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Informal Caregiving Strain: Exploring The Impact Of Gender, Race, And Income

Bria Elaine Willert

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This thesis, submitted by Bria Willert in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Dr. Krista Lynn Minnotte

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Dr. Elizabeth Legerski

This thesis is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

Dr. Grant McGimpsey
Dean of the School of Graduate Studies

May 1, 2018
Date
PERMISSION

Title Informal Caregiving Strain: Exploring the Impact of Gender, Race, and Income

Department Sociology

Degree Master of Arts

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Bria Willert
4-16-2018
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ABSTRACT

Informal caregivers are those who provide care without compensation. In the US, eighty-five percent of elderly individuals receive care from an informal caregiver, and this number is expected to increase at a steady rate in future years. Within this role, caregivers often experience different types of strain, stemming from physical, emotional, and financial demands. Guided by intersectionality theory, this thesis explored the relationship between informal caregiving strains and gender, race, and income. This thesis also took into consideration various control variables, including age, marital status, education, number of hours spent providing care, and employment status. Data from the 2015 Caregiving in the US survey (N = 1,248) were used. Findings indicated male informal caregivers reported more financial strain than female informal caregivers, White women reported more emotional strain than Non-White women, and those with higher incomes reported less financial strain. Results also indicated that gender, race, and income were not significantly related to physical strain among informal caregivers. Implications, limitations, and areas to be considered for future research were discussed.
CHAPTER I
INTRODUCTION

This study elaborates on the link between informal caregiving and strain, focusing mainly on how the social location of care providers in terms of race, gender, and income influences strain. Chapter One will introduce the topic of this study, and expand upon its goals and purpose. To conclude, an overview of the next four chapters of this thesis is provided.

Background to the Problem

An informal caregiver is an individual that performs care without compensation (National Alliance for Caregiving, 2015). Typically, informal caregivers are family members or close friends of the person in need; women most often fill this role. Within the US, the role of informal caregiving is steadily increasing, with 85% of elderly individuals receiving care from an informal caregiver (National Alliance for Caregiving, 2015). More specifically, approximately 44 million Americans provide assistance and support to older adults (Family Caregiver Alliance, 2017). Further, with the number of adults aged 65 and older expected to double by the year 2030, the number of informal caregivers is expected to rise continuously. With informal caregiving steadily increasing, the strains accompanied by informal caregiving are also becoming more common.

Informal caregivers in the US are often unprepared to fill this role, and provide care with little to no support. Indeed, caregivers often experience various types of strain, including emotional, financial, and physical strain. Research shows nearly half of those
providing care for more than 21 hours per week reported high levels of emotional stress (Bookman & Kimbrel, 2011; Cohen & Janicki-Deverts, 2012; National Alliance for Caregiving, 2015). Informal caregivers have also shown higher levels of anxiety, depression, frustration, anger, and helplessness (Family Caregiver Alliance, 2017; Hillier-Parks & Pilisuk, 1991; Hong & Casado, 2015; Litzelman et al., 2015; Navaie-Waliser et al., 2001). In addition, caregivers performing 21 or more hours of care, reported difficulty in finding affordable services, such as delivered meals, transportation, or in-home health services, often leading to financial strain. Those who lived more than an hour from the care recipient also experienced heightened financial strain (National Alliance for Caregiving, 2015). Adding to financial strain, one study found caregivers typically missed an average of 6.6 days of work yearly due to their caregiving duties (Do, Cohen, & Brown, 2014). Furthermore, 33% of informal caregivers eventually decrease their work hours, or leave the workforce altogether. Because of these patterns, financial issues are a common problem among the informal caregiver population (Do et al., 2014; Lee & Zurlo, 2014; Pinquart & Sorensen, 2005; 2006).

Studies also show that informal caregivers often experience physical strain, which occurs when an individual’s physical health is put at risk (Darragh et al., 2015; Family Caregiver Alliance, 2017; Litzelman et al., 2015; Perkins et al., 2013). Approximately one in ten caregivers claim caregiving has caused their physical health to worsen, due in part to aiding care recipients in activities of daily living, often referred to as ADLs, such as bathing, grooming, and lifting, among other personal-care tasks (Darragh, et al., 2015; Family Caregiver Alliance, 2017; Perkins et al., 2013). Informal caregivers are also plagued by various ailments, such as headaches, pain, and aching (Family Caregiver
Alliance, 2017). Additionally, they have a higher likelihood of developing serious illness, and experience high levels of obesity and bodily pain. Caregivers have a 23% higher level of stress hormones, and a 15% lower level of antibody responses due to physical and emotional strain (Family Caregiver Alliance, 2017).

The Impact of Gender, Race, and Income

Although the provision of informal caregiving has continuously grown, little is known about differences in strain among racial groups and income levels. Additionally, women constitute 66% of the informal caregiver population, yet there is little emphasis on differences in strain between women and men. The little research available in this area suggests that women fare worse than their male counterparts, reporting higher levels of depression and anxiety, and lower levels of subjective well-being, life satisfaction, and physical health (Chappell, Dujela, & Smith, 2015; Do et al., 2014; Family Caregiver Alliance, 2017; Hillier-Parks & Pilisuk, 1991). In terms of race, various studies show minority caregivers provide more care than their white peers, and report worse physical health than white caregivers, yet little is known about differences in the experiences of various racial groups, especially in terms of emotional and financial strain (Badana, Marino, & Haley, 2017; Bullock Crawford, & Tennstedt, 2003; Family Caregiver Alliance, 2017; Kirby & Lau, 2010). Despite evidence showing socioeconomic status impacts physical health, income is also often left out of analyses of this topic. However, various studies have found informal caregivers with lower incomes had poorer physical health (Bullock et al., 2003; Do et al., 2014; Kneipp, Castleman, & Gailor, 2004).

Informed by intersectionality theory, the goal of this thesis is to provide a quantitative analysis of how gender, race, and income impact the strain experienced by
informal caregivers. In addition, this thesis aims to bring more awareness to the issue of informal caregiving strain, in hopes of developing more social support for these individuals, which may ultimately lower the strains experienced by this population. While there are programs in place to aid informal caregivers, such as adult day care, ride transportation services, meal delivery services, and respite care, these services are not widely utilized among caregivers, and are not feasible for many informal caregivers to access, due to their location or financial cost (Hong & Casado, 2015). In addition, services available to this community are not widespread enough to support the number of informal caregivers in the US (Family Caregiver Alliance, 2017). In sum, with the continued growth of the elderly population, along with the increasing popularity of informal caregiving as an alternative to nursing/retirement homes and disability centers, more social support and policy is needed to aid informal caregivers.

