staff in the hospice service, I requested a Japanese nurse, but I was not able to have one. If there are Japanese speaking nurses, I would like to learn various things [how to take care of her mother-in-law] from them. I prefer to speak to them in my own language (Ms. I, 9/6/13).*

Throughout the interviews, the word "local" was frequently mentioned by Japanese American participants. Within this theme of professional preferences, several participants used the words, "local" Japanese and "local" person, to describe their professional preferences. A service user, Ms. D, said it is important for her mother to have professionals with the same cultural background, and she specifically stated "local" Japanese would be a better choice for her mother. She said, *"If they [care homes run by Japanese] are here, maybe 'local' Japanese. Maybe, that would be a better choice for her"* (Ms. D, 10/28/13).

Seven out of 13 service users commented that it was *not* important to them to have professionals with the same cultural background. During the interviews, most of these participants acknowledged that there were few Japanese professionals and Japanese service providers in the elder care services. Therefore, for them, other criteria (e.g., personal characters, service quality, and professional credentials) were considered of greater importance for the process of selecting professionals and/or service providers. A service user, Ms. U, shared her opinion:

*Some of the Filipino girls were really compassionate, even young ones. It doesn't matter young or old. It's just nature. That's another thing that I learned. [A]s long as they [care workers] give the basic care that I ask for, which is fundamental hygiene and all of that, I think it [professional with same cultural background] doesn't play that big of role (Ms. U, 10/23/13).*

The same interview question for professional preferences was also asked of non-service using research participants about their future service use. Their responses were similar to that of the service users. Five out of ten non-service users stated that professionals with the same ethnic background was important. Three of these five non-service users said that the professional credentials of the service providers were more important for the care recipient(s) than they were for caregiver(s). Mr. H was a second generation non-service user who took care of his mother. She was born and raised in Japan. Mr. H said, *“For me, it is okay [even if professionals do not understand his cultural background]. But for my mother, yeah, [it is] more [important] for her... Definitely someone [who speaks Japanese] can communicate well with her”* (Mr. H, 9/4/13). Three non-service using caregivers expressed their professional preference for someone with a “local” or Asian background. A non-service user, Ms. A, said, *“Pretty much or at least a ‘local’ background with understanding of ‘local’ Japanese culture”* (Ms. A, 1/11/13).

Five out of ten non-service users said a professional with the same ethnic background was *not* important. Other professional criteria mentioned by non-service users were also very similar to that of their service user counterparts (e.g., service quality and professional credentials). Mr. B mentioned about the communication skills of professionals:

*But some doctors who don't understand culturally ... For instance, a lot of Asian people ... they are not going to talk, right, unless you are able to connect with them ... so that they feel comfortable, right ... Any kind of medical people, they've got to communicate even if social workers. Social workers are very important because they are talking to the people ... and figuring out what people need* (Mr. B, 1/14/13).

#### **Theme 4: Non-Cultural Factors Influenced Decision-Making about Service Use**

When it came to service use decision-making, both service using and non-service using research participants equally emphasized Japanese cultural values/beliefs. However, the researcher found that differences emerged between the two groups of service users and non-

service users when she looked at different interview questions that were asked to each group. In particular, when service using research participants were asked about the reasons why they started using services, three non-cultural determinants for service use decisions emerged: (a) Benefits for using services; (b) Other family members' concerns for the welfare of the caregivers; and (c) The need to juggle work and caregiving.

As for the benefits of using services, 12 of the 13 service using research participants shared their service use experience. Seven of them described how using services benefited both caregivers and care recipients. Mr. L used day care service for his wife and respite service for the both of them. He said, "*[Using day care service] To me, it's beneficial in several ways, it gives me free time. It gives my wife [the opportunity] to associate with others and so on. [It is] mutually beneficial*" (Mr. L, 9/13/13). Ms. M also used various services for her and her husband. She stated her service use experience as, "*Both of us get benefit [from using chore services, Handi-Van service, and Medical Alert service]*" (Ms. M, 9/16/13). There appeared to be a gender difference related to this findings since service use by female participants described more benefits for their care recipients than the benefits for themselves. Ms. F's mother participated in a Tai-Chi class for 20 years. Ms. F said, "*I guess for her [mother's] own health. I think she is very satisfied [with the Tai-Chi class]. That is why she's been going [to the class] for all those years*" (Ms. F, 9/2/13).

The second non-cultural factor for starting service use involved other family members, such as the children of the caregivers. Over the course of caregiving, as parents became older and their physical health conditions worsen, these caregiver's children became concerned about their parents who were serving as caregivers. In three cases, a caregivers' children took the initiative both to start looking for and setting up services for their parents. Mr. L, 90 years old, had for a

year been taking care of his wife, 90 years old, with dementia. His children were concerned about their father and found a day care program for their mother. Mr. L said,

*Well, actually we never thought of it [an adult day care] until our kids began to worry for us. So even driving, I still drive, but my son doesn't want me to drive. He may think that I am going to crack up somewhere, maybe it will happen someday. But they are [more] concerned than we are ... Our kids went around asking [about adult day care programs] (Mr. L, 9/13/13).*

Two female participants had to deal with their own health issues while they were taking care of their husbands, so their children arranged for services for them. Ms. M shared how she started using the home cleaning services. She said, “*My children insisted. ‘We [caregiver’s children] made an arrangement [for house cleaning services] for you, so they are coming over.’ They [her children] were very concerned because we were aged already*” (Ms. M, 9/16/13).

The last non-cultural factor that emerged was having to juggle work and caregiving. Three service using research participants juggled their full-time job while providing care for their family members at the same time. A common problem that they faced was time management between work and caregiving. For them, it was not a matter of choice whether they used elder care services or not. They were desperate to start using the services in order to keep their full-time employment status. Mr. W was another caregiver who started using elder care services after his mother was discharged from the hospital. He described his experience as, “*Well, because I have to work. Because my mom needs 24/7 [care]. I have to work, and my brother was not willing to spend all day [with mother]*” (Mr. W, 11/29/13).

### **Theme 5: Service Use Experience by Service Users**

Beyond the decision-making on service utilization, cultural factors did not appear to influence their caregiving experience. All 13 service users said they were “very satisfied” with their current services. Ms. M has been using three services (home cleaning services, Handi-Van,

and Medical Alert system). She said, “*I am satisfied and I am thankful*” (Ms. M, 9/16/13). Ms. O was also satisfied with attending a caregiver support group, and shared the benefits she received by using the service. She stated that:

*Oh, yes, I am very satisfied with what they do. I highly recommended [it] to other people. I think the staff is very caring ... I am very satisfied [with the support group]. I made a lot of friends there. Good information, excellent information. And then just being together, in these four hours, makes you feel not being alone because everybody is going through the same problems. Some people have more problems, but it's like the group feeling is there* (Ms. O, 10/2/13).

The majority of service users ( $n = 8$ ) did not express any service use barriers. However, four service users were concerned about the cost if they continued using the services. A service user, Ms. O, shared her financial concerns:

*It's about \$72 per day right now. If you need someone to give medication, \$82 per day, and then if you need someone to walk him to the bathroom, it's another \$10 more. So it gets expensive. I pay only \$72 per day, right now. But it's still a lot because it's three times a week. The financial is a big issue* (Ms. O, 10/2/13).

In Mr. L's case, his daughter paid for adult day care services. He said, “*I thought of the cost, but my daughter decided to pay for two days [of the day care]. Yeah, she pays for it. She thinks [of it as] her contribution to the care of the folks*” (Mr. L, 9/13/13).

As for gender differences, female service users tended to express more opinions and had higher expectations for their current services both positive and negative. For example, appreciation for service providers, less benefits of service use, negative service use experiences in the past, and service quality. In particular, five service using female caregivers mentioned the service quality in general. Ms. C said, “*We have a really good guy, you know ... a [Project Dana] volunteer ... is very efficient. So he helps us. So far, I have no complaints*” (Ms. C, 8/11/13). Of these five service using female caregivers, two of them were Japan-born female caregivers. They shared their opinions by making comparisons between current service quality

and the Japanese service quality standard. The Japanese service quality was the only cultural factor emerged among these two Japan-born caregivers in this Theme 5. Ms. I stated:

*If it is in Japan, there is a national long-term care insurance provides variety of elder care services. They provide much better bathing services. I hate to say, but when I see a staff provides a bed bath here, the quality is not the same as Japanese one (Ms. I, 9/6/13).*

### **Theme 6: Service Use Perspectives among Non-Service Users**

It appeared that both cultural and non-cultural factors affected non-service using participants when making a decision for not using services. However, surprisingly 90% of non-service users had used at least one service in their current and/or past caregiving experience. This finding suggested that non-service using participants did not refuse to use services, and that they were more open to accept services than one might think. In other words, both service using and non-service using research participants in this qualitative sample were not distinctly different.

The most commonly used services by nine non-service using research participants in the past were transportation services (e.g., The Handi-Van), and the next commonly used services were nursing services and rehab services. Five care recipients used the Handi-Van services; however, none of them continued using the services for two main reasons: long wait time and inconvenient application process. Mr. T shared his opinion about the Handi-Van: *“The Handi-Van. She used once in the past, but she did not like it because of inconvenient. She had to wait for other passengers. Now I take her places” (Mr. T, 10/22/13).* Mr. P arranged for the Handi-Van service for his mother. He shared his opinions about the renewing process of the Handi-Van:

*But she (mother) ran out of her Handi-Van eligibility, and we had to renew the Handi-Van. But I did not understand the procedure, so I let it go. Then all the sudden, the Handi-Van stopped picking her up. So then we found out (that) we*

*had to bring her in to an interview and other things. We just said, "Well, that's enough" (Mr. P, 10/5/13).*

For nursing and rehab services at home, they were provided right after care recipients were discharged from hospitals. Most of these services were provided only for a limited time and were paid by Medicare. Mr. K's wife received these services right after she was discharged from the hospital. He shared his past service use experience:

*She [wife] was in a hospital for a month and a half ago. And they [medical staff] recommended [it], after she got out of the hospital, Medicare provides services ... for a month and a half, we had PT and OT. Now all finished. She was well enough, so they terminated the services, yeah. They were good, very helpful (Mr. K, 9/11/13).*

In addition to past service use experience, nine out of 10 non-service users were thinking of using services in the future when needed. This finding also confirmed that non-service users were open to use the services again in the future despite past negative service use experiences. As for gender differences, all six non-service using male participants had used services in the past, and five of them already have specific types of services in mind for future use. Mr. B had not used any services for his mother, but he shared his opinion about future service use:

*I may do that [seek out help]. I think that would be the thing would that make me go into looking for services. If it's like medical or technical where that is beyond my scope like what is needed, what is necessary, that would be probably the area we need some help (Mr. B, 1/14/13).*

### **Theme 7: Suggestions for Future Elder Care Service Systems**

Both service using and non-service using research participants suggested improvements to the existing elder care service system by taking into consideration cultural factors related to service delivery. Regardless of service use status, more female research participants had specific suggestions and opinions about the form of a future system. The two main areas suggested were:

- (a) Development of new types of services to meet the needs of caregivers and care recipients and
- (b) Provide caregivers with education, training, and information regarding caregiving and elder

care services. Mr. B suggested having meal services that provide culturally appropriate foods:

*So I don't know details exactly what kind of meals they [Meals-on-Wheels service] serve. But I know a lot of people whom I talked to ... they were not satisfied with the meals. They don't like what they have been served. But perhaps if they do have a lot of consensus for people don't like what they are served, they can find out. They can do a survey what they prefer ... maybe serve a Japanese style meal ... certain time or something like that (Mr. B, 1/14/13).*

Ms. R was a Japan-born non-service using research participant who suggested having care facilities to meet the needs of Japan-born older adults who lived in Hawai'i.

