ABSTRACT

Title of Thesis: THE FORMS AND MECHANISMS BY WHICH SOCIAL RELATIONSHIPS IMPACT DEPRESSION IN LATE LIFE: EXPLORING THE ROLE AND SIGNIFICANCE OF MATTERING.

Candice A. Sergeant, Masters of Arts, 2004

Thesis Directed By: Dr. Leonard Pearlin, Department of Sociology

This thesis examined the significance of two aspects of social life for psychological well-being among a community sample of older adults. I proposed, first, that the degree to which elders engage in both informal interpersonal relationships and formal social affiliations are directly and positively related to psychological well-being; second, that these relationships are mediated through two elements of the sense of mattering. Contrary to expectations, it was found that states of mattering do not operate as mediating mechanisms linking social engagement and depression. Instead, the findings suggest that perceptions of mattering play roles independent of social engagement in promoting psychological well-being. Further conceptual and methodological development of the concept of mattering are needed to better understand the ways in which it is linked to social relationships and how these possible interlinked factors promote optimal health outcomes.

THE FORMS AND MECHANISMS BY WHICH SOCIAL RELATIONSHIPS IMPACT DEPRESSION IN LATE LIFE: EXPLORING THE ROLE AND SIGNIFICANCE OF MATTERING.

By

Candice A. Sergeant

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Arts
2004

Advisory Committee:

Dr. Leonard Pearlin, Chair
Dr. Scott Schieman
Dr. Joan Kahn

Dedication

To my loving husband, Larry.

Your faith in me is enduring and was integral to my successful completion of this project.

Acknowledgements

I, first, thank Dr. Leonard Pearlin for his dedicated mentorship. I sincerely value my experiences working with him on this project and learned so much through out the process. My committee members, Dr. Scott Schieman and Dr. Joan Kahn, were also a source of guidance and I am thankful for their patience. I also acknowledge The American Sociological Association's Minority Fellowship Program (MFP) and NIMH for their support of my higher education. And, a special thanks to my family and friends who are a constant source of support.

Table of Contents

List of Tables

List of Figures

I: Introduction

The study of the significance of social relationships in relation to health and illness has burgeoned in recent decades. No longer limited by the view that biological factors are the sole causes of the etiology of health and illness, social researchers have placed special interest on the role of social relationships in promoting or maintaining physical and mental health functioning (reviews by House et al., 1988; Cohen et al., 2001). The impacts of social relationships on health and well-being, however, have been studied in various ways, especially in terms of what definitions are used to signify social relationships and what meanings they bear for health outcomes. Indeed, there are multiple constructs related to social relationships- social networks, social integration and social support - and though it is not uncommon for these interrelated constructs to be used interchangeably, they represent different aspects of social relationships and are likely to play different roles in promoting positive health outcomes.

Perhaps the broadest conception of social relationships is embodied in the construct of *social networks.* Social networks refer to the structural configuration of social relationships, such as the ways in which individuals are linked to other persons or groups. Social network ties vary in size, type (e.g., friends vs. family), and form (e.g., frequency of contact and closeness of ties) and differences in such network properties may impact health in different ways. Indeed, much of the research on the social relationships-health association focuses on how these structural properties of social relationships influence variations in health outcomes. For example, researchers have found that the type of social relationships, such as ties with family members, friends or co-workers, may serve the needs of individuals in different way or be more closely

related to a given health outcome (Dean, Kolody, & Wood, 1990). Furthermore, social networks may be manifest in different forms, involving relationships with informal interpersonal contacts or relations with more formal associations.

The degree to which individuals are linked to others within structural contexts, through the frequency of contact or exchange with network members, has been referred to as one's level of *integration* into or isolation from social life (House, 1988). Indeed, it has been found that the degree to which individuals are integrated within both informal and formal social contexts do make a difference to health outcomes. In fact, the evidence supporting the notion that integration within social life enhances various domains of health is so widespread that it is a taken for granted principle in social research and policy initiatives. Too often, measures of the existence of social networks and the level of one's connectedness to others within these networks are conflated in research. However, an individual may be a member of various social networks and, also, be loosely tied to other members within these networks. Consequently, researchers are now paying more attention to both the positive and negative aspects of social relationships (Okun & Keith, 1998) demonstrating that the mere existence and availability of social relationships does not necessarily benefit individuals.

It is within the context of social networks that*social support* is formed- a resource that is not uniform across individuals. Referred to as the functional aspects of social relationships (House, 1988), social support represents the emotional, instrumental and/or informational aid that individuals receive from members in their social network. The amount and quality of aid received from network members may vary across individuals;

therefore, it should not be assumed that the receipt of social support is an automatic condition that arises out of one's social relationships.

Being mindful of the conceptual distinctions between social networks, social integration, and social support and their interrelatedness, we are brought to question *what exactly is it that we get out of social relationships that make a difference to health*? Certainly, different aspects of social relationships, such as the structural properties or functional contents, may contribute to health in distinct ways. The implications of these varying structural arrangements for psychological well-being and the pathways that underlie their effectiveness are of central interest in this thesis.

This thesis examines the relationship between one's level of social engagement in late life and its consequences for psychological well-being. My specific interest is in exploring the conditions under which different types of social relationships are effective in maintaining psychological well-being among a sample of older adults. Through existing research into the association between social relationships and health, we know, first, that social relationships can enhance health by integrating people into larger society (e.g., Durkheim, 1951). Second, social relationships can contribute to health in more indirect ways through the development of social support. It is assumed that the more one interacts with other people and participates in the organizational and institutional life of the society, the more opportunities one has for receiving different types of social support. Indeed, the mere perception of support- the belief that one is loved, valued and able to count on others when in need- has proven to play a powerful role in influencing positive health outcomes and is viewed as an important resource that can be obtained from social relationships (Cobb, 1976; Thoits, 1995). Alternatively, there is growing evidence

indicating that the mere availability of these functional aspects of social relationships is not sufficient to predict optimal health and well-being- the effectiveness of social support is not automatic. It may depend on the nature of support given or received and the issue or problem for which it is activated. We have learned that the significance of social relationships depends on the specific emotional, instrumental and informational needs of individuals and is most effective under certain conditions (Pearlin & McCall, 1990; Dean, Kolody, & Wood, 1990; Antonucci, Lansford, Akiyama, 2001). Despite recent efforts made by some scholars to highlight the need for better understandings of the complexity of the social relationships-health association (Turner & Turner, 1999; Cohen et al., 2001), the pathways through which social relationships come to affect health and psychological well-being continue to remain largely unexplored.

I argue that while we may benefit from different types of social resources through our relationships with others, the effectiveness of social relationships in maintaining or promoting health and well-being particularly depend on the extent to which it impacts our sense of self. Specifically, I argue that the social relationships-health association is to some extent mediated by one's level of mattering. By mattering, I refer to a component of the self-concept that is based on the double-sided understanding of one's self as a person, first, whose welfare is important to others and, second, who makes a difference to others' welfare (Rosenberg & McCullough, 1981). Just as social support may involve elements of giving and receiving, the sense of mattering may derive either or both from the beliefs of individuals that their well-being is valued by others and that others' well-being is advanced by them. Researchers have established that there are different components of the self-concept that have demonstrated importance for health and

psychological well-being (Rosenberg, 1979; Pearlin & Schooler, 1978; Pearlin et al, 1981). These include self- esteem- a global sense of self-worth, and mastery- a global sense of control over life circumstances. In this thesis, I contend that mattering, like self-esteem and mastery, also contributes to well-being.

All conceptions of self are assumed to arrive out of social experiences and it is argued that people who have higher senses of self-esteem and mastery will enjoy better psychological health than those with diminished self-concepts. We have accumulated a great deal of evidence supporting these assumptions with regards to self-esteem and mastery (e.g., Rosenberg, 1979; Rosenberg et al, 1995; e.g., Pearlin & Skaff, 1996; Skaff, Pearlin, Mullan, 1996), but there is little work that specifically focuses on the social antecedents of mattering and its potential as a mediating condition that helps to explain why some social relationships are more effective than others in maintaining health and psychological well-being. It may well be that a heightened sense of mattering is both directly beneficial to health and well- being and that it indirectly contributes to health by operating as a mechanism through which social relationships come to positively influence health. In the latter case, social relationships may be effective against adverse health outcomes either by enhancing the belief of individuals that they are valued by others and/or by the belief that they contribute to others' well-being.

In addressing these issues, I began by using exploratory factor analysis to distinguish two aspects of social life and their relation to the psychological well-being of elders. One concerns the extent of their engagement, their frequency of interaction, with informal interpersonal relationships and the second one, their more formal social affiliations. Each of these, I propose, contributes to well-being directly and also

indirectly through the fostering of a sense of mattering. Thus, I predict that higher levels of both engagement in informal interpersonal relationships and in formal social affiliations will induce psychological benefits by fostering the belief that one's well-being is valued by others and/or that one contributes to the well-being of others.

The two sides of mattering may be separately evoked by different social contexts and operate independently as mediating links between social relationships and health. In this regard, I predict that the belief that one's well-being matters to others may be a psychological benefit that grows particularly out of one's interaction with informal interpersonal relationships. By contrast, elders' belief that the well-being of others is enhanced by them may be more closely linked to their more formal social affiliations. Exploring whether mattering serves as a mediating link between social relationships and health in this manner may help to specify some of the types and qualities of social interaction that bring about better health outcomes. Specifically, we may learn that engagement with interpersonal relationships and formal social affiliations contribute to health in different ways through the distinct influences of people's perception of mattering to others and others mattering to them. If mattering dimensions are closely linked to particular forms of social interaction, then the sense of mattering among older adults may also identify the aspects of social life that are most important for health in late life. Thus, I expect that engagement in informal interpersonal relationships and formal social affiliations may each contribute to health and well-being, but through important but distinct psychological pathways. These distinct pathways, in turn, may have separate and equally effective roles in bolstering positive health outcomes. In sum, the present analysis seeks to identify the forms of social engagement that are germane to health

outcomes and the mechanisms, mattering in particular, that account for the observed relationships between social participation and health.