Overview of Thesis

In Chapter Two, previous literature and research on the topic of informal caregiving strain will be discussed, and an outline of the theoretical framework used in this study will be provided. Chapter Three will explain the method used to approach the research question, including the data source, sampling population and strategy, and measurement of the variables. Chapter Four will present the results of the analyses. Lastly, Chapter Five will include a discussion of the implications and limitations of the study, as well as suggestions for future research.
CHAPTER II
LITERATURE REVIEW

The purpose of this thesis is to explore how gender, race, and income influence informal caregiving strain. To do so, Chapter Two begins with a brief discussion of the theoretical framework used to approach the research question, followed by an overview of the previous literature on this topic. The proposed research question and hypotheses for this research will also be presented.

Theoretical Framework

Intersectionality Theory

Informal caregivers experience strain for many different reasons, with demographic traits shaping the amount of strain experienced (Family Caregiver Alliance, 2017; Molloy et al., 2005; Navaie-Waliser, Spriggs, & Feldman, 2002). To better understand how gender, race, and income influence strain, intersectionality theory is used. Intersectionality theory explains how individual experiences are often shaped by multiple social positions at once, such as gender, race, and socioeconomic class (Collins, 2015; Viruell-Fuentes, Miranda, & Abdulrahim, 2012). While these social categories are often looked at in isolation, intersectionality theory posits that these social positions work together to produce differences in the experiences of various groups within society. Therefore, multiple social positions should be considered together, as these positions are experienced concurrently (Collins, 2015). Intersectionality theory was first used in Black feminist work, describing how social positions, such as race, class, gender, and sexuality,
are interwoven in everyday experiences, and has since been extended to many other fields of research (Collins, 2015).

Various social positions, such as gender, race, and income, working together may impact everyday experiences, as certain social positions are less valued and more stigmatized than others (Chappell et al., 2015). For example, being female or being low-income puts one at a social disadvantage, because society tends to place less value on these social locations (Krekula, 2007). As a result, when social positions deemed of less value are experienced simultaneously, the impact these social positions have on individual experiences are even greater (Chappell et al., 2015; Krekula, 2007). For example, being a low-income woman will present greater hardship than being a high-income man.

Intersectionality theory has become increasingly influential in caregiving research, as this theory takes into account multiple factors that may serve as double, triple, or multiple jeopardies for certain groups, and how these jeopardies may affect their experiences. For example, research might consider how the challenges of women caregivers vary based upon income levels (Chappell et al., 2015). Informed by this theory, this thesis aims to explore how gender, race, and income impact informal caregiving strain. Given that women and racial minorities are more likely to be caregivers, these two specific groups may experience more strain than other groups, and may also experience different types of strain (Hillier-Parks & Pilisuk, 1991; Martin, 2000; Navaie-Waliser et al., 2002). In addition, caregivers with lower incomes may experience more strain or different types of strain than other groups, due to lack of resources (Kneipp et al., 2004). Given that certain social positions influence strain, it is
important to explore the intersection of social positions, in order to gain a clearer understanding of which groups within society are most vulnerable to experiencing informal caregiving strain, and which types of strain seem to impact these vulnerable groups most.

**Background and Conceptualization**

**Informal Caregiving Strain**

Medical advances, shorter hospital stays, increasing lifespans, and a shortage of homecare workers all play a role in the increasing prevalence of informal caregiving (Family Caregiver Alliance, 2017). Informal caregiving is accompanied by strain because it involves complex care, conflicting job and family demands, increased economic pressure, physical demands, and emotional exhaustion (National Alliance for Caregiving, 2015). Strain is common among all caregivers, but it impacts certain groups more than others, namely women, minorities, and low-income individuals. In addition, the types of strain experienced by these groups also differ (National Alliance for Caregiving, 2015).

This thesis will consider three different types of strain: emotional, physical, and financial strain. Emotional strain is conceptualized as the psychological distress an informal caregiver may experience, such as stress, depression, and isolation (Roth, Perkins, Wadley, Temple, & Haley, 2009). Physical strain is conceptualized as the physical distress an informal caregiver may experience, such as injury, fatigue, headaches, and backaches, due to caregiving duties (Darragh et al., 2015). Financial strain is conceptualized as the financial distress informal caregivers may experience due to caregiving duties and financial demands (Lee & Zurlo, 2014).
Gender and Informal Caregiving Strain

Women are more likely to be primary caregivers, spend more hours caring for sick relatives, and assist with more hands-on care, such as activities of daily living, housework, and meal preparation (Navaie-Waliser et al., 2002). Reflecting these patterns, studies have found women experience caregiving strain at a much higher rate than men (Family Caregiver Alliance, 2017; Lin, Fee, & Wu, 2012; Navaie-Waliser et al., 2002). In addition, women are more likely to have poorer mental health outcomes due to caregiving than men, such as greater feelings of burden, stress, anxiety, loss of control, and depression. These outcomes often occur due to challenges in balancing caregiving duties with other familial or employment duties (Navaie-Waliser et al., 2002). Women caregivers are also more likely to leave a formal occupation, cut back on time spent with friends, and replace recreation with caregiving duties, resulting in feelings of intense loneliness (Hillier-Parks & Pilisuk, 1991). Altogether, these patterns often result in emotional strain occurring more often for female caregivers than male caregivers (Hillier-Parks & Pilisuk, 1991; Lin et al., 2012; Navaie-Waliser et al., 2002).

Female caregivers also experience poorer physical health due to caregiving than their male counterparts, including more chronic fatigue, sleeplessness, stomach issues, and weight change (Navaie-Waliser et al., 2002). Furthermore, women caregivers are less likely to engage in health positive behaviors than male caregivers (Navaie-Waliser et al., 2002). Additionally, female caregivers have fewer social resources, both formal and informal, than male caregivers (Pinquart & Sorensen, 2006; Yee & Schulz, 2000). Lack of resources, including monetary resources, can be explained by women cutting back on their duties in the workforce or leaving the workforce altogether, due to gender-role
expectations of providing informal care (Hillier-Parks & Pilisuk, 1991; Lee, Tang, Kim, & Albert, 2015; Pavalko & Artis, 1997). On average, women lose an estimated $115,900 in wages, $137,980 in social security benefits, and approximately $50,000 in pension benefits due to leaving the workforce to provide informal care (Lee et al., 2015). Altogether, caregiving responsibilities put female caregivers at risk of living in poverty later in life (Lee et al., 2015). This phenomenon results in female caregivers experiencing more financial strain than male caregivers (Lee et al., 2015; Morgan, Williams, Trussardi, & Gott, 2016).

In addition to experiencing direct strain, women also have more negative experiences with caregiving than men, due to factors such as helping with more hands-on tasks, caring for the care recipient for longer hours, and having a stronger emotional connection to the care recipient (Lin et al., 2012). Women caregivers report lower self-esteem and optimism, due to more hours spent providing care, greater anxiety, and higher levels of burden (Schrank et al., 2015). In sum, these negative experiences impact the amount of general strain female caregivers experience (Schrank et al., 2015). With an abundance of research pointing to gender differences in informal caregiving strain, the following hypothesis was created:

H1: Female informal caregivers will experience more emotional, physical, and financial strain than male informal caregivers.

