ABSTRACT

Title of Document: ROLE OCCUPANCY, PHYSICAL HEALTH AND THE DIMINISHMENT OF THE SENSE OF MATTERING IN LATE LIFE

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Mattering is an important but understudied part of the self-concept. Morris Rosenberg and Claire McCullough (1981) suggested that older adults feel they matter less than middle-aged adults and this discrepancy may in part be explained by a lack of role occupancies such as paid work, and a devaluation of the old in society at large. This dissertation examines sense of mattering in older adults and two mechanisms that may explain the decline of the self-concept in later life – fewer role occupancies and poorer physical health. It examines whether these processes differ for men versus women and for African-Americans versus whites. The study employs the first wave (2001) of data from the Aging, Stress and Health (ASH) Study, which includes over 1100 white and African-American adults over age 65 living in the Washington, D.C. metropolitan area.

Results indicate that there is a negative relationship between age and both dependence mattering and importance mattering and that it is in part explained by

role occupancies as well as physical health status. Compared to informal ties, work and volunteer roles (productive or formal roles), are more important in explaining the relationship between age and mattering. Additionally, the total number of roles held is significantly and positively related to dependence and importance mattering.

How roles mediate the relationship between age and dependence mattering depends on race and gender. The work role significantly mediates the age/mattering relationship for whites, but not for African-Americans. For African-Americans, the volunteer role mediates the relationship between age and dependence mattering, but this is not the case for whites. Also, self-rated health mediates the age-dependence mattering relationship for whites but not African-Americans. These findings point to the need to employ multiple mattering measures in analyses of older adults as well to study diverse samples; results differ depending on the outcome variable and group examined. Mattering is critical to the comprehensive study of the self-concept in later phases of the life course, as it is sensitive to social roles and physical health both of which are locations for key changes occurring during late life.

ROLE OCCUPANCY, PHYSICAL HEALTH AND THE DIMINISHMENT OF THE SENSE OF MATTERING IN LATE LIFE

By

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Chapter 1: Introduction

My father matters to his family. He knows that he matters to his family and derives great happiness from being a parent and husband. He shows his love for his significant others by fixing our cars, making money to support our needs, and providing emotional support to us all. At least, he did all of this when he was younger. Fourteen years ago he was diagnosed with Parkinson's disease and over time, his ability to be the father he wants to be has changed. His soft smile and uncontrollable giggle are forever hallmarks of his spirit, and accurately suggest the enthusiasm he has for life and family. However, a large portion of the way my father used to show love to his family cannot be accomplished at this time.

Although he continues to check the fluids under the hood of my car, he is limited in his ability to do all that he loves to do for his children. No longer able to drive, he can't take the family car and drive to visit his adult children on a moment's notice. He is completely dependent on his wife for transportation. When his children move from apartment to apartment, it is they and his wife who do the heavy lifting, leaving him to watch as they walk past him with a 30-pound television, a toaster oven, or a painting in their arms. His children wonder how the physical changes he has undergone, as a result of his illness, have impacted his self-concept and presumably his overall well-being.

In addition to changes taking place within his body, some of the roles my father holds have changed, and the quality of these roles have changed. He is a spouse, but a spouse greatly dependent on his wife. He still brings money into the home through social security and his pension, but is no longer in the paid labor force.

He is still healthy in many ways, but no longer moves with ease, often unable to walk; he can't drive and is therefore dependent on others for leaving home. With decreasing strength, he has to rely on significant others to accomplish many daily tasks.

The experience of this older American may be typical of the growing population of U.S. elders. Once connected, vibrant middle-aged adults, some older Americans may feel that they are no longer important to others. Rosenberg and McCullough (1981) posited that older adults are likely to feel they matter less than young children or mid-life adults. Regarding one particular role loss, retirement, they theorized, but did not test that a "problem of retirement is that one no longer matters; others no longer depend upon us…The reward of retirement [may] be the punishment of not mattering" (Rosenberg and McCullough 1981:179).

Although Rosenberg and McCullough made a claim that the old feel they matter less than the middle-aged, due to both lack of role occupancies like paid work and to cultural devaluation of the old, there has been little empirical research on age and mattering. This dissertation tests whether the oldest-old feel they matter less than the young-old. It also examines two mechanisms by which this may occur--due to fewer role occupancies and poorer physical health in the oldest group. It examines whether the relationship between role occupancies and physical health and mattering differs for women vs. men and for African-Americans vs. whites. The results extend Rosenberg's and McCullough's ideas about how self-concepts may diminish in late life.

There has been much work conducted on the self-concept of children, adolescents, and adults of various ages. However, less work has been conducted on the self-concept of older adults, specifically on the changes that may take place "within" what for many is a vast number of years as seniors. With Americans living longer and with a great deal of diversity within the older population, I examine what factors explain the diminishment of the self-concept among the oldest segments of adults. With a life course framework and theories of the self as its foundation, I examine older adults' sense of self (here measured by dependence mattering and importance mattering) as they experience aging, more frequent shifts in role occupancies, and changes in physical health.

Specifically, my research questions are:

1) How is aging related to sense of mattering for older adults?
   1a) Does role occupation explain this relationship?
   1b) Does physical health status explain this relationship?

2) Do key social statuses such as gender and race matter for understanding how role occupancies and physical health diminish the self in late life? i.e., do the ways by which role occupancies and physical health mediate the age/mattering relationship depend on gender or race?

I make several contributions to research on the self-concept of older adults. First, this work adds to the mattering literature, for little research has been conducted with this measure of the self-concept within an older population. Here, I look specifically at age within the 65 and older population, in order to understand self-concept differences by older age group. In addition, the research explicitly concentrates on role occupancies and physical health problems as mechanisms that act to diminish the self-concept. This work also adds to the growing social science literature that acknowledges and employs the life course perspective and theories of

the self. Though I use these perspectives to shape my analyses, this research is exploratory and therefore I do not explicitly aim for this work to be a theory-testing endeavor.

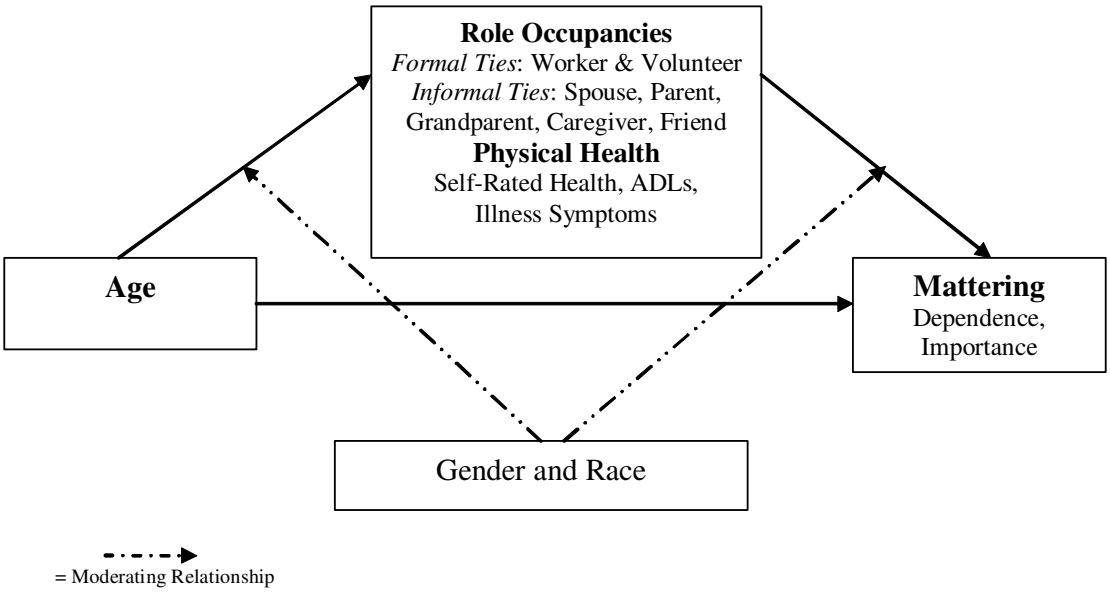
Figure 1.1 provides a conceptual model for this research. The focal relationship to be examined is between age, to the left, and the self-concept, as measured by dependence mattering and importance mattering to the right. Role occupancies as well as physical health status, as shown in the center of the model, suggest two explanations for the focal relationship. The model also suggests the moderating influence of race and gender on the relationships.

I choose roles as a means to capture interactional influences on the self-concept that may be altered in late life. Roles, for the most part, are either occupied or not occupied.[1] For example, at one point in time a person may occupy the marital role, and later, after the death of a spouse, that person has become a widow. To this end, role occupancy in this research is thought of as an "in" or "out" process, where one is holding a role or not holding that role. I conceive of physical health, differently. Some research suggests that health can be described in terms of a "healthy" or "sick" role (Parsons 1951; Petroni 1969). For the purposes of this research, I view physical health as outside of the role occupancy explanation, because there are no direct role partners to speak of in regard to one's physical health, unlike the roles of friend, worker, volunteer, etc. I use health status as mediating variables in

[1] The friendship role is an exception, as I assess contact with friends as a measure of role occupancy. It would be inappropriate to say that someone is a friend or is not a friend in the way that a person is a parent or is not a parent because almost everyone has at least one friend; the issue becomes the quantity (and quality) of friendships. Moreover, role occupancies or exits are not always easily defined, but for analytic purposes I draw a distinction between occupying a role and not occupying a role.

the service of better understanding the self-concept in late life. I therefore do not assess health outcomes, as the self-concept is my outcome of interest.[2]

Figure 1.1. Model of Linkages between Age and Sense of Mattering: Late Life Experiential Roles & Health



Chapter two, the literature review, is divided into three main sections (a, b & c). The first section (a) addresses what we know about aging and the self. The second section (b) assesses what social psychological theories posit about mechanisms through which aging would diminish the self, with two potential explanations for this diminishment (i.e., role occupancy and physical health status) discussed. The third section (c) reviews sociodemographic characteristics as possible moderating variables (i.e. race and gender), specifically, as moderating the meditation process.

[2] It is reasonable to assume that one's physical health is associated with their ability to occupy certain roles. For example, a physical disability may interfere with one's ability to hold a manual labor job. However, I do not explicitly examine the relationship between these in this dissertation.

Section (a1) is an overview of the self-concept. The aim of this section is to situate mattering, self-esteem, and mastery as part of the self-concept, with particular emphasis on mattering. Here I also distinguish between the different sub-dimensions of this construct (i.e., dependence and importance mattering). These sub-dimensions will be used in laying out the analyses. The next section (a2) deals with social relationships and mattering and discusses how mattering can be distinguished from the concept of social support. The third section (a3) reviews prior research on mattering and discusses how aging relates to the self-concept. After the examination of mattering and the other aspects of the self-concept, I turn to section b.

Section (b1) discusses life course theory and social psychological theories as background informing the relationship between age and the diminishment of the self-concept. Section (b2) deals with explanation *one* for the relationship between aging and the self, specifically, how *role occupancy* (e.g. work role, volunteer role, marital, parent role, grandparent role, caregiving role, and friendship role) relates to the diminishment of the self-concept. Section (b3) discusses explanation *two*, or how *physical health* may affect mattering.

Section (c) focuses on race and gender as moderating-mediators of the relationship between age and the self-concept. Here we see how the role occupancies and physical health (i.e., formal and informal roles) and their connection to the self-concept are not uniform across social status and how some roles held help explain the age/self-concept relationship for whites but not African-Americans; for men but not women.

Chapter 2: Literature Review

The Self-Concept: Mastery, Self-Esteem and Mattering (a1)

What is the relationship between aging and the self? To start, I review knowledge about the self-concept, detailing the parts of the self, and then I discuss how aging relates to the self-concept.

The self-concept is the "totality of [an] individual's thoughts and feelings with reference to himself as an object" (Rosenberg 1979:xi). The sense of self or the self-concept is determined fundamentally by social forces (Cooley 1909: Mead 1934). Rosenberg claimed that “although the individual's view of himself may be internal, what he sees and feels when he thinks of himself is largely the product of social life” (Rosenberg 1992). Therefore, while self-assessment suggests a very personal experience, much if not all of the self-concept is formed with reference to persons outside of one’s own individual experience; it is socially constructed.

The self has been described in great detail (Gecas and Burke 1995; Burke, Owens, Serpe and Thoits 2003; Rosenberg 1979; Franks and Gecas 1992), I am focusing here on the evaluative portion of the self. Self-esteem is frequently equated with the evaluative part of the self-concept (Gecas 1989; Gecas and Seff 1990), but there are two additional evaluative dimensions: mattering and mastery, all three components are important pieces of the evaluative self-concept (Rohall, Milkie, and Lucas 2007). From this point forward, I will refer to the evaluative self-concept simply as the self-concept.

While it is interesting to examine the relationship of age to all three components of the self-concept, here I focus on mattering in order to provide a more

nuanced understanding of the interactional self-concept.[3] Role occupancy and social networks imply interaction; to this end, the addition of mattering to a study of older adults is necessary in order to better understand the overall self-concept.[4]

To follow are very brief overviews of the two most frequently studied dimensions of the self-concept; mastery and self-esteem. These dimensions have been regularly examined within a sociological context (e.g. Rosenberg 1979; Gecas and Seff 1990; Schieman, Pudrovska, and Milkie 2005). Beyond these overviews is an in-depth account of the relatively new concept of mattering, the focus of my research.

Mastery and Self-Esteem

Mastery refers to an individual's understanding of his or her ability to control the forces that affect his or her life (Pearlin and Schooler 1978; Pearlin, Menaghan, Lieberman, and Mullan 1981; Pearlin 1999). Mastery is similar to both self-efficacy and locus of control, in that it is concerned with personal control, however, it is different from locus of control because of its more limited focus on the control of conditions that individuals regard as affecting their own personal lives, not on all environmental conditions (Pearlin and Pioli 2003). Mastery is usually incorporated into a stress process model (Pearlin et al. 1981), where it is treated as a condition that can directly affect health outcomes and it can stand as a resource that functions to

[3] A glossary of self-concept terms can be found at the end of this dissertation.

[4] Mattering, self-esteem, and mastery as three measures of the self-concept provide three locations upon which the self can be assessed. Each dimension may be more or less sensitive to the aging processes as well as race and gender contingencies. For example, mattering may be more sensitive to changes in roles, for roles are related to interaction with others, where perhaps mastery may more aptly capture changes related to physical health, where control over one's body, or one's health, may be closely related to this aspect of the self-concept.

moderate the impact of stressful experiences on mental health outcomes (Pearlin and Pioli 2003).

Self-esteem is another component of the self-concept; it can be described as how much a person likes, accepts, and respects himself overall as a person (Gecas and Seff 1990), or, it can be conceptualized as a function of the discrepancy between one's aspirations and achievements (James 1890). Rosenberg defines it as, "the individual's global positive or negative attitude toward himself as an object" (Rosenberg and McCullough 1981). Many social psychological terms have been used to address the concept of esteem: 'self-regard', 'self-worth', 'self-evaluation', and so on. It has been described as an understanding of one's *quality* as an object – that is, how good or bad, valuable or worthless, positive or negative, or superior or inferior one is. Self-esteem may be global ("I am a good person") or domain specific ("I am a pretty good teacher") (Thoits 1999:347). Although both mastery and self-esteem have a relatively long history in social psychology research, mattering does not.

Mattering

Mattering is the extent to which we feel we make a difference in the world and to the people around us (Elliott, Kao, and Grant 2004). Mattering may be the most socially driven assessment of the self-concept, and its benefit above and beyond the study of mastery and esteem is its ability to capture one's self-assessment based on how essential they feel they are to others. Mattering stands as a construct apart from esteem and mastery (Marshall 2001).

Mattering is an understudied concept, in part due to its relatively recent conceptualization. Rosenberg and McCullough (1981), originally defined it as the

feeling that others depend upon us, are interested in us, are concerned with our fate, or experience us as an ego-extension.

Roles are inherently social and relational, as a role cannot be held in the absence of other people. Mattering then is an important research companion to the study of role occupancy for it reflects others most directly into the self – it is a most interactional and interconnected part of the self-concept. It provides more information about the way in which roles impact the self than do other dimensions of the self-concept. By nature, mattering stems from social experience.

Mattering measures the degree to which a person feels in particular ways that he or she is connected to others. Mattering is not a one-dimensional construct. As initially conceived by Rosenberg and McCullough (1981), there are three dimensions of mattering: 1) attention, 2) importance and 3) dependence mattering.[5] However, they were not able to directly measure mattering in their original chapter, and were at the beginning stages of developing the mattering construct when their work was published. At that time there was no scale used to measure the construct that was published only as a developing framework. Their research strategy was to employ theoretical replication; they used diverse measures of similar concepts from different samples. In their work they used four samples of adolescents; one was a nationwide sample, one from Baltimore, one from New York, and one from East Chicago. Theoretical replication addresses how diverse data bear on a common theoretical proposition. Their efforts were exploratory and introductory in nature. Rosenberg and McCullough left open the opportunity to think critically on their conception of

[5] A fourth dimension, ego-extension, is difficult to operationalize and is often incorporated into other dimensions in empirical research. It will not explicitly be addressed here.

mattering. As well, they left open the possibility for exploration of their scale, rather, the continued development of their construct.

Three Types of Mattering. Rosenberg and McCullough detailed three parts of the construct of mattering. The first, attention mattering, is the most elementary form of mattering. It is the feeling that one commands the interest or notice of another person, suggesting, for example, that the only prospect more bleak than dying unmourned, is to die unnoticed. For one's greatest fear is not suffering, but in fact, the sense that he is no longer of interest to others, that he is not an object of their concern (Rosenberg and McCullough 1981). Attention mattering is likely related to a second dimension of mattering, that of importance; for one cannot be important without being the object of another's attention.

In its second dimension, mattering is expressed in the feeling that we are important to another person or are objects of their concern (Rosenberg and McCullough 1981). The belief that another person cares about what we want, think, and do, or is concerned with our fate – this is to matter. A sure sign of importance is whether we are someone's ego-extension, perhaps constituting a part of that person.

To be important, to matter, is independent of approval. That another person persists in criticizing us does not mean that we do not matter; on the contrary, it may be precisely because we matter so much that she is intent on pointing out our faults. A child recognizes that he is important to a parent whether he is reprimanded for bad grades or praised for a stellar report card. Positive or negative, he knows he is important to his parents.

The third dimension, dependence mattering, suggests that our behavior is influenced by our dependence on other people. This is understandable, as most of our needs are satisfied by other human beings. More puzzling is why our actions are similarly governed by their *dependence* on us (Rosenberg and McCullough 1981). The parent who puts dinner on the table is driven by the pressure and the pleasure that others are dependent on him/her.

Dependence mattering suggests social obligation and a powerful source of social integration. We are bound to society not only by virtue of our dependence on others but by their dependence on us. Part of Durkheim's (1857-1951) explanation for the lower rate of suicide among married men and women, especially those with children, rested on this foundation. He pointed out that if suicide were due to stresses and burdens, then married people with children should commit suicide more than single people, as single people are relatively free of obligations. The fact that married people with children had lower suicide rates suggested that it was not simply the individual's dependence on others but also their dependence on him that served as an insulator against suicide (Rosenberg and McCullough 1981).

Dependence mattering appears analytically useful, but, a shortcoming of the original work was the absence of a tested measure of dependence mattering. The concept of dependence mattering may be a bit elusive. I suggest that a shorthand way for understanding and recalling the concept of dependence mattering is to imagine that our psychological well-being[6] suffers when we perceive that no one depends on

[6] I refer to psychological well-being as well as overall well-being throughout this work. "The general quality of *[psychological] well-being* refers to optimal psychological functioning and experience" (Springer and Hauser 2006). I refer to *overall well-being* as a means to capture a more comprehensive

us for their psychological, physical, financial and/or social well-being. We may be dependent on others and others may depend on us. My research focuses on and measures the perception that others *depend on us* or *need us*. This dependence or need may manifest as advice seeking, it can mean that someone counts on us when they are feeling down or that someone tells us things that they don't tell others. Also, others may depend on and call on us to understand what they are going through.

I explore these two sub-dimensions of mattering: *dependence* mattering and *importance* mattering.[7] These different dimensions of mattering may touch upon opportunities to matter in different ways over the late life course (e.g. reporting high levels of importance mattering during later life).

Social Relationships and Mattering (a2)

Within the vast literatures on human relationships and social affiliation it is evident that integration and connection to others is vital for the development and maintenance of a healthy sense of self and, therefore, positive mental health. Perceptions of significance of the self arise from social exchanges that promote a sense of belonging, identity, and commitment (Schieman and Taylor 2001). Sociologists know that it is within exchange and interaction that individuals feel support, love, affection, care, and meaning. Not surprisingly, the study of social support is closely tied to these concepts. Social support, according to its most frequently cited definition, is the information that leads a person to believe that he or she is loved and wanted, valued and esteemed, and integrated into a network of

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assessment of function or dysfunction. Therefore, overall well-being is meant to include psychological, financial, physical, and social well-being.

[7] This dissertation does not explicitly measure attention mattering.

communication and mutual obligation (Cobb 1976). Much research indicates that receiving social support is a key determinant of successful aging, and a vehicle for overall well-being (Rowe and Kahn 1998; Krause 2001). The protective aspects of social support likely reside in emotional bonds linking donor to recipient (Taylor and Turner 2001). How then is mattering, as the main interest of this work, different from social support?

Mattering is what makes social support work. The sense of mattering, as is the case for other parts of the self-concept, is experienced within an individual; it is a personal resource. However, mattering is the way in which social interaction is *translated* into the self-concept. Persons with a sense of mattering perceive they are relevant in the lives of other people (Schieman and Taylor 2001). It is this perception of the connection to others that protects one's mental health, decreasing depression and anxiety. It can buffer against a sense of anomie, connecting the outside world to an individual's sense of self. Individuals need to feel that their well-being matters to others and that the well-being of others is important to them.

The examination of additional mechanisms by which social relations influence psychological well-being may be important because of the potential for enhancing our understanding of the context and meaning of social support. That is, explication of such mechanisms – here mattering – may aid our understanding of what it is about social support that is protective (Taylor and Turner 2001). Moreover, social support in the absence of mattering may actually be detrimental to well-being (Elliott, Colangelo, and Gelles 2005); this suggests the need for continued work to better understand mattering.

Past Work on Mattering: Contributions and Limitations (a3)

Past research on mattering is best reviewed by looking first at previous empirical findings as they relate to my current research, and second, by reviewing limitations or concerns about mattering research that have emerged throughout earlier scholarship.

Relevant Findings. Previous studies have looked at the relationship between mattering and mental health and a cluster of earlier work has shown a connection between these variables (Pearlin and LeBlanc 2001; Whiting 1982; Schieman and Taylor 2001). For example, it has been found that the experience of mattering to others is inversely related to depressive symptomatology (Taylor and Turner 2001). Mattering has also been shown to relate to suicidal ideation in teenagers, where higher levels of mattering as expressed through intervening variables, are related to lower levels of suicidal ideation (Elliott et al. 2005). Additionally, in a study of caregivers to Alzheimer sufferers, the loss of a sense of mattering was found to be associated with depression (Pearlin and LeBlanc 2001).

Much research suggests a relationship between the self-concept and mental health. My focus is on an in-depth account of how mattering, as a measure of the self-concept, may decline with age; a focal relationship that Rosenberg and McCullough hinted at in their original conceptualization. I do not empirically test the linkage between mattering and mental health (e.g., depression, anxiety, or suicidal ideation) as it is beyond the scope of this dissertation.

Along with its association with mental health, mattering has been shown to be related to various social statuses, and has on a few occasions been examined along

with the contexts of such statuses. Gender, marital status, work status (and job autonomy), educational attainment and age have all been linked to mattering. Age is negatively related to mattering for young adults and middle-aged adults (Elliott 2002; Schieman and Taylor 2001; Elliott et al. 2005). After controls are included, women report higher levels of mattering than men. Along with gender, other research suggests that married persons, the highly educated, and those currently working, report higher levels of mattering than their peers.[8] In addition, Schieman and Taylor (2001) find that having children and holding jobs with more autonomy enriches mattering. They also find a positive relationship between age and job autonomy and suggest that this may suppress the negative relationship between age and sense of mattering. This last point is of interest in this dissertation, for older persons who work may benefit from this role occupancy.

Limitations. Previous research on mattering is limited in several ways: because of problematic measurement issues; by largely utilizing data with restricted sample sizes and sample compositions; and by its lack of attention to role occupancy and physical health as linked to mattering. To follow, I discuss each of these limitations.

Past research has used truncated measures of mattering.[9] Some work has only used one question to assess dependence mattering or none at all. Some early work on adolescents assessed mattering in the context of schools, assessing parent, teacher, and friend mattering but these measures do not easily translate to the investigation of older adults. Other work looked specifically at the loss of mattering (Pearlin and

[8] It should be noted that research on the working population has not examined older adults.
[9] For scales used in previous research and scale wording, see Appendix I.

LeBlanc 2001). Elliott (2002), Taylor and Turner (2001), and Schieman and Taylor (2001) combine importance and dependence measures to make a general mattering scale, making their research on mattering more comprehensive than others, however, they too are not able to look at older adults, and they include only a 1-item measure of dependence mattering, where I am able to employ a 4-item measure of dependence mattering. A 4-item measure of importance mattering is also included in my work, and the decision to treat each measure (e.g. importance and dependence) as a separate entity makes possible separate analyses that may lead to a better understanding of the diversity of self-concepts in older adults along many dimensions, including race and gender.

Beyond sociology over the past few years, there has been a rise in research on mattering. This work has focused largely on scale and measurement development and application of mattering scales in applied settings, such as high schools and colleges (Mak and Marshall 2004; Marshall 2001; DeForge and Barclay 1997; Elliott et al. 2004). This is in response to the fact that while mattering to others has been described as important for psychosocial well-being, little attention has been given to the empirical study, measurement, and evaluation of this construct (Marshall 2001). Research on mattering is in its early stages when compared to the decades of scholarship on other parts of the self-concept, (especially self-esteem), and therefore focus on scale construction or variable measurement is necessary.

