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The Impact Of Cultural Identity And Social Capital On American Indian Elders' Subjective Health

Cole Lewis Ward

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THE IMPACT OF CULTURAL IDENTITY AND SOCIAL CAPITAL ON
AMERICAN INDIAN ELDERS' SUBJECTIVE HEALTH

By

Cole Lewis Ward
Bachelor of Science, University of North Dakota, 2014

A Thesis

Submitted to the Graduate Faculty

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

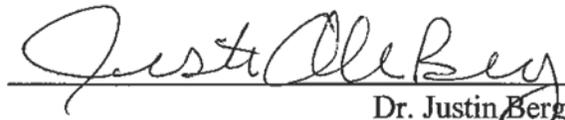
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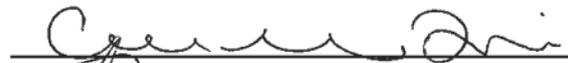
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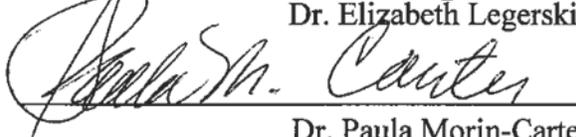
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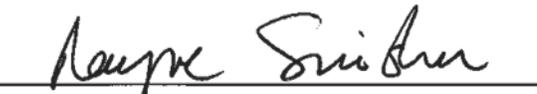
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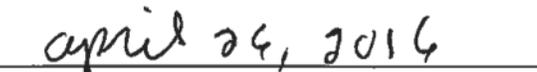

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Title The Impact of Cultural Identity and Social Capital on American
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Degree Master of Arts

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Cole Lewis Ward
26 April 2016

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ABSTRACT

Data gathered from the National Resource Center on Native American Aging at the University of North Dakota was utilized (N = 8,396) to see if a relationship exists between cultural identity and social capital, the independent variables, and the dependent variable, subjective health. It is anticipated that there will be strong relationships between cultural identity, social capital, and subjective health because it is culturally expected that the younger generations of American Indians will take care of their elders by providing support when needed. This will provide a strong sense of well-being for American Indian elders. Additionally, cultural identity is expected to play a greater role in determining American Indians elders' subjective health based off of findings from previous research documenting the importance of culture amongst American Indians.

Results suggest that cultural identity and social capital both play an important role in determining American Indians elders' subjective health. However, it was revealed that social capital did explain more of the variation in subjective health than cultural identity beyond the control variables. Implications of these results suggest a need for reservation officials, caregivers, and family members to consider developing programs that encourage cultural participation while utilizing new ideas incorporating social capital.

CHAPTER I

INTRODUCTION

Overview of the Chapter

The purpose of this thesis is to examine the extent to which social capital and cultural identity affect American Indian elders' subjective health. Insight into cultural identity as a significant factor is determined by using several cultural questions that include: How often an American Indian elder attends traditional ceremonies, whether they reside on/in a reservation, trust land, or Alaska village, the amount of pride they have in their American Indian/Alaskan Native ethnic group, and how often they participate in cultural practices. The possibility of social capital as an influential factor in determining American Indian elders' subjective health is explored through family or friends social support. Chapter One will also introduce the topic of the thesis, including the thesis goals and the importance of the topic. A brief description of American Indian elders is provided as well as an overview of the succeeding chapters.

Background and Goal

Scholars have studied subjective health in the United States for over 50 years. Yet, they have mostly compared Whites to African Americans or, to a lesser extent, they have focused on Hispanics and Asian Americans as their populations of interests. Despite American Indian elders being one of the fastest growing populations in the United States since the 1970s (U.S. Department of Health and Human Services, 1997), they have been understudied. Studying American Indians provides a unique opportunity to

examine the effect of culture and social companionship; because American Indian culture is centered on traditional practices and pride in one's culture, which provides resiliency for individuals (Kaufman et al., 2007). At the same time, studying American Indian elders provides an additional point of interest because many of them were raised in a time when their culture was forbidden and they were being assimilated into Western society. This includes periods of loss of land, language, cultural practices, breaking of treaties by the United States government, and other countless acts that may have gone undocumented (Yellow Horse Brave Heart, 1998 & 2003; Yellow Horse Brave Heart & DeBruyn, 1998).

As a result, many American Indian elders may be weary of partaking in traditional ceremonies or acknowledge that they are American Indian for fear of reliving moments of torture during the period of assimilation. Subsequently, American Indian elders may feel marginalized or lonely because they are forced to hide their personal experiences of suffering in order to conform to society (Waldram, 2004). In a related vein, American Indian culture encourages members of the group to care for one another because they are literally and figuratively surrounded by non-natives. Consequently, social capital likely plays a significant role in American Indian elders' feelings of health. Prior research has considered social capital to consist of the social connections between people that lead to individual upward mobility (Loury, 1977).

With this contextual information in mind, the goal of this thesis is to examine if cultural identity, which will be represented by multicultural theory, and social capital, which will be represented by social capital theory, influence American Indian elders' subjective health. As a result, this thesis contributes to the larger areas of research on

social capital, cultural identity, subjective health, and American Indian elders. More importantly, this study will hopefully give back to the Indian people and communities that are included in this study to be better equipped to plan for the present and future needs of American Indian elders. As the elderly population continues to grow on many reservations, elected officials, caregivers, and family members will benefit from this knowledge by possibly considering the idea of developing programs that encourage and preserve cultural participation and expand elders' social capital.

Overview of American Indian Elders

In a recent study by the U.S. Census Bureau (2012), it was projected that in 2015 American Indian and Alaskan Native men would have a life expectancy of 74.5 years, while women would have a life expectancy of 80.1 years. In comparison, White men would have a life expectancy of 77.7 years and women would have a life expectancy of 82.3 years. Although American Indians still represent a small percentage of the United States population, their numbers have been growing steadily since 1990 - the same is also true for American Indian elders. However, this has not always been the case. In the past 50 years there has been an increase in the life expectancy rate for American Indians. In the 1960's the life expectancy rate was 60 years with the average age of death being 46. In contrast, the general population of the United States had a life expectancy of 70 years, and an average death rate of 65 (Weibel-Orlando, 1989).