**Race and Informal Caregiving Strain**

Racial differences in informal caregiving experiences also occur, as racial minorities spend more time caregiving than do their White peers and assist with more tasks of daily living (Family Caregiver Alliance, 2017). However, despite racial
minorities providing informal care more often than White individuals, African-Americans and Hispanics often perceive informal caregiving more positively than their White counterparts. For example, one study showed African-American individuals spent more time providing informal care than White individuals, which resulted in higher levels of reported emotional well-being than White informal caregivers reported, and less emotional strain (Badana et al., 2017; Martin, 2000).

Additionally, various studies have found African-American caregivers report more satisfaction and less emotional burden with their caregiving duties (Martin, 2000; Pinquart & Sorensen, 2005; Skarupski, McCann, Bienias, & Evans, 2009). Furthermore, African-Americans report lower levels of general burden than their White counterparts (Martin, 2000). Hispanic informal caregivers also report lower levels of emotional strain, lower levels of depression, stress, and emotional burden than White caregivers, despite providing more hours of care (Navaie-Waliser et al., 2001). The aforementioned studies offer similar explanations as to why these patterns emerge. Racial minorities, specifically African-Americans and Hispanics, tend to have stronger social support networks within their families, making the role of caretaking a common and expected role, thus lowering the strain these individuals experience as caregivers (Badana et al., 2017; Martin, 2000; Navaie-Waliser et al., 2001; Pinquart & Sorensen, 2005).

Although emotional strain tends to be lower for African-Americans and Hispanics, the same cannot be said for physical strain. African-Americans report lower levels of physical health as a population altogether, and African-American caregivers experience even lower levels of physical health due to caregiving duties compared to White caregivers (Badana et al., 2017). Another study supports this pattern, showing
African-American and Hispanic caregivers reported higher levels of physical strain due to caregiving than did Whites (Namkung, Greenberg, & Mailick, 2015). In addition, minority caregivers reported worse overall physical health outcomes than White caregivers (Namkung et al., 2015).

Racial minorities are also more likely to experience financial strain (Bullock et al., 2003; Kirby & Lau, 2010; Mier, 2007). Indeed, elderly African-Americans tend to be one of the most socioeconomically disadvantaged groups in the US (Bullock et al., 2003). Further, African American adults tend to underuse medical care services, relying on informal caregiving more heavily, due to access and affordability barriers (Bullock et al., 2003). African-American informal caregivers are also less likely to be employed than their White counterparts, further fueling their financial vulnerability (Bullock et al., 2003). Hispanic individuals also rely more heavily on informal care provided by family members than their White peers, due to economic factors, such as low-income and scarce insurance availability (Kirby & Lau, 2010). In addition, Hispanic informal caregivers are more likely to decrease hours at work in order to increase hours of informal care in relation to their White peers, ultimately increasing their financial instability (Mier, 2007).

Taking into consideration previous evidence that racial minorities experience less emotional strain, yet experience more physical and financial strain due to caregiving, the following hypotheses are proposed:

H2: Among men and women, racial minority informal caregivers will experience less emotional strain than White informal caregivers.
H3: Among men and women, racial minority informal caregivers will experience more physical and financial strain than White informal caregivers.

*Income and Informal Caregiving Strain*

Although previous literature is scarce, income also plays an important role in determining experiences of informal caregiving strain (Family Caregiver Alliance, 2017). Lower-earning informal caregivers report poorer physical health than higher-earning caregivers, and higher levels of caregiver burden due to lower levels of perceived financial support (Do et al., 2014; Kneipp et al., 2004). In particular, low-income caregivers report higher levels of depression, anger, and physical health problems than higher-earning caregivers (Kneipp et al., 2004). Low-income caregivers experience a greater caregiver burden, even after welfare-reform policies took place (Kneipp et al., 2004). Higher-earning informal caregivers have lower financial burden, while the working-poor were found to have the highest levels of financial burden, considered to be “too well off” to qualify for governmental aid, yet unable to pay for care or assistance themselves (Bookman & Kimbrel, 2011). Taking into consideration the evidence presented on the topic of income and informal caregiving strain, the following hypotheses were formed:

H4: Among men and women, lower-earning informal caregivers will experience more emotional, physical, and financial strain than higher-earning informal caregivers.

Given this thesis uses intersectionality as a theoretical framework, which states that various social positions must be considered simultaneously when examining and
comparing the experiences of different groups, hypotheses directly relating to this theory were also created. As mentioned, social locations, such as gender, race, and income, often work together as double or triple jeopardies for some informal caregivers, by increasing the amount of strain experienced (Chappell et al., 2015). Extending the evidence shown in previous sections that women, racial minorities, and low-income individuals experience informal caregiving strain more often, the following hypotheses explore how the intersectionality of gender, race, and income influence strain:

H5: Income will be negatively associated with financial strain among males and females, but it will be more strongly related to strain among female informal caregivers.

H6: Financial strain will be higher among racial minority female caregivers compared to White female caregivers.

Control Variables and Caregiving Strain

This thesis controls for age, marital status, education, hours of care, and employment status. It is important to control for age, as previous research suggests older caregivers are more likely to experience physical and financial strain due to caregiving (Lee et al., 2015; Morgan et al., 2016). It is also important to include marital status in the analyses because being married may increase social support, thereby decreasing the strain an individual experiences (Chappell & Funk, 2011; Schwarz & Roberts, 2000). Education is controlled for because higher levels of education tend to increase an individual’s income level, which may lessen caregiver strain (Cohen & Janicki-Deverts, 2012). Additionally, the number of hours spent performing informal care is included in the analyses, as those who provide more hours of care experience higher levels of strain.
(Litzelman et al., 2015; Rubin & White-Means, 2009). Finally, employment status is taken into consideration, as employment status can play a role in different types of caregiver strain. For example, caregivers in the workforce may experience emotional strain as they attempt to balance their caregiving and workforce roles. In contrast, caregivers out of the workforce due to caregiving may experience financial and emotional strain due to lack of income and increased hours of care (Litzelman et al., 2015; Rubin & White-Means, 2009).

Summary and Overview

In Chapter Two, the theoretical framework used in this work, intersectionality theory, was described and applied to the topic of informal caregiving. Previous literature on this topic was also included, followed by the proposed research hypotheses. Chapter Three will describe the method used to explore the research question and test the hypotheses, including the dataset and sample, measurement of variables, and the analytic strategy used to conduct this research.
CHAPTER III

METHOD

The purpose of this study is to examine how gender, race, and income impact informal caregiving strain. To address this question, secondary data from a nationally representative survey will be used. In this chapter, a description of the data and sampling method will be presented. Following this, measurements of the dependent, independent, and control variables will be described. Lastly, the analytic strategy used in this thesis will be explained.