A more comprehensive assessment of mattering relative to most other work is used in this research. I aim to employ measurements of mattering that are closely aligned with its original conception. However, it should be noted that recent work by

Elliott (2004; 2005) speaks to the different ways that the construct of mattering can be assessed and has made great strides in re-conceiving of the construct of mattering for adolescents and adults, but does not include older adults. In some work Elliott finds that self-esteem and depression act as mediators of the relationship between mattering and suicidal ideation in teens (Elliott et al. 2005). He finds that mattering influences levels of self-esteem, which in turn influence depression, which ultimately leads to suicidal ideation. Notable are the differences that this research offers in regard to the measurement of mattering when compared to earlier research.

Despite the consistency of results on the mattering / psychological well-being relationship found in previous research, the small samples involved in some prior work and the fact that study participants have typically been drawn from special populations (e.g., students and caregivers to Alzheimer sufferers) raises the question of generalizability, and the significance of mattering for the general population remains to be meaningfully evaluated.

As mentioned above, the loss of mattering in Alzheimer's' caregivers has been studied, but research including a more representative group of seniors has to date not been published. Elliott (2002), Taylor and Turner (2001), and Schieman and Taylor (2001) have completed rich work on mattering, but the sample used in their research examined adults 18-55 residing in Toronto, Canada. They were not able to assess the unique situation of older adults, where many role transitions occur. In addition, their sample lacked racial diversity.

Past work has dealt with role occupancy, but it has been limited. Schieman and Taylor (2001) looked at family and work roles, but they did not explicitly look at

the role of volunteer, caregiver, spouse, parent, or grandparent as are addressed in this research. None of the prior research explicitly addresses physical health measures as they might relate to sense of mattering. This may be due in part to the fact that earlier work did not include an older population where physical health decline is more frequent or more apparent than in younger populations.

The Study of Mattering in an Older Population

The first research question I address concerns the relationship between age and mattering and specifically, whether the sense of mattering diminishes in late life. This is in contrast to previous work which has focused largely on adolescents, college students, and mid-life adults. Rosenberg and McCullough (1981) suggested that adolescents and older adults are fitting groups to study when examining mattering, as they are likely to feel they matter less than young children or mid-life adults. They called specifically for the study of adolescents and older adults suggesting that members of each of these groups are apt to question their sense of mattering in a world that privileges adults and young children; not the adolescent nor the older adult. Ostensibly, mid-life adults have control and power within society, as well; young children feel they reside at the very center of the universe. Both of these groups are likely to report high levels of mattering (Pearlin and LeBlanc 2001). It is then a natural extension of previous work to study older adults, as mattering research in a population of older adults, other than caregivers to Alzheimer sufferers, has not been published.

Mattering taps the psychological aspect of integration (Durkheim 1857-1951) and well-being. We know that integration is related to mental health (Moren-Cross

and Lin 2006). It has been suggested that older adults have less opportunity for social integration. Thus, older adults likely find less opportunity for mattering than other adults and, older adults may experience mattering under different role conditions than children, adolescents, young and mid-life adults. Moreover, they may report feelings of mattering based on different dimensions of mattering than other adults. Here I examine age differences in mattering by comparing the young-old (65-74) with the old (75-84) and the oldest-old (85+) to capture what are often significant exits from major social roles and declines in physical health. Technically I do not measure diminishment over time in a panel of older adults; I speak to this limitation in the discussion.

The dimensions of mattering that are of greatest consequence may vary over the life course. Though I cannot compare differences in mattering between middle-aged and older adults, an illustrative example is worthwhile: a mid-life adult may be more likely than an older adult to garner a sense mattering from those *dependent* on her, while an older adult might report high levels of mattering based on the *importance* she feels in the eyes of a significant other. For example, a mid-life parent likely has young children that are dependent on her. An older adult would have less opportunity for such a relationship. However, an older adult may have a sense of self importance based on years of experience, and may happily convey her wisdom to younger adults and grandchildren. This is in alignment with research that has found that with age there is an increase in the amount of instrumental support people receive with a simultaneous increase in the amount of emotional support given (Moren-Cross and Lin 2006). It is thus plausible that the underdeveloped construct of mattering

may help us to better understand the lives of older adults and the various ways self-concepts may change across the late life course.

Aging and the Self-Concept

Aging and Self-Esteem

The relationship between age and self-esteem has been examined more than the relationship between age and mattering, though it is somewhat limited. The exclusion of persons aged 65 and older is characteristic of almost all work on self-esteem. Only a few cross-sectional studies have explored the relationship between age and self-esteem into old age, and these studies have produced mixed results (Dietz 1996; McMullin and Cairney 2004; Giarrusso et al. 2001; Fuller-Thomson, Miller and Driver 2005). Some work suggests that older adults on average have very good self-esteem; here self-esteem can be maintained, and even enhanced, in the face of role transitions, supporting the maturational perspective on the aging self (Dietz 1996; Minkler, Fuller-Thomson, Miller and Driver 2005). It argues that the process of social comparisons is not as salient in later life because at this stage individuals develop "ego integrity" and a general acceptance of their life's accomplishments (Dietz 1996; McMullin and Cairney 2004). Other research finds that older adults have worse self-esteem as compared to adults of younger age groups (McMullin and Cairney 2004; Schieman and Campbell 2001). Role perspectives have also been used to explain the relationship between aging and self-esteem. According to role perspectives, the loss of social roles that is associated with old age will result in lower levels of self-esteem. Thus, the role perspective argues that as people retire and

disengage from active parenting, their self-esteem will suffer (Dietz 1996). Clearly, researchers have not found a uniform relationship between age and self-esteem.

Aging and Mastery

Schieman (2001) and Mirowsky (1995) make great strides at unpacking the relationship between age and mastery or control. While their work looks at age and control across the life course, with Schieman's sample ranging from ages 18 to 89 and Mirowsky's ranges from "under 30" to 80+, their emphasis is on the senior population. Mirowsky (1995) and Schieman (2001) report that age patterns in education, with education being strongly tied to cohort, and physical impairment account for part of the lower sense of control among older adults – although a large percentage of this relationship remains unexplained. Schieman and Campbell (2001) do account for more than education and physical health in their exploration of the age/control relationship. What other factors account for the unexplained portion of the age-mastery association? Schieman and Campbell (2001) suggest that future work is needed to better understand the relationship between aging, mastery, and health. They put forth several possibilities, including the sense of being dependent on others and participation in community involvement. My research addresses these points and may help to fill in some of the gaps in the age/self-concept relationship, with the self-concept measured by sense of mattering.

Aging and Mattering

There has been little study of how age is related to sense of mattering, yet roles that individuals hold vary by age, and with this variation may come an increase

or decrease in opportunities for mattering. Initial work on mattering looked at those of younger ages: adolescents. Today, work on adolescents and mattering is largely done outside of sociology (Mak and Marshall 2004). Some of this work looks at the sense of mattering relative to one's role as a boyfriend or girlfriend or intimate partner. Later in the life course, we may be interested in different types of interaction or qualitatively different types of romantic or intimate relationships that involve spouse or lifelong partners. Martial status generally, and widowhood specifically, may be critical in predicting the self-concept of older adults. Moreover, these intimate relationships in late life may overlap with the role of caregiver or care recipient; the role of caregiver providing opportunities for mattering.

Late life should be recognized as a critical phase of the life course. Though diverse, the 65+ age group will likely have in common a number of unique possibilities for, or changes in, the sense of mattering.

Differences are likely to exist within the population of seniors. The image of 65+ adults as a monolithic group is dated, if it was ever true. Aging research frequently finds that variability among older people is not only great but is often greater than that which exists in other age groups (Settersten 2006; Ferraro 2001). In time, we may find even greater diversity within the 65 and older community. Diversity exists among myriad dimensions: health status, work and family statuses, social interests, race, gender, economic security, hobbies, attitude, among others.

Potentially important, distinct from actual chronological age, is the concept of cohort. Regarding the adults in this study, some were born well in advance of the Great Depression, others, later. The Great Depression, as is commonly mentioned in

social science research (Elder 1999), is but one example of how one's cohort and the related historical milieu of one's growing up plays a large role in their experiences, no less as they move beyond age 65. The cohorts from which older adults come may be correlated with their self-concepts. For example, the level of educational attainment will likely vary by cohort and has been shown to relate to some parts of the self-concept. A continued challenge in any life course work is the disentangling of age effects and cohort effects, especially when examining older adults. Aging effects refer to biographical time (i.e., the influence of maturation or biological aging). Cohort effects refer to social time (i.e., groups born during a particular period of history who share common events) (Giarrusso et al. 2001). I acknowledge that the work I am doing here cannot adequately tease apart aging effects and cohort effects, but it can lend insight into the characteristics and experiences of its respondents who range from 65 years to 101 years old in the early part of the twenty-first century, and make carefully specified predictions about what we learn in this research that may inform future life course work. Aging versus cohort effects will be discussed in the results and conclusions of this research.

In sum, a review of the literature shows diversity in the relationship between age and the self-concept, depending upon which measure is explored; even within measure, there is variation. Self-esteem has been shown to decline, remain stable, and even improve for older adults where work on mastery in older adults has shown a decline in mastery with age. Most importantly, I extend the literature with research on the relationship between aging and mattering. In order to detail the relationship between age and mattering, I put forward two possible explanations or mechanisms

and they are framed as sub-questions under my first research question. Before moving to an empirical review of the literature that lead to these explanations, I review what social psychological theory says about why aging would diminish the self. Additionally, I review scholarship which asks how role occupancies and physical health mediate the relationship between aging and the self.

Social Psychological Perspectives: Aging & the Diminishment of the Self (b1)

What is the theoretical importance of the self-concept? Although there has been much work on the self and the self-concept, I suggest that "self-theories" can be framed within a life course perspective to help explicate the relationship between age and the self-concept. These perspectives speak to the continuity and change in the self over the life course from a sociological perspective. I begin with an overview of the life course perspective.

A life course perspective can guide sociological inquiry, promoting the holistic and contextual understanding of lives over time and across changing social contexts (Elder, Johnson, and Crosnoe 2003). George (2003) and Elder, Johnson & Crosnoe (2003) refer to three major aspects of the life course perspective as "the common denominator of the life-course perspective." First and most critical, the life course consists of long-term sequences of transitions and periods of stability that form distinctive trajectories. Second, the life course perspective focuses on the intersection of history and/or social conditions and personal biography. The third emphasizes linked lives (George 2003; Elder et al. 2003; Thornberry, Freeman-Gallant, Lizotte, Krohn and Smith 2003), which refers to the fact that human development takes place

in the context of interconnected social relationships and the shape of one's life course is influenced by the shape of the lives of others.

Drawing on the life course perspective, researchers have situated the processes by which social change influences and alters the developmental paths of the young, middle-aged adults, and rarely, older adults. It is important to study the oldest of our population with enthusiasm matching the energy that has been used to better understand the trajectories of young persons.

The life course can be viewed sociologically as the systematic movement in and out of social roles with age – a process which reflects a variable mixture of biological, cultural, historical, and interactional conditions (Wells and Stryker 1988). It reflects the consecutive choices made by persons as they make transitions between age linked categories. Self-theorists and the life course perspective view the operation of the self in terms of the interactional choices persons make as a consequence of their social roles and relationships. There are two specific ways that I aim to contribute to the life course perspective and self-theories.

First, it is important to look at late life through life course analysis, using a sociological and scientific lens. Outside of sociology, a great deal of both academic and non-academic work emphasizes "successful aging,"(Rowe and Kahn 1998; 2004) with gerontologists suggesting multiple definitions, among them "adding life to the years" (Havighurst 1961) and "getting satisfaction from life," others stating that successful aging "refers to reaching one's potential" (Gibson 1995). Successful aging research should focus on individual *and* social influences. I take a sociological approach that focuses on role occupancies as locations for formal and informal ties to

institutions, family, and friends, so that successful aging can be framed in terms of relationships to others and not just to the individual. Moreover, role occupancies, while influenced by one's own choices or agency, account for a certain portion of one's lived experience as placed within a larger social structure. The study of occupancy of social roles helps us link the personal to the collective and draw the successful aging literature closer to sociological goals that take into account the inclusion of structural factors, beyond individual experiences.

Second, I aim to extend life course analyses and self-theory in late life, to better understand the loss that is coming to the self within an older population. I include under the rubric of change or transitions, physical health changes, as somewhat unique to late life, and the consequences of such physical health change as important to the understanding and foundation of the self.

The development of the self-concept is not completely formed in earlier years and continues to grow in later years. However, it should be noted that the self-concept and overall well-being of a senior is linked, as the life course perspective would predict, to the formative years of the life course development. Comprehensive assessments of the self have not been examined as often in older adults as in other age groups. In sum, this research pushes the conceptual boundaries of the self-concept in the late years of life within a life course framework. It focuses on how the self weakens in late life, and why. It will contribute to knowledge about the inner lives of seniors in social contexts, and will help the research community better understand the growing population of senior citizens particularly as they are occupants of various roles.

Self Theories. My research is informed by social psychological views of the self; I use each theory to frame the examination of aging and the self-concept over the last part of the life course. Each of the following theories on the self brings with it ideas that are similar in nature, with each theory suggesting something slightly new in regard to the antecedents of the self.

There are many self theories, some originating out of a sociological tradition, others, psychology, and others out of gerontology. I use sociological theories in concert with the life course perspective as theoretical background to the study of the self in late life. I highlight and draw upon two uniquely sociological self-theories/perspectives: identity theory and structural role theory.

Structural Symbolic Interaction: Identity and Role Theory. Identity theory views the self in terms of interaction and choices made as consequences of roles and relationships. In this way, individual biographies will reflect general sequences of identity transitions (movement into and out of roles) and identity transformations (changes in the meaning and salience of ongoing role identities) over the life course (Wells and Stryker 1988).

From the standpoint of identity theory, structurally induced changes in social relationships must impact self. This in turn helps us to understand and to explain lines of action or trajectories taken by persons as they move through the life course (Wells and Stryker 1988). Identity theories have been woven into the life course perspective (Wells and Stryker 1988; Giarrusso, Mabry, and Bengston 2001). Since interactional networks shape commitments, life-course events that lead to role change or to changes in social relationships will have an effect on the salience of identities.

Simply put, life course events alter commitments which in turn may alter one's self-concept.

Identity theory predicts that the relationship between role occupancy or transition and well-being is less clear because an individual's interpretation of the meaning of their role decline is of importance. If roles and identities are salient to one's sense of self and a person perceives the quality of their performance in those salient roles to be competent (Krause 1994; Nuttbrock and Freudiger 1991; Stryker 1980; Stryker 1968), then loss of that role may be particularly difficult.

According to structural role theory, individuals are engaged in the process of role acquisition, role transition, and role loss throughout their entire life course (Giarrusso et al. 2001; Rosow 1974). Age-linked patterns in the self-concept may be importantly connected to the entry and exit of social roles, and role occupancy and role loss would then relate to the self-concept.

Structural role theorists would suggest that exits from roles are likely critical in the diminishment of the self. The death of a spouse (Thoits 1983b; Clayton, Halikas, and Maurice 1972), social "exits" (Paykel 1974) and significant role losses (Glassner, Haldipur, and Dessauersmith 1979; Bart 1974) are related to a decrease in health and well-being. Structural role theorists would predict that the lack of involvement in social roles would lead to a less positive self-concept in the later stages of life (Adelmann 1994; Giarrusso et al. 2001).[10]

[10] Gerontological theories (i.e. activity theory) would make predictions similar to structural role theory. However, a majority of research on these relationships has used a cross-sectional design (Giarrusso et al. 2001), thus the conclusions arrived at and discussed within the context of different theories need to be expanded and more fully explained by the use of longitudinal data.

Theoretical perspectives on the self suggest two avenues to explain the link between age and the diminishment of the self-concept. The *first* suggests that role occupancy or the absence of roles may lead to declines in the self-concept. The Structural Symbolic Interaction role perspective (Stryker 1980) argues that as people retire or leave certain roles, they disengage, and this disengagement or less frequent opportunity for integration may in part explain the negative relationship between age and the self-concept. Late life is a unique time within the life course, where many role exits take place, and fewer entries or ongoing occupancies.

Gerontological research in years past suggests that disengagement may be one's adaptation to the aging process, both as a person relates to themselves and how they interact with their environment and the reaction of that environment toward that older person (Cumming and Henry 1961). Here, disengagement meant a retreating from contact with other people. The negative assumptions about disengagement began to wane with newer more comprehensive studies of older adults. Because of this, the negative connotation of a general withdrawal from others has dissipated, to a degree. However, it is still feasible that there may be harm to the self as older adults age and move away from prior roles, especially if they are not supplemented by new roles or other means toward good health and psychological well-being. If as Rosenberg suggests, the self is socially driven, then decreased amounts of interaction may mean fewer chances to engage with others who might reflect back to us who we are. Particularly, the lack of role engagement may mean greater difficulty in feeling a sense of mattering. I look to role occupancies to gain purchase on relationships or social interactions that may help explain the decline in self-concept of older adults.

The *second* explanation speaks to the potential connection between physical health status in older adults and the diminishment of the self-concept. I suggest that the life course perspective should actively take up the study of physical health as it is related to one's self-concept and overall well-being as one ages.

Role Occupancy as an Explanation for Decline in Self (b2)

The occupancy of roles is dictated in large measure by the position of an individual on their own life course trajectory. Roles can be defined as the behavioral expectations associated with a "position" and are frequently used interchangeably with the concept of identities (e.g. "grandmother," "worker," "peacemaker") (Gecas 1982; Jackson 1997). Role occupancy plays a critical part in the understanding and orchestration of one's life course. The life course perspective argues that transitions are both normative and consequential to well-being (Reitzes, Mutran, and Fernandez 1994; Giarrusso et al. 2001).

As previously stated, structural symbolic interaction role theorists predict that the lack of involvement in social roles would lead to more negative self-concept in late life. Identity theory predicts that the relationship between role transitions and well-being is less clear because an individual's interpretation of the meaning of their role-decline is of importance.

Role identities are protective because they make life purposeful (Thoits 1983a). Individuals who enact social roles are exposed to various actors who engage them in the type of social interaction that is vital for development. Socially, interacting with others allows the individual to take the role of the other and teaches

the individual appropriate conduct. Within these processes, the individual becomes a part of the ongoing relationships that define society (Jackson 1997).

This positive estimation of role engagement is widely held. However, some researchers have argued that social roles are not in themselves beneficial or detrimental to well-being; the context and quality within which roles are enacted determines whether roles are positive or negative for well-being (Wheaton 1990; Rushing, Ritter, and Burton 1992). For the self, being engaged in major roles in social life helps to ensure that one is thought of or depended on by others (i.e. one matters).

Role Occupancies as Formal and Informal Ties. The roles that individuals occupy can provide a sense of purpose and intention; as well, they may function to explicitly allow for social connections with significant others. I suggest that it is helpful to categorize role occupancies according to the ties they provide to other individuals and society at large. To follow, I discuss how *formal ties* vs. *informal ties* as measured through role occupancies are related to sense of mattering. The characteristics of role occupancies are discussed to better understand the sense of mattering in late life as these roles serve as formal and informal ties to other persons and institutions.

I suggest two pathways to mattering through role occupancies. Specifically, in older adults, I suggest that 1) a sense of productivity and 2) a sense of connection to significant others will be linked to sense of mattering. Below, I focus on formal ties (i.e. work and volunteer roles) as a location for productivity and informal ties (i.e.

marital, parent, grandparent, caregiver and friend roles) as a means to mattering through social connections.

Formal ties to the public sector allow individuals to experience a sense of productivity. Such formal roles may provide purpose and intention in one's life and may be associated with sense of mattering. Two means to such ties are the work role and volunteer role.

Rosenberg and McCullough (1981) suggest that the absence of the work role, especially retirement, may mean a lower sense of mattering. A productive role (i.e. work or volunteer role) may provide intention and purpose in one's life that they recognize on an individual level and may also be validated by society. To this end, research suggests that compared to full-time workers, the retired report worse self-concept (i.e. mastery and self-esteem) (Reitzes and Mutran 2006; Ross and Drentea 1998). Since older adults may lack formal roles and statuses within the main institutions of society, it may be difficult for them to maintain positive self-evaluations (Reitzes and Verrill 1995). The sense of productivity that may help individuals to feel personally validated may decline in the absence of such roles. Additionally, society often looks at seniors as less productive members in society than other adults, occupancy of such roles may help others to see older adults as useful. It follows that one's sense of being less than a productive member of society would be associated with a decline in mattering.

The sense of meaning or purpose that accompanies the work or volunteer role may lead to sense of mattering. Having somewhere to go or something to do on a daily or predictable basis would maintain one's sense of mattering. Moreover,

acquisition of the volunteer role may make it possible for an individual to feel as though they are a productive member of society and again, may be positively related to sense of mattering. Though payment does not accompany volunteer work, volunteering likely possesses similar characteristics to paid work such as a keeping a schedule, focusing on goals, and collaborating with others, and can be viewed as a productive role.

Literature shows a correlation between volunteering and health among older adults. Research has shown the benefits of volunteering for volunteers as well as those who are in receipt of volunteer services, both individuals and organizations (Wilson and Simson 2006; Morrow-Howell, Hinterlong, Sherraden Tang and Rozario, 2003; Grossman and Tierney 1998). It has been found that mentoring experiences allow opportunities for older adults to renew positive emotions and reinforce meaning in their lives (Larkin, Sadler, and Mahler 2005).

Though the research base is still relatively small, there is evidence that volunteering fosters psychological well-being. This is reported in three longitudinal studies of individuals traversing the life course (Morrow-Howell, Hinterling, Rozario, & Tang, 2003; Rozario, Morrow-Howell, & Hinterling, 2004; Van Willigen, 2000). It has been found that volunteering yields greater benefits for older than middle-age adults (Binstock and George 2006). From a role enhancement perspective, those older adults who volunteer are more likely to have greater resources, a larger social network, more power and more prestige than their peers, which may lead to better physical and mental health (Lum and Lightfoot 2005; Moen, Dempster-McClain, and Williams Jr. 1992).

In addition to roles that allow for formal ties or the connection to institutions that are more formal in nature, there are a host of informal ties that can be expressed through a variety of role occupancies such as family roles (i.e., marital, parent and grandparent), caregiver, and friend roles. Such roles can provide social connections to important significant others and may overtly provide a sense of belonging and a sense of mattering, additionally, such informal ties can provide opportunities for others to depend on older adults and provide spaces for one to feel important.

According to activity theory and structural role theory, social interaction is important to the maintenance of the self-concept (Lemon, Palisis, and Bennett-Sandler 1972). For example, the spousal role, perhaps more than any other, provides interaction and connection with a significant other. Here a spouse has the opportunity for feelings of importance and dependence relative to a significant other, both means to mattering. If greater sense of mattering is derived from such a role, then its absence will likely decrease the sense of mattering. Married respondents report significantly higher levels of mattering when compared to the currently single (Taylor and Turner 2001). The loss of such a role, or widowhood, especially the time just after the actual event of the death of a spouse, very likely has an impact on one's sense of self.

The parent role is another family tie likely linked to mattering. There is a great amount of literature on how parents impact the self-concept of their children (Maldonado 2002; McClun and Merrell 1998), and even how parental death impacts their children's well-being (Umberson and Chen 1994), but there has been little research on how having children may improve adults' lives (Milkie and Nomaguchi

2003). It is likely that the parental role had great impact on the self-concept of a parent when parenting was new and for many years into a child's life course. For older adults, the role of parent has been theirs for some time and the meaning of that role may have changed over time. That said, parenting never truly ends as long as one's child is living, though the degree to which the parental role is salient to the occupier may change. However, in assessing role occupancy of older adults, the parenting role is likely to be very important for self-concepts (Krause 1994), particularly as measured by dependence and importance mattering.

The grandparent role and the timing of the transition to grandparenthood plays a part in this assessment of self (Kaufman and Elder 2003). The grandparent identity may encourage psychological well-being (Reitzes and Mutran 2004) and this may be how the grandparent role is implicated in the measure of one's self-concept. The grandparent, as an informal or familial role, often leads to interaction and connection with not only grandchildren, but adult children. Greater opportunities for interaction with family may provide chances for increased sense of importance and dependence mattering. These opportunities to matter are likely made available by the need for babysitting or assistance with time demands that come with the introduction of children into a family network.

Another informal tie comes in the form of the caregiver role. Caregiving here is defined as the care of a spouse, family member, or loved one in need of ongoing assistance because of illness or disability. The care of a loved one may, along with its potential stresses, provide opportunities for mattering. The positive and negative consequences of caregiving may mean a positive or negative relationship between

caregiving and mattering. It is plausible that sense of mattering may be high for those who are providing care. Some research has shown that the loss of a caregiver role is related to a decline in mattering (Pearlin and LeBlanc 2001).[11]

Beyond family and caregiver roles, another informal tie is formed through the friendship role. Contact with family members via marriage and caregiving is important for health, so too are the connections forged through friendship. Across the life course the role of friend is consequential for well-being (Matt and Dean 1993). Being a part of a social network or having friends to turn to for social occasions and support is of great importance.

Older adults have less social contact compared to younger adults (e.g., Cue, Holstein, Lund, Modvig, and Avlund, 1999; van Tilburg 1998), and yet these relationships, for many, remain rich and fulfilling. Being a part of a social network aids in positive well-being, though there are questions about how the network and support is useful and how to measure its utility. As people age, there is a general receding from frequent contact with friends. This is potentially because of transportation issues, physical difficulties, and the loss of friends to death, relocation, or infirmity.

[11] Notably, previous research suggests that caregiving, particularly great amounts of caregiving, is related to lowering levels of mastery (Pearlin and LeBlanc 2001). Engaging in the care of a family member or friend may be financially, emotionally, and physically taxing (Horwitz and Reinhard 1995; Pruchno and McKenney 2002). "Caregiver burden," a form of negative appraisal of current and future ability to cope with care demands, may prove problematic for the self-concept and overall well-being of a caregiver (O'Rourke and Tuokko 2004). This burden may become overwhelming, and while it is clear that adult day care and respite care can reduce the burden experienced by caregivers (Zarit, Stephens, Townsend, and Greene 1998), these and other resources are not available to all. Therefore it is possible that different components of the self-concept (i.e. importance mattering, dependence mattering, self-esteem) could be either positively or negatively related to caregiving.