However, the disparities experienced by American Indians are distinct from Western culture and can have drastic life-course consequences. The existing disparities are a reflection of the economic and social inequalities that have led to inadequate education, severe poverty, lack of housing, and inequity in health care service delivery

(IHS, 2002). Additionally, past historical traumas, such as colonial policies of assimilation and annihilation by way of boarding schools and knowingly spreading diseases like smallpox has caused many American Indian communities to become disengaged with their own cultural heritage (Szlemko et al., 2006). As a result, some American Indians live by the idea of living for today instead of tomorrow, which is one of the reasons some tribes, and the data set used for this thesis, consider people aged 55 and older as elders.

Furthermore, prior literature has documented that older American Indian people are much less likely to have “good” self-rated health than other older people (Blandford & Chappell, 1990). Although past literature offers valuable insight into American Indians’ subjective health, the subject as a whole has been understudied when compared to other minority groups. In a study by Fry (2000), which looked at culture and its effect on subjective health, four different cultural groups, including African American and Asian American groups were considered but not American Indians.

Fry’s study (2000), revealed that elderly participants in North America, Europe, and the developed parts of Asia reported a positive association with subjective health, which has been the general sentiment of other scholars over the past 40 years. However, based on Fry’s (2000) conclusions, elderly participants in Africa reported that as they grew older their subjective health was compromised, which could have been the result of limited cultural resources and responses. As a result, it is possible that cultural identity plays a role in subjective health amongst American Indian and Alaskan Native elders. Additionally, past scholars have shown that participating in traditional practices and pride

in one's culture are at the center of American Indian culture because they provide resiliency and support for American Indians (Fleming & Ledogar, 2008).

Another potential explanation that prior research has not examined with American Indians is social capital (Loury, 1977). There have been several studies that show how social capital and social networks have been linked to relieving stress and increase health. In one longitudinal study (Berkman & Syme, 1979; Seeman et al., 1987), it was revealed that over a 17 year period participants with strong social networks and community ties were significantly less likely to die. Further, this study also discovered that the most meaningful relationships with an impact on health were those with close friends and relatives.

Many American Indian and Alaskan Native communities are facing growing populations of elderly people, which increases the need for social networks and community ties. At the same time, these communities are forced to consider the needs of older people, such as support for transitions to retirement, maintenance of independence and in-home care, and provision of services related to health and disability in later life (Cooke et al., 2008). Prior research finds that American Indian elders living on reservations are four times as likely and those living in urban settings are twice as likely to live with extended family as their White counterparts (Weibel-Orlando, 1989). By living with extended families, elders are able to keep culture alive by connecting the old and the young, whether by force or necessity, which may span up to four generations (Weibel-Orlando, 1989).

Research Questions

In summary, the research question of this study is: To what extent does cultural identity and social capital influence American Indian elders' subjective health? This study will add to the existing literature by exploring the impact of social capital and cultural identity on American Indian elders' subjective health. Furthermore, by examining these relationships, the social and cultural needs of American Indian elders may be brought to the forefront on American Indian reservations.

Organization of the Remainder of the Thesis

In Chapter Two, past and current literature will be reviewed and discussed. Concepts such as, social capital and cultural identity, will be defined and the theoretical orientation that guides this thesis will be examined. Chapter Three will detail the methodological approach used by the researcher in this quantitative study, as well as provide information about the secondary data and questionnaire used to gather the data. Chapter Four will reveal the results of the statistical analysis conducted. Lastly, Chapter Five will provide a discussion of the results from the study in relation to previous studies, as well as the limitations of the study and implications for future research.

CHAPTER II

LITERATURE REVIEW

The purpose of this thesis is to examine whether cultural identity or social capital affect American Indian elders' subjective health. Insight into cultural identity as a significant factor is determined by using several cultural questions specific to American Indians. The possibility of social capital as an influential factor in determining American Indian elders' subjective health is explored through family or friends social support. This chapter serves to explain the theoretical framework of this thesis and previous literature on the topic. Based upon the reviewed theories and literature, hypotheses are proposed.

Previous Literature

Prior literature has documented numerous theories that link subjective health to a variety of sources. One of these is reference group theory, which suggests that the health of the elderly largely depends on their comparison and assessment of other elderly persons (Levkoff et al., 1987). For example, when confronting major and minor illnesses, perceptions of their health are similar to peers the same age. Further, past research has considered the influence of religion on subjective health – known as the comfort hypothesis. Religion provides a sense of comfort or control, which leads to hope and optimism during times of hardship and uncontrollable situations, such as in health status (Idler, 1987). Specifically, Ellison (1993), found support for this association during her

study, which revealed that religious activity strengthened self-perceptions of African Americans with health limitations. As a result, her study was able to provide considerable support for the incorporation of religious activities in a minority population that predominantly has low levels of health.

More recently, researchers have started incorporating socioemotional selectivity theory as a way to explain subjective health. This theory advocates that subjective health increases because social contracts (e.g., between family, friends, and coworkers) are reduced (Step toe et al., 2014). As people age, they become more emotionally intelligent and chose social contracts that are beneficial, socially and emotionally, rather than having a lot of social contracts. The accumulation of emotional intelligence and the lack of social contracts leads to meaningful relationships, memorable events and experiences.

This results in an optimistic outlook on life despite tragic life course events that may include death of loved ones or deterioration of physical health. As a result, despite being generally less healthy, less productive, and after hardships experienced; older populations may in fact, experience less stress and worry, leading to a better overall subjective health than middle aged people (Step toe et al., 2014). Despite progress that has led to significant advancement in explaining subjective health by utilizing past theories and developing new theories, there is still less research using social capital and multicultural theories. Moreover, there is even less literature that considers American Indian elders' subjective health.

Therefore, this study will add to the existing literature by exploring the impact of social capital and cultural identity on American Indian elders' subjective health. Prior literature has documented that older American Indian people are much less likely to have

“good” self-rated health than other older people (Blandford & Chappell, 1990). Although past literature offers valuable insight into American Indians’ subjective health, the subject as a whole has been understudied when compared to other minority groups. As mentioned before, Fry (2000), looked at culture and its relationship with subjective health, four different cultural groups, including African American and Asian American groups, were considered; however, American Indians were not included. The reason for being understudied may be the result of the unique and distinct American Indian culture, as discussed in more detail below.