*Everybody is saying that why there is no care facilities to meet the needs of Japanese Nationals. There should be a place like five or six elderly persons live in a place with Japanese style of bath tub ... serves Japanese meals ... sleeps on the futon mattress, not on a bed, in the tatami room. I would like someone to build like the care facility (Ms. R, JN, 10/10/13)*

Another cultural issue related to future elder care service systems was language, which also emerged in Theme 2. Language became one of barriers for both Japan-born caregivers and care recipients. As a non-service user, Ms. R, reported that she did not use services for her parents because of the language barrier. She also said, *"I would like to attend a training for caregivers if it is provided in Japanese"* (Ms. R, 10/10/13). Their preference was for services and training and information sessions provided in Japanese. This is a very critical cultural factor in determining service use patterns for them.

## **Theoretical Model Based on the Qualitative Results**

### **Impact of Cultural and Non-Cultural Factors on Elder Care Service Utilization Patterns**

Based on the seven themes that emerged from the qualitative data analysis, a theoretical model was developed and is presented in Figure 4.3. This theoretical model demonstrates how cultural and other factors have an impact on the patterns of elder care service utilization at different parts of the caregiving experience. Overall, this model was divided into three parts: (a) Throughout the caregiving experience; (b) Service use decision-making stage; and (c) Service use stage. The seven themes are presented in red in Figure 4.3. Sub-themes were also presented under each theme and connected by lines. As presented in the Figure 4.3, cultural factors emerged throughout both the caregiving and the service use decision-making stages. Gender was another factor to be examined in this qualitative stage. There were few gender differences found during data analysis; therefore, gender as a factor was not included in this theoretical model.

Each of these three parts is described as follows:

#### **Throughout the Caregiving Experience**

Two major cultural factors, “family responsibility” and “filial piety,” were found to have an impact on caregiver participants throughout their caregiving experience. This means that no matter what stage the caregivers were in, these two cultural factors influenced their caregiving experience. These two cultural factors were found in both service users and non-service users.

#### **Service Use Decision-Making Stage**

Both cultural and non-cultural factors influenced the service use decision-making stage. Six cultural factors were found: (a) Care recipient did not want to use services; (b) Shame in asking for help; (c) Not being comfortable with strangers in the house; (d) Language barriers; (e) Preferences for professionals; and (f) Manageable caregiving situation with family support. The

first five cultural factors, (a) through (e), were found in both service users and non-service users. The cultural factor (f) was only found in non-service users. In addition to these cultural factors, three non-cultural factors were only found in service users: (a) Benefits for using services; (b) Other family members' concerns for the welfare of the caregivers; and (c) Need to juggle work and caregiving.

At this stage, both cultural factors and non-cultural factors influenced elder care service use decision-making. However, non-cultural factors were essential determinants for service use because these non-cultural factors were only found in current service using research participants. In other words, when caregivers perceived cultural factors as being more important than non-cultural factors, they were more likely *not to use the services*. In contrast, when caregivers perceived that non-cultural factors were more important or more pressing than cultural factors, they were more likely *to use services*.

### **Service Use Stage**

Since 90% of non-service users had used at least one service in their current and/or past caregiving situations, the service use experiences of both service users and non-service users were included in this service use stage. At this stage, no cultural factors were found. For service users, three sub-themes emerged: (a) Satisfaction, (b) Barriers for using services; and (c) Opinions about services. For non-service users, two sub-themes were emerged: (a) Past service use experience and (b) Future service use plans.

### **Suggestions for Future Elder Care Service Systems**

In consideration of these three parts above, suggestions for future elder care service systems were emerged.

## Research Questions

**Research Question 1:** How do cultural factors affect the patterns of elder care service utilization among family caregivers of Japanese ancestry in the State of Hawai‘i?

This Research Question 1 is answered by Theme 2 entitled “cultural factors influenced decision-making about service use” and the Theme 3 entitled “preferences for professionals.” As presented in the theoretical model (Figure 4.3), at the service use decision-making stage, several cultural factors influenced the decision regarding service use: (a) Care recipient did not want to use services; (b) Shame in asking for help; (c) Not being comfortable with strangers in the house; (d) Language barriers; (e) Preferences for professionals; and (f) Manageable caregiving situation with family support. The cultural factors (a) through (e) were found in both service users and non-service users, and the cultural factor (f) is only found in non-service users.

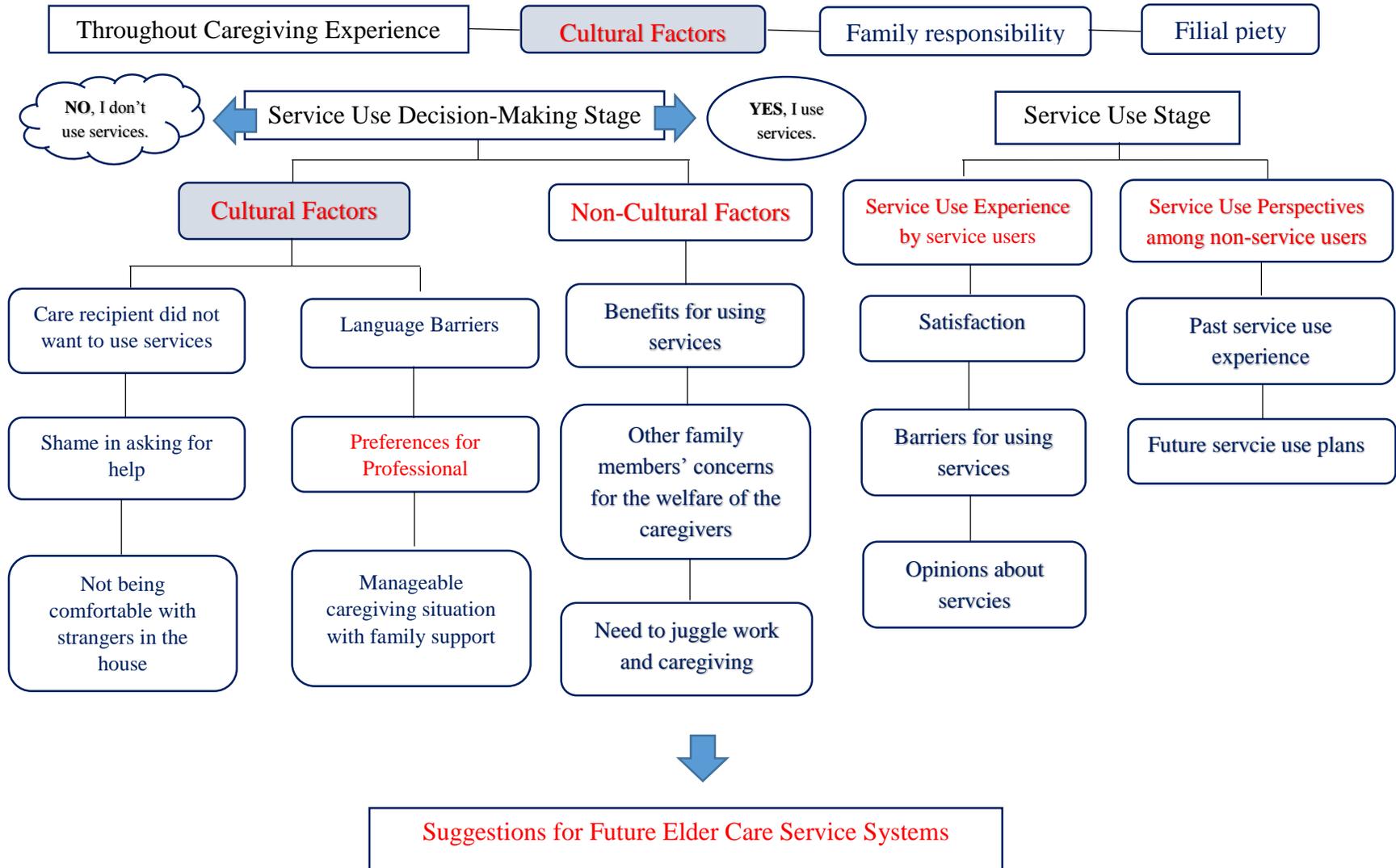
**Research Question 1a:** If there are any differences, how does gender affect the patterns of elder care service utilization among the studied population?

Overall, in this qualitative stage, there were only four gender differences found for the service utilization patterns. First, more female caregivers felt uncomfortable asking for help compared to their male counterparts. Also, female caregivers were clearly divided into two categories, either “not comfortable at all” or “very comfortable” in asking for help, while 60% of the males felt either “mostly comfortable” or “very comfortable” in asking for help. Second, service using female caregivers emphasized more service use benefits for their care recipients than for themselves, while service using male caregivers saw more mutual benefits for both care recipients and themselves. Third, service using female caregivers expressed more opinions about current service use situations, both positive and negative, while service use male caregivers had no opinion. Lastly, among the six non-service using male caregivers, all of them were planning

to use services when future needs arose. Also, five of them already had specific types of services in mind for future service use. Non-service using female caregivers (except for one) also planned to use services in the future, but they did not have any specific types of services in mind at the time of their interviews.