Although total social network size remains the same for most people over time, that is, over their life course, the number of close relatives in the network increases, and the number of friends decreases, as people age (Van Tilburg 2007). In addition, older adults may have different needs and definitions of friendship than persons of other ages. In general, age is related to the amount of social experiences, relationships, and interactions that people are likely to have (Elder 1975; Neugarten and Datan 1973; Wells and Stryker 1988). Davidson, Brooke, and Kendig (2001), in a recent community study found that people age 75 and older were half as likely to have contact with friends than seniors aged 65-74, suggesting further diversity within the "older" segment of the population. However, another study finds that nearly half of the people they studied had made new friends since the age of 85 (Johnson and Barer 1992).

The loss of peers can be very difficult. Just as we speak of widowhood and the loss of a spouse, for seniors, there is a greater probably of decreased friendship networks, the loss of friends, and a decreased ability to see those friends than is the case for younger individuals (van Tilburg 1998; Kalmijn 2003). Based on work that shows the benefits of friendship and interaction within social networks, researchers have devised a number of interventions to improve the health of older people by enhancing the functioning of their social networks that are in part composed of friendship networks (Krause 2004; Stevens, Martina, and Westerhof 2006). Research in this area underscores the value of being a part of a friendship network.

Mattering is the most interactional part of the self-concept. It is predicated on relationships to others as individuals and society at large. Formal and informal ties

can be found through a series of role occupancies. These ties provide opportunities to matter through a sense of productivity and/or social connection to significant others.

Role Accumulation. In addition to the importance of specific role occupancies that provide for formal and informal ties, there is utility in exploring the volume of roles occupied at one time, or role accumulation. The engagement of multiple roles or identities is related to psychological well-being (Thoits 1983b; Faris 1934; Sieber 1974). The accumulation of roles or identities may lead to greater integration into society and perhaps a less isolated existence (Clausen and Kohn 1954).

Multiple roles may produce ego-gratification, namely the sense of being appreciated or needed by diverse role partners (Sieber 1974:576), for those who hold few social identities may fair less well psychologically (Thoits 1983b). Research on role accumulation generally suggests a positive relationship between number of roles held and psychological well-being and role enhancement theory hypothesizes that improvements in well-being take place through the accumulation of benefits such as status, power, social connectedness, access to resources, and reduction of stress that comes with the acquisition of multiple roles (Hinterlong 2006:276; Thoits 1983b).[12] Role accumulation may be associated with higher levels of dependence and importance mattering. Role occupancies may provide opportunities for social connections and therefore opportunities to matter to others such as family members, friends, and co-workers, an accumulation of benefits could take place as more roles are held, making for more opportunities to matter. A general sense of importance to the community and family networks could lead to higher levels of mattering. It is

[12] Other research expects multiple roles to create a burden for an individual hampering his or her ability to fulfill the obligation put forth by these roles (Goode 1960).

conceivable that those who are isolated from society will have a lower sense of well-being (Thoits 1983b) and less chances to matter. In short, the greater the number of identities possessed or roles held, the greater one's chance to experience more mattering and less psychological distress.

Physical Health Decline: An Explanation for the Decline in Self (b3)

Physical malfunctions of the body can have an impact on the emotional well-being of affected individuals (Bartol 1980). If current demographic trends continue, whereby adults live further into old age, physical health decline and problems will most likely increase in numbers and significance (Hadley and Schneider 1980).

Life course perspectives point to the increased probability of changes in physical health at older ages; physical health declines then can be viewed as somewhat unique to late life. And, the consequences of such physical health change are important to the understanding and foundation of the self. This points to the potential importance of physical health decline as it is related to dependence mattering and importance mattering. I propose that there is an important relationship between disability or physical health status and the diminishment of the self-concept in older adults.

The concept of 'age as decline' predicts that age-associated role absences and physical function undermine social integration (e.g. how often one gets out of the house to see friends), potency (e.g. the ability to complete a physical task such as carrying groceries), and the sense of self-worth (i.e. one's capacity to make autonomous decisions unquestioned by others) (Mirowsky and Ross 1992; Schieman and Campbell 2001). 'Age as decline' is appropriate for the prediction of the self-

concept in old age, not only because the state of the physical body is related to one's sense of self, but also because a decline in physical capacity may be connected to one's ability to function in social roles.

Physical health decline has been shown to relate to the decline of different parts of the self-concept. For example, Schieman and Campbell (2001) show that more physical impairment and poorer global health, along with other factors such as low levels of education, less empathy, and less introspectiveness explain about 43% of age's negative association with health control and more than half of its negative association with self-esteem (Schieman and Campbell 2001).

Why should physical health matter to the self, particularly mattering? Although Rosenberg and McCullough (1981) hinted at the lack of attention, importance, and dependence mattering older adults might feel, they did not speculate about physical health. Decreased or declining physical health means one cannot provide support to others as easily as they might have at other points in their life. This type of change may be related to an individual's sense of mattering to friends and family, to his self-esteem, and to his perception of the control or mastery he has over his life circumstances. In addition, the reflected appraisals he receives from others, or the way he comes to see himself as he thinks others see him (Gecas and Burke 1995), may impact the way in which he translates his physical health challenges into his self-concept. For example, if a once physically strong man showed his care for his family by performing home repairs and he can no longer negotiate a ladder or grip a paint brush with arthritic hands, his sense of self, specifically his opportunities for mattering, may be reduced.

Sociological literature on the health/control relationship focuses primarily on the idea that disability and physical impairment probably reduce the sense of control. For example, difficulties in seeing or walking can complicate the tasks of everyday life. People can manage impairment more or less resourcefully, but doing so may tax personal resources. This then may create constraints that lower the average sense of personal control (Mirowsky 1995; Schieman and Campbell 2001).

Interest in the physical health / mental health connection is rapidly growing (Linden, Horgas, Gilberg, and Steinhagen-Thiessen 1997; Kelley-Moore and Ferraro 2005; Heidrich and D'Amico 1993; Wykle 1994). While the relationship between physical health and self-esteem has been studied by Schieman and Campbell (2001) and McMullin and Cairney (2004), it remains to be seen if the patterns for self-esteem play out for other parts of the self-concept, such as dependence mattering and importance mattering.

Race and Gender as Important Moderators (c)

In addition to looking at role occupancies and physical health as explanations of the age/mattering relationship, my work focuses on sociodemographic characteristics as moderators of the age/self-concept relationship; specifically, gender and race. I suggest that these demographic characteristics moderate how age relates to mattering. Life course analysis focuses on the contexts within which people's lives are situated, and these contexts are often shaped by these demographic characteristics (Alwin and Wray 2005). Moreover, the positive benefits of role occupancy and good physical health, as well as the negative consequences of a decline in roles and health, may not be evenly distributed throughout the population, and may vary depending

upon one's position in the social structure. Not only may roles and health status be unequally distributed, but certain roles and certain aspects of physical health may be critical for the selves of one group, but not for the selves of other race and gender groups.

Gender. While not addressing mattering explicitly, there is a vast body of work on gender differences in the psychological impact of social roles (Simon 1995; Jackson 1997; Pearlin 1989). This research is most often conducted at younger and middle ages, as it examines how the experience of roles and the self-concept varies for men and women. It is possible that the relationship between social roles and mattering may vary by gender, moreover, potential gender differences in mattering may be more or less pronounced with increasing age.

Formal roles, such as worker and volunteer, may be more important for men then for women in how they relate to sense of mattering in late life. The salience of the worker role, for example, may be gendered (Barnett, Marshall, and Pleck 1992; Reitzes and Mutran 2002). Those in majority statuses, (i.e. men), may be more likely to engage in formal roles, particularly the work role. To this end, some literature treats the work role as more central to men's psychological well-being than women's well-being (Barnett, Marshall, and Pleck 1992), and I extend this research to see if the work role's relationship to dependence and importance mattering varies for men and women.

Society expects men to be providers for their spouses and family especially those men who traversed their work lives in past decades. Occupancy of such roles may be more strongly related to a man's sense of self than a woman's sense of self.

Moreover, men who give up these formal roles may have limited means to make appropriate social comparisons as they age, leaving behind similarly experienced if not similarly aged peers, to use as reference points when assessing one's sense of self. This may negatively affect their sense of mattering, or remove the opportunity to judge one's self relative to work colleagues. The work place, its people and challenges may have been the background for self assessment for many years.

Men may have a certain evaluation of the type and quality of work roles they held and a favorable assessment of one's occupation may be linked to mattering. Additionally, assessment of mattering based on occupation may be bound up in the prestige of one's work position, and this prestige-mattering assessment may be stronger for men; for men are expected to identify with the work role more than women (Barnett, Marshall, and Pleck 1992).

Women, especially those who are currently 65 years old of age and older, are expected to thrive in informal roles, particularly family roles. Women are traditionally expected to be "good' wives and their sense of self is likely tied to the marital role as well as parent and grandparent roles. Much pressure is placed on women to marry and take on familial roles. Many theories of child rearing and socialization stress that the wife and mother is expected to be the primary caretaker, as parenting tends to be viewed as primarily a maternal duty (Eshleman and Bulcroft 2006). Because of societal and individual expectations, there are gender differences in the experience of parenting. The experience of fathers and mothers will vary, especially for this sample of older adults who became parents and raised children during a time of traditional gender expectations. In addition to the study of parenting,

studies of grandparents have found that women undergo anticipatory socialization to this familial role (Watson and Koblinsky 1997) and this socialization is less apparent for men. Traditional gender expectations imply that women's sense of self would be more closely connected to family roles than to formal or productive roles.[13]

Beyond gender differences in the relationship between role occupancy and mattering, sense of mattering would appear to be more tied to physical health for men than it would be for women. Over their lifetime, men are more likely to provide instrumental support where women are more likely to provide emotional support to significant others, so it would seem that the inability or waning ability to provide assistance with physical tasks as related to poorer physical health, may be of greater detriment to men's sense of self than women's (Schieman and Campbell 2001). Physical strength, beyond the physical ability to help others, may too be related to men's sense of self. In sum, gender is expected to moderate how roles and physical health mediate the age/mattering relationship. For men, formal roles and physical health should mediate; for women, informal roles may be a stronger mediation mechanism.

Race. It is likely that there are race differences in the way roles are linked to one's sense of mattering. Formal roles, particularly work roles, held by African-Americans are likely to be of lower quality then work roles held by their white peers.[14] Regarding a possible race difference in mattering, it is likely that whites, on

[13] We would expect something similar in regard to caregiving and friendship roles as other informal role occupancies, rather, the caregiver role is often associated with women more than men, and the friendship role is associated with women then men with women reporting more friendships then men.
[14] Race differences exist in regard to quality of work roles held by ASH respondents. Those who worked in the paid labor force reported the quality of their "main job", as measured by work control. For African-Americans, the mean level of work control is 2.86/4.00, for whites, the mean is 3.04 /4.00.

average, may have had access to better work positions and may hold "better" jobs than African Americans or are less likely to be in a job out of necessity and these better jobs may be linked to more mattering or a greater decline in mattering with the loss of such roles. It is also possible that for blacks, the work role is not as salient as it may be for whites in late life, or for this cohort, and therefore sense of mattering may be related to the work role for whites but not African-Americans.

The volunteer role is a second formal role. I speculate that special or compensatory roles may be more important for minorities, here, African-Americans, because African-Americans were more likely to be kept out of good work roles prior to late life. The volunteer role can be thought of as a compensatory role and all those who volunteer are likely to be healthier than their counterparts, and this may be especially the case for African-Americans, for African-Americans are less likely to volunteer than whites (Bryant et al 2003; Gallagher 1994). The volunteer role and its relationship to mattering may differ by race.

In regard to informal roles, for African-Americans, research suggests that family and extended families are much more connected to their history and overall well-being than is the case for whites (Hays and Mindel 1973; Hofferth 1984; Brewster and Padavic 2002). For this reason, I would expect lack of family roles to impact sense of mattering more strongly for African-Americans than for whites, or that the relationship between informal roles and mattering would differ for African-Americans and whites.

This suggests that on average, whites held better jobs than African-Americans, at least for the work that constituted the main part of their career.

In sum, race may moderate the ways that roles mediate the age/mattering relationship. Work roles may be more important for whites lack of mattering in old age; volunteer and family roles may be more important for African-Americans.

Summary of Aims and Analysis Plan

This dissertation is intended to extend research on the self by exploring the circumstances contributing to variations in the self-concept, as measured by mattering, of older adults. In this regard, the age of the sample, 65 and older, is particularly useful, for it is a time of life where role transitions as well as physical health changes are prevalent. As the proportion of older people in the U.S. population grows, assessing their outcomes, in this case, via the self-concept, are of increasing importance.

As previously stated, two research questions are addressed:

1) How is aging related to mattering in older adults?
    - 1a) Does role occupation explain this relationship?
    - 1b) Does physical health status explain this relationship?

2) Do key social statuses such as gender and race matter for understanding how role occupancies and physical health diminish the self in late life? i.e., do the ways by which role occupancies and physical health mediate the age/mattering relationship depend on gender or race?

Chapter 4 begins with a set of bivariate analyses that examine the self-concepts of the young-old, old, and old-old. This is followed by multivariate analyses conducted using Ordinary Least Squares Regression (OLS) (Abdi 2003); age is used as a continuous variable through step-wise regression. I examine the degree to which age differences in mattering are attenuated when role occupancies and physical health statuses are introduced in subsequent models. I argue that the relationship between

age and the decline in mattering is mediated by role occupancy and physical health. In this way, role occupancies function as third variables that represents the generative mechanism through which age as the focal independent variable is able to influence the dependent variable of interest, mattering (Baron and Kenny 1986). Formal mediation analyses suggested by Baron and Kenny (1986) are conducted. These analyses explicitly examine the mediation of the age/mattering relationship through role occupancies.

Chapter 5 covers moderated-mediation analyses, addressing research question two. It focuses on race and gender differences in the relationship between age and mattering as it is mediated through role occupancy and physical health. It suggests differences in the self-concept by race and gender, and how race and gender moderate the relationship between role occupancy and the self-concept. In order to see if these mediational analyses vary by these social statuses, I performed moderated-mediational analyses (Petty, Schumann, Richman, and Strathman1993; Muller, Judd, and Yzerbyt 2005). Traditional moderation analyses would examine race or gender differences in the direct relationship between age and mattering. Here, I am not explicitly interested in these differences, but rather, I am interested in the race and gender differences in role occupancies as mediators of the age/mattering relationship. Statistically, this means the creation of interaction terms that multiply race and gender by each of the role occupancies (e.g. work*race, work*gender), as mediators. The following equation (see equation (1)) shows an example of such analysis. An additional interaction term is included in all moderated-mediation analyses (e.g. age*race or age*gender) to help partial out the moderated-mediation analysis beyond

any moderation analyses; where for example race may act as a moderator of the age/mattering relationship or gender may act as a moderator of the age/mattering relationship (Muller, Judd, and Yzerbyt 2005).

The appropriate equation to identify moderated-mediation follows, where *MeMo* is the interaction of interest, representing role occupancy multiplied by race (Muller, Judd, and Yzerbyt 2005):

$$Y = \beta_1 + \beta_2 X + \beta_3 Mo + \beta_4 X\, Mo + \beta_5 X\, Me + \beta_6 MeMo + \epsilon_1 \quad (1)$$

With the incorporation of study variables, the equation looking at differences by race, where role occupancy*race is the interaction of interest, is shown here:

$$Y = \beta_1 + \beta_2 (\text{age}) + \beta_3 (\text{race}) + \beta_4 (\text{age*race}) + \beta_5 X (\text{role occupancy}) + \beta_6 (\text{role occupancy*race}) + \epsilon_1 \quad (2)$$

Regarding differences in role occupancies by gender, the equation would be:

$$Y = \beta_1 + \beta_2 (\text{age}) + \beta_3 (\text{gender}) + \beta_4 (\text{age*gender}) + \beta_5 X (\text{role occupancy}) + \beta_6 (\text{role occupancy*gender}) + \epsilon_1 \quad (3)$$

Chapter 3: Data and Methods

Sample

Quantitative analysis of secondary data is accomplished using data from the Aging, Stress and Health Study (ASH). The ASH study is designed as a three-wave panel study. The first wave was administered via face-to-face interviews in 2001-2002 with a sample of 1167 adults ages 65 and over, living in Washington DC and two adjacent counties in Maryland: Montgomery and Prince Georges'. The original sampling frame was based on the Medicare Beneficiary lists for the three areas. 4800 names were randomly selected, with names equally divided among the three locales, African Americans and whites, and women and men (i.e., 12 groups each with 400 names). From these names, the goal was to obtain a sample of 1200 adults, living independently and able to complete the interview, and equally divided among the 12 groups. Because the Medicare lists do not provide telephone numbers which were needed to screen potential participants, the 4800 names along with their addresses were put through a telephone matching system which identified telephone numbers for 56 % of the names. The survey agency that did the work reported that the 56 percent match is slightly above average for this age group. Clearly, the telephone matching process limits our sample by excluding people with phone numbers that are unlisted or in the names of others, people who have moved, and people who live in institutional settings without telephone lines dedicated to them.

The 2679 matched names were given a short telephone screener interview to determine not only their willingness to participate, but also their physical and cognitive ability to do so. Close to 65 percent of all eligible respondents (1741) who

were contacted agreed to participate, producing a final sample of 1167 respondents, approximately equally divided by residential locale, race and gender (based on Kahn and Pearlin 2006; Kahn and Fazio 2005).

It is recognized that this stratified random design is neither representative of the Washington D.C. metropolitan region nor of the United States in general. However, the ultimate goal is not necessarily to produce estimates of the mean levels of self-concept, physical health and mental health or other variables. Rather, the aim is to gain a better understanding of the differential relationships of role engagement physical health with the sense of mattering by race, gender, and socioeconomic status.

The selection of the three locales in the DC metropolitan area provide racial and class diversity: Montgomery County is relatively affluent and has both high educational and income levels; oversampling African Americans in this locale insures some representation of economically advantaged members of this group. Prince Georges' County serves our sampling goals by having the largest middle class African American population in the country. The District of Columbia, with its majority African American population, stands in contrast to the other locales in its mix of pockets of poverty together with high income areas (Kahn and Fazio 2005).

All analytic variables, including self-concept measures, role occupancies, physical health measures, and demographics will be described below. This overview is followed by preliminary bivariate findings that look at the relationships between main independent and dependent variables.

Dependent Variables

Mattering. Two mattering variables will be used in this work, importance and dependence mattering.[15] Each is included in order to tap into different dimensions of mattering. Appendix I shows what measures of mattering have been used in previous work.

Eight questions are used in the ASH data to assess mattering. Each question began: "Now think about all your relatives and your friends, and the help and support you get from them. Please indicate whether you strongly agree, disagree, or strongly disagree with these statements." The statements were: (1) You are important to people you know; (2) Your well-being matters to people you know; (3) There are people who do things they know will please you; (4) What you think or feel doesn't seem to make much difference to anyone; (5) There are people you know who depend on you when they need help or advice; (6) People count on you when they are down or blue; (7) People seem to tell you things about themselves that they don't tell other people; (8) Other people count on you to understand what they are going through." The response categories are 1= "strongly agree", 2 = "agree", 3 = "disagree", 4 = "strongly agree." Each question is coded so that greater feelings of mattering represent higher mattering scores. Scores from the first four questions, *importance mattering*, are summed and averaged, resulting in a possible range from 1-4. Scores from the second set of four questions, *dependence mattering,* are also summed and averaged to create a score between 1 and 4.

[15] Elsewhere dependence mattering has been referred to as donated support (Schieman and Meersman 2004).

To confirm the factor structure of the items, a principal components analysis was run with no rotation. It showed two eigenvalues greater than one. With orthogonal rotation, all items clearly loaded on one component or the other and there was minimum correlation between the two components. Component scores are shown in Table 3.1. Inspection of the component loadings showed that the first component was composed of *dependence* mattering questions while the second was composed of *importance* mattering questions.

While previous research, both with ASH data and other data, has used some of the items to make up two separate scales, few have used all eight items. Some have used subsets to measure importance mattering while others have attempted to measure dependence with only a single item. Here in separating the two scales, I am following previous conventions, but I am providing measures that include more questions and have better psychometric properties.

Each factor is used as a sub-dimension of mattering. The first factor, *dependence* mattering, represents a measure of the self-concept that suggests whether a person feels that others depend on them. The second measure of mattering, *importance* mattering, represents a series of questions that assesses how much people feel that their welfare or well-being is important to others.[16]

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[16] *Other Measures of the Self-Concept: Self-Esteem & Mastery.* In ancillary analyses, noted briefly in the main text, I use self-esteem and mastery as comparison points to mattering. Self-esteem is assessed with the following questions: (1) "You feel that you have number of good qualities," (2) "You feel that you are a person of worth at least equal to others," (3) "You are able to do things as well as most other people," (4) "You take a positive attitude toward yourself," (5) "On the whole you are satisfied with yourself," and (6) "All in all, you are inclined to feel that you are a failure." Reponses were in a Likert format; they were coded such that a score of 4 indicated the highest level of self-esteem, and a score of 1 the lowest level. The first four items are reverse coded, so that in the scale, higher numbers mean higher levels of self-esteem. The observed range is from 1.6 to 4, the mean level of self-esteem is 3.52; the standard deviation is .439. Results from an internal consistency analysis revealed a highly reliable index (Cronbach's alpha = 0.8597). The summed score across all self-esteem items yielded a

Independent Variables

Age. Age is part of the focal relationship examined in this work. It is a continuous variable. While some bivariate analyses in this study use age categories, in multivariate analyses, age will be measured as a continuous variable. Age ranges from 64 to 98. For bivariate analyses, three categories are created the young-old (65-74), the old (75-84) and the old-old (85+).

Exploratory Variables

There are two categories of main or explanatory variables: Role occupancies and physical health statuses.

Role Occupancy

The roles occupied are productive/formal (i.e. worker and volunteer) roles versus informal roles (i.e., spouse, parent, grandparent, caregiver, and friend,).

Work Role. Retirement appears to be an easy status to determine, however this is not necessarily the case. Someone may declare retirement, when in fact they are still working. Some people have never been in the paid labor force, so they are not eligible for retirement, as they do not have a job to exit. In addition, if an individual is retired from a main job but currently working for pay, have they known a role loss?

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total self-esteem score. Mastery is assessed with the following questions: (1) "You have little control of the things that happen to you," (2) "There is really no way you can solve some of the problems you have," (3) "You often feel helpless in dealing with problems of life," (4) "Sometimes you feel that you are being pushed around in life," (5) "You can do just about anything you really set your mind to." The first four items are reverse coded and items yielded a total mastery score. For both self-esteem and mastery, the response options were (1) strongly agree, (2) agree, and (3) disagree and (4) strongly disagree, and the items are averaged and recoded so that higher scores indicate higher levels of mastery.

In trying to assess mattering or other parts of the self-concept, this becomes problematic. I assess work status instead of retirement status. A respondent is said to be currently working if they answer yes to the question, "Are you currently working for pay?" Those who report that they are not working are coded 0 and those who report working are coded as 1.

Volunteer Role. The volunteer role is assessed with the question, "How often do you do volunteer work?" For most analyses, volunteer work is coded as a continuous variable where daily = 5, 3-4 times a week = 4, 1-2 times a week =3, 2-3 times a week =2, once a month or less =1 and never =0. When the volunteer role is included in the role accumulation variable, it is coded 1 for those who report any amount of volunteering and 0 for those who don't report any volunteer work.

Marital Role. Marital status is based on the question, "Now we are turning to some questions about your marriage history. First, what is your current marital status?" This questions determines marital status (coded 1 = married, 0 = not married).

Caregiver Role. While caregiving may be viewed by some as burdensome, caregiver status can positively impact one's sense of mattering. Caregiver status is ascertained according to the response to the question "Is there anyone who now depends on you for help because of illness or disability?" At each wave, approximately 14%-16% of the sample is providing care. Caregiver is coded 1 and non-caregiver = 0.

Friend Role. The frequency of contact with friends is assessed with the following question: "How often do you visit with friends. Would you say: (1) daily,

(2) 3-4 times a week, (3) 1-2 times a week, (4) 2-3 times a month, (5) once a month or less, or (6) never?" In analyses where role occupancies are treated as separate predictive variables, friendship is treated as a continuous variable. For bivariate tables, the friend role is divided into high contact (coded as 1) for all those who report contact with friends that is at or above the mean, and 0 for those below the mean and are therefore in the low friend contact category. In the creation of the variable "role accumulation" that includes the assessment of number of roles held, friendship is measured as a dichotomous variable where all those participating in contact with friends are coded 1 and those who report no contact with friends are coded 0. See below for further description of the role accumulation variable.

Parent Role. Parent status is based on the question that asks how many children have you ever had, biological or adopted. In order to account for those who have lost children, respondents who had children but who no longer have living children are coded 0. Therefore, those who never had children or no longer have living children are coded 0 for the parent role. Those who said 1 or more were coded as 1.

Grandparent Role. Grandparent status is based on the question that asks, "Do you have any grandchildren?" Those who answered 0 are coded 0 and those who said 1 or more are coded 1.

Role Accumulation. In ancillary analyses, number of roles held simultaneously is used to predict dependence and importance mattering. This is a count variable with a range from 0 to 7, with respondents receiving a score of 1 for each role held up to 7 roles. The friendship role in other analyses is treated as a

dichotomous variable, unlike in other analyses, where those reporting no contact with friends are coded 0 and those who report any contact are coded as 1.

Physical Health

Physical health is a second explanation for the relationship between increasing age and the diminishment of the self-concept. Physical health is assessed using three separate measures; the first reflects a more subjective assessment of physical health and the second and third, more objective assessments.

The first measure, *self-rated health*, asks, "In general, would you say that your current health is excellent, very good, good, fair or poor?" and is coded 1-5 where higher numbers equal better health. This subjective appraisal is highly correlated with other health indicators and has been shown to be a powerful predictor of mortality and morbidity (Idler and Angel 1990; Kahn and Fazio 2005; Wolinksy and Johnson 1992). For bivariate tables, self-rated health is coded as high for those at or above the mean versus low for those below the mean.

The second measure, *Activities of daily living* (ADLs) is measured as the sum of the following questions that measure disability: "…can you do the following activities without difficulty or do you need help?" (1) Dress and undress yourself? Can you do this… (2) Get in and out of bed? (3) Take a bath or shower? (4) Get to and use the toilet? (5) Climb up the stairs? (6) Keep your balance while walking?[17] Response options are: (1) Without difficulty, (2) With difficulty, but without help, (3)

[17] There are three additional ADL measures that are not included in these analyses, as they seem to measure IADLs or Instrumental Activities of Daily Living. They are: (7) Go food shopping? (8) Get from your home to where you need to go? (9) Figure out your own monthly bills? There has been a fair amount of research on ADLS vis-à-vis IADLS (Wakabayashi and Donato 2006). Because I am using ADLs as a measure of physical health, I exclude the three IADL measures.