Theoretical Orientation

Multicultural Theory

American Indian culture is centered on traditional practices and pride in one’s culture, which provide resiliency for individuals (Kaufman et al., 2007). As a result, it is likely that cultural identity plays a positive role in subjective health. For example, multicultural theory states that individuals with a positive and secure sense of their own culture will have positive attitudes towards other groups as well as higher self-esteem (Berry, 1984). Based on this theory, there does seem to be a possible link between cultural identity and “good” subjective health. This thesis will utilize multicultural theory by considering the impact of cultural identity on subjective health amongst American Indian elders. Insight into this link is presented by considering variables such as ethnic pride and cultural participation in relation to subjective health.

Culture for American Indians was, and to some degree still is, centered on cultural buffers, which refers to the elements of tribal life that provided social, emotional, psychological, and physical strength (Kaufman et al., 2007). These elements helped

create a cultural identity by teaching traditional methods and creating cultural resources for individuals to draw upon. However, much of these teachings have been lost over time with the massacres, decimation of populations through war and diseases, and deculturation policies (Yellow Horse Brave Heart & DeBruyn, 1998). As a result, life on a reservation is sometimes filled with traumatic events with comparatively fewer role models to turn to in times of difficulty. In a study done by Indian Health Services (2003) that looked at the American Indian tribes of the Upper Midwest the accident and adverse events faced by tribal members occurred at over three times the national rate.

Additionally, cultural identity for American Indians is broadly defined because there are over 500 different culturally, historically, and linguistically distinct tribal nations (LaFromboise & Low, 1998). For instance, the Sioux tribes on the Great Plains are very different when compared to the Seminoles of Florida. There are many differences, such as family structures, the cultural gatherings, and places of worship. Because of this diversity, there is no monolithic American Indian entity (Horse, 2005). In comparison, it would be similar to say that all European nations are monolithic, which could not be further from the truth. However, broadly defined, cultural identity is the knowledge and attitudes toward one's culture, feelings of commitment and belongingness to a group, and participation in traditional cultural activities (Phinney, 1990). Phinney (1990) also mentions how pride can be a protective factor by encouraging resiliency through positive satisfaction and contentment.

These characteristics of cultural identity can also be influenced by tribal identification, linguistic experiences, or if they were raised on or off a reservation. Although it may be interesting to measure strength of identity by tribal affiliation there is

good reason to avoid singling out any particular tribe. Perhaps the most important is respecting the privacy of American Indian elders' who have once again trusted the research process. Despite variation in strength of identity amongst tribal identification, it is equally noteworthy to measure strength of identity collectively because Native communities provide numerous roles and tasks for American Indian and Alaskan Native elders. These roles and tasks, which are different for every tribal nation, can include being a head dancer at a powwow, prayer leader at sundances, medicine men and women, tribal council members, or stepping in as a parent to a grandchild. By recognizing an elder's unique talents, which have been influenced by years of experience, the family and community validate the elder's sense of worth through cultural roles (Weibel-Orlando, 1989).

Another factor that weighs on American Indians' cultural identity is if they were born and raised on a reservation (LaFromboise & Low, 1998). American Indian identity forms on these reservations, yet identity is more than a person's feelings or experiences, because by this notion anyone could claim to be American Indian. In contrary, people who grow-up away from the reservation are left in a complicated situation because they do not have the same experiences as their peers and may experience marginalization by the community. For instance, the tribal identification, linguistic experiences, and community participation that are unique to American Indians are not present for those who live off of the reservation (Horse 2005; LaFromboise & Dizon, 2003; Phinney, 1996). Marginalization may occur when an American Indian returns to the reservation and/or community after receiving additional higher education in college. Since previous

research has documented the importance of cultural identity for American Indians, the first hypothesis proposed is:

H₁: Cultural identity will be positively associated with American Indian elders' subjective health.

Social Capital

Another potential explanation that prior research has not examined with American Indians is social capital, which refers to the social connections between people that lead to individual upward mobility (Loury, 1977). This upward or downward mobility can affect many networks in life, but the two prominent are cultural and financial (Bourdieu, 1979). Since the inception of social capital there have been many definitions of the concept to better fit, understand, and explain the topic(s) of interest. Many of the definitions follow a common idea; that the cohesion of social ties actually helps to keep modern societies together. For example, Krackhardt's (1992) study revealed that strong social ties provide assistance and comfort during times of uncertainty, which help to reduce stress. More recently, scholars have conducted studies that even show the effects of online social capital on subjective health. In terms of online social capital, Beaudoin & Tao (2007), found that it was positively associated with subjective health as participants reported better coping skills and lower depression.

The current thesis will use social capital as previous researchers have - in that the measurements of social capital will try to examine whether they maintain cohesion, which will help keep American Indian communities together (Bourdieu, 1985; Granovetter, 1974; Lin, Ensel, & Vaughn, 1981; Putnam, 1993 & 1995). However, just as

past researchers have done, this study will adapt to the uniqueness of the population under study, American Indian elders.

Many American Indian communities are facing growing populations of elderly people. As a result, they are forced to consider needs of older people, such as support for transitions to retirement, maintenance of independence, in-home care, provision of services related to health, and disability in later life (Cooke et al., 2008). Many tribal governments have programs, such as language, beading, hide work, or rug weaving classes that provide a setting for social networks (i.e., meeting other American Indians), to develop. Through the social networks of these programs, Native elders gain a strong sense of cultural identity. With minimal access to these benefits, some American Indians are left with a wide gap to fill when trying to develop an identity (LaFromboise & Low, 1998). Whether American Indians are raised on or off a reservation there will be, in many cases, a desire to have some relation to their tribal nation (Horse, 2005).

The needs of American Indian elders may also be influenced by the term, *Tiospaye* (word for close family members in Lakota), and the familistic ideals (Weibel-Orlando, 1989) shared by members in the community. In essence, American Indian elders hold an important role as gatekeeper of cultural knowledge, and the ability to pass it down from generation to generation. As a result, it can be expected that American Indians with more social capital, such as receiving companionship or help with money from family or friends will report better subjective health (Putnam, 1993 & 1995).

Furthermore, American Indian elders tend to be family-oriented, which is best described by the following: “The importance of family as a social, emotional, and economic structure is not an extraordinary phenomenon because it is the cultural base all

American Indians share that needs neither explanation nor veneration” (Weibel-Orlando, 1989). Consequently, many American Indian elders feel that if they need to ask for additional assistance from family, it is proof of their inability to care for themselves or to contribute to society. By living with extended families, elders are able to keep culture alive by connecting the old and the young that, at times, span four generations. In line with the existing research mentioned, the second hypothesis proposed:

H₂: Social capital will be positively associated with American Indian elders’ subjective health.