There has been little attention to mattering as a possible pathway through which social relationships affect well being, possibly because mattering and perceived social support are seen as representing the same construct. If this were the case, mattering would not merit attention in its own right. Indeed, mattering and social support are so conceptually kindred as to raise questions about their differences (Taylor & Turner, 2001). Like mattering, the perception of social support, the feeling that one has access to the help and understanding of others, also grows out of social relationships and leads to positive health outcomes. However, unlike the notion of social support, the construct of mattering brings attention to the self concept underpinnings of effective support. Thus, emotional, instrumental and informational support may find meaning through the ways in which they make individuals feel about themselves. When we think about social support and the self-concept in these distinct ways, we are able to understand that the nature of support may condition the ways individuals view themselves. Although the receipt of socio-emotional support is important for health and psychological well-being, feeling that one is needed by and significant to others in their supportive networks may be the components of self-concept that underlie the effectiveness of social support. Indeed, efforts at support may fail when they do not convey a sense of mattering to the recipient. Perhaps, this is why those who perceive having social support available to them also have the expressed need to engage in the support of others (Antonucci & Israel, 1986; Van Tilburg, 1998). Mattering may then serve as the mechanism through which supportive actions become effective in sustaining health and well-being since the receipt and

provision of instrumental, informational and/or emotional support can greatly enhance one's positive sense of self. In other words, the effectiveness of social support may depend on the extent to which it bolsters one's sense that they are valued by others and that one makes a difference in others' lives. Therefore, the effectiveness of social support may be contingent upon the extent to which it enhances perceptions of mattering. Looking at mattering and support in this way highlights their conceptual distinctiveness and suggests that their interdependence may serve as a special resource for dealing with stress and hardship.

Uncovering the pathways to better health is particularly relevant in promoting understandings of why disparities in health outcomes continue to persist across a range of health conditions. There is overwhelming evidence that health disparities are maintained through racial, ethnic and socioeconomic differences in access and utilization of health care resources (e.g., House, 2002). Differences in health outcomes are also observed through differences in the psychosocial resources available to people. For example, people who have a positive sense of control over their health are significantly more likely to adopt effective coping strategies in dealing with illness (e.g., Bandura, 1997; Pearlin & Pioli, 2003). Having a strong sense of personal control is recognized as an important pathway leading to increased chances for better health and having a strong sense of mattering may also lend to explanations of why some people are less susceptible or better able to cope with illness.

The present work provides an additional perspective in our efforts to understand the ways in which social relationships are linked to the self and how these relationships come to impact health and well-being. It will add to the discourse on health and aging by

its focus on some potentially important psychological processes that speak to the emotional needs of people in late life. I believe that the sense of mattering is a psychological resource that is particularly relevant in the context of aging. Older adults are faced with challenges that limit many aspects of personal control over life circumstances and may need to be empowered by other aspects of the self when adapting to their experiences in late life. Research findings suggest that social engagement is a means through which elders are able to derive social support (see Thoits, 1995). As previously mentioned, we cannot assume that social engagement automatically affords people access to effective support. Social engagement may be a means through which elders are able to maintain or develop the sense that they matter, not only through the attention they get from others but also from their contributions to others. By distinguishing the effects of the two sides of mattering within the context of informal and formal social affiliations, we may gain a better understanding of the costs or benefits of elders maintaining social contact in different spheres of social life. Although, as will be seen, I was not able to demonstrate strong evidence of these expectations, the analysis draws attention to the need for further development of the meaning of mattering and its significance in explaining why some relationships are more effective than others in promoting health and psychological well-being.

II: Previous Work on The Impacts Of Social Relationships On Health In Late Life

Social Networks and Health

The study of the association between social relationships and health has a long history within the discipline of sociology. Much of this work deals with an analysis of the structure and composition of social relationships- or, simply stated, the different ways in which individuals are linked to others and how these various arrangements influence health. The literature on the association between social networks and health is quite extensive- one that I do not review here; however, one of the basic assumptions outlined in this body of work concerns the tenet that the size, complexity, density, and reciprocity of one's social network all contribute to health in meaningful ways. Presumably, the more actively embedded people are in social networks, the more they will be helped, thus reducing rates of psychological distress and mortality (Glass et al, 1999; Lennartsson & Silverstein, 2001).

The level of integration into or isolation from social life has typically been assessed by the size of one's social network and the frequency of contact individuals have with network members (House et al., 1988). These network measures are widely used by sociologists and social gerontologists when studying the effects of social relationships on health, and it is not uncommon for researchers to use them to represent one's level of social engagement. Some research has shown that it is not only the size of one's network but also the diversity in the type and strength of one's network that have implications for health and well-being (Rutledge et al., 2003; Erickson, 2003). Therefore, the importance of the size of and the frequency of interaction among network members may be conditioned by the context with which the engagement is embedded.

The implications of one's level of engagement in social networks for health and well-being may vary by the form of the networks in question as different types and forms of social engagement may contribute to health in distinct ways. It is widely held that informal interpersonal social exchanges that give meaning to life are vital to sustaining health across all life stages, but it may be especially important for adults who come to rely heavily on family and friends with increasing age. These interpersonal interactions and the frequency of which they occur are recognized as important resources that can impact health independently and directly, reduce any negative effects of life strain, and/or help to prevent a stressor from even occurring (Wheaton, 1985). Elders who are provided with service, emotional intimacy and companionship from their informal social exchanges report greater life satisfaction, health, and mental well-being (Gupta & Korte, 1994; Thoits, 1995).

There are other aspects of social engagement that also seem to be especially advantageous to psychological well-being. The extent to which one is embedded in social networks may also facilitate opportunities for one to participate in various social and leisure activities. There is surmounting evidence showing that the frequency with which individuals participate with different types of social activities, whether they are productive (paid or unpaid work) or leisure (reading or watching television) in nature, is positively related to well-being (e.g., Beck & Page, 1988; Litwin, 2000). Time spent in leisure activities, for example, is positively associated with life satisfaction, subjective health, depression and anxiety (Kaufman, 1988; Hooker & Seigler, 1993; Lawton, 1994). Because there are varying definitions of leisure that exist across studies, we are somewhat limited in our understanding of the extent to which a specific leisure activity and the

nature of that activity influences health. Throughout many studies, there is little specification or emphasis placed on the extent to which leisure endeavors are embedded within socially integrative forms of involvement- leisure activities may involve relations with informal ties or with more formal social affiliations. For example, elders may become involved with particular leisure pursuits in order to create or maintain social bonds, as in the case of participating in bingo games or going to the movies. Other leisure pursuits could be practiced in solitude but may serve the purpose of serving other people's needs, as in the case of carpentry, gardening or automotive work. Further, leisure activities may be practiced within formal settings such as involvement with organized voluntary associations. Certainly, many leisure pursuits are social in nature and exert significant and independent effects on health outcomes (Lawton, 1994).

Social engagement in late life also takes the form of more formalized memberships into social clubs and organizations, a matter of special interest to this thesis. Elders' participation in religious services and activities and its relation to psychological well being has received a considerable amount of attention in the literature. Research evidence from both cross-sectional and longitudinal sources marks religious involvement as a reliable predictor of better physical health, mental health and mortality (e.g., Ellison, et al, 2001; Williams et al, 1991; Ellison, 1991; Krause & van Tran, 1989). Some studies have examined the effect of religiosity on health outcomes by examining the impacts of its specific components. Church attendance, religious service, and frequency of prayer all appear to be important resources, especially for dealing with life stressors; however, the evidence is still unclear regarding how these aspects of religious involvement act

together and/or independently on health due to varying conceptualizations of religiosity (Hackney & Sanders, 2003).

Elders' participation in community associations and membership organizations can be manifested in volunteer work. In fact, the majority of older adults who are socially active participate in some form of voluntary service (Chambre´, 1993). Many researchers have moved beyond tallying elders' number of voluntary memberships and instead measure the health effects of volunteer work. Musick, Herzog, and House (1999) found that elders' involvement in volunteer work is related to well-being and mortality, even after controlling for the effects of physical health, socioeconomic status, and social connectedness. Interestingly, volunteer work had a stronger effect for elders who reported low engagements with informal ties. This finding suggests that formal engagement may be protective against adverse health outcomes especially among those who lack informal social resources. Thoits and Hewitt's (2001) later work also support assumptions that older adults who spend more time in volunteer work benefit from higher levels of life satisfaction and numerous other indicators of well being. Their findings are consistent with others that demonstrate a positive effect of volunteer work on health and well-being for older adults (Wheeler, et al, 1998, van Willigen, 2000).

Benefiting from Social Networks: The Role of Social Support

Social relationships in late life can also influence health indirectly through social and psychological pathways that are valuable for confronting and interpreting life experiences. As noted, social support- the functional aspect of social relationships- is one mechanism that is widely acknowledged as being a condition that underlies the association between social relationships and health. It is assumed that the greater one's embeddedness in interpersonal relationships and social affiliations, the greater one's potential to nurture new alliances and benefit from various supportive systems. For example, when confronting physical challenges brought about by illness, the types of support one gets from friends and family may be more important in bolstering well-being than the support one is able to procure from the more formal organizations and associations to which one belongs. In other words, having someone to whom we can rely on to help manage our day to day challenges in this situation may be more beneficial than group membership alone. Social support may also vary in terms of the specific persons that are involved as the social benefits received from relationships with family members, friends, or co-workers may serve the needs of individuals in different ways (Gurland, Dean & Cross, 1983; Antonucci, Lansford, & Akiyama, 2001).