With a little help from someone, (4) Unable to do this without complete help from someone or special equipment. Higher scores on the summative scale mean more disability, or struggles with activities of daily living. For bivariate tables, ADLs are coded 1 for those with average or more than average disability and 0 for those with below average disability.

The third measure, an *illness symptoms scale* summarizes responses to a series of questions about illness symptoms such as, "In the past month have you had headaches?" Would you say…Never, 1 time, 2-3 times, 4-5 times, more than 5 times? In addition to headaches, the following symptoms are measured: a cold, indigestion, constipation or diarrhea, weakness or faintness, back pain, shortness of breath, incontinence, muscle aches or soreness, and heart palpitations. Higher scores mean more illness symptoms. For bivariate tables, this is coded 1 for those with average or more than average disability and 0 for those with less than average disability.

Social Statuses Variables

Gender is a dichotomous variable coded where female = 1 and male = 0.

Race. Race is a dichotomous variable where African-American = 1 and white = 0.

Control Variables

Class. Socioeconomic Status (SES) can be measured in multiple ways. At any point in life, an accurate and meaningful assessment of SES is challenging. The study of older adults presents its own challenges. Many scholars would suggest that the accumulation of wealth is more meaningful than an assessment of current income,

because most older adults no longer have earned income and instead rely on social security and pension income; especially when looking at racial differences in wealth and income (Huie and Patrick M. Krueger 2003; Shapiro 2004). Income is often used as a proxy for SES, but here again; the study of older adults presents a challenge. Many people 65 years and older see a great change in their monthly income compared to income earned prior to age 65.

Though not completely satisfactory, this research uses income as the best estimate of SES, because there is a significant amount of missing data on items that would be used in the creation of a wealth measure (i.e., debt, housing equity), above and beyond some missing data on the income measure. Income is a continuous variable based on self-reported categories measuring total household income. Here, current income is measured from a question asking respondents to select one of 11 categories representing their total household income from the previous year (2000). The categories include: 1 = less than $10,000; 2 = $10,000 to $19,999; 3 = $20,000 to $29,999; 4 = $30,000 to $39,999; 5 = $40,000 to $49,999; 6 = $50,000 to $59,999; 7 = $60,000 to $69,999; 8 = $70,000 to $79,999; 9 = $80,000 to $89,999; 10 = $90,000 to $99,999; 11 = $100,000 or more. The Pareto method was used to generate a top income midpoint that allows for the creation of a continuous income variable for multivariate analyses. This procedure assigns midpoints to each category and estimates top category midpoints.

Missing income data flag. Missing data on income was handled with the creation of a "flag" to identify missing cases on the income variable. This

dichotomous flag variable was created to test for bias in the imputation of missing income information and is included in all multivariate regression analyses.

Education has been shown to relate to the self-concept for older adults (Schieman 2001; Mirowsky 1995). Education has been linked to the reporting of mastery and self-esteem – measures of the self-concept, and therefore is included in the analysis. It is measured by asking respondents to answer the question "can you tell me how far you went in school?" "8^{th} grade or less" is coded as 1, "some high school but did not graduate" is coded as 2, "high school graduate or GED" is 3, "specialized (vocational) training" is 4, "some college but no degree earned" is coded as 5 and "college graduate or more" equals 6. It is especially important to consider given that the oldest old have, on average, lower achieved education (see Table 3.1), and this could be part of the explanation for why, at least at this historical juncture, the oldest old may have weaker selves (i.e. a cohort effect in addition to an aging effect).

Descriptive Tables

Distributions on all analytic variables, including self-concept measures, role occupancies, physical health measures, and demographics can be found in Table 3.1, according to three age categories that represent the young-old (65-74), the old (75-84), and the oldest-old (85+). T-tests have been run on measures according to age category. Subscript letters of a, b, and c delineate significant differences in means between groups where "a" indicates that the mean for the young-old is significantly different than the old-old, "b" shows that the young-old are significantly different than old, and "c" shows that the old are significantly different than the old-old.

Regarding self-concept measures, for each measure of the self-concept "a" is true, indicating that there is a significant difference of means between the young-old and the old-old for importance mattering and dependence mattering. For dependence mattering, "b" is also true, for there is a significant difference between the old and the old-old on this measure. Additionally, Table 3.2 shows correlations between all study variables and both measures of mattering.

Chapter 4: Results, Research Question One: Mattering

This chapter aims to address my primary research question, *how is aging related to sense of mattering for older adults?* It begins with a bivariate examination of the relationship between aging and mattering, as measured both by dependence mattering and importance mattering. The chapter then turns to an analysis of role occupancy as a possible explanation for the relationship between age and mattering. Next, physical health as a possible explanation between age and mattering is examined. To follow, multivariate analysis using OLS regression, that explicitly tests mediation of the age/mattering relationship, is presented.

Bivariate Analyses

Bivariate analysis (n=1149), shows that importance mattering and dependence mattering both are lower among those of advanced age. Figure 4.1 shows this relationship. Age is divided into categories that represent the young-old (65-74), the old (75-84) and the old-old (85+). For each successive age category, both importance mattering and dependence mattering is lower. Differences between the young-old and old-old are statistically significant for importance and dependence mattering. For dependence mattering, differences between the young-old and the old; young-old and the old-old; the old and the old-old; are statistically significant.

Figure 4.1 Average Mattering Scores across Age Categories

(N=1149)

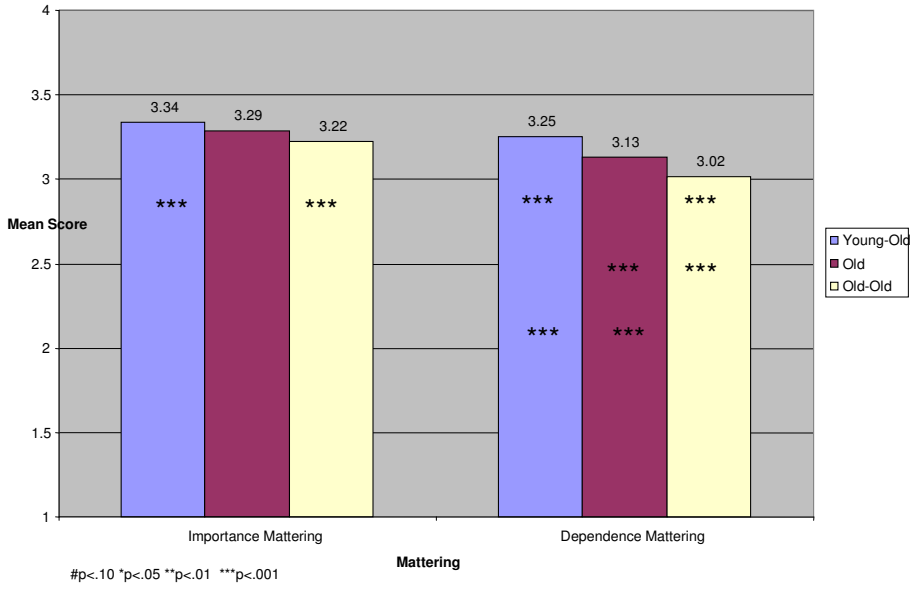


Table 4.1 shows the relationship between age and mattering,[18] age and potential mediators (i.e. roles and physical health), and age and demographic variables (i.e. race, gender, income and education). We find that each role occupancy is significantly related to age, as t-tests show that in a comparison of the young-old (65-74) to the oldest-old (85+), the oldest-old are less likely to occupy each role than the young-old, except for the friendship role. A few roles that seem more closely tied to age, where there are significant differences not only between the young-old and the old-old, but between the young-old and the old; and the old and the oldest-old, these roles are the work, volunteer, and marital roles.

[18] As previously described in Figure 4.1.

Physical health is closely tied to age as well. Self-rated health grows worse with age, with each advancing age category. Greater disability, as measured through ADLs is seen at each age increment, and illness symptoms are significantly worse when comparing the young-old to the old-old.

Role Occupancy and Mattering

Role occupancy is one of two proposed mechanisms that explain the decline of mattering in older adults. Bivariate analysis shown below as t-tests (see Table 4.2), provide information on the relationships between role occupancies and their relationship to mattering. Role occupancy falls under the following headings: work, volunteering, marriage, parenting, grandparenting, caregiving, and friendship. Significant differences are bolded and the group that is bolded reports higher levels of mattering.

First, formal roles of worker and volunteer are shown. Work status is related to sense of mattering, with those who are currently working reporting significantly better self-concepts than those not currently working. Being a volunteer is positively related to both measures of mattering. Bivariate analyses also show the relationship between informal or family, caregiver and friend ties, and mattering. The married have a self-concept advantage over the unmarried with significant differences in importance mattering, though not dependence mattering.

I find that the relationship between the parental role and sense of mattering is significantly related to importance mattering and is marginally related to dependence mattering, that is, persons with children report significantly more mattering than those without children. Holding the grandparent role is significantly related to both

importance and dependence mattering. Table 4.2 also shows that caregivers do report higher levels of dependence mattering than non-caregivers which is not surprising as caregivers are likely to feel that others depend upon them. Frequent contact with friends, as measured by the mean level of friend contact or higher, is significantly related to both measures of the self-concept.

The role accumulation variable is significantly related to dependence mattering and importance mattering, where the occupancy or accumulation of 4 or more roles is significantly related to higher levels of mattering. Additionally, role accumulation or the number of roles held is significantly related to dependence and importance mattering.

Overall, bivariate analyses show three notable relationships. First, each role occupancy is significantly related to at least one measure of mattering. Second, the productive roles of worker and volunteer as well as a couple informal roles, grandparent and friendship, predict both importance and dependence mattering. Third, although importance mattering and dependence mattering may look similar as measures of the self-concept, and are generally positively correlated with role occupancy, they do not produce the same relationships to all roles. Roles are related to importance mattering and dependence mattering differentially. Work or volunteer roles (i.e. "work like" roles) and to a lesser extent, caregiver, friend, parent and grandparent roles relate to dependence mattering. For all family roles, importance mattering is higher for those occupying family roles compared to those not in these roles. Occupancy of the spouse, parent, and grandparent roles are related to importance mattering. Family roles are less strongly related to dependence mattering.

Physical Health and Mattering

A second potential explanation for the relationship between age and a decline in the self-concept is physical health status; here, the relationship between current physical health statuses and mattering is explored. Table 4.3 shows that there is a significant relationship between physical health and the self-concept, where physical health is measured by self rated health (SRH), activities of daily living (ADLs) as well as illness symptoms.

Clearly, better physical health is correlated with greater importance mattering and dependence mattering. Self rated health, which asks "In general, would you say that your current health is excellent, very good, good, fair or poor?" and ADLs which asks, "can you do the following activities without difficulty or do you need help?" (E.g. dress and undress yourself?, take a bath or shower?) more strongly predict importance mattering and dependence mattering than physical illness symptoms which include, for example, headaches, back pain, and diarrhea.

Multivariate Analyses

Bivariate results indicated that age is significantly related to lower importance mattering as well as lower dependence mattering. It also reveals that all role occupancies are related to at least one measure of mattering. Additionally, health status as measured by levels of self rated health, activities of daily living, and physical illness symptoms are significantly related to importance and dependence mattering. The multivariate analyses are designed to test whether or not bivariate findings persist when other factors are introduced into statistical models, and to see if

the negative relationship between age and mattering can be explained through role occupancy and physical health through a formal mediation analysis.

The following multivariate analyses examine the relationship between age and mattering with the incorporation of role occupancy and physical health as possible mechanisms that may explain this relationship. A meaningful part of multivariate analyses are mediation analyses that provide detailed information regarding the association of independent variables and dependent measures (e.g. mattering). A detailed account of mediational analyses precede a typical set of step-wise regression models.

The specific objectives of mediation analyses are to see:

- Whether role occupancies mediate the relationship between age and mattering.
- Whether physical health statuses mediate the relationship between age and mattering.

Multivariate Results

There are two dependent variables of interest: importance mattering and dependence mattering, and therefore I explore two focal relationships. First, the relationship between older age and lower dependence mattering, and second, the relationship between older age and lower importance mattering. I look at intervening or third variables that may serve to mediate the age/mattering relationship. Dependence mattering analyses and importance mattering analyses are examined to show similarities and differences in mattering models as they are influenced by mediator variables.

A mediator variable can be defined as "a third variable [ ] which represents the generative mechanism through which the focal independent [predictor] variable is

able to influence the dependent variable of interest" (Baron and Kenny 1986:1173). Here, I determine if any role occupancies or physical health statuses function as mediating variables. This means that role occupancies and physical health status would mediate the link between age and sense of mattering. If role occupancies and physical health act as mediators, then as one ages, one may occupy fewer roles and experience poorer health, which may lead to declines in sense of mattering. In analyses, I individually introduce each mediator variable into OLS models to see if it acts as a mediator of the age/mattering relationship.

Figure 4.2 depicts the conceptual model guiding the investigation of the relationship between age and sense of mattering.[19] On the basis of the model shown here, age is linked to a declining sense of mattering in late life, including lower levels of dependence mattering and lower levels of importance mattering. I predicted that age would be negatively linked to role occupancy and physical health. I also predicted that role occupancy and physical health would be associated with mattering. Finally, I expected that the effects of age on sense of importance and dependence mattering would be mediated by role occupancies and physical health.

[19] Figure 4.2 is equivalent to Figure 1.1. It is repeated here for ease of viewing.

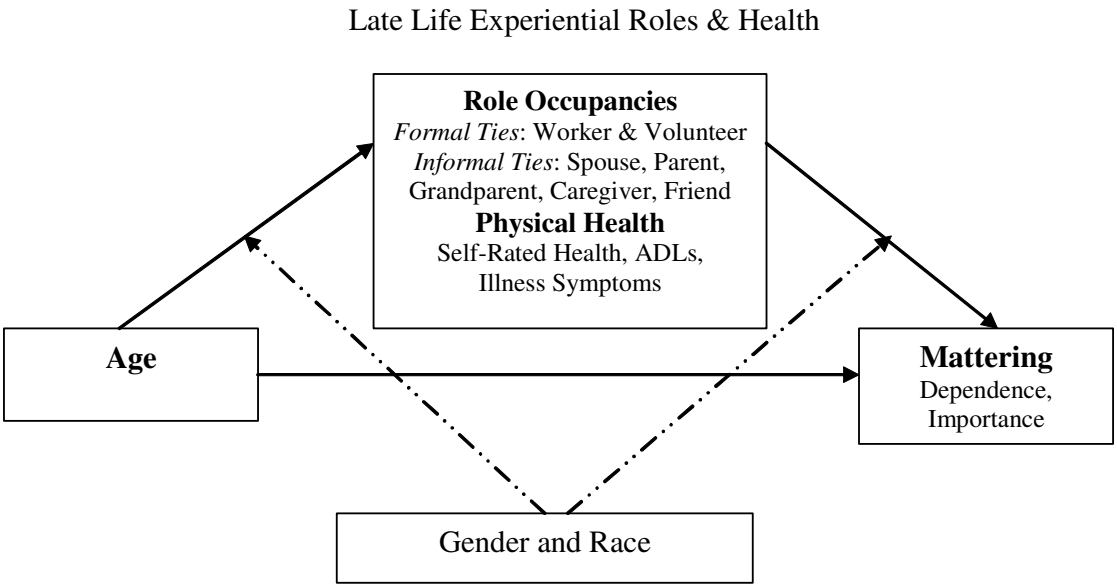


Figure 4.2 Model of linkages between age and sense of mattering.

Analysis Plan

Across all analyses shown in Figures 4.3 - 4.7, the criterion or outcome variables were regressed on all variables, with arrows leading to the outcome variable. This procedure was followed for each of the separate criterion variables -- dependence and importance mattering.

The work of Baron and Kenny (1986) and Taylor, Roberts, and Jacobson (1997) were used as guides for these mediation analyses. According to Baron and Kenny, mediational effects are apparent when there is evidence that (a) the predictor variable (e.g., age) is significantly associated with the criterion variable (e.g., mattering) (b) the predictor variable (e.g., age) and proposed mediator (e.g., role occupancy or physical health status) are significantly related; (c) the mediator (e.g.,

role occupancy or physical health status) and criterion variable (e.g. mattering) are significantly associated; and (d) controlling for the effects of the mediator variable (e.g., role occupancy or physical health status) reduces the association between the predictor (e.g., age) and criterion variables (e.g. mattering) but the association between the mediator (e.g., role occupancy or physical health status) and criterion variables (e.g. mattering) remain.

Age and Dependence Mattering

The first step in assessing the mediation of the association of age with mattering was to examine the relationship between age and dependence mattering. Age is negatively associated with dependence mattering ($\beta = -.012$, $p < .001$; see Figure 4.3). When controls are included in the model ($\beta = -.010$, $p < .001$; see Figure 4.4), age remains negatively related to dependence mattering.

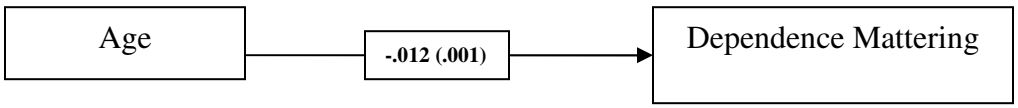


Figure 4.3. Association between age and dependence mattering; no controls. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded.

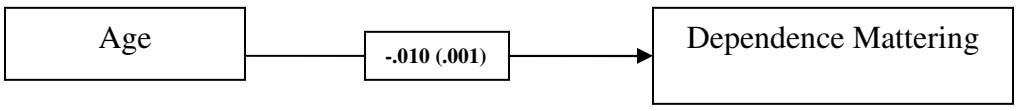


Figure 4.4. Association between age and dependence mattering; controlling for race, gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded.

The second step in assessing the mediation of the association of age with dependence mattering was to examine the association of age with role occupancies and physical health statuses. Each assessment of the potential mediation variables (e.g. role occupancy or physical health status) was individually associated with age, controlling for race, gender, income, and education. These findings are shown in Figure 4.5.

Role occupancies. Age is negatively associated with occupancy of the formal roles of work ($\beta = -.014$, $p < .001$) and volunteering ($\beta = -.008$, $p < .01$). Occupancy of informal roles of spouse ($\beta = -.009$, $p < .001$); caregiver ($\beta = -.004$, $p < .05$); and parent ($\beta = -.005$, $p < .01$) are negatively associated with age. Occupancy of the grandparent role is marginally associated with age ($\beta = -.003$, $p < .10$). Unexpectedly, age is not significantly related to contact with friends.

Physical health statuses. Age is negatively associated with self-rated health ($\beta = -.015$, $p < .01$). Age is positively associated with ADLs or activities of daily living, as persons age they report more limitations regarding activities such as climbing stairs and dressing themselves ($\beta = .011$, $p < .001$). Illness symptoms were not found to be associated with age.

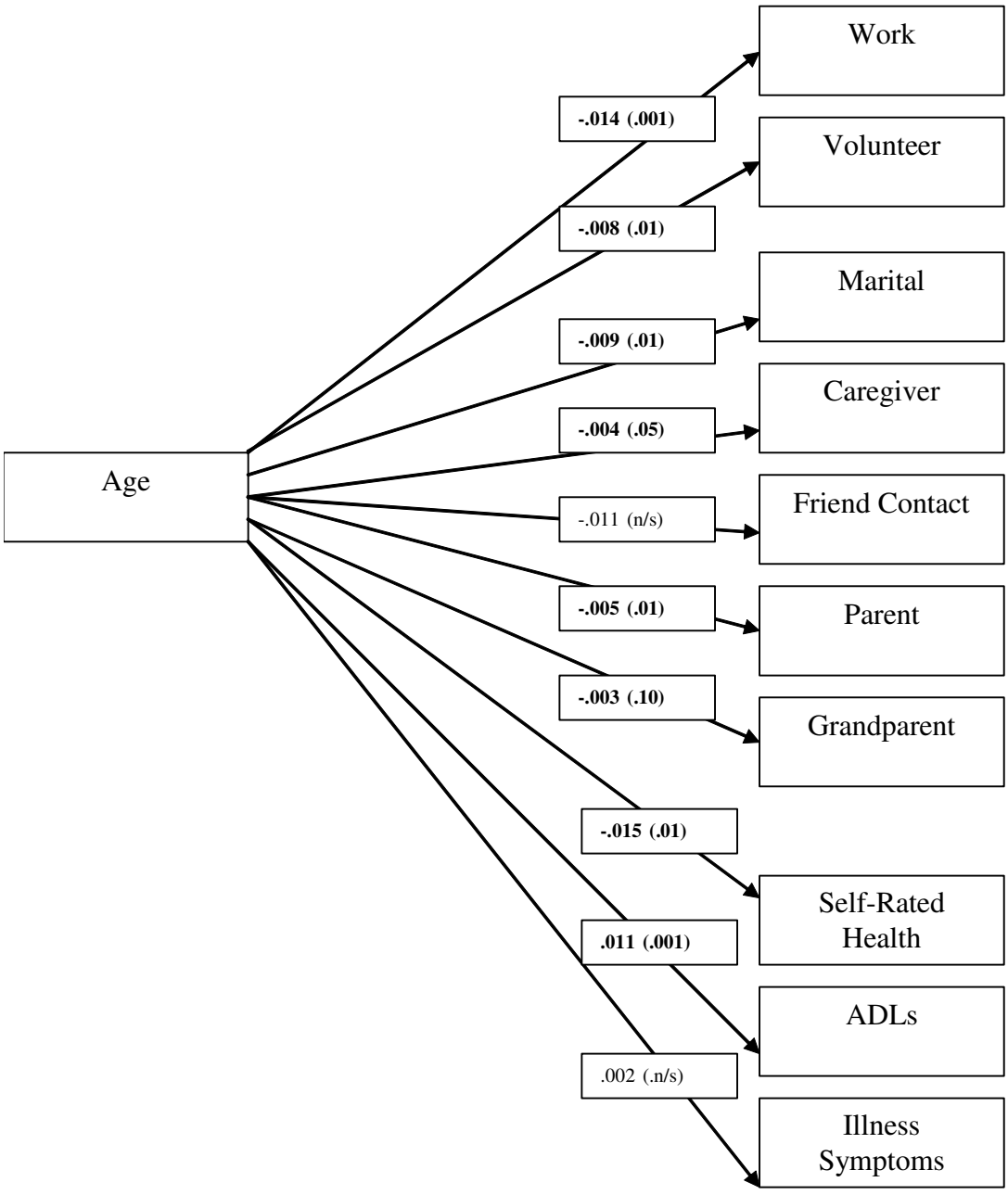


Figure 4.5. Association between age and role occupancies & age and physical health statuses, controlling for race, gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded.

Role Occupancies & Physical Health and Mattering

The third step in assessing the mediation of the relationship of age with mattering was to assess the link between role occupancies and physical health and dependence mattering. These results are shown in Figure 4.6 and indicate that role occupancies and physical health statuses have mixed associations with mattering.

Role occupancies. The work role ($\beta = .128$, $p < .001$); volunteer role ($\beta = .161$, $p < .001$); friend contact ($\beta = .048$, $p < .001$); and the grandparent role ($\beta = .081$, $p < .05$) are positively associated with dependence mattering. Occupancy of the marital, caregiver, and parental roles are not associated with dependence mattering.

Physical health. Self-rated health is positively associated with dependence mattering ($\beta = .055$, $p < .001$). Activities of daily living are negatively associated with importance mattering ($\beta = -.147$, $p < .001$) and illness symptoms are not significantly associated with dependence mattering.

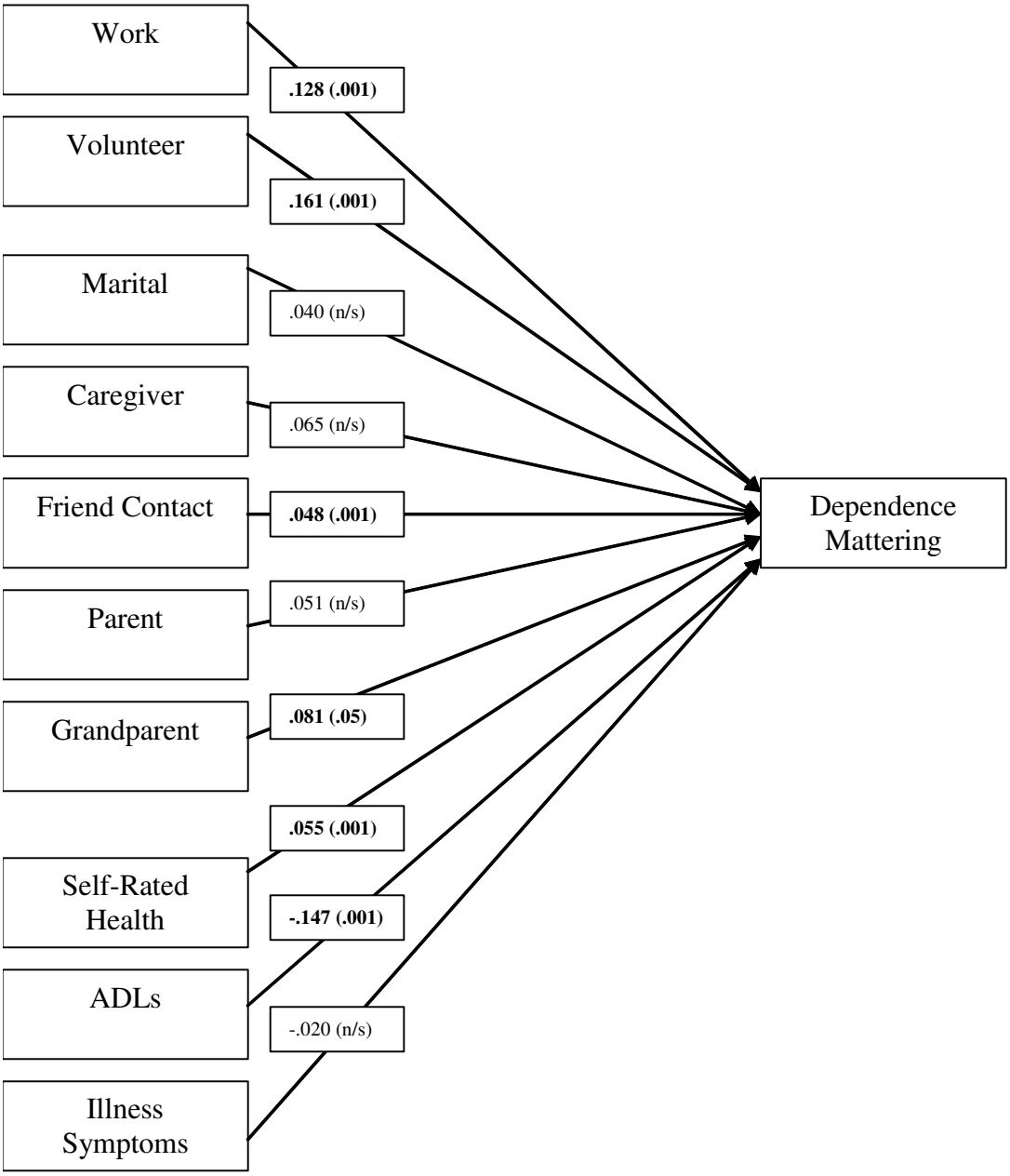


Figure 4.6. Association between role occupancies & physical health statuses and dependence mattering, controlling for race, gender, income, and education. Standardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded.