Multicultural Theory and Social Capital

Multicultural theory and social capital do hold a common understanding, which is the idea that how people perceive themselves and how social connections are constructed are similar. As a reminder, multicultural theory states that, individuals with a positive and secure sense of their own culture will have positive attitudes towards other groups as well as higher self-esteem. Additionally, social capital theory refers to the social connections between people that lead to individual upward mobility. In multicultural theory, individuals with a positive and secure sense of self in their own culture may very well be impacted by the social connections mentioned in social capital. For example, if a family member or close friend provided sufficient emotional or financial support to an American Indian elder, the elder may then develop a secure sense of their own culture constructed from other people’s perceptions. As a result, they may decide to take part or increase their cultural participation, which could positively affect their attitude. Consequently, this could lead to an improved perception of other ethnic groups, leading to additional social connections. The positive association between cultural identity and social capital also

increases the probability of subject health being positively affected because of the influence and importance of cultural and social ties in American Indian communities.

With these associations and perceptions taking place amongst American Indian elders, both multicultural theory and social capital theory provide much needed insight into American Indian elders' subjective health. Nonetheless, I anticipate that multicultural theory will be more explanatory in predicting American Indian elders' subjective health than social capital. This assumption is, in part, due to the unique cultural traditions that American Indians practice and the knowledge about these traditions elders' possess. Another reason is that, despite the hardships that include higher rates of mental health problems and alcoholism when compared to the general U. S. population (Stumblingbear & Romans, 2012), American Indian culture provides resiliency or cultural buffers for American Indians during stressful times (Kaufman et al. 2007). These cultural traits will be more powerful than social connections because subjective health is a personal feeling, which is similar to cultural identity and how it provides a personal feeling of resiliency. Meanwhile, social connections are an indirect, measure because they also measure social cohesion amongst American Indian communities. Because past research has emphasized the cultural importance for American Indians, the third hypothesis proposed:

H₃: Multicultural Theory will be more explanatory in predicting American Indian elders' subjective health than Social Capital Theory.

Summary

It is anticipated that there will be strong relationships between cultural identity, social capital, and subjective health because it is culturally expected that the younger

generations of American Indians will take care of their elders by providing support when needed. This will provide a strong sense of well-being for American Indian elders. Additionally, I expect culture to play a greater role in determining American Indians elders' subjective health based off of what is expected on reservations.

As previously mentioned, scholars have made great progress with past literature and continue to add to the topic of American Indian elder' subjective health. However, there is still a considerable amount of research to be done on this growing issue, especially, if the American Indian elderly population continues to grow on tribal reservations. Therefore, I would like to add to the literature by exploring the impact of social capital and cultural identity on Native American elders' subjective health.

CHAPTER III

METHODOLOGY

The purpose of this thesis is to use a quantitative approach to examine the impact of social capital and cultural identity on American Indian elders' subjective health. Chapter III serves to detail the methodology of this thesis. The first part of the chapter will provide a brief discussion of historical research concerns involving American Indians and data interpretation. The second part of this chapter will explain the secondary data set used to address the research question and hypotheses of this thesis. The third part of this chapter will describe the measurements of cultural identity, social capital, subjective health, and the control variables. The final section of this chapter will describe the analytic strategy used to examine the hypotheses.

Past Research Concerns

Past research projects have made great progress in revealing the current trends that American Indians are currently encountering. However, there are still questions of how accurate these statistics are because of the differences in cultural backgrounds between the researchers and the participants. The principal investigator is usually White and many American Indians still have problems trusting "outsiders" on reservations with their stories (Oman, et al., 2006). It is through these stories that American Indians documented trends and historical events. During the process of interpretation, data may be misinterpreted or left out entirely because of different cultural backgrounds (Oman, et

al., 2006). From a sociological point of view, this thesis takes into account external factors that surround people and influence their perceptions and behaviors. These factors include but are not limited to their race, ethnicity, religious beliefs, or class status.

Data and Sample

For this project, secondary data was obtained from the National Resource Center on Native American Aging at the University of North Dakota (NRCNAA). The NRCNAA has been collecting data for over 15 years using the survey, “Identifying Our Needs: A Survey of Elders IV.” During the past 15 years the center has gathered over 70,000 completed surveys nationwide from Native American elders. Data collection follows a three year cycle period. Each cycle is unique because of new questions added or replaced as needs for American Indian elders change. This study will be utilizing the most recent data from cycle five, which started in 2011 and ended in 2014. The survey asks 77 questions, including subjective health, social functions, and demographics from American Indians, Alaskan Natives, Native Hawaiians, and those who claim to be descendants who are 55 and older. The age of 55 was determined from the life expectancy rate of an American Indian, which is much lower when compared to their White counterparts. Native Hawaiians and descendants were omitted from this study because of the debate that surrounds their inclusion as Native people. Finally, cases with missing data were also omitted from this study - resulting in a final sample size of 8,396.

Measures

Dependent Variable

The dependent variable, *subjective health*, measured American Indian elders’ perceived health by asking, “Would you say your health is excellent, very good, good,

fair, or poor?”. Response categories were coded as (1) “Poor”, (2) “Fair”, (3) “Good”, (4) “Very Good”, and (5) “Excellent”.

Independent variable

For the first independent variable, *cultural identity*, there were four questions used to allow the researcher to gauge cultural identity from the respondent’s point of view as a participant in their culture and from their own personal feelings. For the first question, “How often do you attend traditional ceremonies?” respondents were asked to write in how many times per month they attend traditional ceremonies. Responses were left as a continuous variable that ranged from 0-77 times per month. The second independent variable asked respondents, “Do you reside on/in a reservation, trust land, or Alaskan village?”. Responses were recoded as (1) “yes” or (0) “no”. The next two questions, “Do you have a lot of pride in your American Indian or Alaska Native ethnic group?” and “Do you participate in cultural practices that include traditional food, music, and customs?”, used the same response categories that ranged from (6) “All of the time” to (1) “None of the time”. All questions used to measure cultural identity were analyzed as single items instead of being made into an index. This was done because three of the questions used to measure cultural identity used different response categories.