Data and Sample

To address the research questions, secondary data from the 2015 Caregiving in the US survey (N= 1,248) will be used. This dataset consists of information gathered from a sample of informal caregivers within the US. The questionnaire focuses on demographics of caregivers, caregiving activities, and caregiver burden. This survey was conducted jointly by the National Alliance for Caregiving (NAC) and the American Association of Retired Persons (AARP) Public Policy Institute. The 2015 Caregiving in the US survey is an extension of past surveys conducted by the NAC and AARP. Interviews for the 2015 survey were conducted using quantitative online surveys through GfK’s national, probability-based, online tool KnowledgePanel. GfK is a market research institute located in Nuremberg, Germany. The GfK research institute created the KnowledgePanel tool that is used in the data collection method for this survey. KnowledgePanel was used in place of the traditional random-digit dialing method, in
order to account for the national shift in technology from landline phone usage to cellphone usage (NAC & AARP Public Policy Institute, 2015).

Potential participants were first asked if they had provided care to an adult in the last 12 months. If the participant responded yes, they were then asked to complete the web-based KnowledgePanel survey (NAC & AARP Public Policy Institute, 2015). For those who agreed to participate, but did not have prior Internet access, GfK provided a laptop and service-provider connection. Online surveys were then conducted with a random sample of 1,015 adult caregivers (NAC & AARP Public Policy Institute, 2015). To increase the sample of racial and ethnic minority caregivers, an additional 233 online interviews were conducted using a targeted sampling of racial/ethnic minority groups. By combining the initial random sampling with the targeted racial/ethnic sampling, a total of 1,248 informal caregivers participated in this survey in late 2014.

**Measures**

**Dependent Variables**

The dependent variables used in this study are physical strain, emotional strain, and financial strain. Physical strain was measured on a scale from (1) not a strain at all to (5) very much a strain, based on the following question: “How much of a physical strain would you say that caring for care recipient is/was for you?” Emotional strain was measured on a scale from (1) not at all stressful to (5) very stressful, based on the following question: “How emotionally stressful would you say that caring for care recipient is/was for you?” Financial strain was measured on a scale from (1) not a strain at all to (5) very much a strain, based on the following question: “How much of a financial strain would you say that caring for care recipient is/was for you?”
Independent Variables

The primary independent variables used in this study are gender, race, and income. Gender was measured with one item, asking respondents the following question: “Are you male or female?” Gender was recoded into a dummy variable, with women coded as 0 and men coded as 1. Race was measured with one item, asking respondents the following question: “What is your race/ethnicity?” Response categories ranged from 1-5, (1) White, (2) Black, (3) Asian, (4) Other, and (5) Hispanic. Race was then recoded into a dummy variable such that (0) = Non-White, (1) = White. Income was also measured with one item, asking respondents: “What is the household income of the caregiver?” Response categories ranged from 1-6, (1) = Under $15,000, (2) = $15,000-$29,999, (3) = $30,000-$49,999, (4) = $50,000-$74,999, (5) = $75,000-$99,999, and (6) = $100,000 or more.

Control Variables

The control variables used for this study include age, marital status, education, hours of care, and employment status. Age was measured by the respondent’s age in years at the time of the questionnaire. Marital status was recoded into a dummy variable such that (0) = all other situations (1) = married. Education was coded as (1) = Less than a high school diploma, (2) = high school grad or GED, (3) = some college, (4) = technical school, (5) = college grad, and (6) = graduate school/grad work. Hours of care was measured using four categories of the number of hours spent providing care, with (1) = 0-8 hours, (2) = 9-20 hours, (3) = 21-40 hours, and (4) = More than 40 hours. Employment status was measured using the question: “Are you currently employed?” Employment status was then recoded into a dummy variable such that (0) = no (1) = yes.
Analytic Strategy

The purpose of this thesis is to examine how gender, race, and income influence informal caregiving strain. First, descriptive statistics of all the variables included in the analysis will be provided, along with $t$ tests examining any significant differences in the means of the variables between men and women. Second, a bivariate correlation matrix will be created, including separate correlations for men and women. Lastly, Ordinary Least Squares (OLS) regressions will be employed to test the relationships between informal caregiving strain and the independent and control variables. First, a regression will be performed for each dependent variable, with men and women considered together to test Hypothesis 1. Then, three separate regressions separated by gender will be conducted, one for each independent variable, to test other hypotheses.

Summary and Overview

Chapter Three described the dataset and sampling process used, including a description of the variables used to answer the research question and how the variables were measured, and also provided the analytic strategy employed in this study. Chapter Four will present the results of the analyses, including descriptive statistics, correlations, and OLS regression results.
CHAPTER IV

RESULTS

This thesis examines the relationships between gender, race, income, and types of informal caregiving strain. To do so, data from the 2015 Caregiving in the US survey ($N = 1,248$) were analyzed. First, this chapter will provide descriptive statistics, including means and standard deviations, as well as $t$ test comparisons between men and women. Next, the bivariate correlations will be presented. Lastly, the OLS regression analyses will be explained.

Descriptive Statistics

Table 1. Descriptive Statistics ($N = 1,248$).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall</th>
<th>Male Caregivers</th>
<th>Female Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Male</td>
<td>0,1</td>
<td>.41</td>
<td>--</td>
</tr>
<tr>
<td>White</td>
<td>0,1</td>
<td>.56</td>
<td>--</td>
</tr>
<tr>
<td>Income</td>
<td>1-6</td>
<td>3.79</td>
<td>1.69</td>
</tr>
<tr>
<td>Physical strain</td>
<td>1-5</td>
<td>2.50</td>
<td>1.27</td>
</tr>
<tr>
<td>Emotional strain</td>
<td>1-5</td>
<td>3.02</td>
<td>1.33</td>
</tr>
<tr>
<td>Financial strain</td>
<td>1-5</td>
<td>2.26</td>
<td>1.33</td>
</tr>
<tr>
<td>Age</td>
<td>18-94</td>
<td>50.84</td>
<td>20.23</td>
</tr>
<tr>
<td>Education</td>
<td>1-6</td>
<td>3.67</td>
<td>1.64</td>
</tr>
<tr>
<td>Employed</td>
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<td>.47</td>
<td>--</td>
</tr>
<tr>
<td>Married</td>
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<td>.59</td>
<td>--</td>
</tr>
<tr>
<td>Hours of care</td>
<td>1-4</td>
<td>2.17</td>
<td>1.23</td>
</tr>
</tbody>
</table>

Note: A $t$ test of the difference in means was significant at the .05 level or higher; $t$ tests were only performed on non-dummy variables, with a * placed next to the higher mean in cases in which the difference is significant.
Descriptive statistics for the variables used in this analysis are shown in Table 1. Approximately 59% of caregivers were women, and 41% men. In terms of race, most respondents identified as White (56%), while 44% of respondents were Non-White. In terms of income, the mean response for household income was 3.79 ($SD = 1.69$), indicating on average, respondents had household incomes between $40,000-49,000. On a scale from (1) not a strain at all to (5) very much a strain, the mean response for physical strain due to caregiving was 2.50 ($SD = 1.27$), meaning on average respondents felt informal caregiving had provided moderate physical strain for them. On a scale from (1) not at all stressful to (5) very stressful, the mean response for emotional strain was 3.02 ($SD = 1.33$), indicating on average respondents felt informal caregiving resulted in some emotional stress. On a scale of (1) not a strain at all to (5) very much a strain, the mean response for financial strain was 2.26 ($SD = 1.33$), suggesting moderate levels of this strain, on average.