Mediational Effects

The final step in assessing the mediation of the association between age and mattering was to examine the link between age and mattering when controlling for the effects of role occupancies and physical health statuses. These findings are shown in Figure 4.7. The marital ($\beta = .030$), caregiver ($\beta = .061$), and parent ($\beta = .046$) roles and illness symptoms ($\beta = -.022$; see Figure 4.6) cannot be mediators of the association because the marital status, caregiver status, parental status, and illness symptoms were unrelated to dependence mattering.

Evidence in support of mediation also requires that role occupancies and physical health remain significantly associated with mattering when age is controlled. Evidence of mediation emerged for the association between age and dependence mattering ($\beta = -.010$, $p < .001$; see Figure 4.4), for the association between age and dependence mattering was less strong when the effects of some role occupancies and physical health measures were controlled ($\beta = -.006$, $p < .05$; see Figure 4.7).

With age controlled, the productive roles of work and volunteering, as well as informal roles of friend and grandparent, and self rated health, remained significantly associated with dependence mattering. The significant association between age and dependence mattering ($\beta = -.010$, $p < .001$; see Figure 4.4) was still apparent when the effect of each of these variables were controlled ($\beta = -.006$, $p < .05$), though the significance level decreased indicating that these roles and self-rated health do in fact act as mediators of the negative relationship between age and dependence mattering.

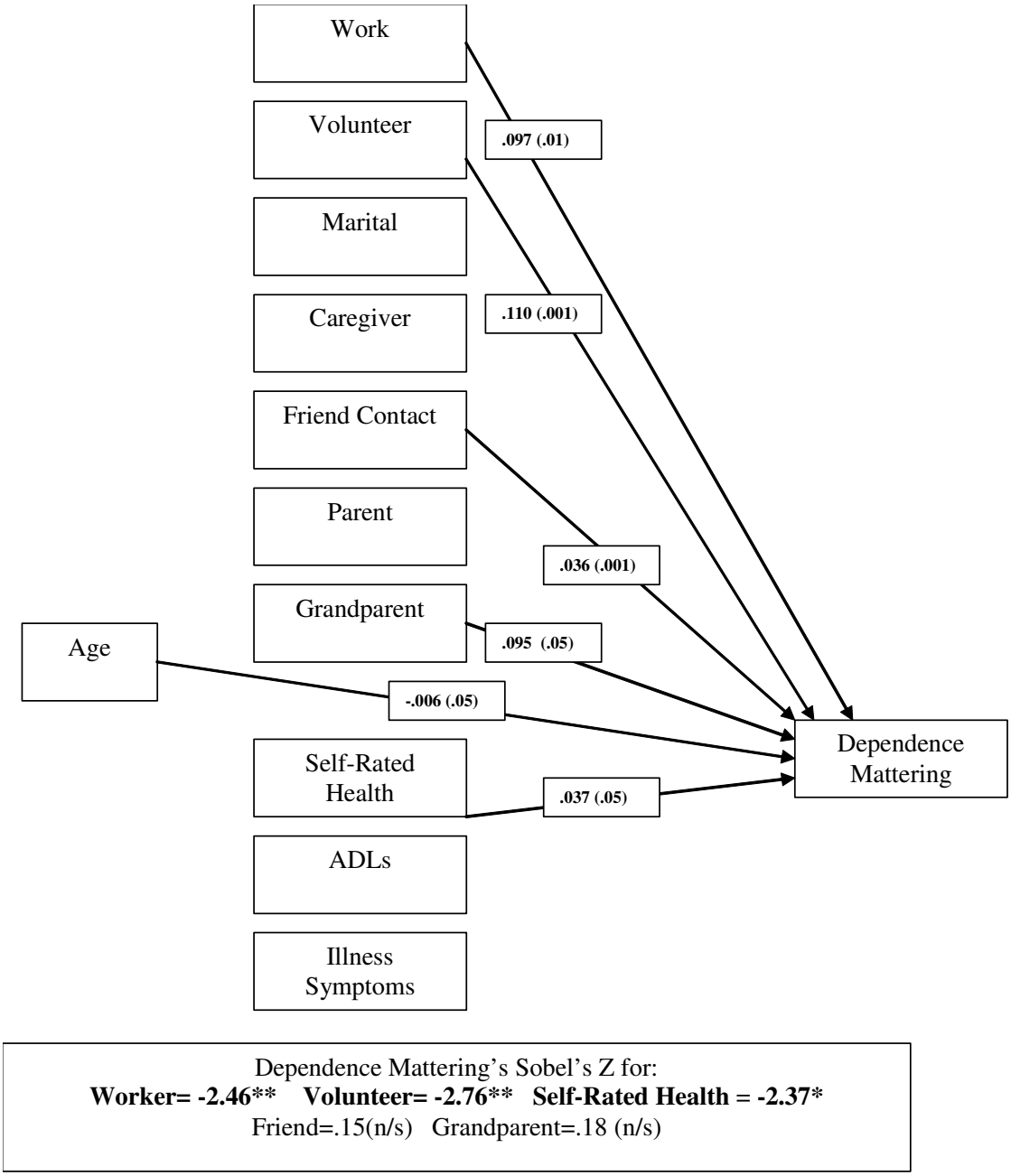


Figure 4.7. Mediational role of role occupancies and physical health status in the linkage between age and dependence mattering, controlling for race, gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Only significant paths are shown.

The Sobel significance test measures the degree to which mediation is actually taking place; it provides an approximate significance test for the indirect effect of the independent variable on the dependent variable via the mediator (Baron and Kenny

1986; Burnette, Taylor, Worthington and Forsyth 2007; Sobel 1982). It indicates that the worker role and the volunteer role as well as self-rated health act as significant mediators in the relationship between age and dependence mattering. It would appear that the "productive" roles that provide formal ties to work or work-like settings, act as true mediators of the relationship between age and dependence mattering, where informal ties or family and friend roles do not mediate the relationship between aging and a decline in dependence mattering. Additionally, health as measured by self-rated health lends support to explanation two that predicted a decline in dependence mattering by age in part due to the poorer physical that can accompany advancing age.

The friend role and the grandparent roles are significantly related to dependence mattering, but may not be true mediators of the association between older and lower dependence mattering.

Regression Analysis

Table 4.4 shows dependence mattering regressed on all role occupancy variables and physical health measures and presented in a typical step-wise OLS form. Model 1 shows that there is a significant and negative relationship between age and dependence mattering, so that older age is related to lower dependence mattering. Model 2 shows the relationship between age and dependence mattering once controls are entered into the model. The negative and significant relationship is slightly impacted by these controls. Model 3 shows that the occupancy of the work role, the volunteer role, the friend role and grandparent role are positively related to dependence mattering. Model 4 shows the relationship between physical health and

dependence mattering. Self-rated health is significantly related to dependence mattering as well as activities of daily living, where greater impairment is negatively related to mattering. Finally, Model 5 includes both sets of explanatory variables, and shows that the work, volunteer, friendship and grandparent roles as well as self-rated health are significantly related to dependence mattering.

Overall, we find that the relationship between age and dependence mattering is partially explained by role occupancies and/or physical health status, or the combination of the two. Age remains negatively related to dependence mattering (b= -.006, $p < 0.05$). This indicates that as age increases, dependence mattering is lower, even when controlling for seven role occupancies, three measures of physical health, race, sex, income and education. However, as indicated in prior analyses, there is some mediation, as the coefficient size decreases from -0.012 to -0.006 and statistical significance declines. Significant differences in dependence mattering exist based on race and gender lines; these relationships will be further explored in chapter 5. I also find that educational attainment is not related to dependence mattering.

Importance Mattering

The first step in assessing the mediation of the association of age with importance mattering was to examine the relationship between the age and importance mattering. The results shown in Figure 4.8 reveal that age was negatively associated with importance mattering. This was a significant relationship. However, this relationship is not statistically significant in the presence of control variables: race, sex, income and education (β = -.002, p = .219; see figure 4.9). For this reason, the first step of the mediated analyses have been violated, as mediation assumes that

the predictor variable (e.g., age) is significantly associated with the criterion variable (e.g., importance mattering) and here age is not significantly related to importance mattering once controls are introduced.

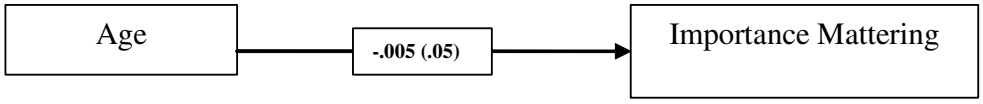


Figure 4.8. Association between age and importance mattering; no controls. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded.

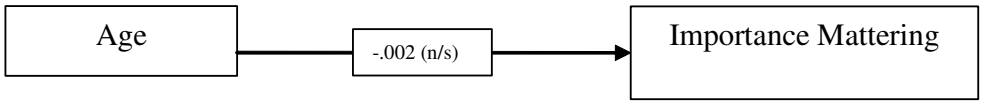


Figure 4.9. Association between age and importance mattering; controlling for race, gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded.

Though age is unrelated to importance mattering in multivariate analyses, I examine variables that predict importance mattering and present these findings in regression tables. Table 4.5 shows the relationship between age and importance mattering. Model 1 shows that there is a significant and negative relationship between age and importance mattering; that is, older age is related to lower importance mattering. Introducing control variables in model 2, we find that the age/importance mattering relationship is no longer significant. Race, gender and income are significantly related to importance mattering so that African-Americans and women report higher levels of mattering than whites and men, which is in alignment with prior research; and those with greater income and higher educational attainment report greater importance mattering.

Models 3 and 4 represent the two explanations put forth to explain the relationship between age and self-concept, respectively. Model 3 suggests that role occupancies can help to explain the relationship between age and importance mattering, and once these roles have been added into regression analysis, the age coefficient goes from -.003 (model 2) to .000 (model 5), and the relationship is no longer statistically significant. However, these variables do not formally mediate the age/mattering relationship.

We also find that certain roles are significantly related to importance mattering. Model 4 shows that including physical health variables also reduces the age coefficient and statistical significant with higher levels of self-rated health related to a higher sense of mattering. Model 5 shows that the parental role (b= .112, $p <$ 0.05) and friend role (b=.026, p < .01) remain positively and significantly related to importance mattering and the volunteer role is marginally related to importance mattering; while the marital, caregiver, and grandparent roles are not significantly related to importance mattering.

It is notable that the volunteer role remains significantly, albeit marginally, related to importance mattering (b= .048, $p < 0.10$). The volunteer role is conceived of as different than the other roles, for it may act as a replacement role for those no longer experiencing a work, marital or caregiver, for example. It is likely that volunteer roles are taken on in many ways to augment or supplement other lost roles.

Overall, the relationship between age and importance mattering is explained. That is, age is no longer significantly related to importance mattering once control variables, role occupancies and physical health are included in statistical models. The

relationship between age and this measure of the self-concept is accounted for largely by control measures and these models also show a reduction in the effect size from -0.003 to .000, though as prior analyses suggest, mediation cannot be claimed.

The friendship and parent roles are most strongly related to importance mattering, while the work and volunteer roles are marginally related to importance mattering. Surprisingly, physical health does not seem to bear much on importance mattering in this older population, as ADLs and illness symptoms are unrelated to importance mattering, though self-rated health remains positively related to importance mattering.[20]

Role Accumulation

Analyses show a relationship between the number of roles held and both measures of mattering. *Dependence Mattering.* In regression analysis (see Table 4.6), we find that models 1 and 2 show a significant relationship between age and dependence mattering, with model 2 incorporating control variables. Model 3 introduces role accumulation as the variable of interest. Here we find that the total number of roles held is significantly related to dependence mattering ($\beta = .067$, $p < .001$). When physical health measures are added into the model (see model 4), the significant relationship between number of roles held and dependence mattering remains significant at the .01 level ($\beta = .060$, $p < .01$).

[20] In analyses not shown here, I examined the relationship between physical health and mastery where levels of physical health might be predictive of one's sense of mastery. I found that mastery, more so than dependence mattering, importance mattering, and self-esteem was significantly related to one's physical health.

Mattering Summation

Importance mattering and dependence mattering are lower with advancing age. For dependence mattering, the relationship between older age and lower dependence mattering is not fully explained; however, I find that the productive roles of worker and volunteer, as well as self-rated health are more predictive of dependence mattering than other role occupancies and act as mediators of the age/dependence mattering relationship. Regarding importance mattering, we don't find mediation, but the volunteer, friend, and parent roles are significantly related to importance mattering. Additionally, role accumulation is positively and significantly related to dependence and importance mattering for these older adults.

Chapter 5: Results: Race and Gender as Moderating-Mediators

Prior analyses focused on the relationship of roles, physical health, and the self-concept. There is reason to believe that race and gender differences exist regarding these late life experiences. I suggest that race and gender act as moderating-mediators. The uncovering of race and gender differences in the mechanisms that connect aging to declines in mattering, would reveal disparities in mattering process in later life.

Moderated-mediation takes place when the mediating process that is responsible for producing the effect of the predictor variable (e.g. age) on the outcome (e.g. mattering) depends on the value of a moderator variable (e.g. race or gender). In other words, the mediating process that intervenes between the predictor (e.g. age) and the outcome (e.g. mattering) differs by race and/or gender (Muller, Judd, and Yzerbyt 2005).

The ASH data are particularly well suited for the investigation of role occupancies & physical health and the self-concept in regard to roles and physical health are moderated by race and gender, as the ASH study was designed to provide equal numbers of men and women, African-Americans and whites. The following analyses are intended to focus on the race and gender differences in role occupancies and health as they relate to the self-concept in this sample of older adults. To follow, I explore only statistically significant moderation relationships (from less significant $p < .05$, to highly significant $p < .001$) that also meet the standards of mediation analyses found in earlier analyses. That is, a moderated-mediator can only be valid if a statistically significant mediation relationship was found to start with.

Results

When examining race and gender as moderators of the age/dependence mattering and age/importance mattering relationship, analysis reveals four significant multiplicative interaction terms between race and each role occupancy as well as gender and each role occupancy to determine if African-Americans and whites, women and men, similarly experience role occupation as related to mattering: African-American*work (for dependence mattering); African-American*work (for importance mattering); woman*friend contact (for dependence mattering) and woman*grandparent status (for importance mattering). These significant interactions show race and gender differences in the role occupancies associated with mattering. However, only one of these four associations shows up in prior mediational analyses as a significant mediator of the age/mattering relationship for the entire sample, and this is the work role(see Figure 4.7).[21] When the entire sample is split by race, I find that the volunteer role is a significant mediator of the age/dependence mattering relationship for African-Americans but not for whites. Work as a mediator for the whole sample, and volunteering as a mediator for African-Americans, are discussed below.

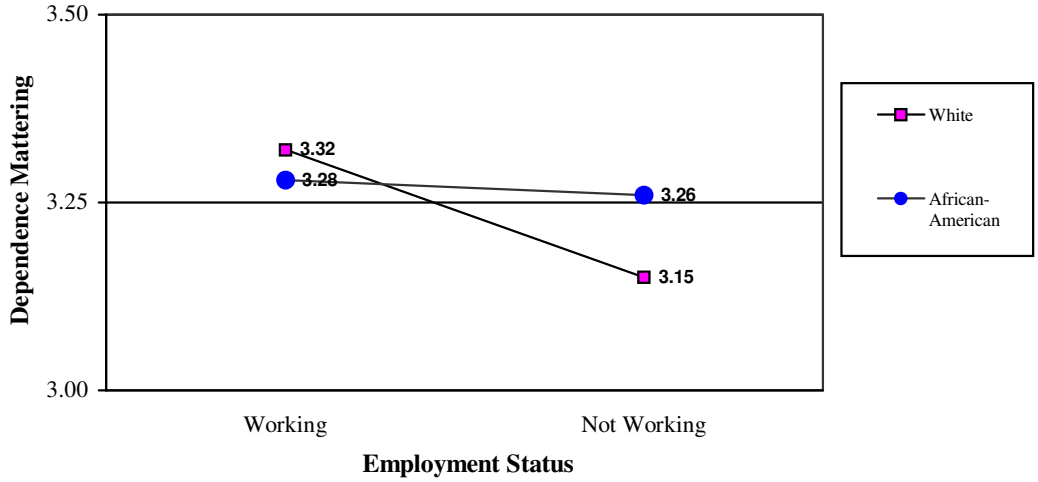
Race and the Work Role: Dependence Mattering. There are significant race differences in the mediation of the age/dependence mattering association as related to

[21] Though three other interaction terms are significant, they are not true mediators of the age/mattering relationship. They are of value because they reveal race and gender differences in the path to mattering, and therefore are noted here. Regarding gender moderation and mattering, there are gender differences in how friendship contact is related to mattering. For men, low levels of friendship contact is related to lower levels of dependence mattering, but this is not the case for women and it may help explain why men lose dependence mattering as they age. Regarding grandparenting for women, the grandparent role is positively and significantly related to importance mattering, where this is not the case for men.

the work role. Here, I am specifically interested in how race may moderate how work mediates the relationship between age and dependence mattering. The significant interaction term for race and role occupancies can be seen in Table 5.1.

In Table 5.1 model 1 is a main effects model while model 2 includes a significant interaction term. There is a significant difference between blacks and whites in the effect of the work role on dependence mattering. These differences are illustrated in Figure 5.1. Separate regression models were run for blacks and whites (see Table 5.2). Here it is found that occupancy of the work role is positive and significantly related to dependence mattering for whites (b= .174, $p < 0.001$). Working whites report higher levels of dependence mattering (3.32) than non-working whites (3.15). However, for blacks, there is no significant difference in the reporting of dependence mattering by occupancy of the work role.

Figure 5.1 Effects of Work Status on Dependence Mattering for African-Americans and Whites



All figures control for age, role occupancies, physical health measures, and socio-demographic characteristics.

Figure 5.1 shows race differences in work's relationship to dependence mattering. To further explore these race differences, split the sample and I performed mediational analyses separately for African-Americans and whites. Regarding mattering and race, the work role seems to explain some of the age/mattering relationship for whites but not for African-Americans in the assessment of dependence mattering. These regression analyses can be viewed in figures 5.2, 5.3, 5.6 & 5.10 to more clearly show how meditation is taking place differently for African-Americans and for whites.

The first step examines the relationship between age and dependence mattering for African-Americans. Age is negatively associated with dependence mattering ($\beta = -.010$, $p < .01$; see figure 5.2). When controls are included in the model ($\beta = -.009$, $p < .01$; see figure 5.3), age remains negatively related to dependence mattering.

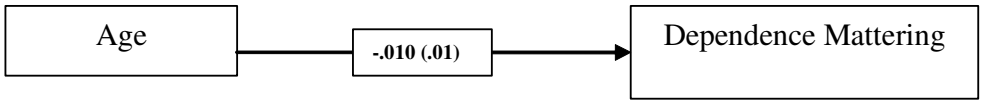


Figure 5.2. Association between age and dependence mattering for **African-Americans**; no controls. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded. N= 568.

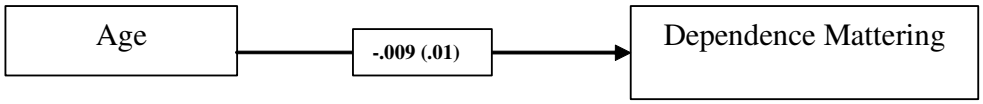


Figure 5.3. Association between age and dependence mattering for **African-Americans**; controlling for gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded. N= 568.

For whites, age is also negatively associated with dependence mattering (β = -.013, p < .001; see figure 5.4). When controls are included in the model (β = -.011, p < .001; see Figure 5.5), age remains negatively related to dependence mattering as well.

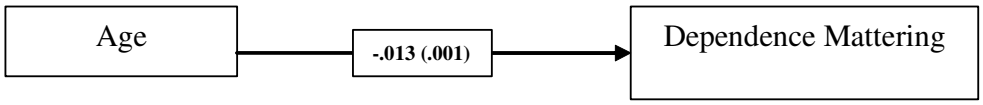


Figure5.4. Association between age and dependence mattering for **white**s; no controls. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded. N= 581.

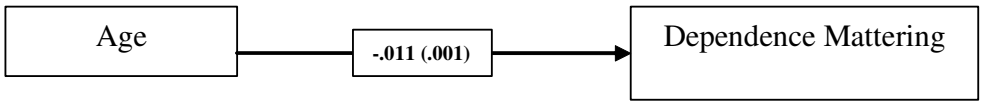


Figure 5.5. Association between age and dependence mattering for **whites**; controlling for gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded. N= 581.

The second step in assessing the mediation of the association of age with dependence mattering, separately for African-Americans and whites, was to examine the association of age with role occupancies and physical health statuses. Each assessment of the potential mediation variables (e.g. role occupancy or physical health status) was individually associated with age, controlling for gender, income, and education. These findings are shown in figures 5.6 and 5.7.

Role occupancies. For African-Americans, age is negatively associated with occupancy of both productive roles: the work role (β = -.014, p < .001) and occupancy of the volunteer role (β = -.008, p < .05). Informal roles were also

significantly related: occupancy of the marital role ($\beta = -.007$, $p < .05$); occupancy of the friend role ($\beta = -.020$, $p < .05$); occupancy of the parent role ($\beta = -.005$, $p < .05$); and is marginally associated with occupancy of the caregiver role ($\beta = -.004$, $p < .10$); Age is not significantly related to grandparent role (see figure 5.6).

Physical health statuses. For African-Americans, age is positively associated with ADLs or activities of daily living, as persons age they report more limitations. ($\beta = .012$, $p < .001$). Self-rated health and illness symptoms were not found to be associated with age (see figure 5.6).

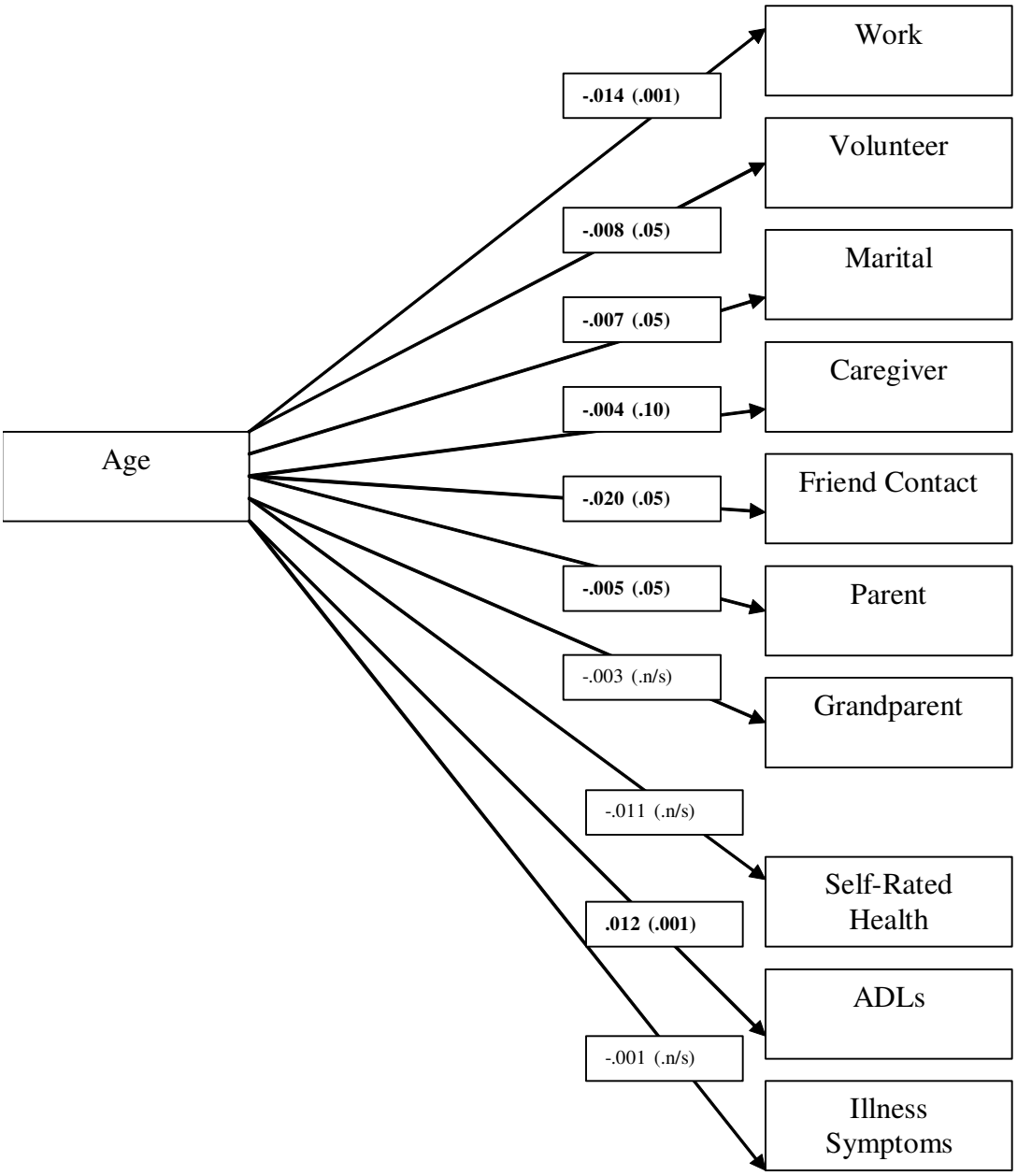


Figure 5.6. Association between age and role occupancies & age and physical health statuses for **African-Americans**; controlling for gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded. N= 568.