The second independent variable, *social capital*, was measured by using 10 separate questions from the base question: “Do family or friends ever help you out in the following ways?”. Each question had responses ranging from (1) “Never/Hardly ever” to (3) “All/Most of the time”. These questions measured social capital by providing insight to American Indian and Alaskan Native elders’ social connections by asking how family or friends helped Native elders. The 10 questions used are as follows: “When you are

sick?”, “Fix things around your house?”, “Keep house for you or help do household chores?”, “Provide companionship to you?”, “Listen to your problems?”, “Shop or run errands for you?”, “Give you gifts?”, “Help you out with money?”, “Give advice on business or financial matters?”, and “Provide transportation to you?”.

Control variables

The control variables gender, age, marital status, personal annual income, highest schooling completed and ethnicity are also included in this study. *Gender* was coded as, (0) male and (1) female. *Age* was measured in years. *Marital status* was coded as, (1) “Married or living with a partner” and (0) “Not married/Single/Divorced/Widowed”. To measure *personal annual income*, responses ranged from (1) “Under \$5,000” to (9) “\$50,000 or more”. *Highest schooling completed* was coded as, (1) “Never attended or kindergarten only”, (2) “Elementary”, (3) “High school”, (4) “College/Technical School”, and (5) “Graduate/Professional School”. Finally, *ethnicity* was coded as, (1) American Indian and (2) Alaskan Native.

Analytic Strategy

Descriptive statistics will be presented to provide a preliminary look at the variables mentioned. Additionally, Pearson’s correlation will be used to estimate the strength and direction of the relationships between all variables of interest. The correlation matrix will be presented in the appendix. Ordinary least square (OLS) regression will be conducted using all variables to test the three hypotheses. In particular, a nested model approach will be used, which will include a baseline model, two models that incorporate each theory separately and a full model.

Summary

This chapter gave an overview of the methodology employed in this thesis. It began by providing a brief discussion on historical research concerns involving American Indians. Next, it detailed the dataset used to address the research question. Chapter Three also detailed the operationalization for the dependent, independent, and control variables used, and explained the analytic strategy used to test the hypotheses. Chapter Four will provide descriptive statistics and a discussion of the results from the OLS regression.

CHAPTER IV

RESULTS

The overall goal of this thesis is to examine the impact of social capital and cultural identity on American Indian elders' subjective health. Secondary data ($N = 8,396$) was obtained from the National Resource Center on Native American Aging at the University of North Dakota (NRCNAA) to address the research question: To what extent does cultural identity and social capital influence American Indians' subjective health? This chapter will outline the descriptive statistics and discuss the results of the OLS regression models.

Descriptive Statistics

The descriptive statistics for the variables included in this study, shown in Table 1, revealed that subjective health status had a mean of 2.83, which indicates that on average respondents reported their subjective health as "Good". In terms of gender, 36.6 percent were men and 63.4 percent were women. Average age of the respondent was 67.78.

The independent variable, attendance of traditional ceremonies, had a mean of 1.19. This means that Native elders usually attend one traditional ceremony per month. The standard deviation for attendance of traditional ceremonies was 3.04. Moreover, 70.3 percent of the sample reported they resided on/in a reservation, trust land, or Indian

community and 29.7 percent did not. Pride in ethnic heritage had a mean of 5.50. This suggests that Native elders have pride in their ethnic heritage group “Most of the time” to “All of the time”. Standard deviation was 1.02 with a range of 1 – 6. Furthermore, participating in cultural practices had a mean of 3.58, which indicates that on average, Native elders participate in cultural practices “Some of the time” to “A good bit of the time”. The standard deviation was 1.73 with a range of 1 – 6.

For social capital variables, all had a range of 1 – 3, representing the categories never, sometimes, and all/most of the time, respectively. Helping when one is sick had the highest mean of the 10 variables, which measured 2.41 with a standard deviation of .674. Fixing things around the house had a mean of 1.98 and a standard deviation of .725. Additionally, keeping house or helping with household chores had a mean of 1.95 and a standard deviation of .773. Providing companionship had a mean of 2.13 and a standard deviation of .701. Next, listening to one’s problems had a mean of 2.28 and had a standard deviation of .678. Shopping or running errands had a mean of 2.13 and a standard deviation of .750. Giving gifts to a Native elder had a mean of 2.12 with a standard deviation of .637. Also, helping with money had a mean of 1.71 with a standard deviation of .697. Meanwhile, giving advice on business or financial matters had the lowest mean, which measured 1.64 and had a standard deviation of .703. Lastly, providing transportation had a mean of 2.07 and a standard deviation of .759 was reported. As the results indicate, there is not a wide range between the means with the lowest being 1.64 and the highest being 2.41. Subsequently, this suggests that Native elders’ family or friends help out between, “Sometimes” and “All/Most of the time”.

Table 1. Descriptive Statistics of Variables of Interest

Variables	Range	Mean	Standard Deviation
Subjective Health	1 – 5	2.83	1.001
Age	55 – 103	67.78	8.78
Gender	0 – 1	.63	.48
Marital Status	0 – 1	.41	.49
Personal Annual Income	1 – 9	4.55	2.47
Highest School Comp.	1 – 5	3.37	.74
Ethnicity	1 – 2	1.09	.29
Pride in Ethnic Group	1 – 6	5.50	1.02
Participate in Cultural Practices	1 – 6	3.58	1.73
Reside on/in Reservation	0 - 1	.70	.46
Attend Traditional Ceremonies	0 – 77	1.19	3.04
Help When Sick	1 – 3	2.41	.674
Fix Around House	1 – 3	1.98	.725
Keep House/Chores	1 – 3	1.95	.773
Provide Companionship	1 – 3	2.13	.701
Listen to Problems	1 – 3	2.28	.678
Shop or Run Errands	1 – 3	2.13	.750
Give Gifts	1 – 3	2.12	.637
Help with Money	1 – 3	1.71	.697
Business Advice	1 – 3	1.64	.703
Provide Transportation	1 – 3	2.07	.759

Notes: “Identifying Our Needs: A Survey of Elders IV” (2011 -2014), N = 8,396

Regression Analyses

In Table 2, OLS models are presented that predict Native elders’ subjective health. These models help determine whether a relationship exists between the independent and dependent variables and if the results support any of the hypotheses stated in Chapter Two. Overall, the f statistics indicate that all of the models are statistically significant at the .001 probability level. Model 1 examines the relationship between the control variables and subjective health. From the six control variables used,

four had a statistically significant relationship with subjective health. However, of these four, one also had a negative relationship.