The socially supportive functions of social relationships have been shown to be particularly significant for dealing with stress and hardship. Specifically, social support can moderate or buffer any damaging effects of life stressors on health (Henderson, 1992). However, the effectiveness of support in cushioning the effects of life strain can vary by the types and sources of support that are provided (Antonucci, Lansford, & Akiyama, 2001), the type of stressor (Jackson, 1992), the intensity and gravity of the

situation (Pearlin, 1989), including the ways in which the recipients of support appraise its quality and adequacy (Barrera, 1986; Pearlin & McCall, 1990).

Benefiting from Social Networks: Social Psychological Resources Considered

Although social support has been shown to have demonstrated effects on health and well-being through direct, moderating and mediating pathways, there are other psychological processes that may play a comparable or more significant role in bolstering health outcomes. Herzog and colleagues (1998) assumed this perspective in their work on the mediating effects of perceived personal control and education on the relationship between social activities and well- being in late life. Their findings suggested that older adults who are more engaged with social activities will benefit from enhanced self perceptions of competence and control that significantly contribute to their well-being. Social engagement has also proven to influence well-being by enhancing self-esteem and perceptions of control and awareness over one's environment (Iso-Ahola, 1989).

The social psychological resources that develop out of social relationships have also been identified in Rosenberg and McCullough's (1981) work on the self-concept. Since their early work, there has been relatively little advancement of the concept on mattering and little attention has been paid to its potential to promote health and psychological well being. The studies that have considered the role of mattering in determining mental health outcomes have done so among adolescent populations, focusing on adolescents' perception of mattering to both parents and peers (Whiting, 1983; Marshall, 2001). Like Rosenberg and McCullough (1981), these studies found that the sense of mattering is important for mental well being. Recent works that examined

the sense of mattering among more diverse populations have also supported the notion that mattering is important for psychological well- being. Using both cross sectional and longitudinal data, Taylor and Turner (2001) found that among a sample of individuals ranging from 18 to 55 years of age, mattering is significantly and negatively associated with depression. Pearlin and LeBlanc's (2001) work focused on the effects of loss of mattering among former caregivers of deceased loved ones who had Alzheimer's disease. They found that the termination of caregiving led to a loss of mattering, which is associated with lower levels of self-esteem and mastery and higher levels of depression. Whereas much of the literature on mattering deals with its direct relationships to health outcomes, the mechanisms through which mattering develops and operates in the stress process certainly deserves more attention.

One of the objectives of this thesis is to draw attention to the potential mediating effects of the sense of mattering. Rosenberg and McCullough (1981), in their original specifications of the term, believed that mattering is a psychological condition that is anchored in one's relationship to significant others, as in the case of adolescents' perception of mattering to parents. Unfortunately, there is a paucity of literature that extends their contributions from adolescence to older populations and addresses the direct relationship between one's levels of engagement into social life and mattering. However, there has been work in the symbolic interactionist (SI) tradition of sociology that would suggest that this relationship would be a positive one. The symbolic interactionist perspective is embodied in research that maintains the premise that one's sense of self is created, maintained or damaged by our interactions with other people and the meanings we assign to our relations with others (Mead, 1934). People assume social roles and

identities from their social interactions and the use of roles "is a means to achieving personal reward in the form of validation of self, self-esteem, and reinforcement from others" (Stryker, 1992). Thus, social interaction is often studied in the form of the multiple roles that people can occupy, the ways in which people interpret the meanings of their social roles, and how these processes influence well-being (Thoits, 1983; Moen, & Dempster-McClain, 1991). This social psychological perspective raises some meaningful questions about the significance of elders' level of interaction in terms of what meanings elders ascribe to their roles in their social settings. Specifically, what kinds of roles do elders assume in their interpersonal relationships and social affiliations, how do they interpret these social roles and how do these conceptions affect well-being?

It is likely that older adults will extract different meanings from their roles in informal and formal social engagements. These meanings may be reflected through different elements of mattering. To illustrate, given that community voluntary organizations are often directed toward goals of preserving or protecting others' well-being, social involvement in such realms would likely contribute to heightened perceptions that one matters because of one's contribution to the welfare of others. In fact, some people's well-being may be greatly defined by the extent to which they are able to make a difference to others' welfare and these people may have little expectation for the same considerations in return. Therefore, people who are highly involved with community organizations may not witness the immediate and direct impacts of their efforts on others, but the belief that they are making a difference through the provision of different types of social support enhances specific domains of the self-concept. Additionally, those who perceive that they have social support available to them are

likely to have positive perceptions that their well-being matters to others. Hence, both the provision and receipt of social support may influence the way individuals feel about themselves in distinct ways and more specifically, enhance perceptions of mattering.

The Association between Social Relationships and Health: Alternative Explanations

It should be noted that there is mixed evidence regarding the extent to which social engagement directly influences health, as these effects on health are conditioned by a number of other psychosocial and demographic factors. For example, researchers are increasingly paying more attention to both the positive and negative exchanges that can occur in social relationships and how they come to influence health outcomes (Rook, 1990; Okun & Keith, 1998). As Rook (1984) cautions, when studying the effects of social relationships on well being, "it is important to assess the benefits of such ties in relation to the costs." One example of this caveat is illustrated in the case of individuals whose livelihood is centered on giving as much of themselves to others (at the expense of their own needs), including those who desperately seek out the attention of others. Increased social involvement for these individuals may result in unhealthy emotional attachments marked by feelings of burden or dependency.

There are additional confounding elements that make it difficult to interpret the direction of causality in the relationship between social engagement and health outcomes. Surely, it is just as likely that people who suffer from physical or mental dysfunction will be less competent in establishing and maintaining social relationships (Coyne, 1976; House et al., 1988). Although there is certainly much to be gained by a continued focus on these issues surrounding the ways we can interpret causality, there is sufficient

evidence supporting the hypothesis that the mere availability of social ties pose important implications for health (Thoits, 1995).

Indeed, there are also sociodemographic characteristics that affect the availability and access to social ties (Pearlin, Lieberman, Menaghan, & Mullan, 1981), limiting social involvement among older adults. These characteristics include income, age, marital status, gender, race, educational level, personality and physical health status. For example, network size and frequency of contact with network members may vary by age (van Tilburg, 1998). Researchers often distinguish between the experiences of the young old (roughly, persons aged 65 to 80 years of age) versus the oldest old (persons aged 80 years old or older). This distinction is important because experiences may be more prominent among one age group than another, with some experiences providing better opportunities to remain integrated within social and community life. For instance, it is likely that the young old will still be employed after retirement but the oldest old may experience more physical frailty that prevent them from being engaged in traditional forms of employment. Also, physical disabilities, regardless of age, can limit one's level of involvement with certain types of social endeavors.

Race should also be considered as some research suggests that social affiliations may be especially important among certain social groups. For example, the institutional influences of the Southern Baptist church on African American's social and political activities is widely recognized as a unique and powerful force in shaping individual attitudes and behaviors. Researchers often observe that blacks tend to engage in religious services and activities more than their white counterparts (Musick, 1996).

There is also some evidence suggesting that there may be gender differences in social involvement in late life. In a study of activity involvement among 2002 retired men aged 60-74 year of age, Beck and Page (1988) found that solitary activities and hobbies that were characterized by productive endeavors, like home maintenance, were better predictors of psychological well being. The authors implied that retired men's involvement in activities that are more productive in nature may be more effective in promoting well being than those that are socioemotional. It would be quite interesting to assess whether these findings hold for women as well because it seemed as though the authors were implying that socioemotional ties are less important among men than they are among women. These assumptions are likely conditioned by earlier findings that supported the notion that women have larger social networks and value them more than do men. More recent works, however, show mixed evidence on the extent to which social relationships differ among men and women (Umberson, et al, 1996).

Marital status may also influence levels of integration into social life. Researchers have documented the social benefits of marriage and promoted ideas that being unmarried, divorced, or widowed can lead to a state of isolation (Sherbourne & Hays, 1990). Although marital unions themselves provide a context of commitment and attachment that promotes feelings of integration (Umberson & Williams, 1999), one should be careful not to ascribe these elements of relationships to all married couples. Indeed, researchers find that some widowed individuals are no more isolated than their married counterparts (Petrowsky, 1976).

Social integration in late life will also be affected by patterns of involvement that were already established earlier in life. Chambre´'s (1984) work on a nationally

representative sample of older adults aged 60 years and over showed that “rather than responding to role loss, a significant number of elderly volunteers may be volunteers who became elderly.” Moen, Dempster-McClain, and Williams (1992) further illustrated the importance of adopting a life course perspective in the evaluation of social activity in late life. They find that even after background characteristics were controlled, women who occupied multiple roles 30 years earlier were more likely to be engaged in multiple roles later in life. Additionally, women who volunteered and who were continuously employed throughout the 30 years continued to occupy multiple roles in later life. These findings bring to light some important considerations that ought to be made when thinking about social engagement in the context of old age. Former activity levels can certainly influence the opportunity and motivation for social engagement in later life.

III: Method

Sample and Measures

This thesis draws on data from Wave I of the Aging, Stress, and Health Study (funded by National Institute on Aging, P.I., Dr. Leonard I. Pearlin, AG 17461) which interviewed a community sample of 1200 black and white men and women ages 65 years and older in the metropolitan Washington, D.C area. The main objective of the study is to improve sociological understandings of health disparities that pervade the American population by examining social and structural determinants of health that persist throughout the life course. Respondents were interviewed on early life experiences, socioeconomic, physical and mental health conditions, satisfaction with life conditions, family structure, including the structure of their social ties. The analysis was based on the entire sample size of 1167 respondents. Missing values were imputed from the variable mean of the complete cases.

Demographic and Independent Variables

Since the rate at which one engages in social activities may decrease at given stages in the life span, age was included as a control. The variable, a*ge,* is a continuous measure.

Gender is coded 1 for females and 0 for males.

Race is coded 1 for blacks and 0 for whites.