Role Occupancies. For whites, age is negatively associated with occupancy of the work role ($\beta = -.014$, $p < .001$) and is marginally associated with occupancy of the volunteer role ($\beta = -.006$, $p < .10$). Occupancy of one informal role, the marital role ($\beta = -.001$, $p < .001$) is significantly related to age. Age is not significantly related to the caregiver role, friend role, parent or grandparent role. *Physical health statuses.* For whites, age is negatively associated with self-rated health ($\beta = -.020$, $p < .01$) and positively associated with ADLs ($\beta = .010$, $p < .001$), again illness symptoms were not found to be associated with age (see figure 5.7).

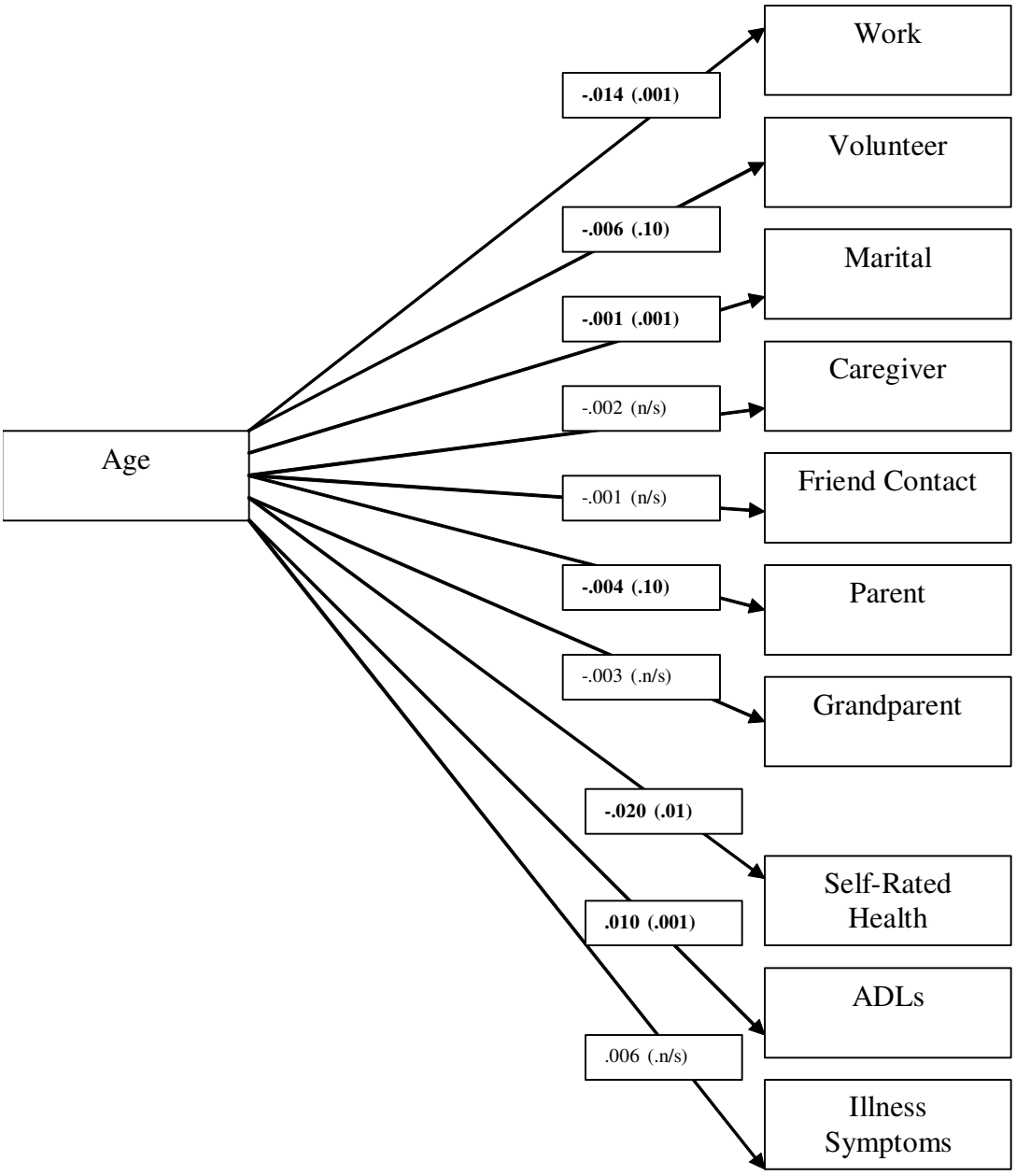


Figure 5.7. Association between age and role occupancies & age and physical health statuses for **whites**; controlling for gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded. N= 581.

The third step in assessing the mediation of the relationship of age with mattering was to assess the link between role occupancies and physical health and dependence mattering for African-Americans and whites. These results are shown in figures 5.8 and 5.9 and indicate that role occupancies and physical health statuses have mixed associations with dependence mattering.

Role occupancies. For African-Americans, one productive role, the volunteer role ($\beta = .178$, $p < .001$), and one informal role, the friend role ($\beta = .041$, $p < .01$) are positively associated with dependence mattering. Occupancy of the work, marital, caregiver, parent and grandparent roles are not associated with dependence mattering.

Physical health. Self-rated health is positively associated with dependence mattering ($\beta = .061$, $p < .01$). Activities of daily living are negatively associated with dependence mattering ($\beta = -.143$, $p < .01$) and illness symptoms are not significantly associated with dependence mattering for African-Americans (see figure 5.8).

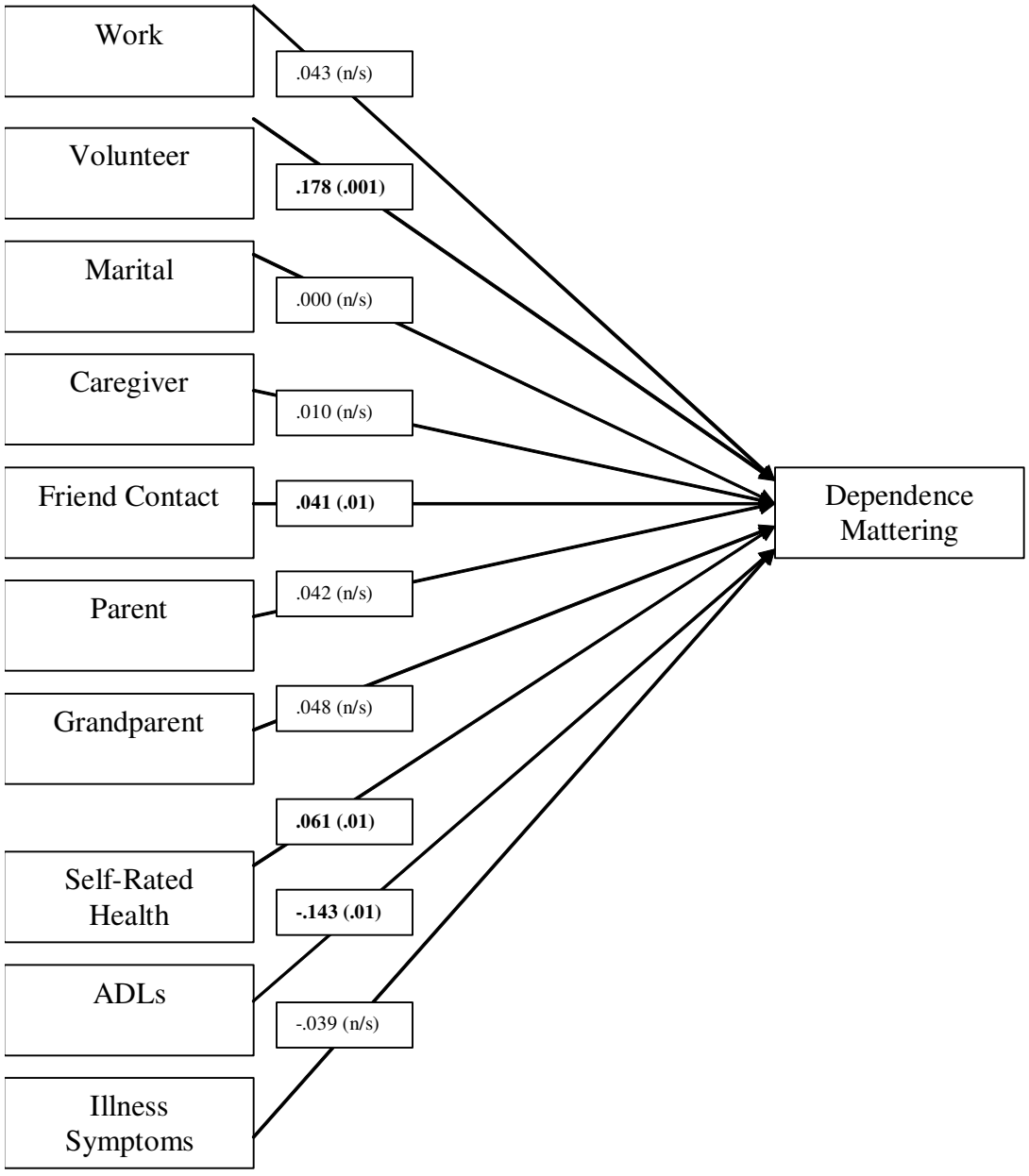


Figure 5.8. Association between role occupancies & physical health statuses and dependence mattering for **African-Americans**; controlling for gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded. N= 568

Role occupancies. For whites, both productive roles, the work role ($\beta = .209$, $p < .001$) and volunteer role ($\beta = .138$, $p < .001$) as well as a few informal roles, the caregiver role ($\beta = .117$, $p < .05$); friend role($\beta = .056$, $p < .001$); and grandparent role ($\beta = .108$, $p < .05$); are positively associated with dependence mattering. Occupancy of the marital and parent roles are not associated with dependence mattering.

Physical health. Self-rated health is positively associated with dependence mattering ($\beta = .051$, $p < .01$). Activities of daily living are negatively associated with dependence mattering ($\beta = -.149$, $p < .01$) and illness symptoms are not significantly associated with dependence mattering for whites (see figure 5.9).

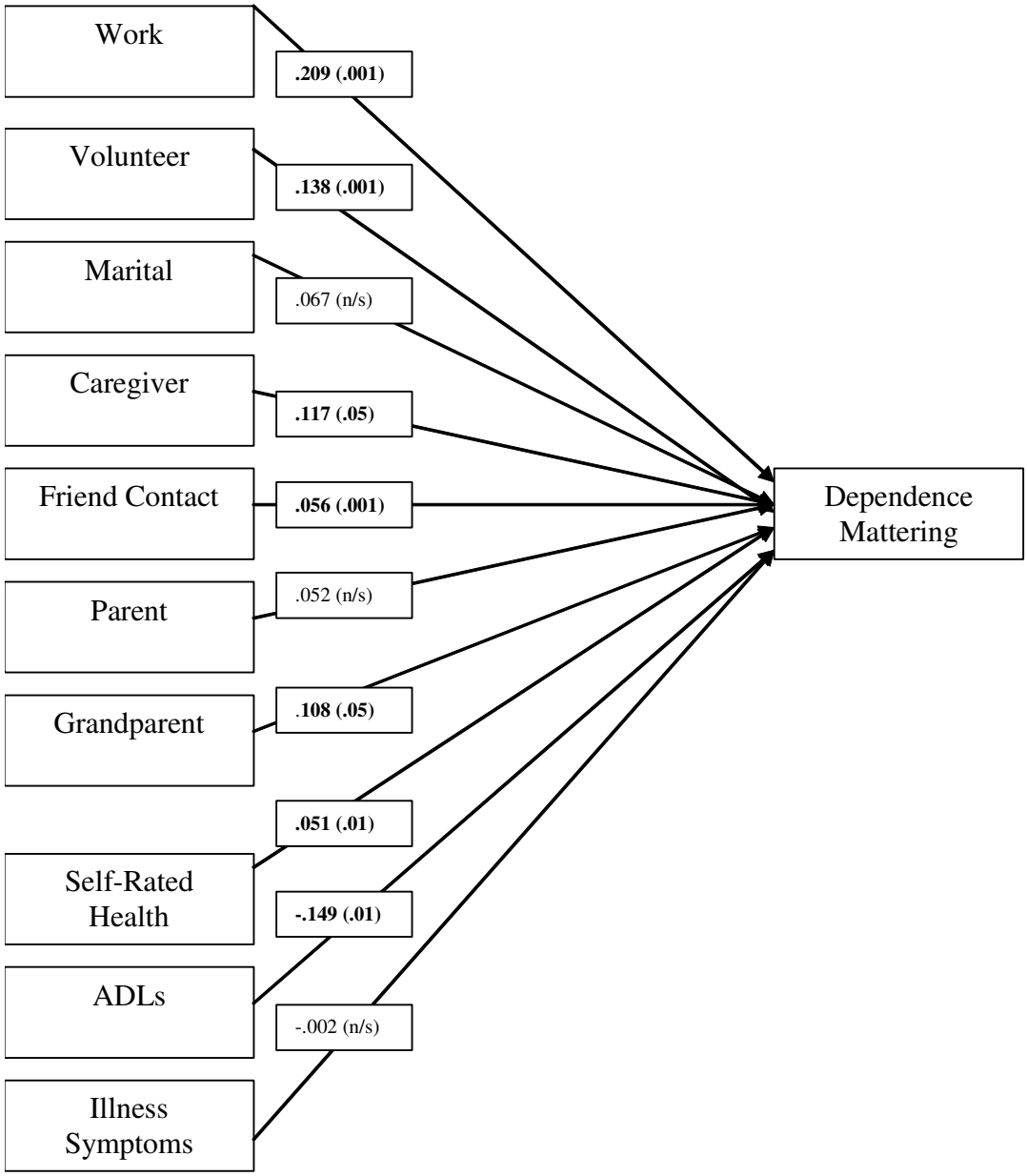


Figure 5.9. Association between role occupancies & physical health statuses and dependence mattering for **whites**; controlling for gender, income, and education. Standardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Significant paths are bolded. N= 581.

Mediational Effects: Race Differences

The final step in assessing the mediation of the association between age and mattering, for African-Americans and whites, was to examine the link between age and dependence mattering when controlling for the effects of role occupancies and physical health statuses. For African-Americans, the work ($\beta = .043$), marital ($\beta = .000$), caregiver ($\beta = .010$), parent ($\beta = .013$) and grandparent ($\beta = .048$) roles and illness symptoms ($\beta = -.039$; see figure 5.8) cannot be mediators of the association because work status, marital status, caregiver status, parental status, grandparent status and illness symptoms were unrelated to dependence mattering.

Evidence in support of mediation also requires that role occupancies and physical health remain significantly associated with dependence mattering when age is controlled. Evidence of mediation emerged for the association between age and dependence mattering ($\beta = -.009$, $p < .01$; see Figure 5.3), for the association between age and dependence mattering was less strong when the effects of some role occupancies and physical health measures were controlled ($\beta = -.006$, $p < .10$; see Figure 5.10). With age controlled, the productive role of volunteering, and self-rated health remained significantly associated with dependence mattering. The significant association between age and dependence mattering ($\beta = -.009$, $p < .01$; see Figure 5.3) was still apparent, when the effect of volunteering and self-rated health were controlled ($\beta = -.006$, $p < .10$), though the significance level decreased to a marginal level indicating that volunteering and self-rated health may in fact act as mediators of the negative relationship between age and dependence mattering. However, it is

noteworthy that the work role is not a mediator of the age/dependence mattering association for African-Americans.

The Sobel significance test measures the degree to which mediation is actually taking place; it provides an approximate significance test for the indirect effect of the independent variable on the dependent variable via the mediator. It indicates that the volunteer role acts as a significant mediator in the relationship between age and dependence mattering. It would appear that this "productive" role that provides formal ties to work or work-like settings, acts as a mediator of the relationship between age and dependence mattering for African-Americans, where informal ties or family and friend roles do not mediate the relationship between aging and a decline in dependence mattering. Though the race*volunteer interaction was not significant, which would have indicated statistically significant race *differences* between African-Americans and whites in regard to the volunteer role's association with dependence mattering, split sample analyses show that the volunteer role is a significant mediator of the age/dependence mattering relationship for African-Americans ($\beta = .134$, $p < .01$) (see Figure 5.10). Self-rated health is marginally related to dependence mattering, but may not be a true mediator of the association between aging and the decline of dependence mattering for African-Americans for it is not significant according to the Sobel significance test.

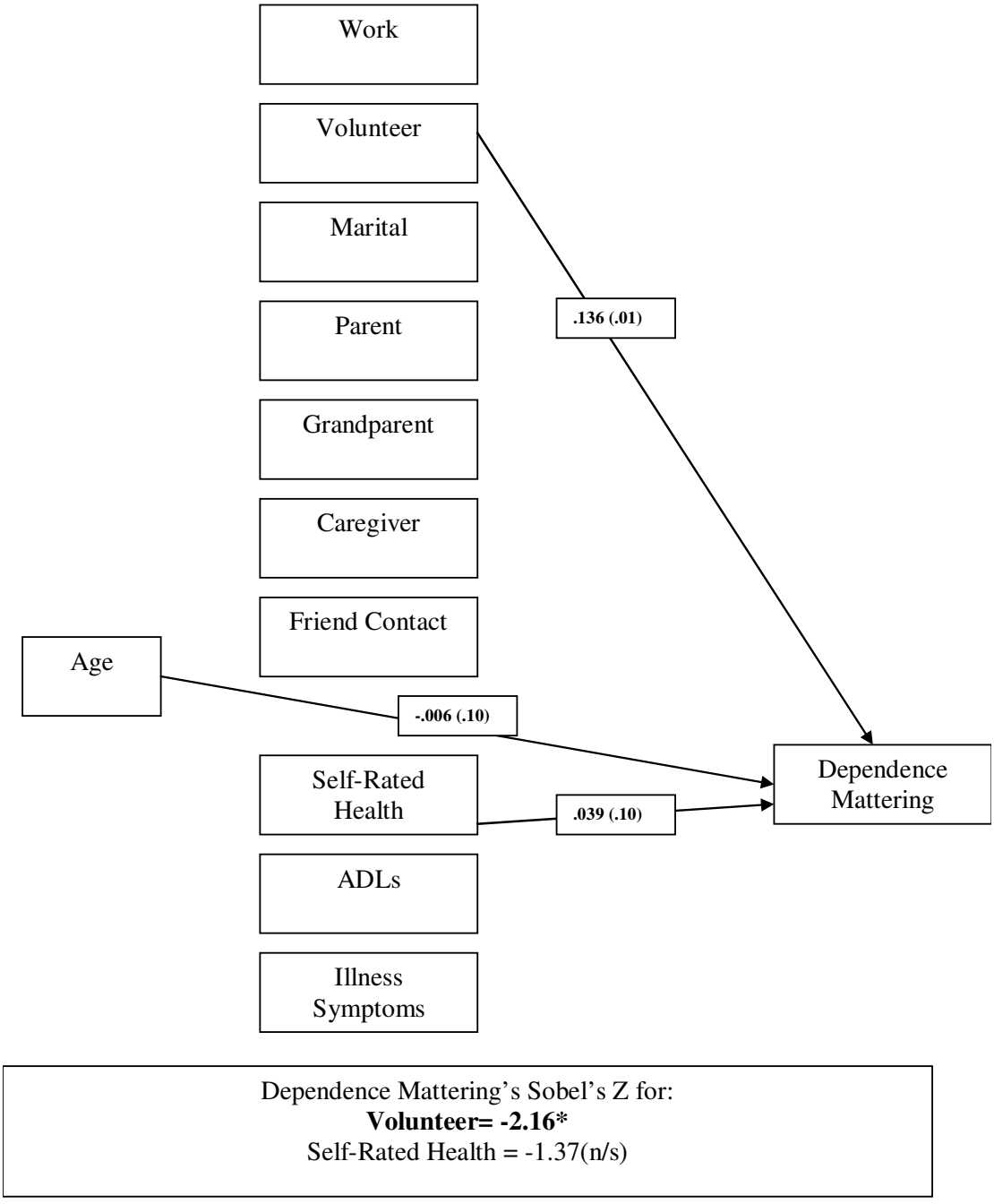


Figure 5.10. Mediational role of role occupancies and physical health status in the linkage between age and dependence mattering for **African-Americans**; controlling for gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Only significant paths are shown. N= 568.

For whites, I assessed the mediation of the association between age and mattering to examine the link between age and mattering when controlling for the effects of role occupancies and physical health statuses. These findings are shown in Figure 5.11. For whites, the marital ($\beta = .067$) and parent ($\beta = .052$) roles and illness symptoms ($\beta = -.002$; see Figure 5.9) cannot be mediators of the association between age and dependence mattering because the marital status, parental status, and illness symptoms were unrelated to dependence mattering.

Evidence in support of mediation also requires that role occupancies and physical health remain significantly associated with dependence mattering when age is controlled. Evidence of mediation emerged for the association between age and dependence mattering ($\beta = -.011$, $p < .001$; see Figure 5.5), for the association between age and dependence mattering was less strong when the effects of some role occupancies and physical health measures were controlled ($\beta = -.006$, $p < .10$); see Figure 5.11). With age controlled, the productive roles of worker and volunteer, as well as informal roles of caregiver, friend, and grandparent, and self-rated health & illness symptoms remained significantly associated with dependence mattering. The significant association between age and dependence mattering ($\beta = -.011$, $p < .001$; see Figure 5.5) was still apparent, when the effect of work, volunteer, caregiving, friend contact, grandparenting, self rated health, and illness symptoms were controlled ($\beta = -.006$, $p < .10$), though the significance level decreased indicating that these roles and self-rated health may in fact act as mediators of the negative relationship between age and dependence mattering.

The Sobel significance test provides an approximate significance test for the indirect effect of the independent variable on the dependent variable via the mediator. It indicates that the work role acts as a significant mediator in the relationship between age and dependence mattering. It would appear that this "productive" role acts as a true mediator of the relationship between age and dependence mattering for whites, where again informal ties or family and friend roles do not mediate the relationship between aging and a decline in dependence mattering. Additionally, self-rated health is a significant mediator.

Volunteering, caregiving, friend contact, grandparenting, and illness symptoms are significantly related to dependence mattering for whites, but may not be true mediators of the association between aging and the decline of dependence mattering for they do not remain significant according to the Sobel significant test.

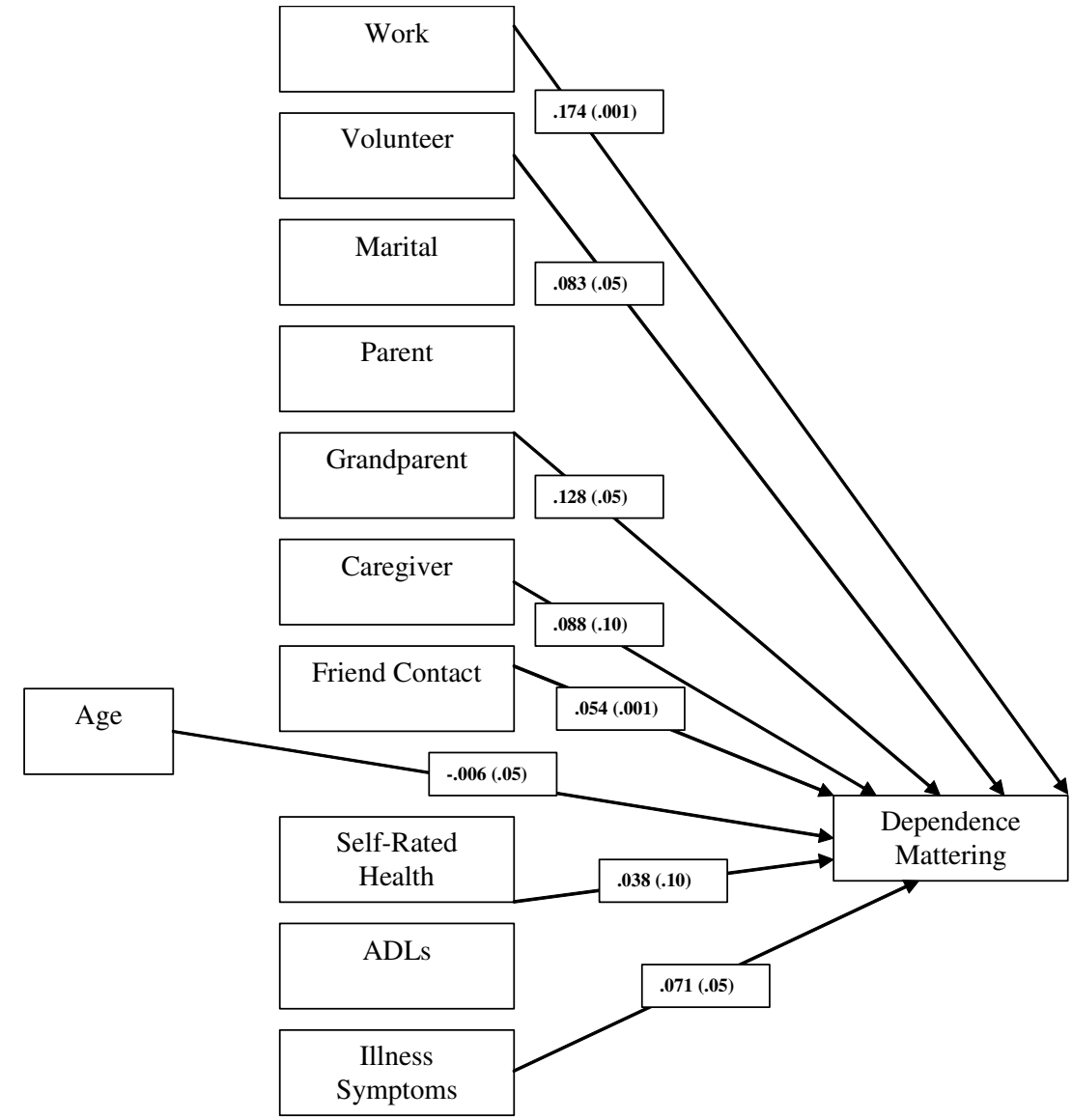


Figure 5.11. Mediational role of role occupancies and physical health status in the linkage between age and importance mattering and dependence mattering for **Whites**; controlling for gender, income, and education. Unstandardized regression coefficients are displayed on each path with corresponding probability values in parentheses. Only significant paths are shown. N= 581.

