ABSTRACT

THE EFFECTS OF SOCIAL SUPPORT ON PERCEIVED HEALTH OF SPANISH ELDERS

By Margaret JoAnn Kengott

Literature from the United States has shown a positive link between social support and health outcomes, but studies from Spain do not confirm that link. The purpose of this research is to explore the effects of social support on the perceived health of Spanish elders. A secondary analysis was conducted with data collected by the Universidad de Salamanca (Spain) from 2004-2005. Social support was measured by reciprocity, cohabitation and total satisfaction with support from relationships. Demographic variables of gender, education and age were included as control variables in tests of the relationship between social support and perceived health. Findings revealed that reciprocity, cohabitation, and gender have an influence on Spanish elders’ self-ratings of health. Cultural context clearly plays a role in the relationship between social support and perceived health. The added value of a comparative analysis for expanding our understanding of social support and health outcomes is demonstrated in this research.
THE EFFECTS OF SOCIAL SUPPORT ON PERCEIVED HEALTH
OF SPANISH ELDERS

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CHAPTER I
INTRODUCTION

Social support is important for many reasons: it provides a social outlet and resources to individuals when they are in need, and it can have positive effects on a person’s health status. “Because the lives of older people are intimately connected with the lives of others, social relationships have far-reaching consequences for the health and well-being of our aging population,” (Krause, 2006, p.197). Bisconti and Bergeman (1999) claim that social ties play an important role in producing positive outcomes for older adults. Research conducted by Ryff and Singer (1998) found that positive emotions, such as those derived from social support, might be linked to favorable physiological effects, including enhanced immunological functioning. Research by Krause (2006) suggests that one particularly significant reason that social support is beneficial especially in old age is that “if stress compromises an older person’s sense of self-esteem, feelings of control, and meaning in life, then perhaps social support operates by replenishing these important psychosocial resources,” (188).

In addition to having beneficial effects on physical and emotional health, social support is important as a component of the network of assistance, complementing the formal services available to older people. Instead of solely relying on formal support from local, state and federal governments, more and more people are turning to family, friends and neighbors for additional support (U.S. DHHS, 1998). This informal support can decrease an older adults’ dependence on formal services and allow them to be cared for in their own homes by those who may better understand the older adults’ abilities and limitations as they relate to personal needs.

As the population of older people around the world increases in number and proportion, it is important to understand which factors are associated with the availability, nature, and impact of social support. Context plays a large role in these aspects of social support. For example, how many people are in one’s social network, how intimate the relationships are among people in the network and the proximity of social network members all have an influence on the way in which social support can/will be provided and received. Additionally, cultural values and beliefs may have an influence on the way in which social support is defined or acceptable or even appropriate as social behavior. For example, it is tradition in many parts of Spain for children to live with their parents well into their 30s, for reasons invoked by the housing market, as well as
by family values. Thus, it can be expected that adult children who live with their aging parents often provide much support, due to proximity, whereas the geographic distance between American adult children and their parents often poses as a barrier to support, as independence and autonomy are important values for U.S. elders.

Thus, our understanding of social support can be enhanced with cross-cultural research. This study will focus on Spain, a nation with universal health care, cohabitation patterns where children living with their aging parents is traditional and where collectivist ideals are the norm. This unique combination of attributes will illuminate the role of social support in this investigation. “Projections from the United Nations (2000) state that in the year 2050, Spain will have the world’s oldest population, with 40% of its people over 60 years old,” (Fernández-Ballesteros, 2002, p. 646). From this assessment, we can come to better understand the importance that social support has on the lives of older people across the globe. From this international perspective, it is possible to gain an understanding of how these findings might inform aging policy in order to improve the quality of life of our aging members at present and for generations to come.

The investigation that follows looks at the extent to which social support affects self-perceptions of health of Spanish elders from the city of Salamanca, Spain. Three dimensions of social support that may play a role in this relationship include: reciprocity (the nature of the support relationship), cohabitation (a measure of availability of support) and satisfaction with support from relationships among family members and friends. This paper explores research on the United States but it will only be used as a reference point; the value here lies in exploring a cultural context. For example, research on social support in the U.S. has shown a strong positive impact on health. However, in studies of Spanish elders, this well-established finding has not held true, but rather, education was found to be a better predictor of health outcomes (Diez-Nicolás, 1995; Fernández-Ballesteros, 2001). The following investigation was conducted to examine this relationship more fully.
CHAPTER II
BACKGROUND/LITERATURE REVIEW

This chapter discusses relevant literature as it relates to the scope of this critical inquiry, with six sections: (1) conceptualization of social support, (2) impact of social support on health, (3) models for understanding the impact of social support on health, (4) demographics, (5) cultural context for findings and discussion and (6) rationale for the study.

Conceptualization of Social Support
Definitions

The concept of social support is multidimensional and complex, but despite this complexity, social support can generally be thought of as the giving and receiving of goods and services among people in a social network (Cohen & Syme, 1985). Dunkel-Schetter & Skokan (1990) refer to social support as an interaction between dyads in which one person recognizes the distress of another and actively seeks to provide support in response to the distress. Social support can also be described as “individuals drawing upon others or resources from the whole (received social support) or even the mere perception that one can do so (perceived social support),” (Moren-Cross & Lin, 2006, p. 112). Antonucci and Jackson (1987) refer to social support as interpersonal interactions where “aid, affect and affirmation” are exchanged. Cohen and Wills (1985) add that the process of social support involves an embeddedness in a social network, while resources provided by others in response to stressful events result in an increase in well-being of the support recipient. In general, social support can be defined as the provision and receipt of resources between connections in a social network (Antonucci, Sherman & Akiyama, 1996).

To further refine our understanding of the concept, several scholars have identified four main types of support: esteem, informational, instrumental, and social integration (or belongingness) (Barrera, 2000; Cutrona and Russell, 1990; Wills, 1985). Esteem support can be defined as providing an individual with information that they are accepted and held in high regard. It also encompasses behaviors that a person uses to provide emotional support or expressive support (Janevic et al., 2004; Cohen & Wills, 1985) – caring and concern (Uchino, 2004), empathy, love and trust (Krause, 1987). Informational support is known as advice and
appraisal, helping people to help themselves by offering advice or feedback (Janevic et al., 2004) or providing them with guidance and advice (Uchino, 2004) and knowledge that they can use to resolve a problem or stressful situation (Krause, 1987). The provision of financial assistance or tangible resources or services is known as instrumental support, given directly to a person in need (Uchino, 2004). The final category of support is called social integration or belongingness, which includes the availability of others “to do fun things with” (Janevic et al., 2004) and spending time with others in one’s social network (Uchino, 2004; Cohen & Wills, 1985).

In general, social support refers to the transfer of resources within a social network. These resources can include any type of emotional, informational, or tangible support or social integration. In order to be better informed about the nature of where these types of support are derived, two particularly important dimensions of social support, social networks and reciprocity, will guide our understanding.

Social networks

The term ‘social network’ encompasses the structure of social relationships that an individual has connections with (Antonucci, Sherman & Akiyama, 1996) and defines “the outer boundaries of support upon which an individual can draw” (Pearlin, 1985, p. 44). Some features of the network include size – the number of people linked directly or indirectly to the individual – which also determines the availability of resources; density – the degree to which the people within the network are connected to the individual; and homogeneity/heterogeneity – the degree to which people within the network are alike or different, as related to a specific characteristic such as race/ethnicity (Moren-Cross & Lin, 2006; House & Kahn, 1985). Another important and more specific piece of social networks is the composition of the network – not just how large or dense it is, but who is in it. Composition of one’s social network reveals much about the potential supportive resources that may be available to an older adult.

“Within a person’s network, the subset of relationships where interactions are most direct, active, and intense presumably represents the most viable source of support,” (Pearlin, 1985, p. 45). Much of the literature states that most networks consist of family members, such as spouses and children and siblings but that friends also comprise a large part of social networks (Uchino, 2004, Antonucci, Sherman & Akiyama, 1996; Wills, 1985). These relatives and friends are potential sources of much social support. However, for each individual, the degree of
support that is provided depends on the intimacy of his/her relationship with the person providing the support. Those who are especially close to an individual in a social network might be able to provide the most adequate or appropriate social support resources because of the intimate knowledge that they have acquired about the individual over time. Antonucci and Jackson (1987) claim that family members are people who individuals turn to when they are the most in need; there is a sense of lifetime reciprocity – for example, parents taking care of children when they are young, and in exchange, adult children caring for their aging parents. In addition, these authors also claim that family members are most helpful in coping with normative life crisis events, whereas friends play an important role in non-normative crises.

In many studies, spouses are said to provide the most support overall. Antonucci and Jackson (1987) have found that married people also seem to have better support networks, and likely more resources, than those who are not married. Recent studies reflect the trends found in older studies of social support in that adult children are often found to provide support to aging parents (Roberto, Allen, Blieszner, 2001; Choi & Wordarski, 1996), especially instrumental support (tangible goods and services). The other family member who receives attention in the literature is the sibling, who is said to be the most egalitarian and the most friend-like among all of the family relations (Antonucci, Sherman & Akiyama, 1996). Depending on location of residence, neighbors can also be very important social support resources. For example, in New York City, neighbors play a daily role in the lives of older adults, mainly due to their availability and proximity (Antonucci & Jackson, 1987).

Finally, friends are a very important part of the social network. In fact, one study found that friend support is a better predictor of well-being than support provided by family members (Antonucci, Sherman & Akiyama, 1996). This may be due to friends having a tendency to bolster feelings of self-worth in the older adult. Lee and Shehan (1989) found that enhancement of feelings of self-worth does not occur with family interactions. This may seem surprising; however, one possible explanation for this result may be that in general, friendship support is a completely voluntary endeavor. Friends choose to become part of other friends’ social networks. In contrast, family members are part of a network that is automatically determined by birth. Family members may feel obligated to care for aging family members due to their familial ties, whereas friends of an older person freely choose to provide care. These statements imply that the older person is only receiving care, services, or other means of support from family members
and friends, but the reverse is also true. Older adults are capable of and often more than willing to provide support to family members and friends as well.

**Reciprocity**

Is it just as important to give social support as to receive it? A unique branch of social support literature touches on the notion of social exchange. Under this framework, the provider of social support is not only a giver, but oftentimes a receiver of resources in exchange for the support that he/she has bestowed upon an individual in his/her social network. The concept of reciprocity captures the relationship between the giving and receiving of resources between individuals (Moren-Cross & Lin, 2006; Pearlin, 1983). According to Liang, Krause and Bennett (2001), these acts of giving and receiving have a tendency to reinforce each other as well as the expectation that support resources will be available for future needs.