Education was measured based on categories of how far respondents went in school. The response categories included: (1) “8th grade or less”; (2) “some high school but did not graduate”; (3) high school graduate or earned GED”; (4) “specialized

(vocational) training"; (5) "some college but no degree earned"; (6) "college graduate or more." Higher values reflect higher educational attainment.

Economic status is assessed by using categories of household income in thousands of dollars. Categories are coded from a range of 1 through 11 (less than $10,000, $10,000 to $19,000…$90,000 to $99,999, to $100,000 or more).

Marital Status is represented by the following categories: 1= married, 2 = widowed, 3 = divorced/separated, and 4 = never married. Items were recoded into one indicator variable for currently married versus not married after it was determined that alternative ways of coding did not significantly affect results of the analysis.

Social engagement. To assess elders' level of integration into or isolation from social life, I used a total of five items that describe how often respondents engage in social activities. Data regarding the level of involvement with social activities were obtained from the following questions: "How often do you…visit with friends, talk to friends/relatives on the phone, go to religious services/activities, go to a club or organizational meetings, or do volunteer work?" Response options were coded as follows: 1 = "never", 2 = "once a month or less", 3 = "2-3 times a month", 4 = "1-2 times a week", 5 = "3-4 times a week", and 6 = "daily."

Based on my theoretical assumptions that different forms of social engagement may influence health in different ways, I performed principal components analysis on these five activity items measuring social participation. The determinant of the correlation matrix (.645) indicated that neither issues of multicollinearity or singularity exists among the five social activity variables. The Kaiser-Meyer- Olkin measure of sampling adequacy (KMO= .648) shows that the patterns of correlations between the

social activity variables are moderately compact, indicating that the derived factors are modestly distinct and reliable. On the basis of the factor loadings reported in Table 1, I found evidence for 2 underlying factors.

TABLE 1**.** Principal Component Factor Analysis of Items Measuring Social Activity Participation (N = 1,167)

Activity Items	Factor 1: Formal Engagement	Factor 2: Informal Engagement
Frequency go to religious services/activities	**.728**	-.051
Frequency go to club meetings	**.631**	.317
Frequency do volunteer work	**.769**	.158
Frequency talk to friends/relatives on the phone	.061	**.733**
Frequency visit friends	.131	**.797**

Each of the items from the first factor produced a loading at or exceeding .63, while the two items from composing the second factor had a loading exceeding .73. The derived factors and their constituent elements represent my two independent variables and are as follows (Valid n= 1167):

1. *Formal engagement*: (a) going to religious services/activities, (b) going to club meetings, and (c) doing volunteer work (Cronbach's Alpha = .54).
2. *Informal engagement*: (a) visiting friends, (b) talking to friends/relatives on the phone (Cronbach's Alpha = .39). The low reliability of this measure is probably partly the result of being but a two-item scale and raises questions regarding the utility of the measure. Consequently, I conducted analyses (not shown) examining informal social activity items separately; however, the results of these analyses did not significantly differ from results drawn from the informal activity

scale and the pattern of results were also similar. Therefore, the final results reported are based on the scale that was constructed through principal components analysis in order to maintain consistency.

Dependent Variable

Depression is measured using 7 items that assessed elders' emotional well-being. The items reflect the number of days within the past week from the date of interview respondents reported (1) experiencing a lack of enthusiasm for doing anything, (2) feeling bored or having little interest in things, (3) crying easily or feeling like crying, (4) feeling downhearted or blue, (5) feeling slowed down or low in energy, (6) blaming one self for anything that goes wrong, and (7) having one's feeling hurt easily. Response categories were coded as follows: 4 = "5 or more days," 3 = "3 or 4 days," 2 = "1 or 2 days," and 1 = "no days." Higher values reflect greater psychological distress. (Cronbach's Alpha = .82).

Mediating Variables

Mattering. To assess elders' sense of mattering across two domains, I performed principal components analysis on a total of seven items that represented the extent to which elders feel that they are supported by members of their network and also feel that other people's welfare is a matter of importance to them. The seven items were prefaced with the following statement: "Now think about all your relatives and your friends, and the help and support you get from them." Respondents were asked to indicate the extent to which they agreed with the following statements: "(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) There are people you know who depend on you when they need help or advice; (5) People count on you when they are down and blue; (6) People seem to tell you things about themselves that they don't tell other people; (7) Other people count on you to understand what they are going through." The response categories were 1= "strongly agree", 2 = "agree", 3 = "disagree", 4 = "strongly agree." Items were reverse coded and averaged so that higher numbers represent a greater sense of mattering. Table 2 shows the factor loadings demonstrating evidence for 2 underlying factors.

TABLE 2. Principal Component Factor Analysis of Items Measuring the Sense of Mattering (N= 1,167)

Mattering Items	Factor 1: Others Matter to You	Factor 2: You Matter to Others
You are important to people you know	.485	**.646**
Your well-being matters to people you know)	.082	**.861**
There are people who do things they know will please you	.043	**.778**
There are people you know who depend on you when they need help or advice	**.551**	.306
People count on you when they are down or blue	**.775**	.315
People seem to tell you things about themselves that they don't tell other people	**.834**	-.005
Other people count on you to understand what they are going through	**.849**	.077

The first measure of mattering, *others matter to you*, represents a series of items that indicate whether people feel that other people's welfare is a matter of importance to

them (Cronbach's Alpha = .79). The second measure of mattering, *you matter to others*, represents a series of items that indicate whether people feel they are the object of other people's concerns (Cronbach's Alpha = .73).

Analytical Strategy

The present thesis aims to (1) distinguish the effects on psychological well-being of older adults' participation in two domains of social life and (2) to elucidate the pathways that underlie these relationships by exploring the conditions under which two aspects of mattering mediates the relationships between social engagement and psychological health. The analysis addressed the following research questions and hypotheses:

First, is the level of social engagement directly related to depressive affect and is this relationship the same or different for engagement in informal and formal relationships?

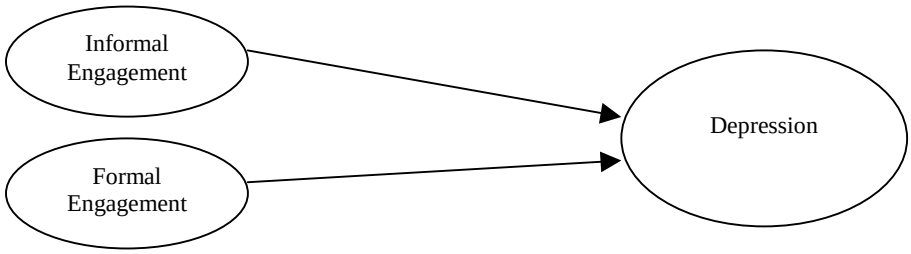
Second, is the level of social engagement directly related to perceptions of mattering and is this relationship the same or different for engagement in informal and formal relationships?

Third, is mattering directly and inversely related to depression and is this relationship the same or different for each element of mattering?

H1: *Social engagement is directly and positively related to psychological well-being*. Thus, elders who engage in a high level of involvement with both interpersonal relationships and formal social affiliations will report lower levels of depression. I believe that it is important to separate the effects of elders' engagement with informal

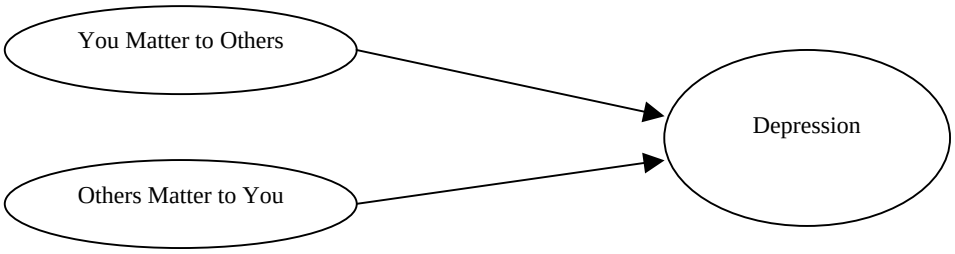
interpersonal relationships and formal social affiliations as forms of engagement may be more significant for a given health outcome. Therefore, I hypothesized that informal and formal social engagements will have independent effects on health outcomes, net of elders' sociodemographic characteristics. The heuristic model is shown in Figure 1 (It should be noted that this figure does not include sociodemographic characteristics that may be related to level of social engagement and depression).

Figure 1. The Relationship between Social Engagement and Depression



H2: Perceptions of mattering are inversely related to depression. The goal of this thesis is to highlight the potentially mediating impacts of mattering on the relationship between elders' level of social engagement and health. If each element of mattering does, indeed, act as a mediator, they should also be directly and inversely related to depression independent of the influences of each other. The heuristic model is shown in Figure 2.

Figure 2. The Relationship between Mattering and Depression



H3: Engagement with informal and formal social ties will impact depression primarily through its influence on each dimension of mattering. High levels of engagement in both informal and formal social domains will influence high states of mattering. Informal engagement will be particularly effective in maintaining the belief that one's well-being is important to others whereas formal engagement will be particularly effective in maintaining the belief that one matters to the welfare of others. The bold arrows in Figures 3 and 4 represent these hypothesized relationships.

Figure 3. The Mediating Effects of Mattering on the Relationship between Informal Social Engagements and Depression.