In sum, for whites, the work role and self-rated health act as significant mediators of the age-dependence mattering relationship. For African-Americans, while work and self-rated health are not mediators of this relationship, the volunteer role mediates the age-dependence mattering relationship. Interestingly, family, caregiver, and friend roles do not act as mediators for either group, nor, as seen previously, do they act as mediators for the entire sample.

Chapter 6: Discussion and Conclusions

I asked at the outset of this dissertation, how is aging related to the self-concept? Does mattering decline with age? I find that the self-concept is lower with advanced age. The two explanations or mechanisms I put forth to elucidate this decline did help to explain the association. On balance, role occupancies seem more closely tied to explaining why mattering declines with age compared with physical health status. With some variation, the roles based on previous research (e.g. the marital role) that might have predicted decline in self-concept, did not. Rather, other roles such as productive or more formal roles of worker and volunteer were especially important.

The discussion is organized as follows. I begin with key findings from the study and address Rosenberg's question that motivated this research. Then I discuss the larger implications of this work as well as its limitations. I end with concluding thoughts and suggestions for future research.

Findings

What Explains the Age/mattering Relationship?

I answer my first main research question *how is aging related to sense of mattering for older adults,* by showing that mattering does decline in late life. This is accomplished through bivariate and multivariate analyses. Bivariate results show that age is related to mattering, where mean levels of both dependence mattering and importance mattering lower with increasing age. Additionally, I find that age links to role occupancy as each role occupancy is significantly related to age. In a

comparison of the young-old (65-74) to the oldest-old (85+), the oldest-old are less likely to occupy each role than the young-old, except for the friendship role. Physical health also declines with the advancement of age.

As well, role occupancies and physical health are linked to mattering. Roles are related to importance mattering and dependence mattering differentially. Formal roles and informal roles are related to dependence mattering, but informal roles, or more specifically, family roles, are more closely tied to importance mattering. For example, the married have a self-concept advantage over the unmarried with significant differences in importance mattering, though not dependence mattering.

Formal roles of worker and volunteer are related to sense of dependence mattering and importance mattering, as those who are currently working or volunteering report significantly better self-concepts than those not currently engaged in these productive roles. Frequent contact with friends is significantly related to both measures of mattering. Regarding health and mattering – self-rated health and ADLs – two measures of physical health, are significantly related to both measures of mattering, while illness symptoms are only related to dependence mattering.

Multivariate analyses that illustrate the mediation relationship between age and mattering shows that several role occupancies are implicated in the relationship between aging and the self-concept. Most striking are the work role and the volunteer role as they relate to dependence mattering and importance mattering. Neither of these roles resides in the informal or familial sphere, but rather in what I suggest to be a productive or formal sphere outside of the home/family. Productivity may in fact be the thread that ties these two role occupancies – work and volunteering – together.

That is, older adults, not unlike persons of other age groups, may feel a need to be productive and therefore connected to and needed by "society". This important formal tie to others may happen when one is in the paid labor force; moreover, the volunteer role may serve a similar purpose that extends beyond the paid labor force (Morris 1996; Wilson and Musick 1997; Herzog, Markus, Franks, and Holmberg 1998).

Research has suggested that those older adults who volunteer are more likely to have access to greater resources, a larger social network, more power and more prestige than their peers, which may lead to better physical and mental health (Lum and Lightfoot 2005). These qualities of volunteer roles may mirror those found in good paid work positions. Mattering to one's community may play a large part in the role occupancy/mattering relationship; having a purpose in one's life beyond one's own immediate circle of family and friends may be essential to their overall well-being. Being productive, as defined by one's self or by others, can make people feel purposeful. It is unfortunately possible that many people view older adults as unproductive members of the community, perhaps even a burden, or at least this is the perception (i.e., the generalized other). Volunteers can say, I am not only pulling my weight, I am contributing to the community and volunteer work may also provide a sense of meaning in their lives (Warburton and Dyer 2004; Rosenberg and Letrero 2006).

An outstanding point remains: it is not clear if productive activities make people healthier or healthy people are more likely to be engaged in productive activities (Moen and Dempster 1992). The volunteer role, and to some extent the

work role, may be taken up by those who are themselves healthy and this may explain the significant and positive relationship between volunteering and a more positive self-concept.

It is noteworthy that some of the formal/informal differences found in the bivariate persist in multivariate analysis, with the work and volunteer roles remaining significantly related to dependence mattering, but not importance mattering. Moreover, the work and volunteer roles act as mediators of the age-dependence mattering relationship. While I do not find that roles and physical health act to mediate the age-importance mattering relationship, I do find that in multivariate analysis, as in bivariate analysis, the informal parent role remains significantly related to importance mattering, but not dependence mattering.

What does it mean that work/productive roles matter, and potentially matter more than informal roles? Societal expectations of productivity may have a truly profound influence on the self-concept, where in order to feel that others depend upon us; we have to be producers within society, not just within the family.

It is noteworthy that we find varied results for dependence mattering versus importance mattering. It would seem that familial roles would be closely tied to sense of dependence mattering and importance mattering, and yet the familial roles of spouse and parent are not significantly related to dependence mattering. An informal role that is significantly related to dependence mattering and importance mattering is the friendship role; it is more closely related to mattering than familial and caregiver roles. The friend, work, and volunteer roles go beyond the family sphere, which we often view as a location for social support and sense of connection to significant

others. The quality of family relationships may be different or hold different meanings in later life relative to earlier years, where the development of family is likely tied to sense of mattering. For older adults, contact with society, beyond the family, appears to be a better predictor of dependence mattering than the occupancy of family roles.

In addition to the significance of individual roles, I find that role accumulation, or number of roles held, is significantly related to dependence mattering and importance mattering. Multiple roles may in fact produce ego-gratification, allowing persons to feel a sense of importance. Social roles provide people with a sense of meaning and behavioral guidance and these roles are essential to psychological well-being and functioning (Thoits 1983b:183). We may matter more when we have greater opportunities to matter. Additionally, if one role is eliminated, others are available to compensate for this loss. More roles also provide more opportunities for social connections and may protect individuals, particularly older adults, from isolation. Future work on role accumulation and mattering should focus not only on number of roles held, but on the psychological centrality of roles occupied (Rosenberg 1979; Thoits 1983b:177).

Self-rated health is significantly related to dependence and importance mattering and is a mediator of the age-dependence mattering relationship. As a mediator of the age-dependence mattering association, self-rated health helps explain the decline of mattering in late life. Self-rated health is a robust measure of physical well-being, and is closely correlated with morbidity and mortality (Idler and Angel 1990). Here it shows that physical health or poor physical health is related to a

decline in dependence mattering. However, I find that physical health is not as strongly tied to mattering as would have been expected, for ADLs and illness symptoms are not significantly related to mattering. In supplemental analysis, I found that physical health is strongly and significantly related to mastery for all three measures of physical health; this relationship is found in prior research (Mirowsky and Ross 1995; Schieman 2001). A stronger relationship with these other measures of physical health would make a better case for the physical health-mattering connection. The self-rated health measures is a subjective "self" assessment which captures some of the age-self-concept relationship, but its lone association with mattering is not as convincing as would be three significant relationships (i.e., self-rated health, ADLS, illness symptoms) between physical health and mattering. Moreover, mattering seems to be more sensitive to role occupancies than one's physical health status. Why might this be the case?

Physical health may be relatively independent of one's sense of mattering compared with mastery. This is potentially good news for older adults whose physical health may be in jeopardy, for part of their self-concept – mattering – may function independently of physical health problems or decline. It appears possible to matter to significant others even if one has some difficulty with physical functioning or general physical health. Future analysis should focus on possible gender differences in physical health's relationship to mattering in late life; it is also possible that a relationship between physical health and mattering might be established when looking at the relationship of health and mattering over time.

Gender, Race and Self in Old Age

A second set of analyses based on research question two; *do key social statuses such as gender and race matter for understanding how role occupancies and physical health diminish the self in late life?* focused on race and gender moderation within the relationship between age and the self-concept. Results from chapter 4 show that women report higher levels of dependence mattering than men, and blacks report higher levels of dependence mattering than whites, but we are most interested in *how* the mediation relationship between age, role occupancies and physical health, and mattering are moderated by race and gender. Moderated-mediation results explored in this dissertation attend to some of these differences.

In four of the role sets – work, volunteer, grandparenting, friendship – race and gender differences in mattering are located. It is noted that gender differences in friendship and grandparenting exist as they relate to dependence mattering and importance mattering. For men, low levels of friend contact is related to lower levels of dependence mattering, but this is not the case for women and it may help explain why men lose dependence mattering as they age. Regarding grandparenting, for women, the grandparent role is positively and significantly related to dependence mattering, where this is not the case for men. Also, for whites, but not blacks, the work role is related to importance mattering. However, the only true moderated-mediator, according to formal mediation analysis – that can speak to significant race differences in mediation – is the interaction of the work role with race. The work role is a mediator of the age/dependence mattering relationship, and moderation exists in regard to race differences in the work/dependence mattering association in late life.

Occupancy of the work role is positively and significantly related to dependence mattering for whites, but not for African-Americans.

The work role explains some of the age/mattering relationship for whites but not for African-Americans. It is conceivable that whites, on average, may have had access to better work positions and may hold "better" jobs than African-Americans or are less likely to be in a job out of necessity. It is also possible that for blacks, the work role is not as salient as it may be for whites in late life, or for this cohort. Interestingly, while the work role mediated the age/dependence mattering relationship for whites but not for African-Americans, in split sample mediation analyses we find that the volunteer role mediates the association between age and dependence mattering relationship for African-Americans but not for whites. It is plausible as stated above, that the positive benefits of work are unequally bestowed upon whites, but for African-Americans volunteer work can provide a link between productivity and a sense of mattering in late life. Additionally, those African-Americans who volunteer may hold positions that mirror good paid work positions that provide benefits to participants in a similar way that the paid work role bestows benefits on white workers.

I proposed there would be gender differences in the mediation of the age/mattering relationship, and yet I do not find any true gender differences in mediation. Why don't I find some of the results I proposed? It is possible that gender differences in the self may diminish in late life, and that the process of aging via changes in role occupancy and health may be more similar than different for men and women. Gender differences that are often described in early and midlife may be tied

to these parts of the life course, or they may in fact be less strong than is often assumed.

Though true mediation is not found in regard to gender, I do find that the friendship role's relationship to dependence mattering is more important for men than women, showing that those men in late life with less friend contact have lower levels of dependence mattering than men who have frequent contact with friends. However, this difference is not found for women. More than men, women may consistently keep up contact with new and old friends.

I also proposed that informal roles would be important for sense of mattering in late life, but found that formal roles were more closely tied to mattering. It is plausible that familial roles, as informal roles, may be more relevant to sense of mattering at earlier stages in the life course. The parental role for instance may be more salient when individuals are actively in the childrearing stage of life relative to late life. The caregiving role, as another informal role, may be closely linked to sense of self. However, the number of caregivers in this sample is limited and therefore this relationship is difficult to assess. Society as a whole may put direct or indirect pressure on older adults to assess their worth or sense of self based on their productivity, more so than their connection to significant others. Overall, formal roles seem to explain more of the relationship between age and mattering than informal roles and physical health status.

Knowledge about Aging and Self: Rosenberg's and McCullough's Question

At the outset I stated that Rosenberg and McCullough (1981) questioned whether and how older adults feel they matter. I could not directly address if older adults feel they matter less than young children or mid-life adults, but I was able to address these questions of mattering within a population of older adults. This dissertation lends support to Rosenberg's notion. If one accepts that the decline in importance mattering and dependence mattering occurs when aging from young-old to old-old, it follows that compared to even younger aged adults, the elderly may fare worse in regard to the important aspects of the self.

Study of the self-concept in older adults provides valuable insight into how this is altered or guided by societal expectations and opportunities afforded to older adults in current times. Once connected vibrant middle-aged adults, older Americans may feel that no longer are important to others. Rosenberg and McCullough (1981) posited that older adults are likely to feel they matter less than young children or mid-life adults. Regarding one role loss, retirement, they theorized, but did not test that "one problem of retirement is that one no longer matters; others no longer depend upon us…The reward of retirement [may] be the punishment of not mattering" (Rosenberg and McCullough 1981:179). My findings support this idea. However, they expand their ideas in two ways, first, by stressing the volunteer role as important to the self in older adults. Rosenberg's thoughts of retirement as punishing to one's sense of mattering fails to recognize the possibility of volunteering and other alternatives to this role loss such as caregiving and active grandparenting roles to offset the loss of a work role. His notion of old age seems in step with social science

research that has in the past described retirement as the "roleless role." However, many seniors are finding multiple ways to provide a sense of meaning and mattering in their lives.

Second, this research expands Rosenberg's by incorporating race differences in the experience of the self-concept. I find that work matters more so for whites than for African Americans. The loss of the work role may mean less mattering for whites, supporting his notion that retirement can punish one's sense of mattering, but this notion is challenged for blacks who may more likely experience this role loss as a positive experience. A second productive role, volunteer, acts as a mediator of age/dependence mattering relationship for African-Americans, but not whites. This finding suggests the need to further investigate the differential benefits of volunteering for the self by racial group.

We likely have come closer to answering the question that asks if older adults feel they matter as much as others. But how do how they matter? I suggest that older adults feel they matter through role occupancies, mainly work and volunteer roles. I also found significant relationships between occupancy of the friend and parent roles. Though Rosenberg and McCullough did not suggest it, physical health does act as a mechanism through which older adults feel they matter in terms of self-rated health. It is possible that a decline in physical health, in the worsening of abilities to perform activities of daily living (ADLs) over time, may be related to dependence and importance mattering. The study of physical heath and mattering should be expanded to examine middle-aged adults into older age and potential changes in mattering and physical health over several decades.

Limitations of the Findings

As previously stated, the goal of this dissertation was to assess the relationship between age and the self-concept and see if role occupancies, as well as physical health status can explain this relationship. While this aim has been addressed, the findings do have some limitations.

First, the ASH sample cannot and should not be generalized to the U.S. population at large. The ASH sample differs from other senior samples, as the African-American population in and around the D.C. metropolitan area has a higher level of average education and job security than other U.S. African-Americans. Generally, the D.C. area is more highly educated than the rest of the country. While the analyses I produced in this dissertation do investigate how patterns vary by race and gender, again, this may not be generalizable to a larger population of elders.

Second, this project is exploratory. Thus, any conclusions drawn are tentative and primarily suggestive of further research. For example, I cannot aptly assess role salience, as respondents were not asked to prioritize or rank the importance of their roles, as some have (e.g., Krause 1994). Additionally, though preliminary analysis of role quality was conducted, it was not nuanced enough, so was not used in this dissertation. Future work should actively seek to understand role context and quality as important to the understanding of how the self-concept, specifically mattering, is related to role occupancies.

Third, though I explicitly examine race differences in sense of mattering, I am limited to a comparison of African-Americans and whites. The inclusion of Latino-Americans and Asian-Americans would make for a richer understanding of race or

cultural differences in the acquisition of mattering. Moreover, immigration status or a focus on recent immigrants and their sense of mattering would be informative. This particular analysis might lend itself to a better understanding of the cultural – U.S. culture – devaluation of the old. An explicit assessment of age discrimination or a cultural devaluation of the old was not possible here. Future work should look at role occupancies, physical health as well as meanings attached to late life for a more diverse sample of older adults.

Fourth, it would be useful to look more comprehensively at other self-concept measures beyond mattering (e.g., mastery and self-esteem) and look at all measures over time. Though comparison analyses of self-esteem and mastery were useful (not shown), a more explicit assessment of all self-concept measures would be of value, especially in over-time analyses. Additionally, while I used a more comprehensive approach to the measurement of mattering than many other researchers (i.e., four items to measure dependence mattering and four items to measure importance mattering), my measures are not directly comparable with other assessments of mattering used in previous studies.

Fifth, the amount I can account for regarding the age/mattering relationship in statistical terms, is minimal. Though I find interesting statistically significant differences in the prediction of dependence and importance mattering, whether these findings are substantively significant is debatable. For example, a significant difference in occupancy of the parent role as it relates to dependence mattering, compared to non-parents, may be of interest, but if the statistical difference is

minimal, albeit significant, this difference may not translate neatly to everyday experiences.

As previously mentioned, it is difficult to tease a part age effects from cohort effects. For example, the diminishment of the self-concept that I find in late life may evaporate over historical time, moreover – technically I do not assess diminishment but look at age differences between the young-old and old-old at one period of the life course. In years to come, it may not be the case that as one moves into late life they inevitably report declines in the self-concept. This current finding may appear because the cohort of respondents in my research (ASH respondents were born between 1900 and 1936) during a specific historical time period that set up meanings and expectations about the self-concept that lead individuals and society to expect a decline with age. It is possible then that future analyses conducted on older adults who were born between 1975 and 2000, for example, might not show the same self-concept declines in the reporting of mattering, mastery, and esteem in their later years. It may be the context and substance of their life course experiences that made for these current findings. A cohort effect, not an age effect may be at work here. We may not continue to expect in late life – or as adults age – a decline in the self-concept. This difference may not be tied to late life; it may be a function of historical context and not appear for all older adults of future cohorts, especially as we see changes in educational attainment and improvements in medical technologies.

The baby boomers (born between 1946 and 1964) as a cohort have been frequently discussed over their collective life course. Currently there is great concern about their rising impact on the healthcare system, their size relative to the working

population, their use of leisure time and disposable income, among other societal-level impacts. As this cohort nears older adulthood, there may be room for concern. Aside from societal worries about their interaction with nursing care facilities, family caregiving and beyond, the experience of individual boomers will likely interact with the diverse opportunities that lie before them. For some, ties to the paid labor force may continue longer than was the case for most of their predecessors. For others, an early retirement will frame their late life experiences. Regarding volunteering, which I show to be positively related to sense of mattering, the baby boomer generation has volunteered at lower levels than their parent generation (Harlow-Rosentraub, Wilson and Steele 2006), and this is of concern if we know that volunteering is related to overall well-being. For those who choose to seek out volunteer positions, research suggests that boomers will likely seek more flexible volunteer opportunities than their forerunners (Silva and Thomas 2006), also, they may be attracted to more continuous learning experiences in addition to volunteer options. To this end, there is a need to match the needs of boomers with potential volunteer organizations for the benefit of both parties. Boomers can expect a diverse set of opportunities for many, and obstacles for many others. Moreover, the boomers, by virtue of their size and life course experiences, may begin to change the face of aging and the expectations of the self in late life.

Finally, the process of aging is not linear. Individuals move in and out of the "aging" process over time (Gill, Gahbauer, Allore, and Han 2006; Mitnitski, Song and Rockwood 2007). That is, the aging of the body for example does not happen in equal and meaningfully equivalent increments. A person might suffer an injury or

illness that impacts their activities of daily living, but recovers from this problem and is restored to good physical health in short measure (Hardy and Gill 2004). In a similar way, a person might move in and out of roles, engaging and disengaging from the work force or volunteer work, for example (Wilson, Steele, Simson and Harlow-Rosentraub 2006). As in any life stage, we can anticipate that experiences are not linear but perhaps cyclical, and when possible research should aim to conceive of aging and/or decline as a non-linear process. Moreover, physical health can make possible, make impossible, enhance, or detract from role engagement. So too, continued occupancy of a role or set of roles may well provide for better overall well-being that would include stable or improving health.

Implications

Macro-level changes, such as longer life expectancies, along with micro-level changes in the meaning and the experience of older adults coalesce, making it evident that the changing lives of seniors and their families need to be examined by social scientists. Americans are living longer and there are varied sociological implications for this longevity. These implications can be thought of along two main lines: first, societal or macro level implications and, second, micro or individual level implications such as changes in the self-concept as have been studied in this dissertation.

On the societal level, we are experiencing a "senior boom" that will transform our homes, our politics and our health care system. Demographically speaking, by 2030 it is projected that 1 out of 5 people, or 20% of the population, will be over 65 (Eitzen and Baca Zinn 2004). This population shift has great implications.

From a social problems perspective, where a social problem is defined as societally induced conditions that cause psychic and material suffering for any segment of the population, we can view the aging society as a challenge. What are the implications of an aging society? Concerns about the U.S. Social Security system are on the rise, another challenge is the growing number of older persons with physical health concerns, additionally, elder abuse is also a very unfortunate but real social problem within the older community and growing, as the population of older adults grows and the percentage of families caring for older adults increases.

What are the implications for an aging society on a micro or individual level? Aging for the individual could be a positive experience, a negative experience, a neutral experience; or a mixture of each as time and context converge. Older adults have the ability to participate in their own lives and are often agents of their own change or stability. In older age there are increased chances for role changes and increased chances for physical decline. Unfortunately, growing older in U.S. society often brings with it a devalued status and many may struggle to manage this ever evolving status.

This dissertation is meant to acknowledge the importance of the self-concept of older adults. The aim of this recognition is the promotion of longer, fuller lives that while diverse in experience, may lead to the raising of positive expectations for the lives and selves of older adults and allow people to remain healthier for a larger proportion of their lives.

I hope that what I have learned can contribute to policies or practices that will help older adults maintain strong selves. To this end, I suggest continued study of

work and volunteering in seniors, friendships in older adults, more research on the physical health of older adults, and in regard to dependence mattering, research that explicitly asks older adults where they derive a sense of mattering.

Summary

In sum, although limitations exist, the analyses presented in this dissertation show convincingly that in the Aging, Stress and Health sample of adults 65 years and older, the relationship between age and mattering is a negative one. That is, young-old adults report higher levels of the self-concept as measured by importance mattering and dependence mattering than the old-old. Additionally, the analyses of role occupancies as well as physical health status in part explain this difference. This research provides a different perspective on the relationship between age and the self-concept where depending upon which measure of the self-concept is employed, we find a different answer to the question what underlies the relationship between age and the decline in the self-concept. What this might mean for future self-concept research is that multiple measures should be employed in any research in order to hold it up as valid and, exploration of formal and informal ties to the community should be explored.

While we can call older persons to supplement old roles with new roles and pay particular attention to their physical health, certain aspects of the self-concept will not be helped by these strategies alone. On one hand, we need to start to change societal perceptions of older adults, as well; we need to work structural or institutional arrangements that provide or encourage meaningful work through very old age. This would help address a "psychological" problem at a societal level. Part

of this meaningful work can be volunteer work. As Wilson and Simson (2006) offer, volunteering for baby boomers is positively related to their well-being, and we can encourage organizations looking for "workers" to actively draw upon this most impressive group of potential volunteers. Moreover, productive work by older adults can benefit their psychological well-being and sense of self and older workers or volunteers can make a valuable contribution to their communities.

Moderated-mediational analyses revealed group differences (i.e., race differences) in the viability of proposed explanations for the decline in the self-concept with age. Future analyses should seek to use a nationally representative sample, and examine race by gender interactions, that is, look at African-American men, white men, African-American women and white women as separate groups.

Any efforts to understand or improve or maintain – through interventions or academic research or policy work or any combination of these efforts – the self-concept of older adults should be sensitive to life-course changes in the lives of seniors and the diverse experiences of older adults. They should seek to acknowledge and address these differences and use them to better understand the self in late life, both the antecedents and consequences of the self.