The norm of reciprocity is so strong that people keep track of how much support they have provided to and received from others over time. “The norm of reciprocity is quite strong in this country, and we believe it has important effects on how the individual accepts, provides, and perceives the exchange of social support” (Antonucci & Jackson, 1987, p. 296). Reciprocity may, in fact, influence if, how and when social support is provided (Dunkel-Schetter & Skokan, 1990). For example, past experience with reciprocity often predicts future provision of support. In addition, “…experience as a support provider is critical in influencing future motivation to provide support, and experience as a support recipient is critical in influencing the quality and effectiveness of support provided” (Dunkel-Schetter & Skokan, 1990, p. 447).

The theoretical basis for reciprocity in social support comes from Dowd’s exchange theory. The theory states that people engage in interactions and relationships in order to maximize their rewards and to reduce costs, whether they are material or non-material (Dowd, 1975). According to the theory, people maintain relationships because they are rewarding in some aspect, even though costs are inevitable too. As applied to reciprocity in social support then, individuals prefer equal exchanges in their interactions (Antonucci, Fuhrer & Jackson, 1990). If both sides in the exchange are equally dependent upon one another, then the relationship is said to be balanced.

However, it is often the case that one person in the exchange relationship benefits more from the interaction because he/she has more resources and thus, has acquired ‘power’ in the
relationship (Dowd, 1975). Resources can be anything that people in the exchange consider to be rewarding, for example, knowledge, money, social position, and persuasiveness. Early research on exchange theory suggests that as people age, they have fewer resources to provide to an exchange relationship than they did when they were younger because of decreased social interaction (Dowd). Eventually, all that they have left to give is compliance. Dowd says in his theory of exchange and aging that older adults reciprocate with compliance because they cannot fully give anything more (1975). Thus, “from an exchange theory perspective, the problems of the oldest-old are essentially problems of scarcity in exchange commodities” (Antonucci, et al., 1996, p. 511). Dowd also claims that for frail elders who cannot reciprocate tangible aid, it is more acceptable for that aid to come from a family member rather a friend, due to the perception of reciprocity over the course of a lifetime.

But recent research on aging (Soldo and Hill, 1993; Bengtson, Rosenthal & Burton, 1990) has shown that older people can and do reciprocate resources and assistance of sizeable proportions. Groger and Kunkel (1995) suggest that this reciprocity can occur if one takes into account and tolerates delayed reciprocity and/or if one can accept repayment of material items in the form of smaller, short-lived offers. However, this goes against the exchange rule that many middle-class Americans hold, which is that exchanges should be equal in kind and value and occur within a relatively short amount of time (Liang, Krause & Bennett, 2001). This ‘rule’ tends to suppress the uneven repayment as described in Groger and Kunkel above, and is therefore, inflexible about recognizing the variety of other resources that those of different classes and cultures can and are willing to provide.

According to Antonucci, Sherman and Akiyama (1996), in the American culture, most people, including older adults, report that they give more than they receive. One suggestion for this pattern in old age is that older adults may over-report what they give and under-report what they receive in order to ‘rebalance’ exchanges (Morgan, Schuster & Butler, 1991). Another possible explanation for this trend is that ‘being a giving person’ is a trait that is valued in American society and over-giving can help to ensure older adults that someone will be able to provide for them in the future if they need it (Liang, Krause & Bennett, 2001).

From this review of literature on reciprocity as a dimension of social support, one can see that the exchange of goods and services and support among people in a social network can be important for future provision of resources. The dimension of reciprocity may, in fact, have
predictive value. For example, reciprocal social support may be more beneficial than one-way or imbalanced support, where one person is giving more support than they receive or vice versa. “…The concept of reciprocity may provide an important explanatory framework within which to interpret diverse findings concerning the effect of social support on health and well-being” (Antonucci, Fuhrer & Jackson, 1990, p. 520). For this reason, it may be useful to examine the relationship between social support and health in the literature.

**Impact of Social Support on Health**

If social support is such a salient part of social interactions, what effect does it have on people? Cohen and Wills (1985) and Krause (2001) have found that individuals with more social resources have better health outcomes than those with less supportive relationships. Another way to look at how support relationships play a role in old age is through lifecourse and human development research. Carstensen’s (1992) socioemotional selectivity theory holds that as people age, they develop preferences to spend time with those who provide them with the most meaningful social relationships. According to this theory, social networks become smaller as people get older because they are putting more effort into the relationships with close others who are emotionally supportive and they spend less time with “peripheral social ties” (Krause, 2006).

Other researchers look at how social relationships play a role in old age by differentiating members within the categories of age, as the ‘young old’ (ages 65-74) can possess characteristics that are very different from the ‘old old’ (ages 75-84) and ‘oldest old’ (ages 85 and up) (Neugarten & Neugarten, 1987). Researchers from the U.S. have come up with various means for differentiating older adults within age categories. Krause and his colleagues (2004), like Neugarten & Neugarten, suggest that there are three cohorts of older adults: the Depression cohort, the World War II cohort and the Postwar or Eisenhower cohort. Krause and colleagues considered the Depression cohort to consist of the oldest-old, individuals over the age of 85. The members of this cohort are known to be quite independent, determined and persistent and do not readily accept material resources from others. The World War II cohort, ages 75-84, demonstrate qualities such as patriotism, community, cooperation and teamwork (Krause, Shaw & Cairney, 2004). These values may suggest that this cohort would be open to receiving social support if their ‘teammates’ (those belonging to their social network) would be willing to provide
The Postwar or Eisenhower Cohort, ages 65-74, is defined by the “good economic times and widespread political consensus” following World War II (Krause, 2006). This ‘young-old’ group is characterized by a strong belief in the American Dream and strong family ties (Karner, 2001). This cohort may have a tendency to mention family members as their primary social support providers with greater frequency than friends or neighbors. This variation among cohorts of older adults suggests that there may be differences in type and amount of social support received and by whom it is provided.

Although the literature discusses numerous outcomes, such as well-being, life satisfaction, and the ability to remain in the community, a wealth of literature in the United States has been written on the relationship between social support and health. Berkman and Syme’s (1979) longitudinal study on network relations and health outcomes concluded that the greater the size of the network and frequency of contact within the network, the lower the mortality rate for people of all ages (Hyduk, 1996). In addition, having a large social network is related to decreased development of an Activity of Daily Living (ADL) disability (Moren-Cross & Lin, 2006). An ecological model of social support suggests that more is better when resources are involved (Vaux, 1990). This model suggests that the more network members an individual has, the more accessible support should be, the more resources the network can provide and the more that support will be spread out over time to meet chronic demands. This last point might not necessarily be a function of size, but rather diversity within the social network.

However, results of some studies have shown a tendency for “delayed effects” with regard to social support over time: as disability increases (often with age), the amount of social contact that is available decreases (Hyduk, 1996). Individuals more at risk of extended illness or disability often include non-metropolitan elders and those with no children (Stolar, 1982). In addition, those who are single, widowed or divorced tend to have higher risks of disease than those who are married (Cohen & Syme, 1985).

In studies where health is the outcome of interest, the variable ‘health’ is often a self-reported measure. It has been found that self-ratings of health do indeed reflect objective health conditions, so they can be considered ‘valid’ measures of health. Research studies have found that there are age-, as well as sex-linked differences in responses to questions of health. Maddox (1962) and Shanas et al. (1968) found that older adults tend to rate their health on a comparative basis, keeping in mind how healthy they feel that they are compared to others their own age, and
that on average, older women tend to report better ratings of health than do older men. There is also evidence that elders with higher levels of education report better health as well (Ferraro, 1980). Keeping these response patterns in mind is important for isolating the effects of social support on health.

Perhaps most importantly, Hyduk (1996) reported that researchers in the past (e.g. Antonucci, 1985) have shown that the adequacy of social support may be the strongest link to health and well-being. This perception of adequacy may be more beneficial than actual received support because some types of social support may be unhelpful and/or inappropriate for the given situation, and because asking for help may decrease one’s self-esteem (Uchino, 2004). Thus, not only is the actual provision of social support important to elders, but satisfaction with support provided is essential as well. According to Krause (1987), satisfaction can only occur when the recipient of support feels that the need for support has been met, and oftentimes, satisfaction with support is a more important determinant of well-being than is the amount of support provided.

An examination of the impact of social support on health has shown that the frequency of contact with people in one’s social network has a positive effect on health outcomes and that the availability of social contacts may lead to availability of a wider range of support resources, providing a support safety net over time. Cohabitation patterns are indicators of daily social contact, and thus, can serve as one measure of potential social support. Satisfaction with support from relationships has been found to be a more important determinant of well-being than is amount of support provided, and so it too, is a second dimension that is potentially useful for understanding the nature of social support. The “delayed effects” of social support provision may represent reciprocity of resources over time, which can serve as a third measure of social support. This giving and receiving of resources can be distinctly positive or negative, depending on whether the resource exchange is perceived as balanced or not. Being under-benefited, for example (giving more support than one receives), may bring about feelings of frustration or other negative emotions. On the other hand, those who feel that the resource exchange is balanced are more likely to feel more content about the reciprocity.

While cohabitation, satisfaction with support from relationships and reciprocity serve as three potentially significant measures of social support, two classic models and one conceptual model help to explain the relationship between social support and health outcomes: the stress-
buffering hypothesis, which says that social support has the potential to act as a buffer to negative life events; the main effects hypothesis, which claims that social support can have a direct effect on the well-being of older adults; and the ecological model, which focuses on support network resources, support behavior and appraisals of support.

Models for Understanding the Impact of Social Support on Health

In the United States literature, it has been clear that connections between social support and health exist. Two main perspectives have been developed to attempt to describe this phenomenon and one conceptual model: the buffering hypothesis and the direct or main effects hypothesis and the ecological model, described by Vaux (1990).

The most common hypothesis, found in much of the research on social support says that its main function may be to aid in coping with and buffering stress (Stolar, MacEntee & Hill, 1993). The stress-buffering hypothesis claims that support may intervene between a stressful event and a reaction to that event, by minimizing or eliminating the stress itself (Cohen & Wills, 1985). Antonucci, Sherman and Akiyama (1996) believe that this buffering effect helps an individual adjust and adapt to negative or stressful situations by coping, thereby improving overall well-being. While stress is directly related to the onset of illness, its duration and its ultimate outcome, social support has been shown to be a moderator of the relationship between stress and illness, thus acting as a buffer (George, 1996). A variant of the stress-buffering hypothesis, the matching hypothesis, states that the stress-buffering effect should be greatest when the appropriate type of support matches the need of the stressor (Uchino, 2004).