This thesis controls for age, education, employment status, marital status, and the number of hours spent providing care per week. The average age of respondents was approximately 51 years ($M = 50.84, SD = 20.23$). The mean for education was 3.67 ($SD = 1.64$), meaning on average respondents had completed some college. Approximately 53% of respondents were not currently employed, and 59% were currently married. In terms of the number of hours spent providing care, the mean response was 2.17 ($SD = 1.23$), indicating on average respondents spent 9-20 hours per week providing care.

When comparing the means for men and women, men had significantly ($t = 2.03$, $df = 1418$, $p < .05$) higher levels of financial strain ($M = 2.34$, $SD = 1.31$) than women ($M = 2.20$, $SD = 1.34$). When considering emotional and physical strain, the $t$ test results did
not show any significant differences between male and female caregivers. In terms of income, men had significantly ($t = 2.28, df = 1458, p < .05$) higher income levels ($M = 3.91, SD = 1.65$) than women ($M = 3.71, SD = 1.71$). Men ($M = 3.86, SD = 1.62$) also had significantly higher levels of education ($t = 3.77, df = 1432 p < .01$) than women ($M = 3.55, SD = 1.64$). In terms of hours spent providing care, women performed significantly ($t = -1.96, df = 1428, p < .001$) more hours of care ($M = 2.22, SD = 1.24$) than men ($M = 2.10, SD = 1.20$) on average.

**Bivariate Correlations**

Separate bivariate correlations were performed for men and women. Correlations are shown in Table 2. Focusing on the main dependent variables, beginning with physical strain, the variable hours of care was significantly and positively correlated to physical strain for both men ($r = .26, p = <.01$) and women ($r = .33, p <.01$). For women, physical strain was correlated with multiple variables. Age was positively correlated with physical strain ($r = .07, p <.05$), while education ($r = -.08, p <.05$) and employment ($r = -.11, p <.01$) were negatively correlated with physical strain.

Two variables were significantly correlated with financial strain among men and women. Income was significantly and negatively correlated with financial strain among men ($r = -.11, p <.01$) and women ($r = -.08, p <.05$). The variable hours of care was positively associated with financial strain for both men ($r = .20, p <.01$) and women ($r = .19, p <.05$). For men, age was significantly and negatively associated with financial strain ($r = -.10, p <.01$). For women, race was significantly and negatively associated with financial strain ($r = -.07, p <.05$), indicating White women reported less financial
strain than Non-White women. Women who were employed also reported significantly less financial strain \((r = -.11, p < .01)\).

Focusing on emotional strain, one variable—hours of care—was significantly correlated with this variable among both men \((r = .23, p < .01)\) and women \((r = .20, p < .01)\), indicating those who reported providing more hours of care also reported more emotional strain. For women, income \((r = .07, p < .05)\) and race \((r = .11, p < .01)\) were both positively associated with emotional strain—indicating White women and those with higher incomes reported more emotional strain. Finally, for women, marital status was positively correlated to emotional strain \((r = .08, p < .05)\), meaning married women reported more emotional strain than women who were not married.

**Table 2. Correlations among Variables \((N = 766\) men and 1,084 women)**

<table>
<thead>
<tr>
<th></th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
<th>X9</th>
<th>X10</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1: Physical strain</td>
<td>-</td>
<td>.46**</td>
<td>.61**</td>
<td>-.06</td>
<td>-.04</td>
<td>-.03</td>
<td>.02</td>
<td>-.05</td>
<td>.26**</td>
<td>-.03</td>
</tr>
<tr>
<td>X2: Financial strain</td>
<td>.36**</td>
<td>-</td>
<td>.46**</td>
<td>-.11**</td>
<td>-.07</td>
<td>-.10**</td>
<td>.00</td>
<td>-.04</td>
<td>.20**</td>
<td>.06</td>
</tr>
<tr>
<td>X3: Emotional strain</td>
<td>.58**</td>
<td>.38**</td>
<td>-</td>
<td>.032</td>
<td>-.02</td>
<td>-.02</td>
<td>.02</td>
<td>.02</td>
<td>.23**</td>
<td>-.01</td>
</tr>
<tr>
<td>X4: Income</td>
<td>-.06</td>
<td>-.08*</td>
<td>.07*</td>
<td>-</td>
<td>.15**</td>
<td>.116**</td>
<td>.35**</td>
<td>.49**</td>
<td>-.15**</td>
<td>.19**</td>
</tr>
<tr>
<td>X5: White</td>
<td>.00</td>
<td>-.07*</td>
<td>.11**</td>
<td>.07*</td>
<td>-</td>
<td>.32**</td>
<td>.17**</td>
<td>.05</td>
<td>-.06</td>
<td>-.20**</td>
</tr>
<tr>
<td>X6: Age</td>
<td>.07*</td>
<td>-.00</td>
<td>.04</td>
<td>.06</td>
<td>.10**</td>
<td>-</td>
<td>.37**</td>
<td>.21**</td>
<td>.12**</td>
<td>-.47**</td>
</tr>
<tr>
<td>X7: Married</td>
<td>.04</td>
<td>.00</td>
<td>.08*</td>
<td>.34**</td>
<td>.18**</td>
<td>.18**</td>
<td>-</td>
<td>.11**</td>
<td>-.03</td>
<td>.00</td>
</tr>
<tr>
<td>X8: Education</td>
<td>-.08*</td>
<td>-.01</td>
<td>.03</td>
<td>.42**</td>
<td>-.06</td>
<td>.04</td>
<td>.01</td>
<td>-</td>
<td>-.19**</td>
<td>.06</td>
</tr>
<tr>
<td>X9: Hours of care</td>
<td>.33**</td>
<td>.19*</td>
<td>.20**</td>
<td>-.13**</td>
<td>-.11**</td>
<td>.06</td>
<td>-.03</td>
<td>-.13**</td>
<td>-</td>
<td>-.19**</td>
</tr>
<tr>
<td>X10: Employed</td>
<td>-.11**</td>
<td>-.11**</td>
<td>-.03</td>
<td>.15*</td>
<td>-.13**</td>
<td>-.15**</td>
<td>-.03</td>
<td>.16**</td>
<td>-.15**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Correlations above the diagonal are for men and those below the diagonal are for women. * \(p < .05\), ** \(p < .01\), *** \(p < .001\).
The three dependent variables, physical, financial, and emotional strain, were significantly correlated with each other. Financial strain, \( r = .46, p < .01; r = .36, p < .01 \), and emotional strain, \( r = .61, p < .01; r = .58, p < .01 \), were found to be positively correlated with physical strain among both men and women. Financial strain was also found to be significantly and positively correlated with emotional strain among both men \( r = .46 p < .01 \) and women \( r = .38, p < .01 \).