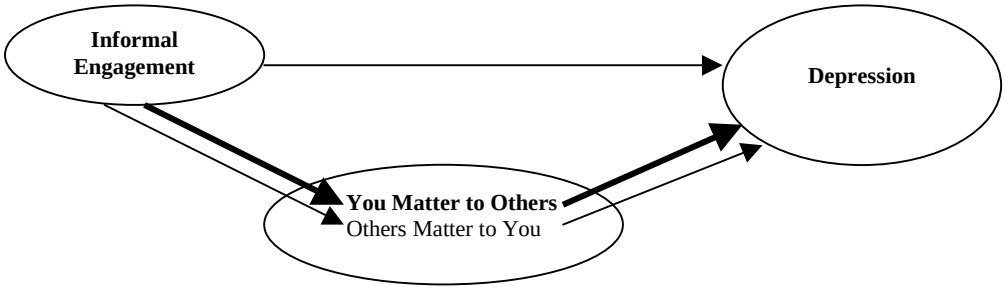
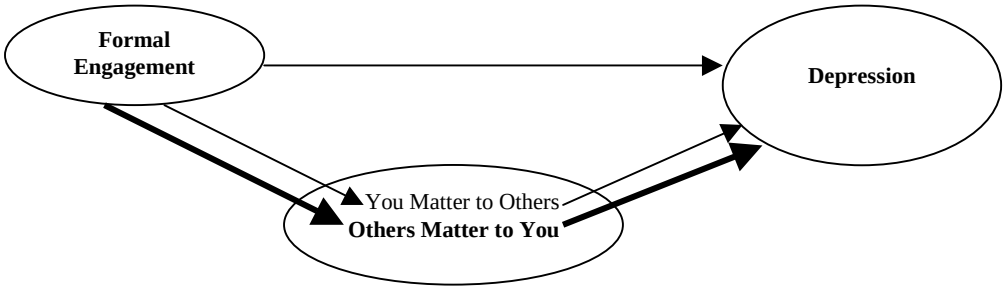


Figure 4. The Mediating Effects of Mattering on the Relationship between Formal Social Engagements and Depression.



Elders who engage in high levels of involvement with informal and formal social ties may benefit from both sides of mattering, but I posit that the effects will be stronger depending on the form of social involvement and the domains of the self-concept. Therefore, the magnitude of the direct effect of social engagement on health outcomes will be reduced once I consider mattering as an underlying quality of social relationships that contributes to health outcomes (See Figures 3 & 4). If each element of mattering is linked to particular forms of engagement, these functions of the self-concept may then help to reduce the direct relationships of social engagement to health and well-being. In sum, social engagement with informal interpersonal relationships and formal social affiliations may be equally important for health outcomes, though these relationships may develop through different pathways.

IV: Results

Descriptive Statistics

The distributions of characteristics of the sample are presented in Table 3. Table 3 shows that the sample consists of similar numbers of men and women and blacks and whites. The average age of respondents is approximately 76 years. The majority of study participants either have some high school or vocational educational training or a college degree and the average income falls between the range of $40,000 and $60,000. A little more than half of the sample is currently married. Widowed individuals make up 29 percent of the sample, divorced or separated persons make up 12 percent, and those who never married make up 6 percent of the sample. Mattering scores are a continuous measure ranging from 1 to 4 with higher values reflecting higher states of mattering. Table 3 shows that the mean scores for the belief that one matters is higher than the mean mattering score for the belief that others matter. The mean scores for both elements of mattering are closer to the upper limits of the range reflecting that, on average, respondents do feel that they matter to others and that others matter to them. The depression scores also range from 1 to 4 with higher values reflecting greater psychological distress. The mean depression score for the sample indicates that, on average, respondents report levels of depression on the lower limits of the range.

TABLE 3. Means and Standard Deviations (in Parentheses) for Variables Used in the Analyses: ASH, 2001 (N=1,167).

Variable	Mean (S.D.)
Socio-Demographic Variables	
Mean Age	75.6 (6.55)
Gender (%)	
Women	.50 (.50)
Men	.50 (.50)
Race (%)	
Black	.50 (.50)
White/Other	.50 (.50)
Education (%)	
Less than high school grad	.07 (.26)
Some HS or HS grad or vocational	.35 (.48)
Some college	.16 (.37)
College grad or more	.42 (.49)
Mean Income (1-11)	5.68 (3.13)
Marital Status (%)	
Married	.53 (.50)
Widowed	.29 (.45)
Divorced/Separated	.12 (.32)
Never Married	.06 (.25)
Intervening Variables (mean scores)	
You matter	3.31 (.44)
Others matter	3.19 (.49)
Dependent Variable	
Mean depression score	1.42 (.51)

Bivariate Correlations

Table 4 presents the bivariate correlations for the variables used in the analysis. An inverse association is observed between informal and formal social engagement and depression (r= -.09, p=.003 and r= -.12, p=.000, respectively). Specifically, the more respondents engage in informal and formal social activities, the less likely they are to report depressive symptomatology. However, formal engagement is more closely negatively correlated with depression than informal forms of engagement, and this finding is consistent with my previous argument that different forms of social engagement may have separate impacts on depression. The modest correlation observed between informal forms of social activity and formal social activity also suggests that these two domains of social relationships are distinct predictors of psychological well-being.

The bivariate correlation coefficients in Table 4 also suggest that the more respondents believe that they matter to others the less depressed they will be (r=-.18, p=.000). Furthermore, the more respondents believe that others' well-being is a matter of importance to them, the less they report being depressed (r=-.13, p=.000). Perceptions of mattering to others is more strongly correlated with depression than perceptions that others matter, also providing support for my assertion that mattering dimensions are distinct.

Social engagement is also positively related to perceptions of mattering. The more engaged respondents are with informal and formal social activities, the greater their sense of mattering to others and others mattering to them. My third hypothesis predicted that informal social engagement would be closely linked to perceptions that one matters to

others while formal social engagement would be particularly linked to perceptions that others matter. Counter to my predictions, informal forms of social activity bolster both perceptions of mattering more strongly than do formal forms of social activity, suggesting that both elements of mattering are more closely linked to engagement with informal social ties. In other words, both elements of mattering are of benefit to respondents who are engaged with informal social relationships, but the belief that other people's well-being is important is more closely linked to involvement with informal social ties. As expected, formal social engagement is more strongly related to perceptions that others matter than perceptions that one matters.

Looking at the background characteristics of people, it can be seen that older and female respondents are more likely to report being depressed than younger and male respondents. Black respondents are slightly less likely to report being depressed than whites; however, the correlation coefficient fails to reach significant levels. Education and income are also negatively related to depression and married people tend to be less depressed than their single counterparts (divorced/separated, never married & widowed individuals).

Although correlations between independent and dependent variables are highly significant, for the most part, they are weak relationships. For this reason, I combined informal and formal social activity items to create a general measure of social engagement and also observed its bivariate relationship with depression. The magnitude of the association between the combined social activity index and depression remains quite weak ($r=-.13$, $p=.000$).

For descriptive purposes, I also examined correlation coefficients separately for men and women, whites and blacks, and married and unmarried individuals (analyses not shown). These bivariate analyses reveal a few interesting results. First, the negative association between social engagement and depression is stronger among men (r=-.20, p=.000) than among women (r=-.10, p=.02). Also, perceptions that one matters to others is slightly more related to depression among women (r=-.20, p=.000) than among men (r=-.15, p=.000). Second, participation with social activities is more strongly related to depression for blacks (r=-.16, p=.000) than for whites (r=-.11, p=.01). Mattering to others is more strongly related to depression among blacks (r=-.23, p=.000) than among whites (r=-.11, p=.01). Finally, married and unmarried individuals gain very similar benefits from their participation with social activities (r=-.15, p=.000 and r=-.13, p=.000, respectively). Although these bivariate correlation analyses provide information on the direction and strength of relationships between an independent and dependent variable, they do not indicate that one variable causes change in another as other factors may be influencing the degree of association between independent and dependent measures.

TABLE 4. Bivariate Correlation Matrix of Core Study Variables (N=1,167)												
Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	1.00											
2. Gender	.08**	1.00										
3. Race	-.09**	.01	1.00									
4. Education	-.09**	-.15***	-.32***	1.00								
5. Economic Status	-.13***	-.25***	-.31***	.53***	1.00							
6. Marital Status	-.18***	-.37***	-.12***	.18***	.39***	1.00						
7. Informal Engagement	-.05†	.10***	-.07*	.08**	.05	-.12***	1.00					
8. Formal Engagement	-.07*	.02	.09**	.09**	.06*	.04	.31***	1.00				
9. Social Activity Index	-.07*	.07*	.02	.11***	.07*	-.04	.75***	.86***	1.00			
10. You Matter	-.07*	.01	-.02	.16***	.19***	.08*	**.20*** **	**.10*** **	.18***	1.00		
11. Others Matter	-.16***	.05†	.11***	.07*	.10***	.04	**.28*** **	**.17*** **	.27***	**.60*** **	1.00	
12. Depression	.07*	.13***	-.02	-.09**	-.16***	-.10***	**-.09** **	**-.12*** **	-.13***	**-.18*** **	**-.13*** **	1.00
* .01 < p ≤ .05; ** .001< p ≤ .01; *** p≤ .001; † =.05 < p ≤.10 (two-tailed test).												

The Focal Relationship: Confirming the Social Engagement-Health Association

In Table 5, I present ordinary least squares (OLS) estimates of unstandardized regression coefficients for the effect of elder's level of social engagement on depression scores, adjusting for the effects of elder's social status characteristics. It can be noted that social and demographic characteristics explain some of the variance in depression scores. Models 2 and 3 show that being a woman is related to higher levels of depression while increasing incomes, being black, more educated, and married predict lower levels of depression. Although the regression coefficient suggests that the older one gets the more depressed they will be, the coefficient failed to reach significant levels. These findings are consistent with repeated results of other research on the social distribution of depression (e.g., Turner & Lloyd, 1999).

Hypothesis I predicts that engagement with informal and formal social activities is directly and inversely related to depression (refer to Figure 1) and Models 2 and 3 show support for this hypothesis. The more engaged individuals are with both informal and formal social activities, the less depressed they will be, adjusting for socio-demographic characteristics. The effects of informal and formal forms of social engagement on depression are quite similar, and when both forms of social engagement are included in Model 4, they remain independent predictors of lower levels of depression. Although statistically significant, the regression coefficients do not reflect substantive changes in depression. Moreover, social engagement with informal and formal social activities only explains 4 and 5 percent of the variance in depression scores, respectively.