“Berkman (1985) noted that in the 1970s, epidemiologists began to observe that some people were protected from social upheavals such as rapid social change, social disorganization, and the effects of mobility because of factors related to community and social ties” (Moren-Cross & Lin, 2006, p. 113). This social support was said to protect people from the negative physiological effects of stressful events (Cohen & Syme, 1985). Bisconti & Bergeman (1999) claim that this “protection” might be particularly salient for older adults because they may be more susceptible to stressful events later in life. For example, the loss of spouse, adjustment to the transition from work to retirement and even forced relocations all have the potential to limit or reduce the amount of resources previously available within an older adult’s social network and
thus, older adults may require extensive supportive relationships in order to help them to cope with the changes.

The process by which social support acts as a buffer is not completely understood but it is hypothesized that support intervenes between a stressful event and a reaction to that event by preventing a stress response from the individual (Antonucci, Sherman & Akiyama, 1996). Esteem support and informational support are two types of coping resources that enhance the buffering process (Cohen & Wills, 1985). Even the mere perception of available support can act as a buffer for individuals faced with stressful situations (Cohen & Wills, 1985).

Support from the second perspective related to social support and health, the main (or direct) effect model, holds that social networks provide people with frequently-occurring positive experiences and thus, they avoid negative events altogether (Cohen & Wills, 1985). This kind of support enhances well-being regardless of the level of stress associated with it because it produces a sense of self-worth, positive affect and a sense of integration within the community; a sense of belongingness (Cohen & Syme, 1985).

There are two major ways to measure social support that may be related to health outcomes. The first method by which researchers measure support is through structural measures which encompasses the presence and interconnectedness of different social ties within a social network (Uchino, 2004; House & Kahn, 1985). According to Cohen and Wills (1985), structural measures of support are more likely to promote positive health outcomes, but in the event of inevitable stressful events, interaction with supportive others helps individuals to cope with those stressors. As such, structural measures of support are more closely related to the main effects model because they tap into more general social resources (Cohen & Wills, 1985). Functional measures of support are the actual functions or types of social support provided by members of the network (House & Kahn, 1985). As they relate to the hypotheses on social support and health, functional measures of support (e.g. emotional or informational) are more likely to be associated with the stress-buffering hypothesis because they are more appropriately geared towards helping to alleviate the stressful situation.

Much of the research in this area has mixed results because of the diversity in design measures and conceptualization of social support. Therefore, researchers have come to different conclusions about whether social support acts as a buffer or through a main effect (Cohen & Wills, 1985). For some researchers, it is not a matter of ‘either/or’, but rather an issue of ‘both.’
Cohen & Wills concluded from their research that there is support for both the buffering hypothesis and the main effects model. Results supporting the buffering hypothesis are found when the social support measure looks at the resources provided by members of the social network in response to the needs of those involved in stressful situations. Support is found for the main effects model when the social support measure looks at the degree to which a person is integrated in the community of his/her social network (Cohen & Wills, 1985).

The literature thus far has explained how social support can have a protective function for individuals confronted with stressful events. But social support does not always have to be associated with negative situations. Social support is relevant in positive dimensions of life as well. An ecological model of support, discussed by Vaux (1990), is important for understanding support as “a complex process involving transitions between people and their social networks that unfold in an ecological context. Such a view may be a prerequisite to predicting aspects of social support and understanding their relationship to psychological well-being and the psychosocial stress process” (Vaux, 1990, p. 512-513). This model includes the concepts of support network resources, support behavior and appraisals of support by those receiving it. Support network resources include such things as tangible aid, advice, understanding, and encouragement – anything that the social network has and is willing to give to other network members when they are in need of support. Supportive behaviors can be described as those emotional responses, feedback, guidance, practical support, tangible aid and socializing (Vaux, 1990). Finally, appraisals of support are “subjective evaluations” that people make about the resources they receive, and which describe the appropriateness and satisfaction with the support behaviors that were enacted in response to a situation necessitating support (Vaux, 1990).

The nature of this investigation lends itself to the focus of social support from an ecological perspective. Availability and provision of social network resources can be determined by various forms of cohabitation within Spanish elders. Reciprocity is one type of support behavior that will be examined, and appraisals of support will be assessed by way of Spanish elders’ responses to satisfaction with support from family members and friends.

**Demographics**

Among studies of any context, demographics play a large role in accounting for the differences between study respondents. Age, gender, and education level are all factors that can
be a source of variation. Studies of social support, health and reciprocity are no exception to this trend. Analyzing demographics in this investigation may be particularly salient for helping to describe fundamental cultural variations among a Spanish sample of elders.

As mentioned previously, age is a variable that older adults use to gauge their own perceptions of health, keeping in mind how healthy they feel compared to others their age (Maddox, 1962; Shanas et al., 1968). In addition, older women have a tendency to report better health than men do, on average. Stolar, MacEntee and Hill (1993) also discuss gender differences as they relate to the provision of social support in order to address personal care needs, instrumental needs and expressive needs. The authors report that generally, men turn to spouses and to formal supports for their unmet needs, whereas women turn to more formal supports, friends, neighbors and family as resources. These differences suggest that men look for help with instrumental tasks and that they seek ‘companionship activities’, and women seek social interaction with close others through receipt of support (Cohen & Wills, 1985).

Differences in marital status often account for variation in size and extent of social networks and hence, variation in amount and extent of social support availability. For example, Stolar, MacEntee and Hill (1993) describe married individuals as those who have a good connection to neighbors, children, family members and the community. Since the most common forms of living arrangements for older Spaniards consist of sharing a home with a partner/spouse and living in the company of partner/spouse and children (Pérez Ortiz, 2005, translated by author), Spanish elders would likely have much accessibility to social support. In contrast, divorced or separated individuals are more likely to be socially isolated. Never married individuals are said to be the most resourceful out of all the marital statuses and widowed individuals are most concentrated on their children (Stolar, MacEntee, & Hill, 1993).

Cohabitation patterns of never married individuals show that they are less likely to live alone and more likely to live with family members than individuals who are divorced - who unfortunately also lack informal support networks (Choi, 1996). Some authors have suggested that among these groups of current older adults and those who are childless, siblings could serve an important supportive function (Wilson, Calsyn, & Orloffsky, 1994), but this trend may change in the future as the baby boomer generation may find that employment opportunities distance siblings geographically (Choi, 1996). This trend is also found in the case of Spanish elders, but
traditionally, close family members, specifically older parents and their adult children, either live
together or in the same geographic region.

Increasing numbers of older individuals within Spain and the United States will find
themselves never married or divorced, due to increasing numbers of older people, in general, and
a growing tendency for adults to forego marriage altogether. This has serious implications for
the future care of these single older adults because they are less likely to be cared for by family
members (Choi, 1996), especially those of the baby-boom generation who are having fewer
children, so there will likely be fewer people to care for them in old age. This pattern is
applicable to Spanish elders as well; however, the baby-boom of Spain occurred about ten years
later than that in the United States, between the years 1957-1977 (Abellán García & Puga
Gonzaléz, 2005).

Having attained higher levels of education is generally associated with positive outcomes.
For example, Ferraro (1980) found evidence that elders with higher levels of education tend to
report better health. Unfortunately, attainment of higher levels of education puts people at risk
for more social isolation and solitude in old age, despite being able to enjoy greater
independence than those with lower levels of education (Choi, 1996). For those older adults who
have never married, who live alone, and who have higher levels of educational attainment (and
likely, larger incomes), it may be difficult to come by someone to care for them if/when it
becomes necessary (Choi, 1996). This may have serious implications for the future as there will
be many more older adults in the United States and Spain with the baby boomer generations
aging, thus leading to an increase in the sheer quantity of older people who will be never
married, divorced, highly-educated single adults living alone who will need someone to care for
them.

This review illustrates that demographics are important variables in determining the
availability of and satisfaction with social support, as well as health outcomes. Among the
dimensions of social support mentioned within the literature review, three will be examined
further in this study: reciprocity, cohabitation and satisfaction with support from relationships, as
they help to describe social support in general. The demographic variables that will be included
to further explain relationships among the variables are: age, gender and education. Of the three
social support measures, reciprocity and cohabitation are two dimensions that have notable
significance within a cultural context due to the family structure and the traditional cultural values and beliefs within the country.

**Cultural Context – Spain and United States**

As of 2003, there were an estimated 35 million people over the age of 65 in the United States, which constitutes about 12 percent of the total population of the country (He, et al., 2005). According to projections from the U.S. Census Bureau, there will be a large increase in the number of older people between 2010 and 2030 as the aging of the Baby boomer generation comes into full force. By the year 2030, projections indicate that there will be nearly 72 million adults aged 65+ in the United States (He, et al., 2005).

As one can see, the United States has an aging population, yet it is still a relatively young country compared to countries of Western Europe. Spain can already be considered an ‘aged’ country because its aging rate, as of 2003, was about 17% - over 7 million of its 40 million inhabitants were over the age of 65 (Abellán García, 2005, translated by author); countries with aging rates higher than 10% are considered ‘old’ countries. Projection data based on the 2001 Census from the Instituto Nacional de Estadística (National Institute of Statistics), estimates that by the year 2050, there will be more than 16 million Spaniards over the age of 65, which will represent about 30% of the total population at that time (Abellán García, 2005, translated by author).

Two demographic processes contributing to this aging population include: 1) a continuous decrease in mortality and the related increase in life expectancy - the life expectancy in Spain, 81.3 years for women and 73.4 years for men, is one of the highest in all of the countries that comprise the European Union and 2) the decrease in fertility of Spanish women - the birth rate, 1.2 children per woman (2000 data), is one of the lowest among those countries. Furthermore, the United Nations projects that by the year 2050, 40% of Spain’s population will be over the age of 60 - the world’s oldest population (Fernández-Ballesteros, 2002). The same trends are also true of the United States as decreasing mortality and decreasing fertility coupled with the increases in life expectancy (79.5 years for women and 74.1 years for men) (2000 data) yield an aging population (He, et al., 2005).