Table 3.1 Principal Components Factor Analysis of Items Measuring the Sense of Mattering (N=1149)

Wave 1 Mattering Items	Factor 1: Dependence Mattering	Factor 2: Importance Mattering
You are important to people you know (amatto1)	0.13434	0.74953
Your well-being matters to people you know (amatto2)	0.10708	0.81770
There are people who do things they know will please you (amatto3)	0.13548	0.75299
What you think or feel doesn't seem to make much difference to anyone (amatto4)	-0.18837	0.78971
There are people you know who depend on you when they need help or advice (amatyou1)	0.69396	0.19665
People count on you when they are down or blue (amatyou2)	0.80425	0.12419
People seem to tell you things about themselves that they don't tell other people (amatyou3)	0.86271	-0.04406
Other people count on you to understand what they are going through (amatyou4)	0.88623	-0.00949

TABLE 3.2

Correlations for Variables Used in Analyses N=1149

	Dep Matt.	Imp Matt.	Work	Married	Caregiver	Volunteer	Friend	Parent	G. parent
Dependence Mattering	1.000								
Importance Mattering	0.606 ***	1.000							
Worker	0.137 ***	0.116 ***	1.000						
Married	0.044	0.080 **	0.144 ***	1.000					
Caregiver	0.057 #	0.033	-0.004	0.166 ***	1.000				
Volunteer	0.180 ***	0.122 ***	0.066 *	0.093 **	0.007	1.000			
Friend Contact	0.126 ***	0.119 ***	0.012	-0.086 **	0.004	0.257 ***	1.000		
Parent	0.054 #	0.122 ***	0.050 #	0.197 ***	0.029	-0.055 #	-0.048	1.000	
Grandparent	0.073 *	0.081 **	-0.020	0.184 ***	0.024	-0.018	-0.072 *	0.600 ***	1.000
Number of Roles Held	0.210 ***	0.205 ***	0.407 ***	0.624 ***	0.352 ***	0.452 ***	0.134 ***	0.516 ***	0.541 ***
Self-Rated Health	0.140 ***	0.169 ***	0.193 ***	0.080 **	0.026	0.211 ***	0.163 ***	-0.022	-0.027
ADLs	-0.139 ***	-0.102 ***	-0.118 ***	-0.131 ***	-0.077 **	-0.203 ***	-0.144 ***	-0.053 *	-0.067 *
Illness Symptoms	-0.062 *	-0.100 ***	-0.113 ***	-0.068 *	-0.025	-0.110 ***	-0.076 *	0.033	0.007
Race	0.112 ***	-0.022	-0.011	-0.124 ***	-0.012	-0.066 *	-0.214 ***	0.057 #	0.008
Gender	0.052 #	0.013	-0.156 ***	-0.367 ***	-0.003	-0.015	-0.008	-0.025	0.027
Income	0.052 ***	0.190 ***	0.298 ***	0.391 ***	0.060 *	0.157 ***	0.127 ***	0.063 *	0.003
Education	0.053 #	0.171 ***	0.175 ***	0.184 ***	0.010	0.157 ***	0.145 ***	-0.040	-0.060 *
Mastery	0.279 ***	0.381 ***	0.184 ***	0.090 **	-0.045	0.136 ***	0.128 ***	0.026	-0.020
Self-Esteem	0.402 ***	0.413 ***	0.131 ***	0.107 ***	0.015	0.132 ***	0.128 ***	0.035	-0.005

Table 4.1 Descriptive Statistics of Variables in the Analysis, N =1149

		Total 1149		**Young-Old *Ages 65-74* 630**		**Old *Ages 75-84* 416**		**Old-Old *Ages 85+* 103**	
Variables	Range	Mean/ Percent	SD	Mean/ Percent	SD	Mean/ Percent	SD	Mean/ Percent	SD
Self-Concepts									
Dependence Mattering	1-4	3.18	0.49	3.25_{ab}	0.47	3.13_{bc}	0.49	3.01_{ac}	0.51
Importance Mattering	1-4	3.31	0.44	3.34_{ab}	0.45	3.28_{b}	0.43	3.22_{a}	0.41
Role Occupancy									
% Working	0-1	22.11	0.42	30.63_{ab}	0.46	13.70_{bc}	0.34	3.88_{ac}	0.19
% Volunteer	0-1	51.16	0.50	53.81_{ab}	0.50	44.95_{bc}	0.50	34.95_{ac}	0.48
% Married	0-1	53.09	0.50	60.32_{ab}	0.49	46.88_{bc}	0.50	33.98_{ac}	0.48
% Caregiving	0-1	15.23	0.36	17.14_{a}	0.38	14.90_{c}	0.36	4.85_{ac}	0.22
Freq. of Friend Contact (centered)	-2.39 - 2.61	0.00	1.46	n/a	n/a	n/a	n/a	n/a	n/a
Freq. of Friend Contact (not centered)	1-6	3.38	1.46	3.42	1.41	3.37	1.51	3.19	1.54
% Parent	0-1	84.42	0.36	86.67_{a}	0.34	83.89_{c}	0.37	72.81_{ac}	0.45
% Grandparent	0-1	76.41	0.42	77.78_{a}	0.42	75.96	0.43	69.90_{a}	0.46
Role Accumulation / Number of Roles Held	0-7	3.94	1.33	4.21_{ab}	1.27	3.74_{bc}	1.31	3.12_{ac}	1.29
Physical Health									
Self Rated Health (centered)	-2.32 - 1.67	0.01	1.10	n/a	n/a	n/a	n/a	n/a	n/a
Self Rated Health (not centered)	1-5	3.33	1.10	3.43_{ab}	1.08	3.29_{bc}	1.11	2.95_{ac}	1.13
ADLs (centered)	-0.139 - 2.86	0.00	0.37	n/a	n/a	n/a	n/a	n/a	n/a
*ADLs (not centered)	1-4	1.14	0.37	1.08_{ab}	0.26	1.16_{bc}	0.40	1.38_{ac}	0.61
Ilness Symptoms (centered)	-0.614 - 3.39	0.00	0.62	n/a	n/a	n/a	n/a	n/a	n/a
*Illness Symptoms (not centered)	1-5	1.61	0.62	1.58_{a}	0.58	1.61_{c}	0.60	1.80_{ac}	0.80
Demographics									
% African-American	0-1	0.49	0.50	53.02_{ab}	0.50	45.67b	0.50	42.72_{a}	0.33
% Women	0-1	0.50	0.50	46.35_{ab}	0.50	52.16_{bc}	0.50	64.08_{a}	0.48
Income	1-11	5.70	3.15	6.04_{ab}	3.19	5.45_{bc}	2.99	4.63_{ac}	3.21
Education	1-6	4.40	1.71	4.47_{ab}	1.67	4.41_{c}	1.69	3.90_{ac}	1.96

Within each row, $_{a}$= young-old sign. different. than old-old $_{b}$= young-old sign. different than old $_{c}$ = old sign. different than old-old

*Higher ADLs and Illness Symptoms indicate more disability or illness.

Table 4.2 Mattering by Role Occupancy: Means, Standard Deviations & T-tests

			Dependence Mattering			Importance Mattering		
Formal Roles								
Work		N		sd	sign		sd	sign
	Working	254	**3.31**	0.47	***	**3.40**	0.45	***
	Not Working	895	3.15	0.48		3.28	0.43	
	Combined	*1149*	3.18	0.49		3.31	0.44	
Volunteer								
	Volunteer (any amount)	562	**3.27**	0.47	***	**3.36**	0.43	***
	Not a volunteer	587	3.10	0.49		3.25	0.44	
	Combined	*1149*	3.18	0.49		3.31	0.44	
Informal Roles								
Marital								
	Married	610	3.20	0.48		**3.34**	0.44	**
	Not Married	539	3.16	0.49		3.27	0.43	
	Combined	*1149*	3.18	0.49		3.31	0.44	
Parent								
	Parent	970	3.19	0.48	#	**3.33**	0.44	***
	Not a Parent	179	3.12	0.50		3.18	0.42	
	Combined	1149	3.18	0.49		3.31	0.44	
Grandparent								
	Grandparent	878	**3.20**	0.48	*	**3.33**	0.44	**
	Not a Grandparent	271	3.12	0.51		3.24	0.45	
	Combined	*1149*	3.18	0.49		3.31	0.44	
Caregiver								
	Providing Care	175	**3.25**	0.48	*	3.34	0.43	
	Not Providing Care	974	3.17	0.49		3.30	0.44	
	Combined	*1149*	3.18	0.49		3.31	0.44	
Friend								
	High Contact	545	**3.23**	0.45	***	**3.35**	0.43	**
	Low Contact	*604*	3.14	0.51		3.27	0.44	
	Combined	*1149*	3.18	0.49		3.31	0.44	
Role Accumulation								
	4 to 7 roles occupied	759	**3.25**	0.46	***	**3.36**	0.43	***
	0 to 3 roles occupied	390	3.06	0.51		3.20	0.45	
	Combined	*1149*	3.18	0.49		3.31	0.44	

#p<.10 *p<.05 **p<.01 ***p<.001

Table 4.3 Mattering by Physical Health Measures: Means, Standard Deviations & T-tests

Physical Health Measures			**Dependence Mattering**			**Importance Mattering**		
Self-Rated Health		N	Mean	sd		Mean	sd	
	High Self-Rated Health	544	**3.24**	0.49	***	**3.36**	0.44	***
	Low Self-Rated Health	605	3.13	0.48		3.26	0.44	
	Combined	*1149*	3.18	0.49		3.31	0.44	
ADLs								
	Few ADLs	830	**3.22**	0.49	***	**3.33**	0.44	**
	Many ADLs	319	3.10	0.48		3.24	0.43	
	Combined	*1149*	3.18	0.49		3.31	0.44	
Illness Symptoms								
	Few Symptoms	732	**3.20**	0.49	#	3.33	0.43	
	Many Symptoms	417	3.15	0.47		3.26	0.45	
	Combined	*1149*	3.18	0.49		3.31	0.44	

#p<.10 *p<.05 **p<.01 ***p<.001

Table 4.4 OLS Regression Coeff. in Models Predicting Dependence Mattering, N=1149					
	Model 1	Model 2	Model 3	Model 4	Mode1 5
Age	-0.012 ***	-0.010 ***	-0.007 **	-0.008 ***	-0.006 *
Role Occupancy					
Formal Roles					
Work Role			0.106 **		0.097 **
Volunteer Role			0.125 ***		0.110 ***
Informal Roles					
Marital Role			0.012		0.013
Parent Role			-0.010		-0.012
Grandparent Role			0.090 *		0.090 *
Caregiver Role			0.057		0.054
Friend Role			0.039 ***		0.036 ***
Physical Health					
Self-Rated Health				0.049 **	0.037 *
Activities of Daily Living				-0.104 *	-0.059
Illness Symptoms				0.035	0.034
Controls					
African-American (1=black 0=white)		0.149 ***	0.168 ***	0.161 ***	0.178 ***
Women (1=women 0=men)		0.102 ***	0.101 **	0.095 **	0.095 **
Income		0.022 ***	0.015 *	0.018 **	0.012 *
Income Flag		-0.042	-0.004	-0.027	0.001
Education		0.008	0.004	0.006	0.003
Constant	4.088	3.645	3.278	3.541	3.242
Adjusted R squared	0.026	0.057	0.098	0.071	0.103

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 4.5 OLS Regression Coeff. in Models Predicting Importance Mattering, N=1149

	Model 1	Model 2	Model 3	Model 4	Mode1 5
Age	-0.005 *	-0.003	0.000	-0.002	0.000
Role Occupancy					
Formal Roles					
Work Role			0.065 *		0.055 #
Volunteer Role			0.060 *		0.048 #
Informal Roles					
Marital Role			0.013		0.016
Parent Role			0.116 **		0.116 **
Grandparent Role			0.036		0.036
Caregiver Role			0.022		0.020
Friend Role			0.028 **		0.026 **
Physical Health					
Self-Rated Health				0.039 **	0.034 *
Activities of Daily Living				-0.042	-0.009
Illness Symptoms				-0.007	-0.009
Controls					
African-American (1=black 0=white)		0.055 *	0.064 *	0.058 *	0.066 *
Women (1=women 0=men)		0.067 *	0.070 *	0.065 *	0.069 *
Income		0.023 ***	0.017 **	0.019 ***	0.014 **
Income Flag		-0.042	-0.019	-0.032	-0.016
Education		0.028 **	0.028 **	0.025 **	0.026 **
Constant	3.663	3.191	2.851	3.144	2.851
Adjusted R squared	0.004	0.048	0.073	0.058	0.079

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 4.6 OLS Regression Coeff. in Models Predicting Dependence Mattering by Number of Roles Held, N=1149

	Model 1	Model 2	Model 3	Model 4
Age	-0.012 ***	-0.010 ***	-0.007 **	-0.006 **
Role Occupancy				
Number of Roles Held			0.067 ***	0.060 ***
Physical Health				
Self-Rated Health				0.046 **
Activities of Daily Living				-0.069 #
Illness Symptoms				0.032
Controls				
African-American (1=black 0=white)		0.149 ***	0.151 ***	0.161 ***
Women (1=women 0=men)		0.102 ***	0.119 ***	0.111 ***
Income		0.022 ***	0.014 *	0.011 #
Income Flag		-0.042	-0.029	-0.020
Education		0.008	0.008	0.006
Constant	4.088	3.645	3.197	3.164
Adjusted R squared	0.026	0.057	0.083	0.092

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 4.7 OLS Regression Coeff. in Models Predicting Importance Mattering by Number of Roles Held, N=1149

	Model 1	Model 2	Model 3	Model 4
Age	-0.005 *	-0.003	0.000	0.000
Role Occupancy				
Number of Roles Held			0.055 ***	0.051 ***
Physical Health				
Self-Rated Health				0.036 **
Activities of Daily Living				-0.012
Illness Symptoms				-0.010
Controls				
African-American (1=black 0=white)		0.055 *	0.056 *	0.059 *
Women (1=women 0=men)		0.067 *	0.081 **	0.079 **
Income		0.023 ***	0.016 **	0.013 *
Income Flag		-0.042	-0.032	-0.026
Education		0.028 **	0.028 **	0.026 **
Constant	3.663	3.191	2.823	2.825
Adjusted R squared	0.004	0.048	0.070	0.076

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 5.1 OLS Regression Coeff. in Models Predicting Dependence Mattering, N=1149			
	Model 1	Model 2	Model 3
Age	-0.006 *	-0.006 *	-0.004
Role Occupancy			
Formal Roles			
Work Role	0.097 **	0.174 ***	0.097 **
Volunteer Role	0.110 ***	0.107 ***	0.114 ***
Informal Roles			
Marital Role	0.013	0.013	0.011
Parent Role	-0.012	-0.014	-0.012
Grandparent Role	0.090 *	0.087 *	0.089 *
Caregiver Role	0.054	0.048	0.053
Friend Role	0.036 ***	0.037 ***	0.053 ***
Physical Health			
Self-Rated Health	0.037 *	0.037 *	0.037 *
Activities of Daily Living	-0.059	-0.064	-0.056
Illness Symptoms	0.034	0.035	0.034
Controls			
African-American (1=black 0=white)	0.178 ***	0.123	0.176 ***
Women (1=women 0=men)	0.095 **	0.097 **	0.344
Income	0.012 *	0.012 *	0.012 *
Income Flag	0.001	0.003	0.001
Education	0.003	0.006	0.004
Interaction Effects			
Age x African-American		0.001	
African-American x work status		-0.157 *	
Age x Women			-0.003
Women x friend status			-0.033 #
Constant	3.242	3.270	3.114
Adjusted R squared	0.103	0.107	0.105

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 5.2 OLS Regression Coeff. in Models Predicting Dependence Mattering for African-Americans and Whites

	African-Americans	Whites
Age	-0.006 #	-0.006 *
Role Occupancy		
Formal Roles		
Work Role	0.010	0.174 ***
Volunteer Role	0.136 **	0.083 *
Informal Roles		
Marital Role	-0.034	0.056
Parent Role	0.013	-0.061
Grandparent Role	0.050	0.128 *
Caregiver Role	0.007	0.088 #
Friend Role	0.023	0.054 ***
Physical Health		
Self-Rated Health	0.039 #	0.038 #
Activities of Daily Living	-0.049	-0.063
Illness Symptoms	0.003	0.071 *
Controls		
Women (1=women 0=men)	0.075	0.106 **
Income	0.007	0.015 *
Income Flag	-0.035	0.073
Education	0.010	0.002
Constant	3.481	3.209
Adjusted R squared	0.053	0.140
N	568	581

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 5.3 OLS Regression Coeff. in Models Predicting Dependence Mattering for Women and Men

	Women	Men
Age	-0.008 **	-0.004
Role Occupancy		
Formal Roles		
Work Role	0.049	0.128 **
Volunteer Role	0.172 ***	0.057
Informal Roles		
Marital Role	-0.011	0.013
Parent Role	0.076	-0.105
Grandparent Role	0.048	0.120 *
Caregiver Role	0.126 *	0.004
Friend Role	0.015	0.055 ***
Physical Health		
Self-Rated Health	0.036 #	0.037 #
Activities of Daily Living	0.024	-0.142 *
Illness Symptoms	0.045	0.007
Controls		
African-American (1=black 0=white)	0.165 ***	0.196 ***
Income	0.017 *	0.009
Income Flag	-0.082	0.178 *
Education	-0.009	0.021
Constant	3.519	3.081
Adjusted R squared	0.100	0.120
N	575	574

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 5.4 OLS Regression Coeff. in Models Predicting Importance Mattering, N=1149			
	Model 1	Model 2	Model 3
Age	0.000	0.000	0.004
Role Occupancy			
Formal Roles			
Work Role	0.055 #	0.121 **	0.061 #
Volunteer Role	0.048 #	0.046 #	0.051 #
Informal Roles			
Marital Role	0.016	0.016	0.011
Parent Role	0.116 **	0.115 **	0.110 *
Grandparent Role	0.036	0.034	-0.013
Caregiver Role	0.020	0.015	0.022
Friend Role	0.026 **	0.026 **	0.026 **
Physical Health			
Self-Rated Health	0.034 *	0.034 *	0.033 *
Activities of Daily Living	-0.009	-0.013	-0.005
Illness Symptoms	-0.009	-0.008	-0.010
Controls			
African-American (1=black 0=white)	0.066 *	0.056	0.067 *
Women (1=women 0=men)	0.069 *	0.071 *	0.462
Income	0.014 **	0.013 *	0.014 **
Income Flag	-0.016	-0.015	-0.011
Education	0.026 **	0.027 **	0.025 **
Interaction Effects			
Age x African-American		0.001	
African-American x work status		-0.133 *	
Age x Women			-0.006
Women x grandparent status			0.111 #
Constant	2.851	2.857	2.629
Adjusted R squared	0.079	0.081	0.082

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 5.5 OLS Regression Coeff. in Models Predicting Importance Mattering for African-Americans and Whites

	African-Americans	Whites
Age	0.000	0.000
Role Occupancy		
Formal Roles		
Work Role	-0.015	0.117 **
Volunteer Role	0.051	0.038
Informal Roles		
Marital Role	0.017	0.020
Parent Role	0.150 *	0.073
Grandparent Role	0.005	0.076
Caregiver Role	-0.021	0.053
Friend Role	0.010	0.045 **
Physical Health		
Self-Rated Health	0.037 #	0.033 #
Activities of Daily Living	-0.028	0.019
Illness Symptoms	-0.052	0.039
Controls		
Women (1=women 0=men)	0.072 #	0.061
Income	0.007	0.019 **
Income Flag	-0.039	0.047
Education	0.027 *	0.028 *
Constant	2.970	2.835
Adjusted R squared	0.061	0.103
N	568	581

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Table 5.6 OLS Regression Coeff. in Models Predicting Importance Mattering for Women and Men

	Women	Men
Age	-0.005 #	0.005
Role Occupancy		
Formal Roles		
Work Role	-0.006	0.107 *
Volunteer Role	0.088 *	0.014
Informal Roles		
Marital Role	-0.055	0.060
Parent Role	0.160 **	0.041
Grandparent Role	0.075	0.005
Caregiver Role	0.055	0.008
Friend Role	0.011	0.040 **
Physical Health		
Self-Rated Health	0.033 #	0.034 #
Activities of Daily Living	0.082	-0.092 #
Illness Symptoms	-0.036	0.020
Controls		
African-American (1=black 0=white)	0.057	0.076 #
Income	0.026 **	0.004
Income Flag	-0.108 #	0.150 #
Education	0.006	0.048 ***
Constant	3.282	2.539
Adjusted R squared	0.096	0.092
N	575	574

Notes: Unstandardized OLS regression coefficents.
#p<.10 *p<.05 **p<.01 ***p<.001

Appendices

Appendix I. Literature Table: The Measurement of Mattering, alpha levels reported where applicable

				Mattering Measures											
Yr	**Authors**	**Format & Size**	**Data & Ages**	**Parental**	**Sibling**	**Global**	**Matt. to Teachers**	**Matt. to Friends**	**Romantic Partner**	**Attention / Awareness**	**Import-ance**	**Depend./ Reliance**	**General /Overall**	**Matt to Others**	**Loss of Mattering**
81'	**Rosenberg & McCullough**	Chapter N=many	4 samples Jr & High Sch	3 B; 1NY 4Ch; 5Nat											
82'	**Whiting**	Dissert. N=825	66 Yth in Trans High Sch Boys	5 items 0.63	6 items 0.81	2 items 0.69	3 items 0.63	3 items 0.5							
97'	**DeForge & Barclay****	Article N=199	Homeless sample Homeless men										5 items 0.85		
01'	**Taylor & Turner**	Article N=3415	Rep. sample 18-55, Canadian										5 items* 0.78		
01'	**Schieman & Taylor**	Article N=1393	Metro Toronto Mean age = 36.1										5 items* 0.78		
01'	**Marshall**	Article N=110	1: Undergrads 2: High School	<<<<< n/a	11 items* n/a	>>>>>> n/a									
01'	**Pearlin & LeBlanc**	Article N=555	Alz. Caregivers Mean age = 63												4 items 0.93
02'	**D. Elliott**	Thesis N=1393	Rep. sample 18-55, Canadian								4 items n/a	1 item n/a	5 items 0.78		
03'	**Rohall**	Article N=1,536	Russian Army sam Army officers			5 items 0.85									
04'	**Sergeant**	Thesis N=1167	ASH, wave 1 65+								3 items 0.79	4 items 0.73			
04'	**Rayle & Meyers**	Article N=462	Hgh Sch S.East US 14-19										5 items 0.85	11 items n/a	
04'	**Elliott, Kao & Grant**	Article n/a	[Construct Validation]							7 items	9 items	5items			
										construct & validate matt. index					
04'	**Mak & Marshall**	Article N=175	M.west & Canad. Undergrads						2 items* n/a						
05'	**Elliott, Col., Gelles**	Article N=1,794	2000 Yth at Risk 11-18 y/o							6 items n/a	6 items n/a	3 items n/a			
06'	**Fazio**	Dissert. N=1,167	ASH waves 1 & 3 65+								4 items 0.88	4 items 0.81			

*Authors do not use this name for their measure

**this work credits an unpublished manuscript (1991) by F.M. Marcus with the "General mattering scale" that was used it this and other work

Appendix I (continued).
Prior Research on Mattering: Select Mattering Scale Wording

(Rosenberg and McCullough 1981)
The subjects were asked:
"Would you say that your mother thinks
Baltimore
"The Baltimore parental mattering index was based on 3 items asking the respondent how often the mother was interested in him, how interested the parents were in what he had to say, and how important a part of the family he was.

New York
"New York had only a single indicator: how interested parents were in what the child had to say at mealtime conversations."

East Chicago
"In East Chicago, 4 items were used: how interested the respondent's father was in him, how interested his mother was in him, whether he had ever felt that he was not wanted by his father, and whether he had ever felt he was not wanted by his mother."

(Whiting 1982)
SIBLING MATTERING: "How would your brother (sister) feel if you got bad grades? Dropped out of school? Or got in trouble

"The original responses were (1) would be happy, (2) would be sad, (3) do not care, and (4) feel it's up to me. 'Do not care' responses were contrasted with the other responses to tap perceptions of mattering."

GLOBAL MATTERING: "The global mattering variable was operationalized by means of two items which used the inclusive pronoun, nobody."
"Both items have response categories which range from (1) Always true to (5) Never."

MATTERING TO TEACHERS: "How would your teacher feel if you got bad grades? (dropped out of school? Or got into trouble?)

"The original responses were (1) would be happy, (2) would be sad, (3) do not care, and (4) feel it's up to me. 'Do not care' responses were contrasted with the other responses to tap perceptions of mattering."

MATTERING TO FRIENDS: "How would your friends feel if you got bad grades? (dropped out of school? or got into trouble?)."

(DeForge and Barclay 1997)
1) How important do you feel you are to other people?

Appendix I (continued).

2) How much do you feel other people pay attention to you?
3) How much do you feel others would miss you if you went away?
4) How interested are people generally in what you have to say?
5) How much do people depend on you?

Response categories: (Very Much = 4, Somewhat = 3, A little = 2, Not at all = 1)

(Taylor and Turner 2001)

1. How important are you in the lives of others?
2. How much do others pay attention to you?
3. How much would you be missed if you went away?
4. How interested are others in what you have to say?
5. How much do other people depend upon you?

Response categories: (1) A lot, (2) somewhat, (3) a little (4) not at all
"This five-item scale was developed by Morris Rosenberg. Factor analysis confirmed a single underlying determinant of responses to these items with loadings ranging from .63 to .79. Cronbach's alpha is .78 (see page 314)

(Schieman and Taylor 2001)

1) How important do you feel you are to other people?
2) How much do you feel other people pay attention to you?
3) How much do you feel others would miss you if you went away?
4) How interested are people generally in what you say?
5) How much do other people depend on you?

Response categories: (1) A lot, (2) somewhat, (3) a little, and (4) not at all.

(Pearlin and LeBlanc 2001)
Caregivers may find themselves missing different things about their (deceased) relative. How much do you miss having someone: (a) to whom you were important; (b) who really needed you; (c) to whom you mattered a great deal; (d) who appreciated your help, even if s/he could not show it
Response categories: very much, somewhat, just a little, and not at all

(Marshall 2001)

	Not much		somewhat		a lot
1) I feel special to my _____	1	2	3	4	5
2) I am need by my_____	1	2	3	4	5
3) I am missed by my ____when I am away.	1	2	3	4	5
4) When I talk, my _____ tries to Understand what I am saying.	1	2	3	4	5
5) I am interesting to my _____.	1	2	3	4	5
6) My _____notices my feelings.	1	2	3	4	5
7) My _____ gives me credit when I do well.	1	2	3	4	5
8) My _____notices when I need help.	1	2	3	4	5
9) I matter to my _____.	1	2	3	4	5

Appendix I (continued).

10) People have many things to think about. If you _____ made a list of all the things s/he thinks about where do you think you'd be on the list?

(bottom) 1 2 3 4 5 (top)

11) If your _____ made a list of all the things s/he cares about, where do you think you'd be on the list?

(bottom) 1 2 3 4 5 (top)

(Elliott 2002)

How important do you feel you are to other people?
How much do you feel other people pay attention to you?
How much do you feel others would miss you if you went away?
How interested are people generally in what you say?
How much do other people depend on you?

Response categories: (1) A lot, (2) somewhat, (3) a little, and (4) not at all.

(Rohall 2003)

GLOBAL MATTERING SCALE:

(1) How important do you feel you are to other people?
(2) How much do you feel other people pay attention to you?
(3) How much would other people miss you if you went away?
(4) How interested are people generally in what you have to say?
(5) How much do other people depend on you?

(Mak and Marshall 2004)

Respondents were administered open-ended questions to elicit written responses about how they know they matter ('Please describe how you know you matter to your romantic partner.') and what makes them feel like they matter to their romantic partners ('What makes you feel like you matter to your romantic partner?)

This dissertation (2007)

1) You are important to people you know.
2) Your well-being matters to people you know.
3) There are people who do things they know will please you.
4) What you think or feel doesn't seem to make much difference to anyone.
5) There are people you know who depend on you when they need help or advice.
6) People count on you when they are down or blue.
7) People seem to tell you things about themselves that they don't tell other people.
8) Other people count on you to understand what they are going through.

Glossary

Dependence Mattering
The feeling that we matter to others because they depend on us, to at least some degree, to meet their needs.

Importance Mattering
The feeling that we are important to another person or are objects of their concern (Rosenberg and McCullough 1981).

Mattering
Mattering is the extent to which we feel we make a difference in the world and to the people around us (Elliott, Kao, and Grant 2004)

Mastery
An individual's understanding of his or her ability to control the forces that affect his or her life (Pearlin and Schooler 1978)

Self-Concept
It is the "totality of [an] individual's thoughts and feelings with reference to himself as an object" (Rosenberg 1979:xi).

Self-Esteem
How much a person likes, accepts, and respects himself [herself] overall as a person (Gecas and Seff 1990)

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