Figure 4.3

Theoretical Model: Impact of Cultural and Non-Cultural Factors on Elder Care Service Utilization Patterns



## **CHAPTER 5**

### **DISCUSSION**

Each stage, quantitative and qualitative, of this present study examined different predictors that affect elder care service utilization patterns. Therefore, this chapter will first be discussed by each stage, followed by a comprehensive discussion of these two stages combined. This chapter will also include limitations, implications for social work practice and education, suggestions for future studies, and conclusion.

#### **1<sup>st</sup> Stage: Quantitative Stage**

##### **Gender & Elder Care Service Utilization Patterns**

In the quantitative stage, gender was significantly related to the utilization of elder care services among family caregivers of Japanese ancestry in the State of Hawai‘i, even when controlling for other predictors. Findings indicate that female caregiver participants used twice as many services as males. This finding is inconsistent with previous literature (Cahill, 2000; Kosloski, et al., 1999; Russell, 2004; Stoller & Cutler, 1992). The reduced amount of service use observed among male caregiver participants in the quantitative stage may be at least partially explained by their demographic characteristics (e.g., marital status and involvement of extra informal caregivers). First, 87.1% of male caregiver participants in this stage were married, so their spouses may become a supplemental informal help to provide additional care in their caregiving situations. Second, while almost half of female caregiver participants provided most of the care by themselves, only one-third of male caregiver participants provided most of the care. Among male caregiver participants, a significant amount of care was either provided by their relative(s) or care responsibilities were shared with relative(s). As the findings described, male caregivers in this sample had additional informal helpers (e.g., wives and other female

relatives) who performed most of the daily care tasks for them compared to their female counterparts who more often reported being the sole caregiver. Therefore, male caregivers in Hawai‘i might not need to use elder care services at the same levels as female caregivers.

Gender also affected the type or range of services. Approximately 81% of both females and males used at least one service. This means these female and male caregiver participants *are not* different groups of caregivers in this sample. In other words, regardless of gender, these caregiver participants were open to accept services when they determined that they needed them. In contrast, female caregivers used a wider range of services (between 0 and 10 different types per person) compared to their male counterparts (between 0 and 3 different types per person). An assumption might be that female caregivers use more services, but in fact, they might use a wider range of services, but use such services less frequently. In contrast, male caregivers might use only specific types of services, but they might use such services more frequently. Since there was no survey question asking the frequency of service use in the State of Hawai‘i Family Caregiver Needs Assessment data, these assumptions cannot be confirmed with this data. Therefore, a “frequency” question may be one consideration for further research. Another assumption may be that female caregivers used a wider range of services because they might have more knowledge of varying elder care services in the community compared to male caregivers. Zodikoff (2007) also reported that female spousal caregivers tended to have a higher level of knowledge of service system than their male counterparts. Thus, male caregivers in this present study used only limited types of services because they may not have knowledge of available elder care services in the community.

## **Other Factors Influenced Elder Care Service Utilization Patterns**

In addition to caregiver gender, five other significant predictors (e.g., living arrangement, extra informal help, sleep interruption, education level, and island) consistent with the Andersen Behavioral Model of Health Services Use predicted the patterns of elder care service utilization in the studied population. This suggests that Andersen model is a strong starting point for understanding the service use decision-making among Japanese caregivers. Living arrangement of care recipient was one of the predictors that affected the service utilization patterns. Care recipients who lived alone used more services than care recipients with other living arrangements (e.g., live with caregiver only, live with a spouse or partner only, and in the home/apartment of another family member/friend). This finding is consistent with previous studies (Mui & Burnette, 1994; Toseland, et al., 2002).

In this study, research participants who had extra informal help used more elder care services than those research participants who did not have such help. This finding is inconsistent with previous caregiving studies (Anngela-Cole & Hilton, 2009; Giunta, et al., 2004; Kemper, 1992; Kinoshita & Giallagher-Thompson, 2004; Kosloski, et al., 2001; Mui & Burnette, 1994; Scharlach, et al., 2006; Strain & Blandford, 2002). These previous studies identify that when caregivers or older adults have informal support, they are less likely to use formal services, especially among racial/ethnic minority groups. The inconsistent finding in this quantitative stage may be explained by the type of services that these research participants used. For instance, certain elder care services, such as support groups, hospice care, legal services, and public assistance, cannot be provided by other family members. Therefore, caregiver participants who responded that they have extra informal help may use more of these particular services that cannot be provided by extra informal help in order to meet their needs.

Although caregiver health and stress conditions were measured by two variables (e.g., sleep interruption and caregiver stress), only sleep interruption was a significant predictor of service utilization patterns. Those caregiver participants who experienced sleep interruptions used more services than their caregiver counterparts who did not report sleep interruptions. Previous studies also examined how caregiver physical or mental health conditions or stresses contributed the service utilization patterns (Bookwala, et al., 2004; Hong, 2010; Scharlach, et al., 2008; Toseland, et al., 2002). These studies suggest that caregivers who experience any physical strain, emotional distress, and mental health problems (e.g., depression), are more likely to accept formal services. Although these studies do not address sleep interruption problems, they may be a somatic symptom caused by caregiving stress.

An association between caregiver education level and formal service use has been commonly examined in previous research (Bookwala, et al., 2004; Hong, 2010; Miller & Mukherjee, 1999; Scharlach, et al., 2008; Toseland, et al., 2002). In this present study, those caregivers who had less than some college education used more types of services than those who were college graduates or above. This finding is inconsistent with previous studies (Bookwala, et al., 2004; Hong, 2010; Scharlach, et al., 2008; Toseland, et al., 2002), where caregivers who have higher education level were more likely to use formal services. However, one study had similar results to this present study. Miller & Mukherjee (1999) found that those caregivers with less education tended to trust services. So those caregivers with less education may not have much knowledge about possible elder care services in the community. Therefore, when professionals, such as social workers, suggest services to them, they may be more likely to accept them.

Four islands (Oahu, Hawai‘i, Maui county, and Kauai) of Hawai‘i were divided into two geographic locations, Oahu and “other islands” (Hawai‘i, Maui county, and Kauai), for the data analysis. Caregiver participants who lived on Oahu (considered an urban area) used fewer elder care services than their caregiver counterparts who lived on other islands. In other words, those caregiver participants who lived on other islands (considered rural areas) used more elder care services than participants who lived on Oahu. This finding is consistent with a previous caregiver study (Hong, 2010). Hong’s study (2010) suggested that those caregivers who lived in rural areas were more likely to be multiple service users. Such high dependency on formal service may be explained by a lack of informal support. In this present study, caregivers living in rural areas (e.g., Hawai‘i, Maui county, and Kauai) may have fewer informal supports because their children or other relatives may move to Oahu or the continental U.S. seeking educational and employment opportunities. As a result, caregivers living on other islands may use more formal services to meet their caregiving needs. Conversely, caregivers on Oahu may have more informal help; therefore, they may use less formal services.

### **2<sup>nd</sup> Stage: Qualitative Stage**

In the qualitative stage, cultural factors did have an influence on different parts of the caregiving experience among the studied population, but they were not essential factors affecting elder care service utilization patterns. As presented in the theoretical model of cultural and non-cultural factors on elder care service utilization patterns (Figure 4.3), these cultural and non-cultural factors are organized into three parts: (a) Throughout the caregiving experience; (b) Service use decision-making stage; and (c) Service use stage. Overall, cultural factors only influenced the (a) and (b) parts. Gender differences in elder care service use patterns were also

examined in this qualitative stage. However, few gender differences were found, which is also included in this discussion below.

### **Throughout the Caregiving Experience**

Throughout the caregiving experience, two major cultural values/beliefs, “family responsibility” and “filial piety,” were addressed by the studied population. “The throughout caregiving experience” means that no matter what stage caregiver participants are in, these two cultural factors had an influence on both service use and non-service use patterns among caregiver participants. The majority of caregivers perceived elder care as a family responsibility, and they often had supplemental informal help from other family members or relatives. As Social Exchange Theory emphasizes, individuals pursue positive outcomes through interactions in dyadic relationships when the goal is to minimize costs while maximizing rewards (Thibaut & Kelley, 1959). In that sense, caregivers may feel rewarded by their actions of fulfilling caregiving responsibilities in spite of what appear to be a cost to them. Another cultural value of filial piety, often found in Asian cultures (Dilworth-Anderson & Gibson, 2002; Harris & Long, 1999; Sung, 1998; Tanabe, n.d.), was also reported, especially by participants giving care to their parents in this present study. These caregiver participants in this qualitative stage respected the value of filial piety, which was often taught throughout their upbringings, and they tried to apply it to their current caregiving situations. Under the value of filial piety, reciprocity was also addressed by these participants. Reciprocity is one of the concepts from Social Exchange Theory (Homans, 1964, 1974), and it is often found in Asian/Asian American caregiver studies to be a motivational reason to take on the caregiving role (Harris, et al., 1998; Hsu & Shyu, 2003; Ishibashi, 2002; Ito, 2006; Wallhagen & Yamamoto-Mitani, 2006). In this present study, the majority of parental caregiver participants conceptualized their caregiving role as payback

opportunity for their parents(s). Interestingly, some caregiver participants mentioned that these two cultural values of family responsibility and filial piety were not only considered as Japanese cultural values/beliefs, but also as “local” ones.

### **The Service Use Decision-Making Stage**

**Cultural Factors Influenced Service Use Decision-Making.** At the “service use decision-making stage,” both various cultural and non-cultural factors influenced service use decisions. As for cultural factors, both service using and non-service using research participants shared common opinions. One of the biggest barriers for deciding to use services was the attitude of care recipients toward services. Almost 70% of non-service using care recipients did not want to use services compared to 31% of care recipients who were currently using services. In other words, service use decisions are made by both caregivers and care recipients in this studied population. This is consistent with Social Exchange Theory’s conceptualization of the importance of the dyadic nature of the caregiver/care recipient’s relationship in regard to decision-making.