In Model 1, gender had a statistically significant relationship, women reported higher subjective health than men. Personal annual income was also statistically significant. In other terms, as personal annual income increased, subjective health increased. This was also true for highest schooling completed. For Native elders, as their amount of education increased their subjective health increased. In contrast, age was statistically significant, but had a negative relationship. As age increased, subjective health decreased. Finally, marital status and ethnicity were not statistically significant.

In Model 2, multiple regression revealed that of the four multicultural variables two were statistically significant. Participating in cultural practices, such as beading, cooking traditional foods, attending rodeos, or quilting, was significant – that is as American Indian elders’ participation in cultural practices increased, so did their subjective health. Additionally, having pride in one’s American Indian or Alaskan Native ethnic group was statistically significant. In other terms, as American Indian and Alaskan Native elders’ pride in their ethnic group increased, so did their subjective health. Meanwhile, attending traditional ceremonies, such as sundances, powwows, or sweats, and residing on/in a reservation, trust land, or Alaskan village were not statistically significant with subjective health.

Based off of the results, there is some evidence to support the first hypothesis, which proposed that cultural identity would be positively associated with American Indian elders’ subjective health. This hypothesis was supported by the variables, “participating in cultural practices”, and “having pride in your American Indian or

Alaskan Native ethnic group” as statistically significant variables. As a result, this hypothesis is partially supported by the results. Furthermore, as indicated by the $R^2 = .063$, the cultural variables added about 1 percent in explaining the variation in subjective health beyond the control variables.

In contrast, Model 3 revealed nine social capital variables that were statistically significant. The first, when family or friends would help by fixing things around the homes of Native elders was statistically significant. In other words, when family or friends would help Native elders by fixing things around the house, Native elders’ subjective health would increase. Additionally, when family or friends listened to Native elders’ problems was statistically significant. In other terms, as Native elders talked about their problems with family or friends their subjective health also increased. Likewise, when family or friends would give gifts to Native elders was significant - that is, as family and friends gave gifts, Native elders’ subjective health increased. Moreover, when family or friends would help with money, Native elders’ subjective health increased. Lastly, as family or friends provided advice on business or financial matters, Native elders subjective health increased.

Perhaps the most interesting finding of this study is that four of the social capital variables had statistically significant and negative relationships. For instance, when family or friends would keep house or help do household chores there was a statistically significant relationship, but it was also negative. In other terms, as family or friends helped by doing household chores, Native elders’ subjective health decreased. The same is also true when family or friends provided companionship – that is, as family or friends provided more companionship, Native elders’ subjective health decreased. Furthermore,

when family or friends shopped or ran errands for Native elders there was a significant, but negative relationship. In other words, as family or friends would shop or run errands for Native elders, their subjective health decreased. This negative relationship was still true when family or friends provided transportation for Native elders. As family or friends provided more transportation for Native elders, subjective health for Native elders decreased. Another intriguing finding was that when family or friends would help a Native elder who was sick there was no statistically significant relationship.

From these results, there is evidence to support the second proposed hypothesis, which posited that social capital will also be positively associated with American Indian elders' subjective health. However, as mentioned above, there are several variables that have negative relationships with subjective health. As a result, this hypothesis is only partially supported by the results. Nonetheless, as revealed by the $R^2 = .083$, the social capital variables added about 3 percent in explaining the variation in subjective health beyond the control variables.

Model 4: Full Model

The third and final hypothesis, Multicultural Theory will be more explanatory in predicting American Indian elders' subjective health than Social Capital Theory was incorrect. The multicultural variables had an $R^2 = .063$ and for the social capital variables, $R^2 = .083$. As a result, the social capital variables explained 3 percent of the variance in the dependent variable, while the multicultural variables explained 1 percent of the variance.

Table 2. OLS Regression Models Predicting Native Elders' Subjective Health

	Model 1	Model 2	Model 3	Model 4
	Control Variables	Multicultural	Social Capital	Full Model
Intercept	2.632 (.118)	2.436 (.131)	2.570 (.123)	2.411 (.134)
Age	-.008*** (.001)	-.008*** (.001)	-.006*** (.001)	-.006*** (.001)
Gender	.059** (.023)	.053* (.022)	.040 (.023)	.038 (.023)
Marital Status	.027 (.023)	.025 (.022)	.019 (.022)	.020 (.022)
Personal Annual Income	.063*** (.005)	.065*** (.005)	.059*** (.005)	.061*** (.005)
Highest School Comp.	.132*** (.016)	.117*** (.016)	.113*** (.015)	.099*** (.016)
Ethnicity	-.027 (.037)	-.043 (.037)	-.023 (.037)	-.037 (.037)
Pride in Ethnic Group		.020 [†] (.011)		.020 (.011)
Part. Cultural Practices		.040*** (.007)		.035*** (.007)
Reside on Reservation		-.011 (.024)		.003 (.024)
Traditional Ceremonies		.004 (.004)		.004 (.004)
Help when sick			.001 (.021)	-.006 (.021)
Fix Around House			.070*** (.020)	.068*** (.020)
Keep House/Chores			-.119*** (.019)	-.120*** (.019)
Provide Companionship			-.049* (.020)	-.047* (.020)
Listen to Problems			.094*** (.021)	.090*** (.021)
Shop or Run Errands			-.133*** (.020)	-.129*** (.020)
Give Gifts			.150*** (.021)	.141*** (.021)
Help with Money			.071*** (.019)	.065*** (.019)
Business Advice			.036 [†] (.019)	.033 (.019)
Provide Transportation			-.097*** (.019)	-.094*** (.019)

Table 2. cont.

R^2	.056	.063	.083	.088
F for Model	83.379	56.113	47.490	40.565

† $p < .10$ * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests)

Notes: “Identifying Our Needs: A Survey of Elders IV” (2011 -2014),

N = 8,396

Summary and Overview

This chapter provided a detailed analysis of the relationships between social capital and cultural identity and their impact on subjective health. In terms of multicultural variables, measures either had a relationship or were not statistically significant. As a result, the predicted cultural identity hypothesis was partially supported with “participating in cultural practices” and “pride in American Indian or Alaskan Native ethnic group” having a significant and positive association with subjective health, which provides some support for multicultural theory. In terms of social capital variables, measures either had a positive or negative relationship or were not statistically significant. As a result, there is some support for social capital being predictive of subjective health. Speculation and discussion on these relationships and others will be discussed in the next chapter, as well as connecting the results back to multicultural and social capital theory and previous literature. Chapter Five will also offer some implications and limitations of the thesis. Finally, ideas and direction for future research will be proposed.