The data that analyzed in this project were generated from Salamanca, a city that lies in the heart of the province Castilla y León, a region in the northwestern part of Spain and one of
the oldest regions throughout the world. The benefit of studying a population in such an old region is to observe how the increase in number and proportion of this age group has had and will have an impact on the housing market, social programs and services, and the economy in general. Younger countries can take the lessons learned from older countries and apply and implement policies for older people in their own countries. For example, the ratio of older people compared to other age groups has implications for families and the governments of these nations, both of which provide instrumental support to their elders (He, et al., 2005). As more elders are living longer, this will require families to devote more time and money toward the care for their aging members (He, et al., 2005).

In 2003, the United States Census Bureau found that 71.2% of the population over the age of 65 was married, 14.3% was widowed, 4.3% was never married and 10.2% was divorced or separated. Census data from 2001 show that 59.7% of older Spaniards were married, 30.9% were widowed, 8.0% were single and 1.4% were separated or divorced (Abellán García, 2005) and that more women were likely to be widowed and to live alone than were men. This is true for Spanish as well as American women and can be attributed to biology, attitudes, social roles (men face risks in labor tasks), and health behaviors (He, et al., 2005).

Marital status has been found to be an important variable, affecting many aspects of individuals’ lives, such as health, mortality, income, and living arrangements (He, et al., 2005). Census data from the U.S. reveal that older men are more likely to live with a spouse in later life than are older women. Since widowhood is more common among women, there are larger proportions of women living alone in old age. But cohabitation patterns of older adults may be a reflection of other factors besides marital status – such as familial ties and cultural values, perceived health status and even socioeconomic status (He, et al., 2005). For example, Mui and Burnette (1994) specifically found that an older adult’s living arrangement is correlated with health and functioning.

As it relates to social support, where and with whom a person lives is an important consideration when determining availability and amount of support resources within a social network of relationships (Fernández-Ballesteros, 2002). Living in a community, institution, alone, or with family – each of these living situations contributes to a person’s network of support. According to census data from Spain, in 2002, there were over 4 million households headed by a person over the age of 65 (Pérez Ortiz, 2005, translated by author). The most
common forms of living arrangements for older Spaniards consist of sharing a home with a partner/spouse (33.2%), living alone (19.9%), and living in the company of partner/spouse and children (16.4%) (Pérez Ortiz, 2005, translated by author). One important point to mention is that there are differences between these cohabitation patterns by gender. For example, seven out of ten (~70%) older men live with spouses: 41.6% live with only spouse, 23.3% live with spouse and children, and 5% live with spouse and others (Pérez Ortiz, 2005, translated by author). However, the total proportion of women who share homes with spouses is much lower, at 41.2% (Pérez Ortiz, 2005, translated by author). This is a reflection of the fact that greater numbers of older Spanish men tend to be married than older women, as more women are widowed and are generally younger than married older men (Pérez Ortiz, 2005, translated by author).

Fewer Spanish elders live alone and more live with children than any other country within the European Union (Fernández-Ballesteros, 2002) and Spanish adult children in Salamanca, where the data were collected, generally live with their parents until marriage and oftentimes parents will move in with children later in life. Adult children will likely be important for social support due to cohabitation patterns in Spain. Living with a partner or spouse is one of the principal ways for maintaining independence later in life. Data on living alone shows that more women live alone but this living situation affects men more significantly because the traditional roles between sexes have remained quite differentiated in many areas of Spain (Pérez Ortiz, 2005, translated by author), where men work outside of the home and women’s work is generally in the home. There is an imbalance in equilibrium between sexes. Single, widowed or divorced/separated older men are less likely to have extensive social networks (Pérez Ortiz, 2005, translated by author) due to their lives being defined so much by work (and family); therefore, they may be more likely to report experiencing poorer health.

As cohabitation patterns differ between Spain and the U.S., one can assume that variations in social structures could also lead to differences in support resources as well (Antonucci, Sherman & Akiyama, 1996). In societies where people tend to live in a communal setting, such as Spain, social networks can be found among families who may be able to provide all of the care that an elder may need. In places where the elder lives alone or far away from relatives and close family, such as the United States, friends also tend to give a large portion of supportive resources. “Independent living arrangements – living either alone or with a spouse – are considered most desirable for older adults in the United States because they offer more
autonomy. However, these living arrangements (in particular living alone) can increase social isolation and reliance upon formal social supports” (Wilmoth, 2001, p. 228). However, U.S. Census Bureau data indicate that unmarried elders who live alone tend to have better health than those who live with other people, perhaps suggesting that they have adjusted to living alone and to their social situation over time. Keep in mind that this research on U.S. cohabitation patterns is merely used as a reference point for a cultural context. Familial ties and cultural values and preferences often have an influence on living arrangements for older adults (He, et al., 2005). Cohabitation patterns in old age may, in fact, provide an opportunity ripe for reciprocal exchanges.

In terms of reciprocity, one of the major avenues for older Spaniards to be providers of social support is through the care that they provide for their grandchildren (Fernández-Ballesteros, 2002). Generally, older women are more involved in this care and this trend is on the rise, as there are more dual-income households, due to the changing family structure where more women are entering the workforce. Antonucci, Fuhrer and Jackson (1990) claim that the norm of reciprocity is likely to be high in most cultures; however, the degree to which reciprocal behaviors are recognized may depend on the situation and the cultural beliefs. In a comparison study between French and American elders, Antonucci, Fuhrer and Jackson found that French elders were more likely to report reciprocal exchanges in their relationships. In addition, French elders were less likely than their American counterparts to claim that they receive less support than they provide, which may suggest cultural differences in regard to perceptions of reciprocity. Reciprocity may be more highly valued and intentional in these cultures and thus may have an important impact on health and well-being.

On the topic of social support and health, studies of Spanish elders have not held up to the highly established finding that social support, in general, is related to health. In Spanish studies, education is the best predictor of health outcomes (Díez-Nicolás, 1995: Fernández-Ballesteros, 2001). Only small relationships were found between social support and subjective health in these studies (Fernández-Ballesteros, 2001). This is a major discrepancy between social support and health data from the United States and Spain. What factors must be having an influence on health outcomes if not social support and why might social support not be a determinant of health?
Rationale for Study

Studies of social support reinforce the idea that this complex, multidimensional aspect of human life can have an impact on a wide range of outcomes, including health. Theoretical models and research emphasize the idea that both the buffering and main (or direct) effects hypotheses have value: social support can act as a buffer to stress and help an individual cope with the situation; in addition, social support has been found to help people avoid negative events altogether, while providing a sense of self-worth, thus enhancing well-being. An ecological model of social support and health might be a better method of examination within the context of the current investigation because of its focus on social interactions within the context of the support-provoking situation. Reciprocity, the giving and receiving of social support, is related to the appropriateness of support, which is tied to the likelihood of positive outcomes. Exchange theory provides further foundation for the importance of reciprocity; being able to give as well as receive support promotes more equitable and balanced exchanges, and allows the receiver of support to remain an equal partner in a relationship. Reciprocity is valuable for the potential provision and receipt of resources in the future. Finally, cultural context is important in the social support-health equation; research literature points to differences in the ways in which social support operates, and social policies (such as universal health care) and social norms (such as living with family) can moderate the nature, availability, and need for different kinds of social support.

The purpose of this inquiry then, is to examine whether social support may have an effect on self-reported health of Spanish elders. Perceptions of reciprocity, cohabitation patterns, and satisfaction with support from relationships are three dimensions of social support that will be examined within the investigation due to their importance in relation to cultural context. Age, gender, and education can all play a role in the availability and impact of support resources on health outcomes, so these variables will also be included in this research. This research will address the following inquiries:

1) Which dimensions of social support (reciprocity, cohabitation or satisfaction with support from relationships) have the greatest impact on self-rated health?
2) How do the demographic variables of age, gender and education, shown to be important in previous research affect social support, self-rated health, and the relationship between them?
CHAPTER III
METHODOLOGY

To answer questions about whether social support has an influence on health perceptions for older Spaniards, this research analyzed data collected by the University of Salamanca’s Education department on topics of social support, self-reported health, and demographics of Spanish elders. This chapter discusses the methods undertaken to carry out a secondary data analysis, focusing on the main research questions relating to the effects of social support on perceived health in Spanish elders. The questions are reviewed by analyzing data variables such as demographics (age, gender, and education); self-rated health; and social support, as measured by reciprocity, cohabitation and satisfaction with support from relationships. Contents of this chapter include a description of the methods of the investigation and the survey instrument used in the original study, sample characteristics, concepts and variables examined, and an analysis plan.

Methods

The data for this analysis are a subset from a more extensive study that focused on the social networks and isolation of older people in Spain. According to one of the project investigators, the purpose of that original study was to “gain an understanding of the real situation of Spanish elders from the point of view of their social isolation, their perceived loneliness and the characteristics of the people that support them” (J. Buz, personal communication, January 22, 2007, translated by author). In the original study, written and conducted in Spanish, interviewers conducted face-to-face interviews between the years 2004 and 2005 with a stratified random sample of 950 older individuals, obtained from census data, from various cities throughout Spain. The interview schedule collected information regarding loneliness, activities of daily living, participation in social activities, life satisfaction, perceptions of reciprocity and the provision of social support by family, friends and others.

This inquiry uses only some of the variables from the original data set – exclusively those that are pertinent to the author’s investigation: demographic variables (age, gender and education), perceived health and variables relating to social support (reciprocity, cohabitation and satisfaction with support from relationships). Those specific questions were then translated
This study focuses exclusively on one sub-sample of 247 respondents: those who lived in the city of Salamanca, Spain, located roughly 180 miles northwest of the nation’s capital, Madrid, due to the nature of the author’s familiarity with the socio-cultural aspects of life in the area.

Sample Characteristics

For the purposes of this study, responses from 247 persons of the 950 persons in the original study aged 60 and older from the city of Salamanca, Spain were examined. The sample consisted of 119 men and 127 women; over half were married and over 30% were widowed. Most of these Spanish elders lived with a spouse, and the next largest proportion lived alone. Almost three-quarters (74.5%) of this sample have attended school, whereas about 14% had no formal schooling but could read and write. The largest percentage of this sample falls within the age range of 75-84 years, whereas the next largest group ranges from 65-74 years (see Table 1).