TABLE 5. OLS Regression Results of Depression on Informal and Formal Social Engagement

Variables	(1)	(2)	(3)	(4)
Socio-Demographic Variables				
Age (in years)	.002	.002	.002	.002
Gender (Women=1)	.089**	.097**	.095**	.099**
Race (Blacks=1)	-.067*	-.073*	-.053	-.060†
Education (1-6)	-.005	-.004	-.002	-.001
Economic Status (1-11)	-.022***	-.021***	-.022***	-.021***
Marital Status (Married= 1)	-.016	-.031	-.012	-.023
Independent Variables				
Informal Engagement	—	-.045***	—	-.032*
Formal Engagement	—	—	-.060***	-.048**
R^2	.035	.043	.046	.049

* .01 < p ≤ .05; ** .001< p ≤ .01; *** p≤ .001; † =.05 < p ≤.10 (two-tailed test).

Note: Unstandardized regression coefficients.

Impacts of Social Engagement on Mattering

As stated above, in order for mattering to serve as a mediator through which social engagement affects depression, it should be shown that social engagement is related to mattering. Table 6 shows OLS regression estimates of the effects of informal and formal forms of social engagement on respondents' perceptions that they *matter to others*. Indeed, the more engaged elders are with both informal and formal social activities, the greater their sense of mattering to others. Additionally, it appears that informal activities play a greater role in bolstering perceptions of mattering to others than formal activities. This finding is consistent with my expectation that particular forms of social engagement are linked to certain dimensions of mattering. However, Model 4 in Table 6 shows that informal and formal forms of social engagement are not independent predictors of perceptions that one matters to others. Specifically, the effect of formal engagement on the belief that one matters to others is reduced in magnitude and significance when both predictors are in the same model. Much like the relationships between informal and formal social engagement and depression, the relationships between both forms of engagement and mattering are statistically significant with modest substantive importance.

TABLE 6. OLS Regression Results of You Mattering on Informal and Formal Social Engagement

Variables	(1)	(2)	(3)	(4)
Socio-Demographic Variables				
Age (in years)	-.002	-.001	-.002	-.001
Gender (Women=1)	.073**	.059*	.069*	.059*
Race (Blacks=1)	.056*	.066*	.047†	.064*
Education (1-6)	.027**	.024**	.025**	.024**
Economic Status (1-11)	.022***	.020***	.022***	.020***
Marital Status (Married= 1)	.025	.051†	.023	.050†
Independent Variables				
Informal Engagement	—	.078***	—	.076***
Formal Engagement	—	—	.035*	.007
R^2	.047	.082	.051	.081

* .01 < p ≤ .05; ** .001< p ≤ .01; *** p≤ .001; † =.05 < p ≤.10 (two-tailed test).

Note: Unstandardized regression coefficients.

Table 7 presents OLS regression estimates of the effect of informal and formal forms of social engagement on respondents' perceptions that *others matter* to them. Both forms of social engagement are significantly and positively related to mattering, but when both predictors are included in Model 4, the effect of formal engagement drops in magnitude and in significance thereby confirming that informal and formal social engagement are not independent predictors of either dimension of mattering. Contrary to what I expected, informal rather than formal social engagement has a greater influence on perceptions that other people's dependencies are a matter of importance. In sum, Tables 6 and 7 indicate that informal rather than formal social engagement bolsters perceptions of both dimensions of mattering, net of the influences of social status characteristics.

TABLE 7. OLS Regression Results of Others Mattering on Informal and Formal Social Engagement

Variables	(1)	(2)	(3)	(4)
Socio-Demographic Variables				
Age (in years)	-.010***	-.008***	-.010***	-.008***
Gender (Women=1)	.099***	.078**	.091**	.076**
Race (Blacks=1)	.144***	.159***	.126***	.151***
Education (1-6)	.009	.004	.005	.003
Economic Status (1-11)	.021***	.019***	.020***	.018***
Marital Status (Married= 1)	.008	.048	.003	.044
Independent Variables				
Informal Engagement	—	.123***	—	.115***
Formal Engagement	—	—	.071***	.029†
R^2	.054	.126	.071	.128

* .01 < p ≤ .05; ** .001< p ≤ .01; *** p≤ .001; † =.05 < p ≤.10 (two-tailed test).

Note: Unstandardized regression coefficients.

Impacts of Mattering on Depression

One of the guiding assumptions of this thesis is the postulate that the extent to which people belief that they matter to others and contribute to others' well-being has important implications for psychological well-being. Hypothesis 2 states that higher perceptions of mattering will exert a negative effect on depression. Models 2 and 3 of Table 8 confirms this expected relationship by demonstrating that mattering variables are highly significant in predicting depression scores, independent of the influences of one's social and demographic characteristics. Perceptions that one matters to others has a greater effect on depression than does perceptions that other people's welfare are important to one. The negative effect of feeling that one matters to others on depression remain highly significant in the final model. However, the final model indicates that the belief that mattering based on one's contributions to others' well-being loses its predictive power in explaining variations in depression scores. Thus, contrary to my predictions, the two elements of mattering are not independent predictors of depression scores and more specifically, perceptions that one matters to others play a role in decreasing depression.

TABLE 8. OLS Regression Results of Depression on Mattering Variables

Variables	(1)	(2)	(3)	(4)
Socio-Demographic Variables				
Age (in years)	.002	.002	.001	.002
Gender (Women=1)	.089**	.102***	.100**	.103***
Race (Blacks=1)	-.067*	-.058	-.051	-.054†
Education (1-6)	-.005	-.001	-.004	-.001
Economic Status (1-11)	-.022***	-.018**	-.020***	-.018**
Marital Status (Married= 1)	-.016	-.012	-.015	-.012
Independent Variables				
You Matter	—	-.178***	—	-.158***
Others Matter	—	—	-.116***	-.030
R^2	.035	.056	.045	.056

* .01 < p ≤ .05; ** .001< p ≤ .01; *** p≤ .001; † =.05 < p ≤.10 (two-tailed test).

Note: Unstandardized regression coefficients.

Mediating models

I remind the reader that it is my belief that the sense of mattering is an important psychological resource that under girds the effectiveness of social relationships in influencing psychological well-being. Accordingly, hypothesis 3 predicts that dimensions of mattering will mediate the relationship between social engagement and depression. Although Tables 5 through 8 show some support for the main effects of social engagement and mattering on depression, OLS results in Tables 9 and 10 do not support this hypothesized relationship. If mattering variables were mediators, I would expect to observe a significant reduction in the magnitude of the effect of informal and formal social engagement on depression once mattering dimensions are added to the regression model. Table 9 shows that both elements of mattering have a slight impact on the relationship between informal social engagement and depression; however, the magnitude of the effect of informal social engagement on depression does not decrease significantly. Similarly, Table 10 shows that both elements of mattering slightly reduce the effect of formal social engagement on depression but, again, not enough to confirm a mediating relationship. The reader should note that Table 5 shows that there is little variance to be explained. However, if mattering variables were truly mediators, the effects of social engagement on depression would be significantlyreduced or eliminated.

TABLE 9. The Impacts of Mattering on the Relationship between Informal Engagement and Depression

Variables	(1)	(2)	(3)	(4)	(5)
Socio-Demographic Variables					
Age (in years)	.002	.002	.002	.001	.001
Gender (Women =1)	.089**	.097**	.106***	.104**	.107***
Race (Blacks=1)	-.067*	-.073*	-.063*	-.058†	-.061†
Education (1-6)	-.005	-.004	.000	-.003	.000
Economic Status (1-11)	-.022***	-.021***	-.018**	-.020***	-.018**
Marital Status (Married=1)	-.016	-.031	-.023	-.026	-.022
Independent Variable					
Informal Engagement	—	-.045***	-.032*	-.033*	-.032*
Intervening Variables					
You Matter	—	—	-.162***	—	-.154***
Others Matter	—	—	—	-.095**	-.012
R^2	.035	.043	.060	.049	.059

* .01 < p ≤ .05; ** .001< p ≤ .01; *** p≤ .001; † =.05 < p ≤.10 (two-tailed test).

Note: Unstandardized regression coefficients.

TABLE 10. The Impacts of Mattering on the Relationship between Formal Engagement and Depression

Variables	(1)	(2)	(3)	(4)	(5)
Socio-Demographic Variables					
Age (in years)	.002	.002	.002	.001	.001
Gender (Women =1)	.089**	.095**	.107***	.104***	.108***
Race (Blacks=1)	-.067*	-.053	-.045	-.040	-.043
Education (1-6)	-.005	-.002	.002	-.001	.002
Economic Status (1-11)	-.022***	-.022***	-.018**	-.020***	-.018**
Marital Status (Married=1)	-.016	-.012	-.008	-.012	-.008
Independent Variable					
Formal Engagement	—	-.060***	-.054***	-.053***	-.053***
Intervening Variables					
You Matter	—	—	-.169***	—	-.159***
Others Matter	—	—	—	-.102***	-.015
R^2	.035	.046	.065	.054	.064

* $.01 < p \leq .05$; ** $.001 < p \leq .01$; *** $p \leq .001$; † $=.05 < p \leq .10$ (two-tailed test).

Note: Unstandardized regression coefficients.

The combined impacts of mattering to others and others mattering on the relationship between social engagement and depression are shown in Table 11. It can be seen that informal and formal social engagements do not remain independent predictors of depression scores when mattering variables are also taken into account. Though the magnitude of the effect of informal social engagement on depression does decrease, the coefficient for the effect of informal social engagement on depression loses significance once mattering variables are included in the models. This finding is made less impressive by the fact of the weak bivariate relationship observed between the measures of informal social activities used here and depression scores. On the other hand, engagement with formal social activities does exert an independent effect on depression, net of the effects of mattering and one's social and demographic characteristics. The magnitude of the effect of formal social activities on depression decreases slightly once mattering dimensions are added to the regression model, but this result also does not show sufficient evidence to support my earlier claims that the effects of social engagement operates primarily through distinct dimensions of mattering. The patterns of these findings were also observed when I analyzed the effects of social engagement using a five item social activity scale or examining informal social activity items separately (results not shown).