Another factor in deciding whether or not to use services was perceived shame in asking for help. As Abe (1997) and Benedict (1989) discussed, the Japanese are conscious about how their behaviors are perceived by others. Because caregiving is considered as a family responsibility among the studied population, using formal services is seen as failing to fulfill their obligation or duty as a child or spouse. This belief then leads to feelings of shame. This may explain why four service using female caregivers reported that, although they used services, they still felt “not comfortable at all” in asking for help.

Asai and Kameoka (2005) found that the concept of *sekentei* influenced the underutilization of social services among Japanese caregivers. In the qualitative stage, only one

Japan-born service using female participant mentioned *sekentei*. She was not comfortable asking her friends for help since her son, who lived close by, did not help her at all. The concepts of shame and *sekentei* in Japanese culture are also related to another factor found in this stage, “not being comfortable with strangers in the house.” This finding is consistent with previous service utilization studies (Casado, et al., 2010; Li, 2004). They found that a common reason for the underutilization of formal services is that either caregiver or care recipient does not want outsiders coming into their home to provide services because of privacy issues. Because of shame and *sekentei*, family issues need to be kept within the family. Thus, half of caregiver participants in this qualitative stage mentioned that they were not comfortable with care workers coming into their house to provide services. In particular, they were concerned that having care workers in the house may disturb a sense of privacy and create security issues. One study indicated that Japanese Americans perceived that having a stranger in the house compromised privacy and was problematic (Young, et al., 2002a).

Opinions on the preference for professionals with the same ethnic background were very similar between service using and non-service using participants. Half of both groups said that it is important to have professionals with the same ethnic background because they may have a better understanding of their caregiving situation. The similar findings are found in previous research (Giunta, et al., 2004; Yeatts, et al., 1992; Young, et al., 2002a). They address that if service providers or other service users have different racial/ethnic backgrounds, minority older adults or caregivers are less likely to use formal services, such as adult day care programs. The other half felt that professional credentials, service quality, and personal characteristics are more important factors to be considered in the process of selecting service providers. These findings also contribute to this body of literature, where a previous study found that quality in services

and caring staff are also emphasized by Japanese Americans (Young, et al., 2002a). For this cultural factor, preference for “local” Japanese, “local” persons, and Asian persons was also mentioned by caregiver participants.

In addition to preference for professionals, language becomes an issue among the Japan-born caregivers and care recipients when they accessed elder care services in this qualitative stage. The Japan-born caregiver participants preferred to work with professionals who spoke Japanese because it is easier for them to communicate their needs and receive information in their native language. This preference for services provided in a native language is consistent with previous racial/ethnic service utilization studies (Chow, et al., 2000; Giunta, et al., 2004; Montoro-Rodriguez, et al., 2003; Scharlach, et al., 2006; Yeatts, et al., 1992; Young, et al., 2002a). However, it is important to note that simply being of ethnically Japanese did not pre-determine the need for professionals who can speak Japanese—rather, this was a unique need identified by the Japan-born caregivers and care recipients.

The most common reason why non-service using participants did not use services at the time of their interviews was that they had manageable caregiving situations with sufficient family support to provide adequate care. This finding is consistent with previous racial/ethnic diverse caregiving studies (Anngela-Cole & Hilton, 2009; Giunta, et al., 2004; Kemper, 1992; Kinoshita & Giallagher-Thompson, 2004; Kosloski, et al., 2001; Mui & Burnette, 1994; Scharlach, et al., 2006; Strain & Blandford, 2002). They report that when caregivers or older adults have informal support, they are less likely to use formal services.

**Non-Cultural Factors Influenced Service Use Decision-Making.** The biggest difference between service using and non-service using research participants were three non-cultural factors, which were only found among service users. These three non-cultural factors are

the essential determinants whether participants used or did not use elder care services among the studied population. One factor is “benefits for using services.” Despite all the barriers that may limit service use (e.g., care recipient did not want to use services), service using caregivers see that the overall benefits in using services outweighs the cultural factors that may otherwise have limited their service use. Service using male participants tended to see using formal services as bringing mutual benefits to both caregivers and care recipients. In contrast, service using female participants tended to emphasize the benefits to their care recipients over themselves. This may also explain why those female caregiver participants expressed strong feelings of obligation or duty in this qualitative stage. For female caregivers, using services may not replace their care responsibilities, but it may provide additional benefits to their care recipients.

The second non-cultural factor was “other family members’ concerns for the welfare of the caregivers.” In particular, for spousal caregiving cases in this qualitative stage, the majority of both caregivers and care recipients were in their 70’s, 80’s, or even 90’s. In these cases, their adult children were especially worried about the welfare of their mother or father who was the primary caregiver to their spouse. Therefore, these adult children took an initial step to search and connect to service provide, which eased caregiving responsibilities on their caregiver parent. This highlights again the interconnectedness of family members in the decision-making process as suggested by Social Exchange Theory.

The last non-cultural factor was “the need to juggle work and caregiving.” A couple of caregiver participants in the qualitative stage took early retirement because of their increasing caregiving responsibilities. However, for employed caregivers, one option might be utilizing services in order to keep their full-time job status. This non-cultural factor is especially applied to younger caregivers, those who are in their 50’s and early 60’s in this qualitative stage. These

younger employed caregivers are more likely to use services in order to maintain their full-time job status and to fulfill their caregiving responsibilities. The finding is consistent with previous caregiving studies (Hong, 2010; Kosloski, et al., 1999). Employed caregivers are more likely to utilize services to fulfill unmet needs of their care recipients.

As described above, both cultural and non-cultural factors influenced the service use decision-making stage. However, in this studied population, when caregivers perceived non-cultural factors were more important than cultural factors, then they are *more likely to use services*. In contrast, when caregivers perceived cultural factors were more important than non-cultural factors, then they are *less likely to use services*. This finding suggests that these non-cultural factors were the essential determinants of elder care service use decision. In other words, prior to the service use decision-making stage, caregivers could balance cultural factors and the needs of their care recipients. However, once those non-cultural factors, such as increased care recipient needs, became too great, balancing cultural factors was no longer perceived as pertinent to decision-making. As this finding indicated, cultural factors were not essential factors to influence service use decision-making; however, these cultural factors still need to be taken into consideration while professionals work with caregivers and care recipients of Japanese ancestry in the State of Hawai‘i.

### **The Service Use Stage**

**Service use experience among service users.** Beyond the service use decision-making stage, such as “the service use stage,” few cultural factors had a clear influence on caregivers and care recipients. All of the service using caregiver participants were “very satisfied” with their services, but females had more opinions and higher expectations about their current services. This finding is consistent with the findings from research on unmet need (Lima & Allen, 2001).

Lima and Allen (2001) found that women were more likely to report unmet needs because they had higher standards of care than male caregivers. In the present study, especially, two Japan-born service using female caregivers were not satisfied with the quality of current services compared to what they perceived as the Japanese standard. This was the only cultural factor found at this stage. Although most of these service using participants did not mention major barriers to continuing to use current services, one salient barrier were financial concerns. The finding was consistent with previous racial/ethnic minority caregiving studies (Fredriksen-Goldsen & Farwell, 2005; Giunta, et al., 2004; Scharlach, et al., 2008). These studies found that financial strain is a reason for caregivers to have less access to formal services.

**Service use perspective among non-service users.** One of the curious findings was that 90% of non-service using participants used at least one service in the past. Furthermore, these 90% of non-service using participants are planning to use services as needed in the future. This finding suggests that these non-service using caregivers do not refuse services entirely, but they are open to accept services when the need arises. This finding also suggests that studies that compare those who use services to those who do not need to think more deeply about how these two categories are defined. Although this may be an artifact of the sampling strategy for the qualitative portion of this study, these findings suggest that these two groups may not be as discreet as previously assumed, and that someone who responds that they are not currently using services does not mean that they never have or never will.

Another noteworthy finding from these responses was the reasons why these non-service users stopped using services. The Handi-Van service was the most used service by respondents, and two common reasons why they stopped using the service were waiting time and inconvenient initial application and renewal process. The Handi-Van is the City and County of

Honolulu paratransit service is for persons with disabilities who are not able to ride TheBus (Hawai'i Reservations, n.d.). In order to utilize the Handi-Van service, a person has to apply and to be qualified for the service. Improvement of this Handi-Van service, meaning reductions in waiting time and making the application and renewal process simpler, may benefit on both caregivers and care recipient. This finding also raises the possibility that transportation services may be one of the most needed services in the State.

Other commonly used services were nursing services and rehab services after hospitalization, which were paid by Medicare. The use of Medicare coverage for home-based programs after hospital discharge was also reported in another recent study (Casado, et al., 2010). This may suggest that cost is a barrier for some non-service users to utilize services in the future.

One of the consistent findings across the quantitative and qualitative stages was male caregivers' perception of who was the "primary" caregiver. Nine out of 10 male caregiver participants in the qualitative stage responded that other family member(s) were available when they needed help. Two non-service using male participants identified themselves as primary caregivers, but their wives or female siblings provided most of house chores and personal care for their care recipients. This tells us that male caregivers may conceptualize the definition of a "primary" caregiver differently than their female counterparts. This finding is consistent with a previous study of male caregivers conducted by McFarland and Sanders (1999). They found that when sons become caregivers they are often not comfortable with providing personal care tasks. Thus, most of such care responsibilities are performed either by their wives or another female relative.

Another interesting finding among male caregivers in this qualitative stage was, for future service use, non-service using male caregivers had more specific services in mind already, such as personal care services (e.g., bathing). This is consistent with previous male caregiver studies that suggest that bathing is the most difficult care task for male caregivers (Harris; 1998; Parsons, 1997) and they are more likely to ask others to perform the tasks (Ginzler, 2010). This implies that male caregivers understand their limits in caregiving, while female caregivers may provide care above and beyond their capacity to meet the needs of their care recipients (Ishibashi, 2002).

### **Combined Discussion: Quantitative & Qualitative Stages**

#### **The Andersen Behavioral Model, Social Exchange Theory, and Present Study Findings**

The Andersen Behavior Model of Health Services Use was used as the theoretical framework for the quantitative stage, and potential predictors from the Hawai‘i Family Caregiver Needs Assessment data were selected based on the model. Although the Andersen model conceptualizes *individual* determinants of health service utilization based on three components—predisposing, enabling, and need components—the Andersen model still proved a useful model for determining elder care service utilization based on the determinants of both caregiver and care recipient in this present study. In the present study, three predictors from the “predisposing” component (gender, education, and living arrangement), and two predictors from the “enabling” component (extra informal help and island), and one predictor (sleep interruption) from the “need” component were found to be statistically significant predictors of elder care service use.