Table 1. Demographic Data

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age (mean: 73.95)</th>
<th>Marital Status</th>
<th>Education</th>
<th>Cohabitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men: 48.4%</td>
<td>60-64: 15.4%</td>
<td>Married: 57.5%</td>
<td>University: 10.1%</td>
<td>Lives with spouse: 37.2%</td>
</tr>
<tr>
<td>Women: 51.6%</td>
<td>65-74: 34.0%</td>
<td>Widowed: 32.4%</td>
<td>Some school: 74.5%</td>
<td>Lives alone: 22.3%</td>
</tr>
<tr>
<td>75-84: 38.9%</td>
<td>Divorced/separated: 3.6%</td>
<td>Can read &amp; write: 14.2%</td>
<td>Lives with spouse &amp; children: 18.6%</td>
<td></td>
</tr>
<tr>
<td>85-96: 10.9%</td>
<td>Single: 6.5%</td>
<td></td>
<td>Lives with others: 21.1%</td>
<td></td>
</tr>
</tbody>
</table>

Measures

The dependent variable in this study of the impact of social support is perceived health. For this investigation, it is important to realize that “Spain is a welfare state, with a public social security system covering about 97% of its citizens over 65 years old” (Fernández-Ballesteros, 2002, p. 647). The term ‘welfare state’ in this context means that there is a collective orientation of universal coverage of all citizens. The fact that almost all of Spain’s older citizens are covered under this system controls for the fact that the majority of the respondents have the same health care coverage and thus, self-reports of health may indeed be accurate reflections of
individual health conditions, minus the speculation about differences in access to health care. Even in the absence of universal health care, self-ratings of health are often used within research studies as a subjective measure of physical health and they have been found to reflect objective health conditions fairly accurately. Self-ratings of health are generally judged to be valid measures of health (Ferraro, 1980) and in this analysis, the dependent variable, ‘perceived health’ was examined to determine health status of the respondents.

In this study, self-reported health was measured by the question (translated by author): “Having in mind your age, would you say you enjoy the benefit of…?” Respondents were given a list of five options, including: “Very good health,” “Good health,” “Average,” “Bad health,” or “Very bad health.” For tabular analyses, this item was recoded into two categories: 1= “Poor health” (including very bad, bad and average health), and 2= “Good health” (including good, and very good health).

Table 2. Variables Used to Measure Social Support

<table>
<thead>
<tr>
<th>Social Support</th>
<th>Reciprocity</th>
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<tbody>
<tr>
<td></td>
<td>Cohabitation</td>
</tr>
<tr>
<td></td>
<td>Satisfaction with support from relationships (parents, spouses/partners, children, siblings, other family, friends, neighbors, others)</td>
</tr>
</tbody>
</table>

In the analysis, there is one overarching independent concept, social support, which is comprised of three separate dimensions: reciprocity, cohabitation and satisfaction with support from relationships (see Table 2). The first measure, perceived reciprocity, was measured by the following statement and responses (translated by author): “Tell which of the following statements most applies to you:” 1= “I receive more support than I give,” 2= “I receive as much support as I give,” and 3= “I give more than which I receive.”

The second social support measure, cohabitation, was included as an indicator of availability of social support. The question that was used to assess cohabitation was written as (translated by author): “With whom do you live?” The original response categories included: “With spouse and with children,” “With spouse and without children,” “Lives alone but with some child(ren),” “Lives without children but with other people,” “Lives alone,” and “Other.”
The responses were recoded into four categories: “Lives with spouse and children,” “Lives with spouse only,” “Lives alone,” and “Lives with others.”

The third and final measure of social support was satisfaction with the provision of social support from relationships, which was measured by the question (translated by author): “How satisfied do you feel with the support that you receive from these people?” The response categories include: “Not at all,” “A little,” “Somewhat,” and “A lot.” This question was asked of the respondent as it related to each of the following groups of individuals: parents and spouse/partner, children and their spouses, siblings and their spouses, other family, friends, neighbors, and other people. The measure of satisfaction with support was created by combining satisfaction with family support – coded as parents, spouse/partner, children, siblings, and other family - with scores of satisfaction with friend support – coded as friends, neighbors and others, to compute a total score for satisfaction with relationships that ranged from 0.00 to 8.00. Due to the distribution of percentages for each score, the recoded responses used in cross-tabulations were: 1= Low (total score of 2.00-5.99), 2= Medium (6.00-6.99) and 3= High (7.00-8.00).

In addition to the dependent and independent variables, three demographic variables were included in this analysis: age, gender, and education, due to their potential to have a direct impact on health and an effect on social support. Marital status was not included in the analysis because it was assumed to be largely reflected in the cohabitation variable.

The analysis plan for this investigation was guided by the main research concept - the effects of social support on perceived health in Spanish elders. In addition, the investigation will examine how certain demographic variables (age, gender, and education) affect self-ratings of health, reciprocity, cohabitation, and satisfaction with support from relationships. This research will address the following inquiries:

1) Which dimensions of social support (reciprocity, cohabitation or satisfaction with support from relationships) have the greatest impact on self-rated health?

2) How do the demographic variables of age, gender and education, shown to be important in previous research affect social support, self-rated health, and the relationship between them?
Analysis Plan

Analyses for this investigation included frequencies; cross-tabulations and correlations of demographic variables with health and social support; cross-tabulations and correlations of perceived health and the social support variables; and a multiple regression of perceived health on the dimensions of social support and the demographic variables shown to be important in the bivariate analyses.
CHAPTER IV
RESULTS

In order to examine the relationship between social support and health, this investigation analyzed the independent variables: reciprocity, cohabitation and total satisfaction with support from relationships to see which dimensions might have the greatest impact on the dependent variable, perceived health. In addition, demographic characteristics shown to be important in previous research (age, gender and education) were examined to explore how they might affect social support, perceived health and the relationship between them.

Demographic Summary

As seen in Table 1 (in Chapter III), a greater proportion of older women from Salamanca responded to the original survey than older men (51.6% and 48.4%, respectively). This is more or less reflective of the sex ratio found within Spain, as census data from 2003 reported that 57.8% of the population 65 and older consisted of women and the remaining 42.2% consisted of men (Abellán García, 2005). The respondents ranged in age from 60 to 96 years old, with the majority of both sexes falling between the ages of 65-74 years (34.0%) or 75-84 years (38.9%). More Salamancan elders were married or widowed (57.5% and 32.4% respectively) than divorced/separated or single (10.1%). In addition, about three-quarters of elders had some formal education (74.5%), fourteen percent had no schooling but were able to read and write, and ten percent reported attaining university levels of education. A little over a third of the respondents lived with spouses (37.2%), 22.3% lived alone, 18.6% lived with spouse and children and 21.1% lived with ‘others’. Living with spouse and children is a unique feature of the Spanish cultural context, and can be an important support resource related to the availability of close others.

Description of Analyses

In order to determine the effects of social support on perceived health of Spanish elders, three measures of social support were analyzed against self-reports of health: reciprocity, cohabitation, and total satisfaction with support from relationships. As maintained by the literature on social support, these three measures seem to have particular value when exploring
social support within a cultural context. Reciprocity is considered a valuable measure of social support, as it explains the nature of the exchange of resources among members of a social network. Cohabitation patterns are important for describing the availability of social support and the proximity of close others. Total satisfaction with support from relationships gives a concrete evaluation of the perceptions of received support from others.

This analysis was conducted with cross-tabulations and correlations among independent variables of social support, the dependent variable of self-reported health, and demographic variables. Based on bivariate cross-tabulations, the most striking relationships were found among reports of good self-rated health, balanced reciprocity, living with spouse and children, living with spouse only and high levels of satisfaction with support from relationships (see Tables 4-9). In addition to the present findings of these bivariate cross-tabs, correlations were used to describe the relationships between self-rated health, reciprocity, cohabitation, satisfaction with support from relationships and demographic characteristics. Table 3 refers to these correlations.
Table 3. Correlation Matrix

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</thead>
<tbody>
<tr>
<td>Under-benefited</td>
<td>1</td>
<td>- .685**</td>
<td>-.193**</td>
<td>-.008</td>
<td>-.065</td>
<td>-.041</td>
<td>-.163*</td>
<td>-.035</td>
<td>.078</td>
<td>.026</td>
<td>-.095</td>
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<tr>
<td>Reciprocity</td>
<td>X</td>
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<td>.102</td>
<td>.071</td>
<td>.031</td>
<td>-.072</td>
<td>.154*</td>
<td>-.017</td>
<td>.008</td>
<td>-.011</td>
<td>.019</td>
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<td>Satisfaction</td>
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<td>X</td>
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<td>.085</td>
<td>-.098</td>
<td>.127</td>
<td>-.024</td>
<td>.019</td>
<td>-.023</td>
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<tr>
<td>with support</td>
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<td>-.203**</td>
<td>-.202*</td>
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<td>.182**</td>
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<td>-.277**</td>
<td>-.046</td>
<td>.139*</td>
<td>.170**</td>
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<td>Education</td>
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<td>X</td>
<td>1</td>
<td>.017</td>
<td>-.030</td>
<td>-.049</td>
<td>-.035</td>
<td>.124</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Health</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>1</td>
<td>-.369**</td>
<td>-.412**</td>
<td>-.398**</td>
<td></td>
</tr>
<tr>
<td>Lives with spouse &amp; children</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>1</td>
<td>-.369**</td>
<td>-.412**</td>
<td>-.398**</td>
</tr>
<tr>
<td>Lives with spouse</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>1</td>
<td>-.256**</td>
<td>-.247**</td>
<td></td>
</tr>
<tr>
<td>Lives alone</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>1</td>
<td></td>
<td>-.276**</td>
</tr>
<tr>
<td>Lives with others</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Results of Demographic Variables and Perceived Health

From the cross-tabular analysis of demographic characteristics and Spanish elders’ ratings of perceived health, being male, having had some formal schooling or higher education and being between the age ranges of 60-64 or 85-96 have especially positive influences on perceived health, as over 65% in each of those categories reported good self-ratings of health (see Table 4 below). Further analysis by correlations confirmed that perceived health is significantly correlated with gender (-.153, significant at the .05 level). Being male is associated with good ratings of perceived health in the case of Spanish elders, whereas being female is associated with poor ratings of perceived health. This finding was not consistent with literature on social support and health in the United States, where women have a tendency to report better health than men do, on average (Maddox, 1962; Shanas, et al., 1968). Correlations between education and perceived health, as well as between age and perceived health, were not shown to be statistically significant, even though the tabular analysis suggest some patterns of interest. Previous studies of Spanish elders have found that social support does not appear to have an effect on perceived health, but that education is a strong predictor of health outcomes (Díez-Nicolás, 1995; Fernández-Ballesteros, 2001). An analysis of perceived health by education in the present study showed that a higher percentage of those who attained university levels of education report good health (68.0%) than those who lacked any formal education (51.4%), which would support the findings from prior Spanish studies. Unfortunately, correlational analysis indicates that education is not related to social support nor strongly correlated with the dependent variable, perceived health. The lack of correlation between education, social support, and perceived health may be due to the overall lack of variability in that measure; the question was asked with only three response categories, and 75% of the sample fell into the middle category. Because of its lack of variance, education will not be used in any further analyses. The fact that age was not correlated with health may be explained by the non-linear pattern suggested in the cross-tabs—the youngest and the oldest age groups were most likely to report good health.
Table 4. Demographic Characteristics & Perceived Health