CHAPTER V

DISCUSSION

The purpose of this thesis is to examine the relationships between social capital and cultural identity and American Indian elders' subjective health. The National Resource Center on Native American Aging (NRCNAA) was used to examine the research question: To what extent does cultural identity and social capital influence American Indians' subjective health? Chapter Five will review and provide a discussion of the findings from the results. Additionally, the findings will be tied back to the theoretical orientation and previous literature that guided this thesis. Also, implications this research has for American Indian elders and the limitations this study had will then be discussed. Lastly, future areas for research will be proposed followed, by a brief conclusion that summarizes the results of this thesis.

Discussion of Results

In terms of cultural identity, the researcher was expecting to find that all of the variables used to measure the first hypothesis would have a statistically significant relationship. Previous literature has documented that American Indian culture is centered on traditional practices and pride in one's culture because it provides resiliency for individuals (Kaufman et al., 2007). However, from the regression models, this was not entirely supported by empirical evidence, as there was no statistical significance between

subjective health and attending traditional ceremonies or residing on/in a reservation, trust land, or Alaskan village. In contrast, the regression models also revealed that participating in cultural practices and having pride in one's American Indian ethnic group were statistically significant and were positively associated with subjective health. As a result, these relationships do provide partial support for the first hypothesis, which speculated that cultural identity would be positively associated with American Indian elders' subjective health.

This provides some support for the multicultural theory, which mentions that individuals with a positive and secure sense of their culture will have higher self-esteem (Berry, 1984). By participating in cultural practices, Native elders displayed a positive and secure sense of themselves as Native people, which is reflected in the positive association between subjective health and Native elders' pride in their ethnic group. Further, the researcher did find an interesting comparison between participating in cultural practices, which had a significant and positive association with subjective health whereas attending traditional ceremonies did not have a relationship with subjective health. By attending a traditional ceremony the elder is essentially participating in cultural practices, which makes this relationship confusing and interesting. Speculation and future research on this relationship is reasonable since past literature indicates that American Indian and Alaskan Native culture plays a major part in a Native elder's life.

In regards to social capital variables, there were several important findings that surprised the researcher because four of the social capital variables had a negative relationship with subjective health. These variables include: "When family or friends would keep house or help do household chores?", "When family or friends provided

companionship?”, “When family or friends shopped or ran errands?”, and “When family or friends provided transportation for Native elders?”. Social capital suggests that social connections between people leads to individual upward mobility. However, there is significantly less research on social capital and its effect on American Indians in academia. Nonetheless, it was thought that social capital would be positively associated with American Indian elders’ subjective health.

The relationships mentioned above seem to indicate that a negative relationship may exist between social capital and subjective health when a Native elder is made to feel like they cannot be productive anymore. This is revealed in the relationship when family or friends shop or run errands for a Native elder. Another example is when family or friends provide transportation for a Native elder. In contrast, positive relationships between social capital and subjective health occur when Native elders receive meaningful gifts that show they are still an important part of their family or friends lives. These gifts ranged from thoughtful advice and listening to problems to providing money.

Another explanation is that the relationships are non-linear. At a certain point, the returns of help from family or friends have a negative effect rather than a positive effect because elders may feel they no longer have a role to play in the community. In essence, as their dependency on someone to take care of them increases, their ability to help others decreases. Yet, social capital may already have a negative association with subjective health from the beginning. For instance, when elders receive more help from family or friends than they are used to, they may stop being independent and become dependent on them.

Subsequently, these variables did not support the second hypothesis, which posited that social capital will be positively associated with American Indian elders' subjective health. One explanation of this finding may be entrenched in past colonialization. American Indians, especially present day elders, trusted European nations and the United States government to provide and take care of them because this was promised in past treaties. However, massacres, decimation of populations through war and diseases, and deculturation practices (Yellow Horse Brave Heart & DeBruyn, 1998), such as boarding schools, have made them dependent on themselves. As a result, present day American Indian elders may feel as if they are being taken advantage of when an individual or a health facility attempts to care for them as they grow older.

Meanwhile, it was revealed that there were five social capital variables that supported the second hypothesis do to their significant and positive relationship with subjective health. "When family or friends would fix things around the house?", "When family or friends listened to problems?", "When family or friends gave gifts?", "When family or friends would help with money?", and "When family or friends provided advice on business or financial matters?" Native elders' subjective health increased. As a result, these findings do suggest that American Indian elders' subjective health is indeed affected by their social connections with others in the community. This brings to the forefront the need for tribal communities to consider how American Indian elders may interpret caregivers, family members, and friends providing care as they grow older. Transition to retirement, maintenance of independence, in-home care, and provision of services related to health, and disability in later life (Cooke et al., 2008) are a few stages in an elder's life where these findings may provide insight.

Furthermore, results indicate that cultural identity and social capital collectively increase subjective health amongst American Indian elders. However, it was revealed that social capital explains more variation in subjective health than cultural identity beyond the control variables, thus providing empirical evidence against hypothesis three. Although cultural identity plays a role in American Indian elders' subjective health, this study provides evidence that social capital may be just as important. As a result, it may be beneficial for American Indian communities to consider the importance of social capital in American Indian elders' lives and its effect on their role as gatekeepers of cultural knowledge. As the results indicate, social capital can also have a negative outcome, which could affect American Indian elders' decision whether to pass their knowledge to the next generation or keep it until they feel needed.

Implications

Previous research documents the importance of culture for American Indians and American Indian elders, but findings from this study indicate that social capital plays a greater role in predicting American Indian elders' subjective health than cultural identity. Consequently, it would benefit American Indian communities to place greater emphasis on social capital by considering how to provide care services as American Indian elders continue to age. For instance, asking what sort of services would benefit them instead of assuming what they need to survive could positively affect their subjective health because it shows that they are still cared about and needed for input. Furthermore, the types of services and what they provide also plays a role in determining American Indian elders' subjective health. For example, if family or friends provide transportation for them, it

could make them feel like they cannot be productive anymore. In contrast, when elders receive meaningful gifts, it shows that they are still an important part of the community.