Regression Results

OLS regression analyses were conducted to test the relationships between informal caregiving strain and race, gender, and income. First, to test Hypothesis 1, an OLS regression was performed for each dependent variable with men and women considered together. This allows for the testing of whether gender is significant in each model. To test Hypotheses 2-6, physical, financial, and emotional strain were regressed on race, income, and the control variables. In these models, separate OLS regressions were conducted for men and women. Table 3-6 display the results of these analyses.

Regression Results for Hypothesis 1

To examine whether men and women experience different levels of each strain, an analysis for each dependent variable with men and women considered together was performed. The results of these analyses are shown in Table 3. Focusing on Hypothesis 1, which stated that female caregivers will experience more emotional, physical, and financial strain than male informal caregivers, regression results showed no support for this hypothesis, given that gender was significantly associated with financial strain among men \( \beta = .06, p < .01 \), but not women. This means that net of the other variables, men reported significantly higher financial strain due to caregiving than women. Income
was significantly associated with financial strain ($\beta = -0.10, p < .01$), meaning those with higher incomes reported less financial strain. Focusing on emotional strain, race was found to be significantly associated with emotional strain ($\beta = 0.07, p < .01$), meaning White caregivers reported greater emotional strain than Non-White caregivers.

Table 3. Regression Predicting Strain ($N = 766$ men and 1,084 women).

<table>
<thead>
<tr>
<th></th>
<th>Physical strain</th>
<th>Financial strain</th>
<th>Emotional strain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Male</td>
<td>-.004</td>
<td>.06</td>
<td>-.002</td>
</tr>
<tr>
<td>White</td>
<td>-.003</td>
<td>.06</td>
<td>-.001</td>
</tr>
<tr>
<td>Income</td>
<td>-.012</td>
<td>.02</td>
<td>-.03</td>
</tr>
<tr>
<td>Age</td>
<td>.001</td>
<td>.001</td>
<td>.02</td>
</tr>
<tr>
<td>Married</td>
<td>.13</td>
<td>.07</td>
<td>.05</td>
</tr>
<tr>
<td>Education</td>
<td>-.04</td>
<td>.02</td>
<td>-.03</td>
</tr>
<tr>
<td>Hours of care</td>
<td>.30***</td>
<td>.03</td>
<td>.29</td>
</tr>
<tr>
<td>Employed</td>
<td>-.06</td>
<td>.07</td>
<td>-.02</td>
</tr>
</tbody>
</table>

$R^2$ | .096 | .056 | .060  
Adjusted $R^2$ | .092 | .051 | .055  
$F$ | 20.553*** | 11.372*** | 12.237***  

*p ≤ .05, ** p ≤ .01, *** p ≤ .001

Turning to control variables, the variable hours of care was found to be statistically significant in predicting physical ($\beta = 0.29, p < .001$), financial ($\beta = 0.20, p < .001$) and emotional ($\beta = 0.23, p < .001$) strain among caregivers, meaning greater hours of care were associated with higher physical, financial, and emotional strain. Results for regression analyses shown in Table 3 show that 9.6% of the variance in physical strain among male and female caregivers was explained by the independent and control variables. Approximately 5.6% of the variance in financial strain, and 6% of the variance in emotional strain among caregivers was explained by the independent and control variables.
Regression Results for Hypotheses 2-6

The results pertaining to emotional strain are displayed in Table 4. Hypothesis 2 stated that among men and women, racial minority informal caregivers will experience less emotional strain than White informal caregivers. Hypothesis 2 was partially supported, given that race was significantly associated with emotional strain among women ($\beta = .12, p < .01$). This means that female White informal caregivers reported more emotional strain due to caregiving than did female Non-White informal caregivers.

Table 4. OLS Regression Predicting Emotional Strain for Men and Women (N = 766 men and 1,084 women).

<table>
<thead>
<tr>
<th></th>
<th>Male Caregivers</th>
<th>Female Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE B$</td>
</tr>
<tr>
<td>White</td>
<td>-.003</td>
<td>.11</td>
</tr>
<tr>
<td>Income</td>
<td>.04</td>
<td>.04</td>
</tr>
<tr>
<td>Age</td>
<td>-.005</td>
<td>.004</td>
</tr>
<tr>
<td>Married</td>
<td>.06</td>
<td>.12</td>
</tr>
<tr>
<td>Education</td>
<td>.03</td>
<td>.04</td>
</tr>
<tr>
<td>Hours of care</td>
<td>.27***</td>
<td>.04</td>
</tr>
<tr>
<td>Employed</td>
<td>-.04</td>
<td>.12</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.064</td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.054</td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>6.220***</td>
<td></td>
</tr>
</tbody>
</table>

*p $\leq .05$, ** $p \leq .01$, *** $p \leq .001$

Table 5 includes OLS regression results for physical strain, and Table 6 includes OLS regression results for financial strain. Hypothesis 3 stated that among men and women, racial minority informal caregivers will experience more physical and financial strain than White informal caregivers. This hypothesis was not supported, as race was not a significant variable in predicting either of these types of strain. Hypothesis 4 stated that
among men and women, lower-earning informal caregivers will experience more emotional, physical, and financial strain than higher-earning informal caregivers.

Regression analyses displayed in Table 4-6 showed partial support for this hypothesis, as income was negatively associated with financial strain among both male ($\beta = -.13, p < .01$) and female ($\beta = -.09, p < .05$) caregivers. This means that controlling for all other variables, those with higher incomes experienced less financial strain due to caregiving than did those with lower incomes.

Table 5. OLS Regression Predicting Physical Strain for Men and Women ($N = 766$ men and $1,084$ women).