<table>
<thead>
<tr>
<th></th>
<th>Percent (%) reporting Good Health</th>
<th>Percent (%) reporting Poor Health</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>70.6</td>
<td>29.4</td>
</tr>
<tr>
<td>Female</td>
<td>58.3</td>
<td>41.7</td>
</tr>
<tr>
<td>Chi-square: .044</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended a university</td>
<td>68.0</td>
<td>32.0</td>
</tr>
<tr>
<td>Some formal schooling</td>
<td>66.3</td>
<td>33.7</td>
</tr>
<tr>
<td>Can read &amp; write</td>
<td>51.4</td>
<td>48.6</td>
</tr>
<tr>
<td>Chi-square: .223</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-64</td>
<td>81.6</td>
<td>18.4</td>
</tr>
<tr>
<td>65-74</td>
<td>65.5</td>
<td>34.5</td>
</tr>
<tr>
<td>75-84</td>
<td>51.0</td>
<td>49.0</td>
</tr>
<tr>
<td>85-96</td>
<td>81.5</td>
<td>18.5</td>
</tr>
<tr>
<td>Chi-square: .001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* = p ≤ .05
** = p ≤ .01

Results of Social Support Measures and Perceived Health

As previously discussed, the purpose of this investigation is to determine if social support has a beneficial function in health outcomes for older Spaniards. Since a cultural focus is important for understanding the underlying components of social support, the literature from the United States is a useful point of reference. That literature has shown that there is, indeed, a positive relationship between social support and health. The data in the present study suggest that such a relationship is also found in Spain – social support has an influence on self-ratings of health in Spanish elders. Table 5 shows the bivariate relationships of the three dimensions of social support with perceived health. In particular, cross-tabulations demonstrate that reciprocity and cohabitation are significantly related to perceived health.
Table 5. Social Support Variables & Perceived Health

<table>
<thead>
<tr>
<th>Reciprocity</th>
<th>Under-benefited*</th>
<th>Balanced*</th>
<th>Percent (%) reporting Good Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square: .026</td>
<td>51.5</td>
<td>71.0</td>
<td></td>
</tr>
<tr>
<td>Lives with spouse and children**</td>
<td>78.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives with spouse only*</td>
<td>56.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives alone</td>
<td>56.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives with others</td>
<td>75.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Cohabitation | Lives with others | 75.0 |
| Chi-square: .015 |
| Lives with spouse only* | 56.5 |
| Lives alone | 56.4 |
| Lives with others | 75.0 |

| Total satisfaction with support | Low | 64.9 |
| Chi-square: .959 |
| Medium | 63.0 |
| High | 65.1 |

* = p ≤ .05  
** = p ≤ .01

**Reciprocity**

In order to explore the significance of reciprocity as a measure of social support for perceived health, the original reciprocity variable was redefined into two dichotomous variables: under-benefiting from social exchanges and balanced reciprocity. Under-benefiting from social exchanges was defined as a person giving more support than they receive. Balanced reciprocity was defined as giving as much support as one receives. The third response category, ‘over-benefiting’ (receiving more support than one gives), was not included due to its size and distribution among other variables in cross-tabulation analyses. Therefore, only two of the three dimensions of reciprocity were examined in this investigation. This recoding was necessary because the original set of responses (‘I receive more support than I give’; ‘I give as much support as I receive’; ‘I give more than which I receive’) suggested that the measure had to be considered nominal level of measurement.

Findings from the analysis of the two reciprocity variables on perceived health reveal that those reporting equitable reciprocity in their relationships with close others are much more likely to report their health positively (71.0%) than those who say that they give more support than they receive (51.5%), as shown in Table 5. Results from correlations of these two recoded reciprocity
variables and perceived health confirm this pattern. For Spanish elders, perceived health is significantly related to under-benefiting from social exchanges ($r = -.163; p \leq .05$). Being under-benefited is associated with poor ratings of perceived health. On the other hand, there is a positive relationship between perceived health and balanced reciprocity ($r = .154; p \leq .05$). Thus, receiving as much support as one gives is associated with good self-ratings of health in Spanish elders.

An analysis of reciprocity as it relates to other variables in the data set shows a significant but negative relationship between under-benefiting and total satisfaction with social support from relationships. The relationship between under-benefiting and total satisfaction with support is significant at the .01 level, and the correlation of -.193 demonstrates that the more under-benefited one feels, the less likely he/she is to report high levels of satisfaction with support from close others.

Based on cross-tabs of reciprocity with demographic characteristics, there does not seem to be a relationship between reciprocity and age, except that the oldest age group reports a higher proportion of balanced reciprocity than the other age groups; three-quarters of 85-96 year olds report equitable reciprocity in terms of support given and received (73.1%), compared to around half for the other three age groups. An exploration of reciprocity by gender indicates that both men and women are more likely to report balanced reciprocity than being under-benefited (giving more than one receives) or over-benefited (receiving more than one gives); women are somewhat more likely to report balanced reciprocity than men (58.3% versus 51.3%) (see Table 6). None of the demographic characteristics were statistically significant with either reciprocity variable.
Table 6. Results of Reciprocity by Demographics

<table>
<thead>
<tr>
<th></th>
<th>Percent (%) reporting Receiving more than Giving</th>
<th>Percent (%) reporting Balanced Reciprocity</th>
<th>Percent (%) reporting Giving more than Receiving</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>20.5</td>
<td>51.3</td>
<td>28.2</td>
</tr>
<tr>
<td>Female</td>
<td>14.2</td>
<td>58.3</td>
<td>27.5</td>
</tr>
<tr>
<td>Chi-square: .382</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended a university</td>
<td>32.0</td>
<td>56.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Some formal schooling</td>
<td>14.1</td>
<td>55.4</td>
<td>30.5</td>
</tr>
<tr>
<td>Can read &amp; write</td>
<td>18.2</td>
<td>54.5</td>
<td>27.3</td>
</tr>
<tr>
<td>Chi-square: .138</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-64</td>
<td>21.1</td>
<td>57.9</td>
<td>21.1</td>
</tr>
<tr>
<td>65-74</td>
<td>13.9</td>
<td>51.9</td>
<td>34.2</td>
</tr>
<tr>
<td>75-84</td>
<td>18.3</td>
<td>50.5</td>
<td>31.2</td>
</tr>
<tr>
<td>85-96</td>
<td>19.2</td>
<td>73.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Chi-square: .178</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cohabitation

In order to explore the significance of cohabitation as a measure of social support for perceived health, the original cohabitation variable was redefined into four dichotomous variables: ‘living with spouse and children’, ‘living with spouse only’, ‘living alone’ and ‘living with others’. This recoding was necessary in order to reduce the number of response categories and to indicate the categories most frequently reported. Findings from the analysis of the cohabitation variables with perceived health, listed in Table 5, revealed that those ‘living with spouse and children’ and those ‘living with others’ were found most likely to report good self-ratings of health (78.3% and 75.0%, respectively).

Further analysis by correlations of perceived health and cohabitation denoted a particularly interesting finding: there is a significant relationship between perceived health and cohabitation with a spouse. The relationship between perceived health and ‘living with spouse only’ is significant at the .05 level, and the correlation of -.154 suggests that ‘living with spouse only’ is associated with poor ratings of perceived health. On the other hand, there is a positive association between perceived health and cohabitation with spouse and children, significant at the .01 level, and the correlation of .177 illustrates that this living arrangement results in good ratings of perceived health. As mentioned above, ‘living with spouse and children’ had the highest percentage of all of the cohabitation patterns reporting good health, followed closely by
‘living with others.’ The results of this analysis suggest that marital status may not be as salient for Spanish elders as is the presence of adult children, but demographics may also play a role in this phenomenon.

Table 7. Results of Cohabitation by Demographics

<table>
<thead>
<tr>
<th>Gender**</th>
<th>Percent (%) Living with Spouse and Children</th>
<th>Percent (%) Living with Spouse only</th>
<th>Percent (%) Living Alone</th>
<th>Percent (%) Living with Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>27.4</td>
<td>47.9</td>
<td>11.1</td>
<td>13.7</td>
</tr>
<tr>
<td>Female</td>
<td>11.0</td>
<td>27.6</td>
<td>33.1</td>
<td>28.3</td>
</tr>
<tr>
<td>Education*</td>
<td>Percent (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28.0</td>
<td>28.0</td>
<td>12.0</td>
<td>32.0</td>
</tr>
<tr>
<td>Female</td>
<td>19.7</td>
<td>39.3</td>
<td>20.2</td>
<td>20.8</td>
</tr>
<tr>
<td>Can read &amp; write</td>
<td>5.9</td>
<td>35.3</td>
<td>44.1</td>
<td>14.7</td>
</tr>
<tr>
<td>Age**</td>
<td>Percent (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-64</td>
<td>39.5</td>
<td>31.6</td>
<td>13.2</td>
<td>15.8</td>
</tr>
<tr>
<td>65-74</td>
<td>20.5</td>
<td>42.2</td>
<td>18.1</td>
<td>19.3</td>
</tr>
<tr>
<td>75-84</td>
<td>13.7</td>
<td>38.9</td>
<td>30.5</td>
<td>16.8</td>
</tr>
<tr>
<td>85-96</td>
<td>3.7</td>
<td>22.2</td>
<td>22.2</td>
<td>51.9</td>
</tr>
</tbody>
</table>

* = p ≤ .05  
** = p ≤ .01

In a cross-tab analysis with demographic characteristics, the availability of support variable (as measured by cohabitation) as related to age showed the following pattern: the majority of 60-64 year olds lived with ‘spouse and children’ (39.5%), 65-74 year olds and 75-84 year olds were most likely to live with ‘spouse only’ (42.2% and 38.9%, respectively), and over half of 85-96 year olds lived with ‘others’ (51.9%) (see Table 7). However, it is important to keep in mind, especially with this last statement, that the Spanish sample analyzed in this investigation consists of community-dwelling elders only. Of those who lived alone, over half (51.9%) fall within the 75-84 year old age group.