One of the reasons why the qualitative stage was added to this present study was the Andersen model does not include cultural factors. Based on the findings of the qualitative stage, including cultural factors in the Andersen model may not be essential to determine the elder care

service use. However, as predicted by Social Exchange Theory, the dyadic relationship between caregiver and care recipient, and social and economic characteristics of *both* caregivers and care recipients, needs to be included in the Andersen model. As Andersen (1995) originally focused on the family as the unit of analysis, and he also suggested "... it is more efficient to attach important family characteristics to the individual as the unit for analysis" (p. 1), the family should be the unit of analysis in future service utilization studies among caregivers and care recipients. Based on the qualitative findings in this present study, both cultural and non-cultural factors influenced the service decision-making stage. More specifically, non-cultural factors *were essential determinants* of service use decisions. However, the relationship between caregiver and care recipient of Japanese ancestry is influenced by cultural values and beliefs, such as filial piety. In other words, such cultural values and beliefs *are not* necessarily directly related to the service use decision-making process, but such dyadic relationship between Japanese caregivers and care recipients is definitely based on cultural values/beliefs. Social Exchange Theory emphasizes this dyadic relationship, and cultural values are just one possible predictor for how the dyad might make decisions in regard to care. This belief system as it plays out between the caregiver and care recipient can impact the types of services utilized, and when those services are utilized by Japanese caregivers.

### **Gender and Elder Care Service Utilization Patterns**

One finding from this study that is inconsistent with findings from previous studies (Cahill, 2000; Kosloski, et al., 1999; Russell, 2004; Stoller & Cutler, 1992) was that male caregivers in this present study used fewer types of services than their female counterparts. Male caregivers in this study had relatively high levels of supplemental informal support from other family members and relatives; therefore, they used fewer types of formal services. One of the

characteristics of traditional Japanese elder care was the eldest son is responsible for care of his aging parents, but his wife (daughter-in-law) is the one who actually provides hands-on care (Asahara, Momose, & Murashima, 2002; Ogawa & Retherford, 1997; Webb, 2002). In the present study, two non-service using male caregivers in the qualitative stage could be described in a similar fashion. Thus, when studying male caregivers, one important consideration for the future is examining their caregiving network: who else is involved, how much, and how other individuals are involved in male caregiving situations.

The unit of data analysis for the quantitative stage was based on gender of caregivers. As presented above, when looking at service utilization patterns (used or did not use), almost the same percentage (81%) of both male and female caregiver participants used at least one service. This implies both genders are equally open to use elder care services when needed. However, when looking at the number of services used by these participants, females used twice as many types of services as males. Conversely, the unit of analysis for the qualitative stage was based on service users and non-service users. Since 90% of non-service users used services in the past and are planning to use services as needed in the future, they are also open to accept services when needed. These findings suggest that both female and male caregivers in the quantitative stage and both service users and non-service users *are not* completely different groups of caregivers. Regardless of gender and current service use status, caregivers of Japanese ancestry in this present study are open to accept services when needs arose. Although a previous male caregiver study suggested developing support services (e.g., support group) tailored to male caregivers (Gandel, 2009), there was not enough evidence to determine the need for such gender tailored/specific services in this present study. Rather, providing education on available home

and community-based services and other long-term care options may help male caregivers to expand their knowledge of service types for future service use.

### **Role of “Local” Culture in Caregiving and Elder Care Service Utilization Patterns**

Unique findings in the qualitative stage were the importance of “local” culture and “local” identity in service use and caregiving experiences, which may cause inconsistent findings from past Japanese American caregiving studies that were conducted on the continental U.S. (Kinoshita & Gallagher-Thompson, 2004; Young, et al., 2002a, 2002b). In previous caregiving studies, ethnicity of the caregiver or care recipient has been used as a proxy for culture. However, the meaning of ethnicity needs to be carefully understood. Okamura (2014) used the concept of ethnicity in two different but related ways and with two different meanings in his book:

The first and more frequently involved meaning is that ethnicity is an organizing principle of social relations in the same way that race, class, and gender are insofar as they structure or regulate relations among racial, class, or gender groups, respectively. The second and much less frequent way in which I discuss ethnicity is in terms of the combined identity, culture, and social relations of an ethnic group ...” (Okamura, 2014, p. 4).

The findings in the qualitative stage of this present study suggested that even within the same ethnic background, such as being Japanese, there were important cultural differences in service use and caregiving experiences between these caregivers of Japanese ancestry in the State of Hawai‘i and those from prior studies on the continental U.S. In other words, the findings from previous Japanese American caregiver studies conducted on the continental U.S. (Kinoshita & Gallagher-Thompson, 2004; Young, et al., 2002a, 2002b) may not be applicable to those

caregivers of Japanese ancestry in the State of Hawai‘i. Also, in previous racial/ethnic diverse caregiving studies (Dilworth-Anderson & Gibson, 2002; Li, 2004; Scharlach, et al., 2006; Scharlach, et al., 2008; Yeatts, et al., 1992), developing culturally sensitive services for minority ethnic groups has been recommended, such as providing culturally appropriate food (e.g., through the Meals-on-Wheels) and having staff who speak the native language of those who access services. However, research participants in the qualitative stage of this present study frequently mentioned the importance of “local” food, “local” persons, and “Asian” persons in their interviews. That means their preference may be the “local” culturally sensitive services rather than “Japanese” culturally sensitive services. The culture of “local” Japanese, who were born and raised in Hawai‘i, may have influenced by American, Japanese, and “local” cultures. Such unique cultural experiences among “local” Japanese may have an impact on their caregiving and service utilization experiences. Thus, the Japanese culturally sensitive services may be only beneficial for those who are Japan-born caregivers and care recipients in the State of Hawai‘i. This implies that “local” Japanese and Japan-born caregivers are two different groups of caregivers and data analysis needs to be separately analyzed for future studies.

### **Limitations**

Although this present study made a contribution to the literature exploring elder care service utilization among the caregivers of Japanese ancestry in the State of Hawai‘i, several challenges and limitations need to be addressed.

For the quantitative stage, a possible limitation is the generalizability of the findings. The original State of Hawai‘i Family Caregiver Needs Assessment data was collected by using a probability sampling methods, which increases generalizability. However, since the target population for this present study was limited to the caregivers of Japanese ancestry, the sample

size was small. Also, with missing data values, the sample size became even smaller, and subsequently the small sample size limited the selection of statistical tests and affected the statistical power. In particular, the sample of male caregivers of Japanese ancestry was small. The issue of generalizability also applies to the qualitative stage because of the nature of the qualitative approach. Also, caregiver research participants for the qualitative stage were only recruited from the island of Oahu. Therefore, the findings derived from both quantitative and qualitative stages may not be generalizable to the Japanese population in other U.S. states or other racial/ethnic minority groups.

Using the secondary data for data analysis of the quantitative stage limited the selection of potential predictors, especially the selection of variables that could be based on the Andersen model. If some variables (e.g., frequency of each service use and knowledge of elder care services) were included in the original data, that might have provided a better understanding of service utilization patterns of the studied population.

Another limitation that needs to be acknowledged was the data collection year gap between quantitative and qualitative data. The quantitative data was collected in 2007 and the qualitative data was collected in 2013. Major political changes occurred between 2007 and 2013, such as the Affordable Care Act, that may affected the responses of these research participants in the present study.

One of the challenges was the recruitment of research participants for the qualitative stage of this study. Normally, potential research participants in previous service utilization studies were recruited from organizations or agencies providing elder care services. That means recruiting caregivers or care recipients who already used services at the time of their recruitment. Since only two non-profit organizations were used as recruitment sites, only a limited range of

service using caregivers (e.g., support groups, respite services, and day care programs) were recruited. In addition, the recruitment of non-service using caregiver participants was another challenge. Only the researcher's personal contacts and the snowball sampling method were used to recruit such non-service using caregiver participants, which might further limit generalizability. In addition, many of those participants classified as "non-service users" had actually utilized services in the past and planned to do so in the future.

Instead of specifying "Japanese" cultural values/beliefs, the general term "cultural factors" was used in the theoretical model and in the discussion section of the qualitative stage for the following reasons. One reason is that there was not enough evidence to generalize the findings as "Japanese" cultural values/beliefs based on the small sample size of the qualitative data. The second reason is that some of the research participants who were born and raised in Hawai'i described certain cultural values/beliefs as "Japanese" as well as "local." Therefore, using the general term of "cultural factors" was more appropriate for this present study. At the same time, this raises important questions about how and when "cultural factors" based on race/ethnicity vs. "cultural factors" based on geographical locations are stronger predictors in caregiving contexts.

### **Implications for Social Work Practice and Education**

#### **Social Work Practice Implications**

**Social work practice in elder care cases.** Caregiving is a dyadic relationship between the caregiver and care recipient. Therefore, when social workers engage in any caregiving cases, they need to give equal attention to both the caregiver and the care recipient. One of the cultural factors that influenced service use decision-making in this present study was that a care recipient often did not want to use services even when his/her caregiver wanted to use them. Caregivers do

not make decisions in isolation, but instead take the needs and wishes of the care recipient into account when making service utilization decisions. Understanding why the care recipient was reluctant to accept such services is a key to working effectively with such cases. Also, as found in this present study, family plays an important role in caregiving among the caregivers of Japanese ancestry in the State of Hawai'i. Thus, conducting an assessment of both caregivers and care recipients in order to identify the issues and needs of both people is essential for social workers when working with this particular population.

**Consideration of elder care service options.** Since many care recipients and caregivers in this present study expressed discomfort with someone from outside the home coming into their homes to provide services, options for different types of services need to be considered. For instance, if a caregiver requests respite services, there might be two options. One would be having someone come over to the home to provide respite services. The other would be the care recipient going to a day care program, thereby giving his/her caregiver a temporary break from the caregiving responsibilities. Some of the cultural factors identified in this present study might be important when considering service selection and the development of future services.