TABLE 11. The Combined Impacts of Mattering on the Relationship between Social Engagement and Depression

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Socio-Demographic Variables							
Age (in years)	.002	.002	.002	.002	.001	.001	.001
Gender (Women =1)	.089**	.097**	.095**	.099**	.109***	.106***	.109***
Race (Blacks=1)	-.067*	-.073*	-.053	-.060†	-.049	-.046	-.049
Education (1-6)	-.005	-.004	-.002	-.001	.003	-.001	.003
Economic Status (1-11)	-.022***	-.021***	-.022***	-.021***	-.018**	-.019***	-.018**
Marital Status (Married=1)	-.016	-.031	-.012	-.023	-.015	-.019	-.015
Independent Variable							
Informal Engagement	—	-.045***	—	-.032*	-.020	-.022	-.019
Formal Engagement	—	—	-.060***	-.048**	-.047**	-.046**	-.047**
Intervening Variables							
You Matter	—	—	—	—	-.161***	—	-.157***
Others Matter	—	—	—	—	—	-.090**	-.006
R^2	.035	.043	.046	.049	.066	.054	.065

* .01 < p ≤ .05; ** .001< p ≤ .01; *** p≤ .001; † =.05 < p ≤.10 (two-tailed test).

Note: Unstandardized regression coefficients.

Discussion

The present study examined the significance of interpersonal relationships and formal social affiliations for psychological well-being and how these relationships are conditioned through different domains of mattering. I approached my work by questioning which social relationships are important for health, what aspects of these relationships are important, and what are the processes by which they operate to promote health. Answers to these questions are particularly relevant to our understandings of the conditions underlying social and structural disadvantage.

Through existing research, we can be confident that in general, people who are embedded into greater social networks have greater chances of being supported in various domains of their lives (reviews by Turner & Turner, 1999; Berkman et al., 2000). We also know that older adults who are more connected with family, friends and their community than those who are not socially connected live longer and enjoy a better quality of life (Cohen et al., 2001). These understandings were the basis for my first hypothesis, that the more people are engaged with informal and formal social activities, the more they would benefit from positive health outcomes, such as lower levels of depression.

In this sample, the results deviated from my original expectations. First, whereas I believed that it was important to distinguish the effects of informal interpersonal relationships and formal social affiliations on psychological well-being, the analysis showed that with the data available to the analysis it was not easy to develop strong independent measures of each of these dimensions of social engagement despite the fact that exploratory principal components analysis shows that social activity items load on

different factors. Second, it is certainly possible that my hypotheses were misguided and the failure to confirm initial hypotheses can be explained by the likely circumstance that among this older population, one's informal ties may be embedded within formal associations. Therefore, attending church services, club meetings or volunteering may be important contexts in which older adults are able to create or nurture interpersonal bonds. In fact, a recent study has shown that a majority of elders engage in volunteer work through religious or community based institutions (Wallace, 2003). Also, in response to the wealth of research that acknowledges the importance of supportive social relationships for successful adaptation in late life, many communities sponsor formal programs designed to keep elders physically and socially active. The informal interpersonal relationships that can develop within these formal contexts are not adequately accounted for in the results of the multivariate analyses that examine the impacts of informal and formal social engagement separately. In light of these considerations, I performed analyses where both informal and formal social activities were combined into a single social activity scale. However, the pattern of these results was not significantly different from results that examined the two forms of social engagement.

I also posited that the effectiveness of social relationships in late life may vary by the extent to which they bolster or maintain a sense of mattering and that the double-sided understandings evoked by the sense of mattering, feeling valued by others and being valuable to others, are especially meaningful for different forms of social engagement. Yet, dimensions of mattering also turned out to be less analytically distinct than was originally expected and did not mediate the relationship between social

engagement and depression. Although each dimension of mattering was shown to have important independent relationships with depression, multivariate analyses revealed that when both mattering variables are in the same model, each competed for the same variance.

The unsupported hypotheses presented in this thesis do not merit an abandonment of the idea that dimensions of social engagement and mattering are distinct. There were some limitations in the analysis that may be observed in the ways that concepts were measured. The measures of mattering used in this analysis may not have adequately tapped into the components of the self-concept that I hoped to address. For example, the belief that other people's well-being is a matter of importance to one, *others matter*, was assessed by reports of people's belief that others count on them for certain kinds of support. Yet, I believe this measure would better capture one's sense of mattering if these items were self-appraisals of the extent to which donating support is important to the individual. Furthermore, perceptions that others matter need not be solely driven by providing socio-emotive supportive actions such as being available to give advice or understanding other people's psychosocial issues. In fact, the domain of mattering that concerns the belief that other's well-being depends on one may be fostered through various domains of support provision and also is best measured by assessing the degree of its importance to individuals. Essentially, measures of the provision and receipt of support should be distinct from measures of the ways in which these supportive actions influence one's view of oneself.

The results of this project are also influenced by several points related to issues of causality. First, the direction of causation between social engagement and psychological

well-being cannot be firmly established. It is just as plausible that those who are depressed shy away from maintaining social relationships. Related to this point, those who have a strong sense of mattering may also be the ones that seek out and maintain social relationships. Additionally, life course perspectives on the development of the self-concept, particularly the sense of mattering, will also add depth to the present analysis for mattering may, indeed, grow out of social relationships, but knowing how these social relationships influence states of mattering over time will prove to be a more enlightening point of inquiry. Specifically, older adults' current states of mattering may be a product of both past and current social relationships. This analysis was only able to assess respondents' current levels of social activity. Future work might also examine how one's social status interacts with states of mattering. If mattering is a resource for dealing with stress and illness and is influenced more through the social position one holds in society, we may learn that dimensions of the self that grow out of social relationships may have different meanings for different groups of people.

REFERENCES

Antonucci, Toni C., and Barbara A. Israel. 1986. “Veridicality of social support: A comparison of principal and network members’ responses.” *Journal of Consulting and Clinical Psychology*, 54, 432-437.

Antonucci, Toni C., Jennifer E. Lansford, and Hiroko Akiyama. 2001. “Impact of positive and negative aspects of marital relationships and friendships on well-being of older adults.” *Applied Developmental Science,* 5(2): 68-75.

Baltes, Paul B. and Margaret M. Baltes. 1990. *Successful aging: Perspectives from the behavioral sciences*. New York: Cambridge University Press.

Bandura, Albert. 1997. *Self Efficacy: The Exercise of Control*. New York: Freeman & Co.

Barrera, Manuel Jr. 1986. “Distinctions between social support concepts, measures and models”. *American Journal of Community Psychology,* 14: 413-446.

Baumeister, Roy F. and Mark R. Leary. 1995. “The need to belong: Desire for interpersonal attachments as a fundamental human motivation.” *Psychological Bulletin*, 117: 497-529.

Beck, Scott Herman and Joe W. Page. 1988. “Involvement in activities and the psychological well being of retired men.” *Activities, Adaptation, & Aging*, 11 (1): 31-47.

Benyamini, Yael and Ellen L. Idler. 1999. “Community studies reporting association between self-rated health and mortality.” *Research on Aging*, 21, 392-401.

Berkman, Lisa F., Thomas Glass, Ian Brissette, and Teresa E. Seeman. 2000. “From

social integration to health: Durkheim in the new millennium." *Social Science & Medicine*, 51 (6): 843-857.

Bevil, Catherine A., O'Connor, Priscilla C., & Pamela M. Mattoon. 1993. "Leisure activity, life satisfaction, and perceived health status in older adults." *Gerontology & Geriatrics Education*, 14 (2), 3-19.

Bisconti, Toni L. and C.S. Bergeman. 1999. "Perceived social control as a mediator of the relationships among social support, psychological well being, and perceived health." *The Gerontologist*, 39, 94-103.

Carstensen, Laura L. 1991. "Selectivity theory: Social activity in life-span context." *Annual Review of Gerontology and Geriatrics*, 11, 195-217.

Cassel, John. 1976. The contribution of the social environment to host resistance." *American Journal of Epidemiology*, 104, 107-123.

Chambre´, Susan M. 1984. "Is volunteering a substitute for role loss in old age? An empirical test of activity theory." *The Gerontologist*, 24, 292-298.

————. 1993. "Volunteerism by elders: Past trends and future prospects." *The Gerontologist*, 33: 221-228.

Cobb, Sidney. 1976. "Social support as a moderator of life stress." *Psychomatic Medicine*, 38: 300-314.

Coyne, James C. 1976. "Depression and the response of others." *Journal of Abnormal Psychology*, 85: 186-93.

Cohen, Sheldon, Benjamin H. Gottlieb, and Lynn G. Underwood. 2001. "Social relationships and health: Challenges for measurement and intervention." *Advances in Mind -Body Medicine*, 17 (2): 129-141.

Dean, Alfred, Bohdan Kolody, and Patricia Wood. 1990. “Effects of Social Support from Various Sources on Depression in Elderly Persons.” *Journal of Health and Social Behavior*, 31 (2): 148-161.

Durkheim, Emile. 1951. *Suicide*. New York: Free Press.

Ellison, Christopher G. 1991. “Religious involvement and subjective well-being.” *Journal of Health and Social Behavior*, 32(1): 80-99.

Ellison, Christopher G., Jason D. Boardman, David R. Williams, and James S.Jackson. 2001. “Religious involvement, stress, and mental health: Findings form the 1995 Detroit Area Study.” *Social Forces*, 80(1): 215-249.

Erickson, Bonnie. 2003. “Social Networks: The Value of Variety.” *Contexts,* Winter.