An examination of cohabitation by gender showed that almost half of men in all age groups lived with a spouse, and that number increases to about 75% when combining both ‘living with a spouse’ and ‘living with spouse and children’. Percentages of women seem to be distributed more evenly among types of living arrangements, but the category least reported by
women was living with spouse and children (11.0%), whereas the category most reported was living alone (33.1%).

Gender and age were significantly related to cohabitation patterns of Spanish elders. Cohabitation with ‘spouse only’ and with ‘spouse and children’ were the two living arrangements that were significantly related to gender (-.202 and -.203, respectively, at the .01 level of significance). More men lived with spouse only or with spouse and children than women. In contrast, results of the analysis identify women as more likely to live alone and with others than do men (positive associations of .266 and .182, respectively, at the .01 significance level). These correlations confirm the patterns revealed in cross-tabs of gender and cohabitation.

Cohabitation patterns were also related to age. There was a significant relationship between age and living with ‘spouse and children’ (-.277, significant at the .01 level), and between age and living with ‘others’ (.170, significant at the .01 level). The young-old were more likely to live with spouse and children, whereas the oldest-old were more likely to live with others. A significantly positive relationship also existed between age and ‘living alone’, but to a lesser extent than cohabitation with ‘others’ (.139, at a .05 level).

In cross-tabs with cohabitation and education, a Chi-square analysis (see Table 7 above) showed that the pattern between these two variables was significant; however, there was not much variability of responses within the education variable. Due to its lack of variation and that correlations showed no relationship between cohabitation and education, education will not be considered a significant determinant of cohabitation patterns nor will it be used in further analyses.

Since demographics clearly are related to perceived health and to this particular dimension of social support (cohabitation), a layered cross-tabulation of perceived health, cohabitation, and gender was analyzed (see Table 8). Results showed that men ‘living with spouse’ or ‘living with others’ were the respondents most likely to report good self-ratings of health (87.5% for both groups). The next largest response category was women ‘living with others’, where 69.4% reported good health. However, for women, ‘living alone’ was both beneficial and detrimental to perceived health, as half of the women reported their health as good and half rated their health as poor. Correlations revealed that this relationship between perceived health and cohabitation was significant for Spanish men, but not for Spanish women, as the correlation for men was .004 (significant at the .01 level) and .383 for women (not significant).
The multivariate relationships among demographics, social support, and perceived health will further be explored in the final section of this chapter.

Table 8. Perceived Health & Cohabitation by Gender

<table>
<thead>
<tr>
<th></th>
<th>Percent (%) reporting Good Health</th>
<th>Percent (%) reporting Poor Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living with spouse and</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>children**</td>
<td>87.5</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>57.1</td>
<td>42.9</td>
</tr>
<tr>
<td>Living with spouse*</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td></td>
<td>55.4</td>
<td>44.6</td>
</tr>
<tr>
<td></td>
<td>57.1</td>
<td>42.9</td>
</tr>
<tr>
<td>Living alone</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td></td>
<td>76.9</td>
<td>23.1</td>
</tr>
<tr>
<td></td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Living with others</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td></td>
<td>87.5</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>69.4</td>
<td>30.6</td>
</tr>
</tbody>
</table>

* = p ≤ .05
** = p ≤ .01
Chi-square (men): .004
Chi-square (women): .383

Satisfaction with Support from Relationships

The third measure of social support that was examined as a possible determinant of perceived health was total satisfaction with support from relationships of close others. In this analysis, cross-tabulation results showed an even distribution in percentages of Spanish elders with ‘Low,’ ‘Medium,’ and ‘High’ levels of satisfaction with support from relationships reporting good self-ratings of health, (see Table 5). A Chi-square value of p = .959 revealed that there was no relationship between perceived health and total satisfaction with support from relationships.

The bivariate tabular analysis of total satisfaction with support from relationships by demographic characteristics revealed that in terms of age, there was a mixed response to total satisfaction with support from relationships within all four age groups. Eighty-five to ninety-six year olds were the most likely of the four age groups to report “high” levels of satisfaction with support (44.4%), as shown in Table 9. The full cross-tab in Table 9 shows that 85-96 year olds also had a high percentage rating their health as ‘low’ (37.0%). Seventy-five to eighty-four year olds showed a similar pattern, where 38.6% reported ‘high’ levels of satisfaction and 34.1% reported ‘low’ levels. Sixty-five to seventy-four year olds were split among all responses, whereas 60-64 year olds were most likely to report ‘medium’ satisfaction with support (47.1%).
An exploration of total satisfaction with support from relationships by gender indicated that both men and women were fairly evenly split between all three of the response categories, but 32.4% of men and 39.7% of women reported high satisfaction with support from relationships. These results indicate that age and gender are unlikely to be salient demographic predictors of total satisfaction with support from relationships.

In addition to cross-tabulation results, correlational data illustrated that total satisfaction with support from relationships was not significantly related to perceived health or demographic characteristics (age, gender and education). These patterns suggest that this particular variable of social support does not predict self-ratings of health in Spanish elders. This finding is contradictory to the well-established link between social support and health, found in studies of U.S. samples. However, past studies of Spanish elders did find this same result, that social support was not a significant predictor of health outcomes (Díez-Nicolás, 1995; Fernández-Ballesteros, 2001). The correlation between education and total satisfaction with support in this particular analysis, .127, also suggested no significant relationship. Despite a significant Chi-square value for education with total satisfaction with support from relationships, the lack of variation among responses to the education variable and correlational data showing no relationship between the two variables confirms that education will not be considered a significant determinant of total satisfaction with support from relationships.
Table 9. Results of Total Satisfaction with Support from Relationships by Demographics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>36.1</th>
<th>31.5</th>
<th>32.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>28.1</td>
<td>32.2</td>
<td>39.7</td>
</tr>
<tr>
<td>Chi-square: .370</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Education*      | Attended a university | 13.0 | 26.1 | 60.9  |
|                 | Some formal schooling | 32.8 | 32.8 | 34.5  |
|                 | Can read & write      | 45.2 | 29.0 | 25.8  |
| Chi-square: .049|      |      |      |       |

| Age             | 60-64 | 17.6 | 47.1 | 35.3  |
|                 | 65-74 | 35.4 | 32.9 | 31.6  |
|                 | 75-84 | 34.1 | 27.3 | 38.6  |
|                 | 85-96 | 37.0 | 18.5 | 44.4  |
| Chi-square: .203|      |      |      |       |

* = p ≤ .05
** = p ≤ .01

Multivariate Regression Analysis

Since the demographic, social support, and health variables looked at in the bivariate analyses showed varying degrees of interrelationship, multivariate analyses were necessary. In order to determine the predictive value of the variables examined in this study, a multiple regression analysis was performed. The variables included in the regression model to predict health were: gender, age, reciprocity, cohabitation, and satisfaction with support. As noted previously, both reciprocity and cohabitation were recoded into several dichotomous variables. Normally, all variables would be examined in these models, but since specific reciprocity and cohabitation variables were highly correlated, only those variables were reported.

Since each dichotomous variable for cohabitation was strongly correlated with the others, they were not included in the same regression model, nor were the two reciprocity variables (which were correlated at .68). As a result, four different models were calculated. Each model included gender, age, and satisfaction with support and a unique combination of the cohabitation and reciprocity variables (living with spouse, living with spouse and children; balanced, under-benefited). Table 10 reports the results of the four models. Model 1 includes gender, age, total
satisfaction with support, under-benefiting (giving more support than receiving), and cohabitation with spouse only as predictors of perceived health. Gender, under-benefiting, and cohabitation with spouse were all significant predictors of health. Gender was the strongest predictor of health in this model, as it was in model 2 which included balanced reciprocity instead of under-benefiting. Models 1 and 2 showed very similar results, in that gender, reciprocity, and living with spouse were all significant predictors of health, and both sets of variables explained about 9% of the variance in self-rated health.

In models 3 and 4, the cohabitation variable included was living with spouse and children. These models are similar to each other, but the impact of gender was less in these models than it was in the first two. A similar regression analysis was conducted in Model 3 using the variables: gender, age, total satisfaction with support, under-benefiting, and cohabitation with spouse and children as predictors of perceived health. As in Models 1 and 2, gender, under-benefiting and cohabitation were all significant predictors of health, but contrary to the first two models, where gender was the strongest predictor of health, in Model 3, the reciprocity variable (under-benefiting) proved to be the strongest, as it did in Model 4 (balanced reciprocity) as well. Models 3 and 4 both showed similar results, in that gender, reciprocity and living with spouse and children were all significant predictors of health, and both sets of variables explained about 8% of the variance in self-rated health.
Table 10. Regression Analysis of Significant Variables on Perceived Health

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Standardized Beta Coefficient</th>
<th>Significance</th>
<th>Model 2</th>
<th>Standardized Beta Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.211</td>
<td>.002**</td>
<td>Gender</td>
<td>-.228</td>
<td>.001**</td>
</tr>
<tr>
<td>Age</td>
<td>-.031</td>
<td>.645</td>
<td>Age</td>
<td>-.020</td>
<td>.757</td>
</tr>
<tr>
<td>Satisfaction with support</td>
<td>-.039</td>
<td>.568</td>
<td>Satisfaction with support</td>
<td>-.021</td>
<td>.749</td>
</tr>
<tr>
<td>Under-benefiting</td>
<td>-.174</td>
<td>.010**</td>
<td>Balanced Reciprocity</td>
<td>.180</td>
<td>.007**</td>
</tr>
<tr>
<td>Lives with spouse</td>
<td>-.172</td>
<td>.012*</td>
<td>Lives with spouse</td>
<td>-.187</td>
<td>.006**</td>
</tr>
</tbody>
</table>

Model 3: \( r^2 = .091 \)  
Model 4: \( r^2 = .094 \)

<table>
<thead>
<tr>
<th>Model 3</th>
<th>Standardized Beta Coefficient</th>
<th>Significance</th>
<th>Model 4</th>
<th>Standardized Beta Coefficient</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.147</td>
<td>.029*</td>
<td>Gender</td>
<td>-.159</td>
<td>.018*</td>
</tr>
<tr>
<td>Age</td>
<td>.011</td>
<td>.872</td>
<td>Age</td>
<td>.025</td>
<td>.715</td>
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<tr>
<td>Satisfaction with support</td>
<td>-.041</td>
<td>.543</td>
<td>Satisfaction with support</td>
<td>-.022</td>
<td>.736</td>
</tr>
<tr>
<td>Under-benefiting</td>
<td>-.182</td>
<td>.008**</td>
<td>Balanced Reciprocity</td>
<td>.180</td>
<td>.007**</td>
</tr>
</tbody>
</table>