**Cultural competence and social diversity in social work education.** According to the National Association of Social Work (NASW, 2008), one of a social worker's ethical responsibilities to clients is cultural competence and social diversity. In social work education, students often learn how important it is to have "a knowledge base of clients" cultures and to demonstrate competence in the provision of services that are sensitive to clients' cultures and to differences among people and cultural groups" (NASW, 2008, 1.05). Some understanding of Japanese culture is important when social workers work with clients of Japanese ancestry. However, as the findings from the qualitative stage of this present study identified, "local"

culture, as well as Japanese culture, is embedded among caregivers of Japanese ancestry in the State of Hawai‘i. Therefore, understanding of such “local” culture and how it might interact with Japanese culture when working with those caregivers and care recipients of Japanese ancestry who were born and raised in the State is of critical importance. Furthermore, knowledge of the “local” culture may be applicable, not only to caregivers of Japanese ancestry, but also to other ethnic caregivers who were born and raised in the State. In that sense, Hawai‘i is such a state where various minority ethnic groups are the dominant group in the whole State, and such “local” culture values need to be further examined and respected in social work practice, education, and research.

### **Future Elder Care Service Systems**

There are some suggestions for future elder care systems in the State of Hawai‘i that were addressed by research participants in this present study. In this present study, it was found that transportation services, such as the Handi-Van, were the most used service in the past by the current non-service using research participants. The reason why they did not continue using the transportation services was the long wait time and the inconvenient application process of such services. The complaint of long wait time for the Handi-Van has been also a general public complaint, yet, the findings from the present study show that transportation services are one of the most needed services. Therefore, improvement of the Handi-Van operation or the provision of other transportation options is necessary to meet the needs of both caregivers as well as care recipients.

It was also found that both backgrounds and characteristics of current informal caregivers in this present study vary. For instance, employed caregivers have to juggle work with caregiving and a 90-year old husband took care of his 90-year old wife. Therefore, it seems that no one

service fits all. It may be a challenge to develop elder care service to meet the various backgrounds of older adults and caregivers; however, the utilization of technology (e.g., using computer to monitor daily activities of older adults and to create internet caregiver support networks) or the development of caregiving-friendly communities (e.g., developing a neighbor's monitoring network to keep an eye on older adults with dementia and utilizing social capital to form an informal caregiving network in the community) may expand care options in future elder care systems.

**Gender-sensitive practice approach.** In social work practice, it is important to pay attention to caregiver gender and to be sensitive that there may be gender differences in caregiving. In this present study, there was the finding that male caregivers tended to utilize more extra informal help, but in most cases, male and female caregivers made decisions about utilizing services in a similar fashion. The biggest difference between men and women was identified as male caregivers using a smaller range of services compared with their female counterparts. Thus, one possible suggestion is to educate the public regarding the availability of elder care services and long-term care options, especially for male caregivers.

As the quantitative findings of this present study indicated, almost half of female caregivers provided most of the care by themselves. Yet, female caregivers used a wider range/types of service compared to male caregivers. These findings suggest that these female caregivers tend to be sole caregivers who took charge of their caregiving situation even though most of them had extra informal help when needed. Also, as Ishibashi (2002) reported, female caregivers tend to strive to provide care often above and beyond their physical capabilities because of their presumed "natural" caring role. Therefore, paying attention to their physical and

mental health and providing appropriate services to maintain their well-being is one important role for social workers.

Gender-sensitive practice approach may help social workers to work more effectively with either male or female caregivers, to have a better understanding of his/her issues in caregiving, and to provide appropriate possible services and/or support to meet their needs.

**Culturally-sensitive services.** Developing culturally sensitive services was addressed by the studied population. One of the requests was for the food provided by Meals-on-Wheels to be more “culturally appropriate” in order to meet the needs of older adults in Hawai‘i. Although their definition of “culturally appropriate” may be different from the findings from previous studies, for the studied population, the request was not necessary to have Japanese food, which is often requested by some Japanese elderly persons on the continental U.S. However, many of the research participants mentioned “local” food as their preference. Another culturally sensitive service seems to be related to language for those who are foreign-born. Since 30.2% of those aged 60 and over in Hawai‘i spoke a language other than English at home (compared with the U.S. national average of 14.1%) (as cited in Executive Office on Aging and Hawai‘i State Department of Health, 2013), suggesting that providing services in their native language is important. Informational materials regarding caregiving and the availability of home and community services need to be translated into different non-English languages. For instance, the Aging and Disability Resource Center (ADRC) was launched to be a one-stop information center for providing options for long-term care supports and services available in the State of Hawai‘i, but currently none of information on the ADRC website has been translated from English to other languages. As the findings from the present study indicated, language is an important factor for foreign-born caregivers and care recipients. Therefore, it is one consideration to improve the

ADRC website is to provide information in various languages, such as Japanese. Working through minority groups or churches in the community may be also an option for preparing other translated materials related to caregiving and elder care services.

### **Recommendations for Future Public Policies Related to Elder Care**

As the results of the qualitative stage indicated, one of the options for employed caregivers is to utilize elder care services to avoid quitting their jobs or taking early retirement. Therefore, workplace related to public policies, such as paid/unpaid family leave, need to be considered. In the current 2015 State of Hawai‘i legislative session, a bill related to family caregiving, HB 1049, has been introduced (Hawai‘i State Legislature, 2015). The purpose of this bill is to ensure that employed caregivers (for newborns, children, spouses, or parents with a serious health condition) within the State are provided partial wage replacement during times when they need to provide care. Although the employees need to make some contributions to the trust fund, they are eligible to take up to 12 weeks per calendar year for paid family leave. If employed caregivers are eligible for such paid or even unpaid family leave policy at work, they may use the paid/unpaid family leave period to search for long-term care options and arrange possible services to meet their needs.

Another possible policy may be cash assistance for unpaid/informal caregivers and older adults as a service option. As discussed in the suggestions for culturally-sensitive services above, service preferences for older adults and caregivers may vary in every caregiving situation. Therefore, if cash assistance, such as Cash and Counseling, is provided to older adults or caregivers, they may be able to expand their service options to meet their individual needs.

## Suggestions for Future Studies

### Suggestions for Future Methodology

There are various methodological issues that need to be considered for future studies. One is that the definition of a “caregiver” needs to be more clearly defined. In the present study, the majority of research participants did not consider themselves as caregivers. They responded like, “I am just a son, so I take care of my mother.” One female caregiver participant said, “[A caregiver is] like somebody who does caregiving solely. That’s all they do, just solely do that [caregiving].” Thus, individuals have different definitions of a “caregiver,” which affects any potential research participant recruitment process. Also, if researchers specify recruiting only “primary caregivers” for future studies, the word “primary” also needs to be more clearly defined. In this example, many participants, particularly men, answered that they were the primary caretaker while also identifying other family members or friends who did most of the direct caregiving activities. Another definitional issue lies with the types of elder care services and how they are conceptualized. In the present study, some caregiver participants considered only privately paid services, while others considered only services provided by the government. Therefore, in any future service utilization studies where researchers would like to include both governmental, home and community-based services, and privately paid services, the definition of such services needs to be more clearly defined and understandable to the research participants.

The main purpose of this present study was to examine the relationship between service use status (either used or did not use any elder care services) and gender and cultural factors. Therefore, how these factors impact *types of services* used by caregivers and/or care recipients was not examined. However, as the findings of the quantitative stage indicated, there were gender differences in range/types of services used by caregivers and care recipients. Thus, a

suggestion for future studies will be to examine how cultural factors impact types of services used.

Another methodological issue lies with the selection of a mixed method strategy as used in this present study. Although each quantitative method and qualitative method has strengths and limitations, combining the two methods certainly benefited this present study. As for the quantitative method, testing potential predictors in certain statistical tests provides a bigger picture as to how these predictors influence elder care service utilization patterns. On the other hand, the use of a qualitative strategy, such as conducting individual interviews, provided a better picture of the subtle cultural nuances of the caregiving and service use experiences among the studied population of this present study. Thus, selecting a mixed method strategy, especially for future studies examining cultural factors, is recommended.

Lastly, as the qualitative findings in this present study indicate, Japan-born caregivers and Japanese American caregivers in the State of Hawai'i are two quite different groups of caregivers in terms of their needs for elder care services. For instance, language barriers in accessing such services were often addressed by the Japan-born caregivers. Therefore, if both foreign-born and American-born caregivers are included in future studies, the data for these two groups should be analyzed separately in order to have a better understanding of the issues and needs of each for elder care services.

### **Suggestions for Future Measures**

There are also four suggestions for the “measures” for future studies. First, in this present study, an almost equal percentage of both male and female caregiver participants had used at least one elder care service; however, females used a wider range of these services compared with males. An assumption could be made that male caregivers used only certain types of

services, but that they might use them more frequently. Since the item “frequency of each service use” wasn’t included in either the State of Hawai‘i Family Caregiver Needs Assessment or the interview questions used in the qualitative stage of the present study, the service utilization patterns by male caregivers in this study was not clearly determined. Therefore, the item “frequency of each service use by either caregiver or care recipient” needs to be included in future service utilization studies.

Second, although the Andersen (1995) model focuses on the individual, he does recognize the importance of family characteristics to the individual as a unit for analysis. As the findings in this present study identified, many of predictors affecting service decision are socioeconomic characteristics of both caregivers and care recipients. Especially, for certain cultures, such as Japanese, family plays a significant role in elder care. Thus, the dyadic relationship between caregivers and care recipient cannot be ignored for future service utilization studies. Andersen (1995) also responds to the criticisms of paying less attention to social networks, social interactions, and culture, these factors can be measured in one of the predisposing component, such as social structure, in his model. Although the social structure category contains race and ethnicity, these predictors may not provide enough evidence to determine how culture plays a role in service use decision-making. Therefore, as mentioned above, it is essential to add qualitative method in order to have an in-depth understanding of the role of culture in future elder care service utilization studies along with utilizing the Andersen model.

Third, this research initially paid attention only to the impacts of Japanese cultural values and beliefs on service utilization patterns. However, the findings from the qualitative stage of this present study also addressed the importance of “local” cultural values and “local” identity in

the caregiving experience. There was not enough evidence to fully define the characteristics of “local” culture in this present study. Therefore, the inclusion of such “local” cultural characteristics in any future measures would be appropriate for studying other populations in the State of Hawai‘i.

Lastly, there were some generational differences in opinions toward caregiving and service utilization among research participants in the qualitative stage. Since the two main factors for this present study were gender and cultural factors, such generational differences were not further examined. Yet, it may be beneficial for future studies to include survey items or interview questions related to “generation” of both caregivers and care recipients. That may provide a better picture of how generational differences in caregivers and care recipients have an impact on elder care service utilization patterns.