<table>
<thead>
<tr>
<th></th>
<th>Male Caregivers</th>
<th>Female Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
</tr>
<tr>
<td>White</td>
<td>-.02</td>
<td>.10</td>
</tr>
<tr>
<td>Income</td>
<td>-.04</td>
<td>.04</td>
</tr>
<tr>
<td>Age</td>
<td>-.006</td>
<td>.003</td>
</tr>
<tr>
<td>Married</td>
<td>.21</td>
<td>.11</td>
</tr>
<tr>
<td>Education</td>
<td>.01</td>
<td>.03</td>
</tr>
<tr>
<td>Hours of care</td>
<td>.27 $^{***}$</td>
<td>.04</td>
</tr>
<tr>
<td>Employed</td>
<td>-.03</td>
<td>.11</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.079</td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.069</td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>7.808 $^{***}$</td>
<td></td>
</tr>
</tbody>
</table>

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Hypothesis 5 stated that income will be negatively associated with financial strain among males and females, but it will be more strongly related to strain among female informal caregivers. Regression results in Table 6 did not support this hypothesis, as income was negatively associated with financial strain among males ($\beta = -.13, p < .01$) and females ($\beta = -.09, p < .05$), but was found to be more strongly associated with financial strain among male caregivers. Hypothesis 6 stated that financial strain will be higher among racial minority female caregivers compared to White female caregivers.
Focusing on Table 6, this hypothesis was not supported, as race was not significant in the regression analyses predicting financial strain.

*Other Regression Findings for Emotional Strain*

One control variable—hours of care—was found to be statistically significant in predicting emotional strain among both male (β = .26, p < .001) and female (β = .23, p < .001) caregivers. As shown in Table 4, 5.4% of the variance in emotional strain among male caregivers was explained by the independent and control variables, while 5.9% of the variance in emotional strain among female caregivers was explained by the independent and control variables.

Table 6. *OLS Regression Predicting Financial Strain for Men and Women (N = 766 men and 1,084 women).*

<table>
<thead>
<tr>
<th></th>
<th>Male Caregivers</th>
<th>Female Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>White</td>
<td>-.03</td>
<td>.11</td>
</tr>
<tr>
<td>Income</td>
<td>-.11**</td>
<td>.04</td>
</tr>
<tr>
<td>Age</td>
<td>-.009**</td>
<td>.004</td>
</tr>
<tr>
<td>Married</td>
<td>.25*</td>
<td>.12</td>
</tr>
<tr>
<td>Education</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>Hours of care</td>
<td>.24***</td>
<td>.04</td>
</tr>
<tr>
<td>Employed</td>
<td>.16</td>
<td>.12</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>.076</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td></td>
<td>.066</td>
</tr>
<tr>
<td>F</td>
<td>7.480***</td>
<td>6.109***</td>
</tr>
</tbody>
</table>

*p ≤ .05, ** p ≤ .01, *** p ≤ .001

*Other Regression Findings for Physical Strain*

One control variable—hours of care—was found to be significantly associated with higher physical strain among male (β = .26, p < .001) and female (β = .31, p < .001) caregivers. Results for the regression analyses involving physical strain show that 6.9% of the variance in physical strain among male caregivers and 11.2% of the variance in
physical strain among female caregivers was explained by the independent and control variables.

**Other Regression Findings for Financial Strain**

Focusing on the control variables, the variable hours of care was found to be significantly associated with financial strain for both male \( (\beta = .23, p < .001) \) and female \( (\beta = .19, p < .001) \) caregivers. Net of other variables, greater hours spent providing care was associated with more financial strain. For men, age was significantly \( (\beta = -.13, p < .01) \) associated with financial strain, indicating older men reported less of this type of strain. Results show 6.6\% of the variance in financial strain among men was explained by independent and control variables used in the analyses, while 3.8\% of the variance in financial strain among women was explained by the independent and control variables.

**Summary and Overview**

In this chapter, results of the analyses exploring the relationships between gender, income, race, and informal caregiving strain were presented. Results indicated income was associated with financial strain for both male and female caregivers, but mattered more for male caregivers. The results of this chapter will be discussed in greater depth in Chapter Five. Results of this study will also be extended to previous literature and intersectionality theory. Chapter Five will also discuss limitations of this thesis and provide suggestions for future research.
CHAPTER V
DISCUSSION

The purpose of this thesis was to examine whether three social positions—gender, race, and income—are related to types of informal caregiving strain. Using data from the 2015 Caregiving in the US survey ($N = 1,248$), this thesis tested six hypotheses regarding social positions and informal caregiving strain. In this chapter, a summary of the results will be presented. The results will then be related back to intersectionality theory and relevant literature. Next, implications of the findings will be discussed, as well as limitations of this study. Finally, suggestions for future research will be presented, followed by a conclusion.

Discussion of Results

*Control Variables and Informal Caregiving Strains*

Before discussing the relationships between gender, race, income, and types of informal caregiving strain, it is important to discuss control variables that were significant. The findings from the OLS regressions showed that the number of hours spent providing care was significantly related to all three types of informal caregiving strain. In each case, greater hours spent providing care was associated with more strain among males and females. This finding is consistent with previous literature stating those who provide more hours of care experience increased strain due to caregiving demands (Family Caregiver Alliance, 2017). As previous studies have shown, caregivers are more likely to experience higher levels of distress when they spend long hours helping the care
recipient with daily or instrumental activities of daily living (Hillier-Parks & Pilisuk, 1991; Lin et al., 2012). Additionally, caregivers who provide more hours of care are more likely to decrease or terminate their workforce participation, leading to increased financial strain (Bookman & Kimbrel, 2011; Family Caregiver Alliance, 2017). Age was negatively associated with financial strain only among men, indicating older men reported less financial strain than younger men. Previous literature suggests this may be due to men becoming more financially stable as they age. As they age, they may also gain access to outside monetary support, such as federal aid programs, which may decrease the financial strain associated with caregiving (Bookman & Kimbrel, 2011). Marriage was also found to be significantly and positively associated with financial strain for men, indicating men who were married reported more financial strain. Previous literature suggests this may be due to the fact that co-resident carers, such as those who are married, are more likely to be unemployed than non-co-resident carers, which may decrease financial stability (Henz, 2006). No other control variables included in the analyses were significant in predicting financial strain among women, suggesting other factors not included in this analysis may matter. Previous research suggests that women informal caregivers often rely on instrumental social support, such as receiving meals or rides from friends, to lessen their burdens, which in turn may decrease the strain they experience (Barker, Morrow & Mitteness, 1998; Pinquart & Sorensen, 2006).