Ferraro, Kenneth F. 1980. “Self-ratings of health among the old and the old-old.” *Journal of Health and Social Behavior*, 21: 377-83.

Friedrich, Douglas D. 2001. *Successful Aging: Integrating Contemporary Ideas, Research Findings, and Intervention Strategies*. Charles C. Thomas Publishers.

Glass, Thomas A., Carlos F. Mendes de Leon, Richard A. Marottoli, and Lisa F. Berkman. 1999. “Population based study of social and productive activities as predictors of survival among elderly Americans.” *British Medical Journal,* 319, 478-483.

Greenberg, M.S. 1980. “A theory of indebtedness,” in K.J. Gergen, Greenberg & Willis, *Social Exchange: Advances in Theory and Research*, pp. 3-26. New York: Plenum Press.

Gupta, Vasudha and Charles Korte. 1994. “The effects of a confidant and a peer group on

the well-being of single elders." *International Journal of Human Development*, 39 (4): 293-302.

Henderson, A.S. 1992. "Social support and depression." In H.O.F. Veiel, & U. Baumann (Eds.), *The meaning and measurement of social support*, (pp.85-92). New York: Hemisphere.

Herzog, A. Regula, Melissa M. Franks, Hazel R. Markus, and Diane Holmberg. 1998. "Activity and well-being in older age: Effects of self concept and educational attainment." *Psychology and Aging*, 13(2): 179-85.

Hooker, Karen, and Ilene C. Siegler. 1993. "Life goals, satisfaction, and self rated health: Preliminary findings." *Experimental Aging Research*, 19, 97-110.

House, James S. 2002. "Understanding Social Factors and Inequalities in Health: 20th Century Progress and 21st Century Prospects." *Journal of Health and Social Behavior*, 43 (2): 125-142.

House, James S., Karl R. Landis, and Debra Umberson. 1988. "Social relationships and health." *Science*, 241: 540-545.

Idler, Ellen L. and Yael Benyamini. 1997. "Self-rated Health and Mortality: A Review of Twenty-Seven Community Studies." *Journal of Health and Social Behavior,* 38:21-37.

Iso-Ahola, Seppo E. 1989. "Motivation for leisure." In E.L. Jackson & T. Burton (Eds.), *Understanding Leisure and Recreation*. State College, PA: Venture.

Jackson, Pamela Braboy. 1992. "Specifying the Buffering Hypothesis: Support, Strain and Depression." *Social Psychology Quarterly*, 55 (4): 363-378.

Kaufman, Jane E. 1988. “Leisure and anxiety: A study of retirees.” *Activities, Adaptation and Aging*, 1: 3-10.

Krause, Neal. 1987. “Life stress, social support, and self-esteem in an elderly population.” *Psychology and Aging*, 2, 349-356.

Krause, Neal and Thanh Van Tran. 1989. “Stress and religious involvement among older blacks.” *Journal of Gerontology: Social Sciences*, 44: 4-13.

Lawton, M. Powell. 1994. “Aging and activity: A theoretical perspective.” In D.M. Compton & S.E. Iso-Ahola (Eds.), *Leisure & Mental Health* (Vol.1, pp. 61-74). Park City, UT: Family Development Resources.

Lennartsson, Carin and Merril Silverstein. 2001. “Does engagement with life enhance survival of elderly people in Sweden? The role of social and leisure activities.” *Journal of Gerontology: Social Sciences*, 56B (6): S335-S342.

Litwin, Howard. 2000. “Activity, social network, and well-being: An empirical examination.” *Canadian Journal on Aging*, 19: 343-362.

Marshall, Sheila K. 2001. “Do I matter? Construct validation of adolescents’ perceived mattering to parents and friends.” *Journal of Adolescence*, 24 (4): 473- 490.

Mead, George Herbert. 1934. *Mind, Self, and Society*. Chicago: University of Chicago Press.

Moen, Phyllis and Donna Dempster-McClain. 1991. “Motherhood, multiple roles, and maternal well-being: Women of the 1950s.” *Gender & Society*, 5: 565-582.

Moen, Phyllis, Donna Dempster-McClain and Robin M. Williams, Jr. 1992. “Successful aging: A life-course perspective on women’s multiple roles and health.” *American Journal of Sociology*, 97, 1612-1638.

Musick, Marc A. 1996. "Religion and subjective health among black and white elders." *Journal of Health and Social Behavior*, 37(3):221-237.

Musick, Marc A., A. Regula Herzog, and James S. House. 1999. "Volunteering and mortality among older adults: Findings from a national sample." *Journal of Gerontology: Social Sciences*, 54B, S173-S180.

Musick, Marc A. and John Wilson. 2003. "Volunteering and depression: the role of psychological andsocial resources in different age groups." *Social Science & Medicine*, 56 (2): 259-269.

Pearlin, Leonard I. 1989. "The sociological study of stress." *Journal of Health and Social Behavior*, 30: 241-256.

Pearlin, Leonard I., and Allen J. LeBlanc. 2001. "Bereavement and the loss of mattering." In *Extending Self-Esteem Theory and Research*, T. Owens, S. Stryker & N. Goodman (Eds.). Cambridge: University Press.

Pearlin, Leonard I. and Mary E. McCall. 1990. "Occupational stress and marital support: A description of microprocesses." In J. Eckenrode and S. Gore (Eds.) *Stress Between Work and Family* (pp.39-60). New York: Plenum Press.

Pearlin, Leonard I. and Mark Pioli. 2003. "Personal Control: Some Conceptual Turf and Future Directions." Pp. 1-21 in *Personal Control in Social and Life Course Contexts*, ed. by S.H. Zarit, L.I. Pearlin and K.W. Schaie. New York: Springer.

Pearlin, Leonard I. & Marilyn McKean Skaff. 1995. "Stressors and Adaptation in Late Life." In Margaret Gatz (Ed.) *Emerging Issues in Mental Health and Aging*, (pp 97-123). Washington DC: American Psychological Association.

Pearlin, Leonard I. & Marilyn McKean Skaff. 1996. "Stress and the Life Course: A

Paradigmatic Alliance. *The Gerontologist*, 36 (2): 239-247.

Pearlin, Leonard I., Morton A. Lieberman, Elizabeth G. Menaghan, and Joseph T. Mullan. 1981. "The Stress Process." *Journal of Health and Social Behavior*, 22: 337-356.

Pearlin, Leonard I. and Carmi Schooler. 1978. "The structure of coping." *Journal of Health and Social Behavior*, 18: 2-21.

Petrowsky, Marc. 1976. "Marital status, sex, and the social networks of the elderly." Journal of Marriage and the Family, 38 (4): 749- 756.

Rosenberg, Morris. 1979. Conceiving the self. New York: Basic Books.

Rosenberg, Morris and B. Claire McCullough. 1981. "Mattering: Inferred significance and mental health among adolescents." In R.G. Simmons (Ed.) *Research in Community and Mental Health: A Research Annual* (pp. 163-82). New York: JAI Press, Inc.

Ross, Catherine E., and Chia-Ling Wu. 1995. "The links between education and health." *American Sociological Review*, 60: 719-745.

Rowe, John W. and Robert L. Kahn. 1997. "Successful Aging." *The Gerontologist*, 37 (4), 433-440.

Rutledge, Thomas, Karen Matthews, Li-Yung Lui, Katie L. Stone, and Jane A. Cauley. 2003. "Social Networks and Marital Status Predict Mortality in Older Women: Prospective Evidence From the Study of Osteoporotic Fractures (SOF)." *Psychosomatic Medicine*, 65: 688-694.

Saranson, Irwin G., Pierce, G. R., & Saranson, B. R. (1994). General and specific

perceptions of social support. In W. R. Avison & I.H. Gotlib (Eds.), *Stress and mental health* (pp. 151-177). New York: Plenum Press.

Schieman, Scott and John Taylor. 2001. "Statuses, roles, and the sense of mattering." *Sociological Perspectives*, 44 (4): 469-484.

Sherbourne, Cathy D., and Ron D. Hays. 1990. Marital status, social support, and health transitions in chronic disease patients. *Journal of Health and Social Behavior, 31*(4), 328–339.

Taylor, John and R. Jay Turner. 2001. "A longitudinal study of the role and significance of mattering to others for depressive symptoms." *Journal of Health and Social Behavior*, 42: 310-325.

Thoits, Peggy A. 1995. "Stress, Coping, and Social Support Processes; Where Are We? What Next? *Journal of Health and Social Behavior*, 35: 53-79.

Thoits, Peggy A. 1983. "Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis." *American Sociological Review*, 48: 174-87.

Thoits, Peggy A. and Lyndi N. Hewitt. 2001. "Volunteer work and well-being." *Journal of Health and Social Behavior*, 42 (2): 115-131.

Turner, R. Jay and Donald A. Lloyd. 1999. "The stress process and the social distribution of depression." *Journal of Health & Social Behavior*, 40 (4): 374- 404.

Turner, R. Jay and J. Blake Turner. 1999. "Social integration and support." In C.S. Aneschensel and J.C. Phelan (Eds.) *Handbook of the Sociology of Mental Health* (Pp.301-20). New York: Plenum.

Umberson, Debra, Meichu D. Chen, James S. House, Kristine Hopkins, and Ellen Slaten. 1996. “The effect of social relationships on psychological well-being: Are men and women really different?” *American Sociological Review*, 61 (5): 837-857.

van Tilburg, Theo. 1998. “Losing and gaining in old age: changes in personal network size and social support in a four-year longitudinal study.” *Journal of Gerontology B Psychology Sc Soc Sci*, 53: s313-23.

Wallace, Nicole. 2003. “Majority of Older Adults Are Volunteers and Donors, New Study Finds.” *Chronicle of Philanthropy*, 16 (4): 22.

Whiting, Brooke E. 1983. “Determinants and consequences of mattering in the adolescents’ social world.” Ph.D. dissertation, University of Maryland.