### **Suggestions for Future Qualitative Studies**

The selection of the interview style to be used in future studies is an important consideration. For the qualitative stage of this study, the researcher conducted 23 semi-structured interviews for each research participant. Most of the interview questions were open-ended questions for gaining in-depth understandings of caregiving and service utilization experience. However, for this particular studied population, caregivers of Japanese ancestry in Hawai‘i, some of the research participants preferred to have a structured interview that began with a closed-ended question and then was followed by open-ended questions for them to elaborate their comments. The preference of interview style may vary by individual researchers; but it should be a consideration for future studies.

Only a cross-sectional survey and a one-time semi-structured interview were employed in this present study. The majority of non-service users in the qualitative stage were planning to use

services in the future. As caregiving responsibilities and tasks normally increase as the physical and/or cognitive condition of care recipients deteriorate, conducting follow-up surveys and/or interviews, especially for non-service users, will be beneficial for identifying any determinant factors affecting their service use decision-making. Also conceptualizing service use as something that fluctuates over time, and asking participants about both past and present use of services is important to understanding the overall pattern of service utilization.

### **Conclusion**

This present study identified the details in the roles of gender and culture on elder care service utilization patterns among caregivers of Japanese ancestry in the State of Hawai‘i. Also, this study brings some new knowledge in addition to confirm the findings from previous caregiving and service utilization studies. In particular, one of the important roles of this present study was to fill the gaps in previous service utilization studies by utilizing a 2-stage mixed methods strategies. Such methodological strategy gave a better understanding of how well the Andersen Behavior Model for Health Services Use predicted and explained the elder care service utilization, and what factors should be added to the model when utilizing for certain racial/ethnic groups.

One unexpected finding in this study was the role of “local” culture in elder care among “local” born Japanese caregivers. In previous studies, researchers tried to use “ethnicity” as a proxy for “culture,” and they might overlook the existence of such unique cultures existing only certain geographic locations in the U.S.

A male caregiver in the present study defined “local” culture as:

“Our local culture ... local culture is everybody is family. Our local culture is ‘ohana.’  
We are all family. We take care of people that live here.”

For this present study, the researcher did not have an in-depth understanding of the role of “local” culture among caregiver research participants. However, as the male caregiver respondent defined above, “local” culture in Hawai‘i seems to have significant impacts on people’s lives in different contexts.

Since this present study was a first step in examining elder care service utilization patterns among caregivers of Japanese ancestry in the State of Hawai‘i, it is hoped that further research will explore additional details about service utilization patterns among the studied population, and also to be used to study other ethnic groups in the State of Hawai‘i.

## APPENDIX A

### Predictors and Outcome Variable Selected for Quantitative Data Analysis

Variable names	Interview questions	Original response categories (#s of categories)	Recoded response categories (#s of categories)
<b>Predictors</b>			
CG age	Your age, please.	(3 categories) Age in whole years Don't know Refused	(2 categories) Age 22 through 59 Age 60 through 89
CG gender	What is your gender?	(3) Male Female Don't know/Refused	(2) Male Female
CG marital status	What is your marital status?	(7) Married Living with partner Separated Divorced Widowed Never married Don't know/Refused	(2) Married All others
CG relationship to CR	What is your relationship to the person you help?	(12) Spouse Father Mother Grandfather Grandmother Brother Sister Uncle Aunt Significant other Friend Other	(2) Parental relationship All other relationships
CG education level	What is your highest level of schooling?	(8) Less than high school High school graduate Some community college/technical school Community college/technical school graduate	(2) Up to some college Above college graduate

		Some college (4yrs) College graduate (4yrs) Post graduate Don't know/Refused	
CG employment status	Are you currently employed?	(3) Yes No Don't know/Refused	(2) Yes No
CR living arrangement	What is your CR's current living arrangement?	(9) Alone in their own home/apartment With CG only With spouse or partner only In the home/apartment of another family member/friend In a retirement community/care home/group home or assisted living facility In a nursing home Somewhere else (specify) Don't know Refused	(2) Live alone All other arrangements
Household income	What was your CR's approximate household income, from all sources, for 2006?	(17) Less than \$20,000 \$20,000 - \$24,999 \$25,000 - \$29,999 \$30,000 - \$34,999 \$35,000 - \$39,999 \$40,000 - \$44,999 \$45,000 - \$49,999 \$50,000 - \$59,999 \$60,000 - \$69,999 \$70,000 - \$79,999 \$80,000 - \$89,999 \$90,000 - \$99,999 \$100,000 - \$119,999 \$120,000 - \$149,999 \$150,000 and over Don't know Refused	(2) Less than \$29,999 \$30,000 and over

Extra informal help	If you were unable to help your CR, is there someone else who would do the things you do?	(4) Yes No Don't know Refused	(2) Yes No
Island	Which island do you live?	(4) Oahu Hawai'i Maui County Kauai	(2) Oahu All other islands
Caregiver stress (financial hardship, physical strain, and emotional stress)			
CG financial hardship	On a scale from 1 to 5, where 1 is no hardship at all and 5 is a great deal of hardship, how much of a financial hardship would you say that caring for your CR is for you?	(7) 1 – no hardship 2 3 4 5 – great deal of hardship Don't know Refused	First, recoded into 5 categories: (5) 1 – no stress 2 3 4 5 – great stress
CG physical strain	On a scale from 1 to 5, where 1 is not a strain at all and 5 is very much of a strain, how much of a physical strain would you say that caring for your CR is for you?	(7) 1 – not a strain at all 2 3 4 5 – very much of a strain Don't know Refused	Then summed 3 types of stresses. The possible of total scores ranged from 3 to 15. The higher scores refer to the higher stress CG experienced.
CG emotional stress	On a scale from 1 to 5, where 1 is not at all stressful and 5 is very stressful, how emotionally stressful would you say that caring for your CR is for you?	(7) 1 – not at all stressful 2 3 4 5 – very stressful Don't know Refused	
CG sleep interruption	Has your sleep been interrupted during the past week as a result of caring for your CR?	(4) Yes No Don't know Refused	(2) Yes No
CR health conditions	Please indicate whether or not your CR has each illness or conditions.	(4) Yes No Don't know	First, recoded to 2 categories: (2) Yes

	<p>(13 conditions)</p> <p>Arthritis</p> <p>Heart disease or high blood pressure</p> <p>Diabetes</p> <p>Severe hearing impairment</p> <p>Blindness or severe visual impairment</p> <p>Lung disease or emphysema</p> <p>Cancer (any)</p> <p>Stroke or paralysis</p> <p>HIV or AIDS</p> <p>Mental health problems or emotional problems</p> <p>Severe memory problems or dementia</p> <p>Behavior problems</p> <p>Any other illness or health conditions</p>	Refused	<p>No</p> <p>Then summed all 13 conditions.</p> <p>The possible total number of health conditions ranged from 0 to 13.</p>
<b>Outcome Variable</b>			
Service utilization	<p>Has your CR used any of the following community services? (16 services)</p> <p>Home-delivered meals</p> <p>Adult day services</p> <p>Transportation or escorts services</p> <p>Counseling or support services</p> <p>Bathing or personal care services</p> <p>Nursing services</p> <p>Light cleaning, shopping or cooking services</p> <p>Heavy cleaning or yard work services</p> <p>Companion services</p> <p>Health maintenance services</p> <p>Case management</p> <p>Public assistance</p>	<p>(4)</p> <p>Yes</p> <p>No</p> <p>Don't know</p> <p>Refused</p>	<p>First, recoded to 2 categories:</p> <p>(2)</p> <p>Yes</p> <p>No</p> <p>Then summed all 16 services.</p> <p>The possible total number of services used ranged from 0 to 16.</p>

	Training on how to assist Legal rights and obligations Financial services or advice End of life services		
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*Note.* CG = caregiver. CR = care recipient.

## **APPENDIX B**

### **Interview Guide**

#### **Introduction**

Before the interview, the informed consent forms need to be completed.

1. Thank you for participating in this study. My name is Seiko Sato and I am a PhD student in the Social Welfare program at the University of Hawai‘i, Mānoa.
2. The purpose of this study is to examine how cultural factors affect the patterns of elder care service utilization among family caregivers of Japanese ancestry in the State of Hawai‘i. I would like to understand who is more likely to use or not use elder care services, why caregivers use or do not use services, what types of services are preferred by service users, and what role cultural beliefs, values, norms, and/or attitudes play in determining the use or non-use services among caregivers.
3. The purpose of this interview is to understand your experiences as a Japanese national/Japanese American caregiver.
4. The interview will take on average from 60 to 90 minutes. Are you okay with the length of the interview? During the interview, if you feel the need to take a break, I can stop for a period of time. You are free to refuse to answer any questions when you do not wish to answer.
5. All personal information and interview responses will be kept confidential.
6. Demographic information will be asked before the interview.
7. With your permission, I would like to record this interview and take notes to ensure the accuracy of the data. Is this okay with you?
8. During this study, I will keep your data in a secure location.
9. Recorded interview files and the notes will be destroyed at the completion of this study.
10. Is it okay to have contact you second time by phone if I need to clarify any of your comments from the interview?
11. Do you have any questions before we start the interview?