Gender, Race, Income, and Informal Caregiving Strains

The aim of this thesis was to further examine whether gender, race, and income predict caregiving strain. Women and racial minorities constitute the largest portion of this population, yet previous literature exploring their experiences is scarce (Kneipp et
al., 2004; Pinquart, 2005; Martin, 2000). Given that informal care is generally costly, and often results in caregivers cutting back on work hours or leaving the formal workforce altogether, this thesis also aimed to explore the role income may have played in influencing caregiving strain (Kneipp et al., 2004). When considering emotional strain, it was found that White female informal caregivers reported more emotional strain than Non-White female informal caregivers. This finding is consistent with previous literature (Badana et al., 2017; Martin, 2000; Navaie-Waliser et al., 2001; Skarupski et al., 2009), and may be due to the high value placed on family and kinship by racial minorities. Thus, caretaking may be seen as a normal and expected task, making it less of an emotional strain (Badana et al., 2017; Martin, 2000; Skarupski et al., 2009). For example, among many African-Americans and Hispanics, cultural traditions of providing care to family members have been long-standing, and such groups have stronger bonds with extended family members and are more interested in providing them with support than Whites (Namkung et al., 2015). These patterns may limit the degree to which minorities perceive caregiving as a source of strain (Namkung et al., 2015).

When considering financial strain, income was negatively associated with financial strain among men and women, suggesting those with higher incomes reported less financial strain. This finding is consistent with previous literature, highlighting the greater resources often enjoyed by those with higher incomes that may help with caregiving expenses (Do et al., 2014; Henz, 2006; Kneipp et al., 2004). Indeed, the average out-of-pocket expense for informal caregivers per year is $5,531 (National Alliance for Caregiving and Evercare, 2007), which can be quite burdensome for those with lower incomes. These expenses include household goods, food and meals,
transportation, and medical care co-pays and prescriptions (National Alliance for Caregiving and Evercare, 2007). Aside from hours of care, no other variables used in the analyses were significant in predicting physical strain among men and women caregivers. These results are unique, given that previous research shows 11% of informal caregivers report that caregiving has caused their physical health to worsen (Family Caregiver Alliance, 2017). Additionally, informal caregivers have been found to have a 63% higher mortality rate than non-caregivers of the same age (Family Caregiver Alliance, 2017). Findings of this study suggest other factors may be important to consider when exploring physical strain, such as caregiving activities and objective markers of physical health (Darragh, et al., 2015).

Informed by intersectionality theory, this thesis took into consideration multiple social locations of informal caregivers. Intersectionality theory posits that experiencing multiple minority statuses simultaneously impacts the experiences of various groups in society. The results of this study suggest that when an individual occupies more than one minority status, the strains they experience may become amplified. For example, although men had more financial strain overall, this thesis found women informal caregivers with lower incomes experienced more financial strain than higher-income women caregivers. The findings of this study showed that race and gender came into play, with White women reporting more emotional strain than Non-White women. This may be in part due to the fact that social support, spirituality, and coping processes differ among racial categories, which often results in less perceived strain from caregiving among racial minorities (Pinquart & Sorensen, 2005; Skarupski et al., 2009). Some findings related to race, such as racial differences in financial or physical strain, were
found to run counter to an intersectionality framework, given that race was not found to be significant in predicting financial or physical strain. This may also be explained by the fact that Non-White individuals are more likely to provide informal care and expect to take on this role, thus encountering fewer strains in this role than may be otherwise predicted (Family Caregiver Alliance, 2017; Skarupski et al., 2009).

**Implications**

The main goal of this thesis was to examine whether gender, race, and income predict types of informal caregiving strain. Findings show partial support for the idea that gender, race, and income are related to the strains of caregiving. In order to lessen the impact of these social positions, widespread social policies should be set in place for those who provide informal care. Informal care is often referred to as “invisible labor”, and therefore does not receive much governmental support. This pattern persists despite the fact that informal care, when hypothetically replaced by a paid, formal structure, would cost the US between $45 and 75 billion dollars per year (Kneipp, et al., 2004). In sum, providing care has increasingly become the responsibility of communities, families, and friends, but has not been met with adequate social support (Kneipp et al., 2004).

Formal social support has been found to ease the burdens of informal caregiving (Gouin, Estrela, Desmarais, & Barker, 2016). As a result, implementing social policies for the informal caregiving population may possibly lessen the different strains that occur because of this duty. By creating social policies that help support this population, those who provide care may feel less burdened by their caregiving duties in many ways. For example, if a social policy were implemented to provide affordable at-home assistance for those who provide informal care, the physical, emotional, and financial stress
informal caregivers experience may decrease. Additionally, informal caregivers would
also benefit from monetary support. In particular, results of this thesis suggest informal
caregivers with lower incomes could benefit from financial assistance, in order to lessen
the financial burden they face. Informal care support groups may also be beneficial.
Findings of this thesis suggest White women experience heightened emotional strain.
Offering more emotional support for this particular group may give them an outlet to
express their frustrations, receive advice from others, and help them feel like they are part
of a supportive community.

Limitations

Limitations of this study should be mentioned. This study only focuses on three
social positions that may play a role in caregiving strain, which limits the conclusions
that can be drawn. Because of this, results of this study are limited. Other social positions
may be important to consider, such as the geographic location of caregivers and other
indicators of social class, to gain a more in-depth understanding of the factors that
influence caregiving strain. A second limitation of this study centers on the relatively low
number of minority respondents in the 2015 Caregiving in the US survey, despite the
efforts of researchers to increase the minority response rate. Another limitation stems
from each dependent variable being measured by a single item, which means responses to
those particular items are somewhat superficial and vague. Additionally, considering this
thesis is quantitative, it may be beneficial to use qualitative methods, in order to gain a
richer understanding of the strain informal caregivers experience, and what factors
decrease this strain.
Suggestions for Future Research

To gain a deeper understanding of how certain social positions predict caregiving strain, future research should consider additional social positions, such as a rural living area versus non-rural living area component or other facets of class status. For example, future research looking at income and caregiving might consider the experiences of informal caregivers living in poverty versus those not in poverty. Other factors evident in providing informal care, such as relationship to care recipient, distance from care recipient, and outside social support are also important to consider, as these factors influence perceived strain (Badana et al., 2017; Lin et al., 2012; Namkung et al., 2015; Pinquart & Sorensen, 2005). It may also be beneficial to explore the roles of formal program availability and usage. Future research may also benefit from expanding the number of items used to measure each form of strain, in order to gain a clearer understanding of caregiving strain and the factors that may influence them.

Conclusion

This thesis analyzed the relationships between gender, race, income and informal caregiving strain. Because women are more likely than men to perform informal care, it is important to consider the outcomes of their experiences separately. As a whole, scholarship on the topic of informal caregiving is sparse, yet it is an important topic to research, due to the steadily increasing commonality of this role. The results of this study help to further the understanding of the relationships between social positions and informal caregiving strain. Although support for the hypotheses was limited, the findings
remain important, as they give a clearer understanding of what factors matter in influencing strain.

The primary contribution of this thesis to existing literature comes from the findings that income predicts financial strain and race is related to emotional strain. These findings are important as they paint a clearer picture of what kind of social support is needed for this population, and which specific groups may benefit most from the creation of social policies. Altogether, there appears to be a differential relationship between financial and emotional strain among those from varying income levels and racial backgrounds.
REFERENCES


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