\( r^2 = .082 \)  
\( r^2 = .082 \)

\* = \( p \leq .05 \)  
\** = \( p \leq .01 \)

Results of this investigation showed that social support does have an influence on perceived health of Spanish elders. The independent variables of reciprocity and cohabitation had the greatest influence on health, whereas total satisfaction with support from relationships had no relationship to health. Feeling that one receives as much support as one gives (balanced reciprocity) has a positive influence on perceived health whereas feeling under-benefited (giving more than one receives) is indicative of poor self-ratings of health. Residing with spouse and children proved to have a positive influence on health but cohabitation with spouse only resulted in poor ratings of health. Only one demographic variable was shown to have an influence on perceived health: gender was most strongly predictive of health responses. The education variable did not vary enough to contribute significantly as a demographic variable and age was predictive of cohabitation with spouse and children, but had no predictive power on health. From these results, one can see that reciprocity and cohabitation ‘with spouse’ or ‘with spouse
and children’, as social support variables; and gender, as a demographic variable, all had an influence on the perceived health of Spanish elders.
CHAPTER V
SUMMARY AND DISCUSSION

At the onset of this investigation, the author wanted to know if social support had a predictive effect on self-reports of health. Specifically, this research sought to answer the following questions: Which dimensions of social support (reciprocity, cohabitation, or satisfaction with support from relationships) have the greatest impact on self-rated health? How do the demographic variables of age, gender, and education, shown to be important in previous research affect social support, self-rated health and the relationship between them? The findings of this study revealed an interesting phenomenon that was somewhat contrary to, and certainly extended, conclusions reached in previous studies on this topic. The well-established link between social support and health that has been found in studies using United States samples has not been completely supported by these data of Spanish elders. From the analysis of the data, it is clear that only three variables mattered for Salamancan elders’ reports of perceived health: gender, cohabitation (as a measure of availability of support), and reciprocity.

With regard to gender and perceived health, more men reported higher levels of good health than did women (70.6% versus 58.3%). For both men and women, the youngest (60-64) and oldest (85-96) age groups reported the highest ratings of health. This could possibly be a function of marital status, as a greater number of older men were married than older women in all age categories by an overwhelming majority, or cohabitation patterns, as more men reported living with “spouse” and ‘spouse and children’ than women. In all types of living arrangements, men reported enjoying the benefit of good health, but the highest percentage reporting good health were those who lived with ‘spouse and children’ or with ‘others.’ For women, ‘living with others’ was most highly associated with reports of good health.

The findings of this investigation illustrated that gender was the only demographic variable that proved to be important for self-ratings of health. Age significantly predicted cohabitation with spouse and children, but not perceived health. The most surprising finding was that education was not significantly related to perceived health. Previous studies on social support in Spain (e.g. Díez-Nicolás, 1995; Fernández-Ballesteros, 2001) have shown that education, rather than social support, proved to be a better predictor of health outcomes in Spanish elders; however, that was not the case in this particular sample.
Analyses of the independent variables showed that cohabitation was one measure of social support that had an impact on the self-rated health of Spanish elders. At every age, older Spaniards resided in various types of living arrangements; however living with both ‘spouse and children’ was common among 60-64 year olds and was associated with good ratings of perceived health, whereas living with a ‘spouse’ was prominent between the ages of 65 and 84 and associated with poor ratings of perceived health. This trend might be accounted for by Spanish adult children getting married and moving out of the home around the time that their parents are entering into these age groups. Consistent with the literature on living arrangements in Spain (Pérez Ortiz, 2005), the majority of men in this sample lived with a ‘spouse only’ or with ‘spouse and children’. Percentages of women seemed to be distributed more evenly among types of living arrangements, but of those who lived alone, women were overwhelmingly the majority (76.4%).

In addition to cohabitation, reciprocity was the other dimension used to measure social support in this investigation that was a significant determinant of perceived health in the Spanish sample. Reciprocity, as defined by feeling under-benefited in a supportive exchange, was negatively associated with health, whereas balanced reciprocity was positively associated with perceived health. Reciprocity data showed that those reporting equitable reciprocity in their relationships with close others were most likely to report good health, whereas those who felt under-benefited (giving more support than they receive) reported poor ratings of health. Clearly, balanced reciprocity is preferred when it comes to the exchange of social resources and this has a large impact on the way in which one perceives his/her overall health status.

Results from analyses of the independent social support variables and perceived health demonstrated that cohabitation and reciprocity were the two measures of social support that had the greatest impact on self-ratings of health in Spanish elders. The third measure, total satisfaction with support from relationships, did not reveal a significant relationship with perceived health.

**Limitations**

The findings of this investigation proved to be interesting for the ways in which they confirmed and expanded upon previous findings on the topic of social support and health. However, there were several key limitations. Principally, much of the research in the literature
review focused on studies of social support and health from the United States, despite its analysis of data from Spain. Literature from the U.S. was meant to be a reference point for the secondary data analysis. However, there are many significant cultural differences that may lead to distinct responses given to research questions involving the topics of social support and health. For example, cohabitation patterns and traditional family life styles are strikingly different in Spain, as the housing market makes it difficult for younger adults to buy their own living space. Therefore, many Spanish young adults live with their parents/family until marriage or until they obtain a permanent career, which often does not occur until reaching the 30s.

In addition, Spain is a welfare state with over 97% of its older population covered by public social security (Fernández-Ballesteros, 2002). The term ‘welfare state’, as it is used in this context means that there is a collective orientation of universal coverage of all citizens. Universal health care is available in Spain, but not in United States, where payment for health care services is required by insurance or out-of-pocket. This could have an effect on responses that US older adults might give to questions about their perception of health in a comparable study. As mentioned previously, family structure and/or proximity to relatives may also play an important role in elders’ perceptions of health, satisfaction with support from relationships or reciprocity.

Cultural differences may also have an impact on the definitions that elders give to each of those variables and consequently, their responses to questions reflecting those variables. For example, elders from the United States may more readily report feelings of reciprocity or the uneven distribution of support because American values applaud an individual’s giving spirit and frown upon taking and not giving in return. However, Spanish ideals seem to reflect more collectivist behaviors. For Spanish elders, caring for others and being cared for by others appears to be a natural component of family and/or friend relationships and may not be seen as something extra that deserves recognition.

Finally, as with any secondary data analysis, there were limitations with availability of data and not being able to ask all the questions that may be important for the topic discussed. Specifically, in this investigation, data regarding type of social support and specific individuals within one’s social network providing these types of support may have enriched or better informed the nature of this research study. This information could have possibly lent further support to the appropriateness of resources elicited towards the need or problem addressed by the
Implications/Conclusions

From this investigation, it is clear that some dimensions of social support do have an effect on health. The ways in which social support is defined is crucial to understanding just what kind of role it may play in older adults’ health outcomes. In this study, cohabitation and reciprocity proved to be the key measures defining social support for Spanish elders of Salamanca. This finding proved to be consistent with previous literature on the positive link between social support and health in general (Krause, 2006; Moren-Cross & Lin, 2006; Krause, 2001; Bisconti & Bergeman, 1999; Cohen & Wills, 1985; Berkman & Syme, 1979). Opportunities given to the recipients of support to give back to their caregivers proved essential for reporting good health. This balance of reciprocity has implications not only for family members of older adults, but for caregivers, and even public policies as well.

In contrast to balanced reciprocity, being under-benefited in social resource exchanges has an overwhelmingly negative impact on perceived health. It may seem obvious that if a person gives more support than he/she receives, a sense of inequality may ensue. But Dowd’s (1975) theory would say that those who give more than they receive would actually have more power in the social exchange relationship and should therefore be benefiting from the relationship. Thus, the outcome of under-benefiting having a negative impact on perceived health appears to be inconsistent with previous literature. However, this data set is limited in its scope to provide information about how exactly the person is under-benefited. What are the actual, circumstantial and/or psychological factors that might determine the perception that a person is under-benefited? If we want to help those who have these perceptions, we need an accurate understanding of the mindset that results in these feelings.

Future directions for this research might include exploration of a comparative analysis of reciprocity as a predictor of perceived health between the United States and Spain to more accurately portray differences among the populations and to provide more concrete evidence of why these differences may occur. Cultural beliefs and values are likely to play a large role in the definitions and meanings that one gives to social exchanges of support resources. A cultural comparison of the effects of reciprocity on perceived health between elders in the United States
and Spain might be better suited for discovering how the idea of social exchanges is perceived and how this perception may relate to self-reports of health.

The variable ‘reciprocity’ is not present in many studies of social support; however, the availability of the reciprocity variable in the survey used for this investigation proved to be an opportunity to see just how important it is as a measure of social support. Since reciprocity resulted in being such a strong predictor of perceived health in Spanish elders, perhaps all future investigations of social support as they relate to health should include reciprocity as one of the dimensions or measures of social support.

Another potential future direction for this research could consist of an exploration of social support and its effect on well-being. Research on social support in the United States has shown a positive association with life satisfaction and well-being. The survey that was used in the original Spanish study’s data collection included questions about life satisfaction. An examination of the three dimensions of social support, as they were utilized in this investigation could prove useful and more significant in another investigation concerning the effects of social support on life-satisfaction in Spanish elders.

It was originally thought that what was learned from the results of social support and perceived health of Spanish elders could expand our understanding of the complicated ways in which social support affects people, from a cultural context. A comparative analysis could be useful for any country to help reconsider their own programs, services and policies related to aging. However, cultural differences may in fact, complicate such an analysis. Countries differ on more accounts than simply social support and its effect on health. Definitions and meanings, as well as societal values and beliefs held about certain ideas, and individual differences, all play a role in responses to perceived health, reciprocity, and availability and satisfaction with support. That is not to say that the application of policies, programs and services for populations that will be most in need of supportive assistance in the future – those who do not have adequate family and friend support or social networks with the capabilities to care for the multitude of aging elders – cannot inform future policies, programs and services in other countries. Perhaps if countries provide their elders with opportunities for social interaction, such as social gathering places or home-sharing – as living with others proved to be an important predictor of self-rated health, then social support would naturally become a part of those interactions. The graying of the world’s population will certainly necessitate attention to the health needs of its aging
members and perhaps a better understanding of the role that social support plays on health will help to shed light on the ways in which health outcomes for older adults are determined.
References