ID# \_\_\_\_\_

Date: \_\_\_\_\_

### Demographic Information

Caregiver Demographics     Japanese     Japanese American

- Age \_\_\_\_\_ years old
- Gender \_\_\_\_\_
- Generation \_\_\_\_\_
- Relationship to care recipient \_\_\_\_\_
- Have you taken care of other family members/relatives before?  
 Yes (who? \_\_\_\_\_ )     No
- Do you currently take care of multiple family members?  
 Yes (who? \_\_\_\_\_ )     No
- Do you have any brothers and/or sisters who also help care for care recipient?  
 Yes (how many? \_\_\_ brother(s)    \_\_\_ sister(s))     No
- Do you have any children/others who also help care for care recipient?  
 Yes (how many? \_\_\_ son(s) \_\_\_ daughter(s) \_\_\_ other)     No
- Do you have any extra (or substitute) informal support when you are unable to provide care for this family member(s)?  
 Yes (by whom? \_\_\_\_\_ )     No
- Marital status  
 Married     Living with partner     Separated     Divorced     Widowed  
 Never married
- Education (what is your highest level of schooling? )  
 less than high school     high school graduate     some community college/technical school  
 community college/technical school graduate  
 some college (4 year)     college graduate (4 year)     post graduate
- Employment status  
 currently employed     retired     on leave of absence     other  
If caregiver is employed,     full-time     part-time
- What was your approximate household income from all sources for 2012? (only caregiver)  
 less than \$20,000     \$20,000 – \$39,999     more than \$40,000
- How long have you been the caregiver for your family member? \_\_\_\_\_ years \_\_\_\_\_ months
- On average, how many hours per week do you spend taking care of this family member(s)?  
 \_\_\_\_\_ hours    or     constant care (24/7)
- How is your health? \_\_\_\_\_
- Any stress? \_\_\_\_\_
- How do you manage your stress? \_\_\_\_\_
- If caregiver is Japanese national,  
How long have you lived in the U.S.? \_\_\_\_\_ years

Care recipient Demographics

- Age \_\_\_\_\_ years old
- Gender \_\_\_\_\_
- Ethnicity \_\_\_\_\_
- Generation \_\_\_\_\_
- Living arrangement
  - alone in their own home/apartment     with caregiver only
  - with spouse or partner only     in the home/apartment of another family member/friend
  - other arrangements (describe: \_\_\_\_\_ )
- What was your care recipient’s approximate household income from all sources for 2012? (only care recipient)
  - less than \$20,000     \$20,000 – \$39,999     more than \$40,000
- Any illness and health conditions
  - high blood pressure/hypertension     diabetes     hearing     visual
  - cancer ( \_\_\_\_\_ )     stroke/TIA     dementia     mental health     behavior
  - incontinent     high cholesterol     other
- Severe memory problems or dementia?
  - Yes (diagnosed by physician? Y / N when? \_\_\_\_\_ )     No

Elder Care Service Utilization Patterns

- Have you ever used any elder care services and/or caregiver support services?
  - Yes (if yes, how long have you been using the services? \_\_\_\_\_ )
  - No
- What types of services do you currently use? Describe to me.
- Have you ever heard of “respite care/services”?  Yes     No
- Have you ever used any respite services?  Yes     No

## Interview Questions

1. Would you please describe your caregiving experiences?

Sub-questions

1a. What types of care/assistance do you provide to your family member?

Probe area:

- feeding     bathing     toileting     dressing
- shopping     chore/cleaning the house     laundry     cooking/meal preparation
- medication     doctor's appointments     transportation
- money management     medication     other

1b. What are the challenges you have encountered in your caregiving experience?

Probe area:

(Gender: What are the challenges of being a male/female caregiver?)

(Employment: If you are currently employed, have you experienced any conflict between your work and your caregiving responsibilities? Have you missed any days of work because of your caregiving responsibilities?)

(Only for Japanese nationals: What are the challenges for you to be a caregiver in the U.S.?)

1c. What are the rewards or positive outcomes you have from your caregiving experience?

Probe area:

(Please tell me about the things you've learned/gained from your caregiving experiences.)

1d. How has your life changed since you became a caregiver for your family member(s)?

2. What were your reasons for becoming a caregiver for this family member(s)?

What motivated you to become a caregiver for this family member?

Sub-questions

2a. Did you choose to become a caregiver for this family member(s)?

2b. How do you feel about being a caregiver for this family member(s)?

2c. How was your relationship with this family member (care recipient) before this caregiving?

2d. Have you seen any changes in your relationship with other family member(s) while you have been a caregiver?

Probe area:

(Please describe your relationship with other family member(s) since you have become a caregiver (better or worse?). If there are any other family members (e.g., siblings and relatives), how often, how much and what ways do they get involved in the caregiving? Are you satisfied with their involvement?)

3. In your opinion, (in general) who should be responsible to take care of elderly family member(s)?

Probe area:

(In your opinion, should caregiving be mostly a family responsibility, a government responsibility or equally both?)

Sub-questions

3a. Where would you turn for support and assistance if you needed help?

Probe area:

(Other family members? Friends? Agencies or organizations?)

3b. How comfortable are you asking for help? Describe on a scale from 1 to 4,  
1 – not comfortable at all, 2 – somewhat comfortable, 3 – mostly comfortable,  
4 – very comfortable.

3c. Which values/beliefs do you follow the most when making decision on caregiving?

Probe area:

(Why such values/beliefs (that you mentioned) are important to you? Where do such values/beliefs come from? What is your idea of the ideal caregiving situation based on your values/beliefs?)

3d. Do you think being Japanese makes a difference in the way you take care of this family member?

4. (For service users)

Why did you start using service(s)? What was the process to start using service(s)?

Probe area:

(Who decided to use the service(s)? Who first suggested using this service(s)? What point did you decide to use the service(s)?)

Sub-questions

4a. What types of services do you currently use? How often do you use them? Do you pay for the service(s)? How long have you used the service(s)?

- 4b. How did you learn about this service(s)?
- 4c. Who benefits from the service(s) most, your family member (care recipient), yourself, or both?
- 4d. Are there any challenges you needed to overcome when beginning to use the service(s)?
- 4e. How did your other family members or friends feel about your using this service(s), both positive and/or negative reactions?
- 4f. Were you afraid of criticism from others when you planned/began using this service(s)?

5. (For service users)

Would you describe your experience(s) of using the service(s)?

Sub-questions

5a. How satisfied are you with the service(s)?

Describe on a scale from 1 to 4, 1 – not satisfied at all, 2 – somewhat satisfied, 3 – mostly satisfied, 4 – very satisfied.

5b. Have you ever experienced any barriers (e.g., cost, quality of services, transportation) to using the service(s)?

5c. How important is it for you to have professionals (e.g., social workers, care workers, nurses) who understand your cultural background when discussing your caregiving needs?

Probe area:

(When you need help, do you prefer to see professionals who are Japanese national? Japanese Americans? Why? or Why not?)

5d. How can the current service delivery systems be improved?

5e. What types of services would you like to have in your community that are not currently available?

5f. Why some people use services and others do not?

6. (For non-service users)

Why don't you use the available services?

Probe area:

(Do you feel any need for using available elder care service(s) now?)

Sub-questions

- 6a. What types of available service(s) in your community are you aware of?
- 6b. Have you ever used any elder care services before? If yes, please describe the service(s) used, and when and why you stopped using it (them).
- 6c. Do you have any concerns or are there any barriers (e.g., language, cost, waiting list, any bad experiences in the past, criticism from others) to using such service(s)?

Probe area:

(What do you think other family members or friends would say if you began using the service(s)? Would you fear criticism from others for using any service(s), some service(s)?)

7. (For non-service users)

How do you manage your caregiving responsibilities/tasks without using any available elder care service(s)?

Sub-questions

- 7a. Are you interested in learning about elder care services available in your community?
- 7b. Are you interested in using such services in the future? If yes, what types of services would you be interested in using? Do you know how and where to obtain such services?
- 7c. How important is it for you to have professionals (e.g., social workers, care workers, nurses) who understand your cultural background when discussing your caregiving needs?

Probe area:

(When you need help, do you prefer to see professionals who are Japanese national? Japanese Americans? Why? or Why not?)

7f. Why some people use services and others do not?

8. (If cultural issues are not discussed in any of previous questions, I will ask the following questions.)

How do you take care of your family member(s) differently if you are not Japanese national/Japanese American?

Probe area:

(What do your friends (Japanese and/or non-Japanese) say about your caregiving role? If you have non-Japanese caregiver friends, how do they provide care differently?)

## APPENDIX C

### Results of Qualitative Data Analysis

#### I: Open Coding Results – 52 Concepts

	Concepts		Concepts
1	Being a caregiver	29	Gender – male
2	Family relationship	30	Gender – female
3	Reasons to become a caregiver		<b>Social Exchange Theory</b>
4	Responsibility	31	Costs/challenges
5	Asking for help	32	Rewards/things learned
6	Where to get help	33	Payback/give back/reciprocity
7	Being a Japanese	34	Future systems
8	Japanese values/beliefs		<b>Service users</b>
9	Generation	35	Why use services
10	Upbringing	36	Satisfaction
11	“Local” culture	37	Preference for professionals
12	Duty-obligation	38	Barriers to using services
13	Past caregiving experience	39	Benefits of using services
14	Care recipient – dementia/forgetfulness	40	Challenges to be overcome when starting to use services
15	Strangers	41	Criticism from others
16	Japanese culture on the continental U.S.	42	Service use experience
17	Placement		<b>Non-service users</b>
18	Prejudice	43	Why not use services
19	Filial piety	44	Knowledge of services
20	Shame	45	Past service use experience
21	Care recipient – mental health issues	46	Barriers to using services
22	“Cannot be helped”	47	Future service use
23	Support system – family members	48	Preferences for professionals
24	Support system – others	49	How to manage caregiving without services
25	Work – work conflict		<b>Some definitions</b>
26	Work – support at work	50	Respite
27	Work – positive effects	51	Caregiver
28	Work – quit job/early retirement	52	Services

## II: Axial Coding Results – 25 Categories

	Categories
1	Caregiver perspectives on caregiving responsibility and service utilization
2	Cultural factors related to family caregiving
3	Cultural factors related to service utilization patterns
4	“Local culture” – definition of “local” culture
	<b>Service users</b>
5	Why use services
6	Benefits
7	Challenges to be overcome when starting to use services
8	Criticism from others
9	Service use experience
10	Service use satisfaction
11	Barriers to using current services
12	Preferences for professionals
13	Suggestions for future elder care systems
	<b>Non-service users</b>
14	Why not use services
15	Knowledge of services
16	Past service use experience
17	Barriers to using services
18	How to manage caregiving without services
19	Future service use
20	Cultural factors related to preference for professionals
21	Not comfortable with strangers in the house
	<b>Social Exchange Theory</b>
22	Various costs/challenges for caregivers
23	Various rewards for caregivers
24	Payback/give back/reciprocity
25	Family support systems

## III: Selective Coding Results – 7 Themes

	Themes
1	Cultural factors contributed to the caregiver’s perspectives of caregiving
2	Cultural factors influenced decision-making about service use
3	Preferences for professionals
4	Non-cultural factors influenced decision-making about service use
5	Service use experience by service users
6	Service use perspectives among non-service users
7	Suggestions for future elder care service systems

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