Theoretically, this study does reveal a few implications. First, for social capital, it was discovered that it did play a role in determining subjective health. However, because there were several variables that revealed a negative relationship with subjective health there is a need to adapt how social capital is measured amongst American Indian people. As past scholars have documented, after centuries of colonial policies, historical traumas, boarding schools, and forced deculturation American Indian communities have become disengaged with their own cultural heritage (Szlemko et al., 2006). Subsequently, it is important to acknowledge these past historical traumas and how they might account for harmful social connections today. The negative relationships that exist between social capital and subjective health may also affect American Indian elders' cultural identity. Since multicultural theory includes the idea of social connections by stating that individuals with a positive and secure sense of their own culture will have positive attitudes towards other groups as well as higher self-esteem (Berry, 1984), there is a need to adapt multicultural theory for American Indian people as well.

Limitations

Although this study has been able to make great progress by adding to the literature using unique and current data there are still limitations. First, some questions may have been misinterpreted or incorrectly filled out because of the possibility that Native elders may lack knowledge about the research process. Moreover, this study does not include all tribes because there are still Native elders who resent any research because of past experiences. Additionally, this research was limited by its quantitative approach.

It would be interesting to approach this study qualitatively and ask follow-up questions that may end speculation about the lack of cultural identity and social capital significance.

Another limitation is the difficulty of generalizing the results to all American Indians because of the great diversity amongst tribes. As previously mentioned, there are over 500 different culturally, historically, and linguistically distinct nations (LaFromboise & Low, 1998). In essence, what may work for one tribal nation may not work for another as tribal communities develop new ways to care for an increasing elderly population. Furthermore, due to the cross-sectional nature of the data the researcher cannot determine causal direction in terms of the relationship. As a result, it is possible that subjective health affects social capital, rather than social capital affecting subjective health. Further discussion on this limitation and several others will be discussed in direction for future research amongst American Indian elders and their communities.

Direction for Future Research

This thesis examined the relationship between cultural identity and social capital on American Indian elders' subjective health. The results of this thesis indicate that cultural identity positively affects subjective health. Additionally, it was shown that social capital explains more variation in subjective health than cultural identity beyond the control variables. However, several of the social capital variables did have a negative relationship subjective health. For this reason, it would be beneficial for academia to adapt social capital theory so that it can account for the past historical traumas that American Indian elders experienced. Subsequently, this adaptation may affect multicultural theory because of the social connections involved in culture. For example,

some Native elders may refuse to take part in traditional ceremonies or acknowledge that they are American Indian for fear of reliving moments of torture from other people during the period of assimilation.

Although the quantitative approach allowed for the usage of recently collected secondary data and to incorporate over 8,000 American Indian elders nationally there is still a need to examine this topic qualitatively. In-depth interviews may allow researchers to expand on topics that may not be present on the survey or learn new topics that have not yet been brought to the forefront. There is also a need to collect longitudinal data. This would allow researchers to get the time sequence right in order to conclusively assess the direction of the relationships between subjective health and cultural identity and social capital.

Conclusion

This thesis examined the influence of social capital and cultural identity on subjective health amongst American Indian and Alaskan Native elders. As the elderly population continues to grow on many reservations; elected officials, caregivers, and family members will benefit from this knowledge by possibly considering the idea of developing programs that encourage and preserve cultural participation. An idea that may benefit all American Indian age groups is the idea of a linguistic, traditional beading, or singing and dance class taught by elders so they can continue to participate in cultural practices and pass down their knowledge. This may also increase Native elders' subjective health because it reinforces the need for elders in the community as gatekeepers of cultural knowledge. This thesis also contributes to the literature by reinforcing the importance of culture amongst American Indian elders and revealing how

social capital influences American Indian elders' subjective health. Additionally, this thesis provides a starting point for discussion, about the need to adapt both social capital theory and multicultural theory, to account for past historical traumas experienced by Native elders. Overall, the results of this study have social implications and consequences for Native elders and the people who will care for them as they continue to age.

APPENDIX

Table 3. Bivariate Correlations for Subjective Health

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Sub. Health	--	.056**	.087**	-.017	.038**	-.031**	-.013	-.103**	-.014	.013	-.107**	.060**	-.008	-.028*	-.110**
2. Pride	.056**	--	.283**	.047**	.069	.107**	.060**	.041**	.070**	.093**	.048**	.089**	.037**	.013	.042**
3. Cult. Practices	.087**	.283	--	.123**	.265	.086**	.081**	.062**	.067**	.083**	.050**	.112**	.104**	.082**	.040**
4. Reside Res.	-.017	.047**	.123**	--	.060**	.019	.046**	.101**	-.019	.013	.025*	.026*	.090**	.022*	.080**
5. Attend Trad.	.038**	.069**	.265**	.060**	--	.025*	.030**	.029**	.018	.014	.009	.041**	.049**	.052**	.015
6. Help Sick	-.031**	.107**	.086**	.019	.025*	--	.443**	.441**	.437**	.495**	.593**	.450**	.326**	.318**	.432**
7. Fix House	-.013	.060**	.081**	.046**	.030**	.443**	--	.557**	.427**	.448**	.498**	.430**	.428**	.422**	.467**
8. Keep Chores	-.103**	.041**	.062**	.101**	.029**	.441**	.557**	--	.412**	.475**	.558**	.360**	.410**	.455**	.500**
9. Pro. Comp.	-.014	.070**	.067**	-.019	.018	.437**	.427**	.413**	--	.593**	.422**	.438**	.379**	.439**	.462**
10. List. Problems	.013	.093**	.083**	.013	.014	.495**	.448**	.475**	.593**	--	.459**	.443**	.321**	.348**	.455**
11. Run Errands	-.107**	.048**	.050**	.025*	.009	.593**	.498**	.558**	.422**	.459**	--	.431**	.402**	.397**	.553**
12. Give Gifts	.060**	.089**	.112**	.026*	.041**	.450**	.430**	.360**	.438**	.443**	.431**	--	.412**	.348**	.360**
13. Help Money	-.008	.037**	.104**	.090**	.049**	.326**	.428**	.410**	.379**	.321**	.402**	.412**	--	.473**	.430**
14. Business Ad.	-.028*	.013	.082**	.022*	.052**	.318**	.422**	.455**	.439**	.348**	.397**	.348**	.473**	--	.426**
15. Pro. Trans.	-.110**	.042**	.040**	.080**	.015	.432**	.467**	.500**	.462**	.455**	.553**	.360**	.430**	.426**	--

Notes: "Identifying Our Needs: A Survey of Elders IV" (2011 -2014), N = 8,396, *p < .05, **p < .01, (two-tailed tests)

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