

THE ROLE OF WOMEN'S FRIENDSHIPS IN LATER LIFE:
IMPLICATIONS FOR MARRIED AND WIDOWED WOMEN

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The role of women's friendships in later life: Implications for married and widowed women

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ABSTRACT

Increasingly, aging research demonstrates the importance of social support for well-being in later life, particularly among women. Women often rely on their spouse as a source of social support; however, it is unclear how older women's support, particularly friendships, adapts when their spouses die. The current study selected a sample of 253 women from the Social Integration and Aging Study (Fuller-Iglesias & Rajbhandari, 2015) with the goal of examining whether friendship characteristics differ between married and widowed older women and determining the implications for well-being. Results revealed married and widowed women did not differ in friendship number, frequency of contact, and satisfaction. Moreover, married women's happiness was linked to in-person contact whereas widowed women's happiness was associated with better friendship satisfaction. These results suggest friendships matter in later life despite marital status, yet the function may shift upon widowhood, highlighting important implications for research about and practice with older women.

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DEDICATION

To my generations before me and after me: I couldn't have done it without you and don't ever stop fighting. It will always be worth it during the battle and at the end.

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INTRODUCTION

Issues related to aging are becoming increasingly salient as older adults represent the fastest growing segment of the population (Jeste et al., 2013). The Administration on Aging (2013) estimates that 13.7% of Americans are currently age 65 or older, a figure expected to increase to 21% by the year 2040 as the Baby Boomers continue to age (Administration on Aging, 2013). Moreover, women represent the majority of older adults, as women make up 55% of all individuals aged 60 and over (U.S. Census, 2014). This is especially true among the oldest old, as the 2005 US Census reported that 80% of all centenarians are women (Kincel, 2014).

Due to advances in modern medicine, millions of Americans are living longer, healthier lives. However, the process of aging is often stigmatized and associated primarily with stereotypes of declines in well-being (i.e., disease, increased disability, lower life satisfaction, and greater depression). A burgeoning body of research highlights positive aspects of aging as well as ways that older adults compensate for losses (Vaillant, 2001). In particular, social support has been identified as a mechanism that may buffer against life stresses and challenges in later life (Cohen & Wills, 1985). For women in particular, social support has been documented as protective for well-being (Antonucci & Akiyama, 1987).

Though normative in later life, widowhood has been identified as one of the most traumatic and stressful life transitions that a person faces (Baarsen & Broese van Groenou, 2011; Barrett, 1977). Women are more likely to be widows because of two primary factors: 1) at any given age women have a lower mortality rate than men and so are more likely to outlive their husbands, and 2) women tend to marry men who are slightly older than they, thus increasing the probability of them outliving their husbands (Barrett, 1977; Bradsher, 2001). Among older women in the United States, approximately 10.3 million (45%) are married and over 8.7 million

(36%) are widowed (Census, 2014). While older women generally report greater social support than older men (Baarsen & Broese van Groenou, 2011), the role of social support may differ between widowed and married women. Having a close confidant in later life is important for well-being (Babchuk & Anderson, 1989; Ferraro, Mutran & Barresi, 1984; Rawlins, 2004). Research suggests that women most often rely on their spouse and/or best friend as this confidant (Rawlins, 2004), but it is unclear how older women adapt when they no longer have a spouse. It may be the case that they replace support previously received from their spouse with support from friends. The current study seeks to examine whether friendships among later life women differ between married and widowed women in terms of friendship quantity, function, and quality. Moreover, this study will examine implications of friendship characteristics for well-being of married and widowed women in later life.

Social Support in Later Life

The current study is guided by a Convoy Model theoretical framework (Antonucci, 2001; Antonucci & Akiyama, 1987). Antonucci and Akiyama proposed a Convoy Model that offered an explanation of the distinctive places a person holds in another person's social network (Patrick, Cottrell, & Barnes, 2001). The Convoy Model predicts both permanence and change in the organization and role of social support across the lifespan, as people enter and leave a person's life or stay and play a part in the person's life (Patrick et al., 2001; Wrzus, Hänel, Wagner & Neyer, 2013). In this model, a 'convoy' is a dynamic group of social partners that provide varying levels and types of support across the lifespan. Convoy members often consist of varying family members, such as spouse, parents, siblings, and children, as well as friends. The social support provided by intimate family members, such as a spouse, is proposed to be quite distinct from the type of support provided by non-family social support partners like friends.

Social support can be divided into different subtypes which include emotional, appraisal and instrumental support (Berkman, Glass, Brissette, & Seeman, 2000). Emotional support is related to “the amount of love and caring, sympathy, and understanding and/or esteem or value available from others” (Berkman et al., 2000, p. 848). Shearer and Fleury (2006) found in their study that women considered emotional support as being present for one another, both listening and sharing feelings within friendships; and offering security to the well-being of the other. Appraisal support relates to help with decision-making, giving feedback, or giving help on deciding what course of action to take. This can be given by a parent or a confidante as well. Instrumental support refers to helping with tangible support such as money, grocery shopping, cooking, and various types of labor (Berkman et al., 2000). Of these types of support, it is more likely that family, especially adult children, will provide instrumental support and that friends will provide emotional support (Shearer et al., 2006).

Social integration is involvement in a web of social relationships and activities individuals maintain throughout life, including immediate family members and friends as well as formal relationships with other people, groups, and organizations that is important for health and well-being (Utz, Carr, Nesse, & Wortman, 2002). Social support is seen as one of the most influential mechanisms for well-being in later adulthood. Both actual and perceived aspects of support affect well-being. Throughout adulthood, women, when compared to men, report having larger networks, receiving more emotional support and feeling greater satisfaction with the social support received (Patrick et al., 2001). Harvey and Alexander (2012) found that an individual derives support, self-definition, and a sense of stability from their group of close friends. Women, in particular, are more likely than men to report having a best friend as well as report confiding in that best friend (Antonucci, 2001).

As mentioned previously, a key component of the Convoy Model is that social support networks are dynamic, and change over time (Antonucci, Ajrouch, & Birditt, 2013; Antonucci & Akiyama, 1987). This change can include shifts in membership, function, quality and types of support. Shifts in a person's convoy are especially prevalent during major life transitions. Widowhood is one of those major life transitions that would necessitate change of the social convoy.

The widowhood event for the wife creates a void in the completion of practical and social tasks that were once performed by the late husband (Zettel & Rook, 2004). Antonucci (1985) writes that widows (and widowers) engage in substitution, which is the replacement of members within the network due to various reasons such as death or relocation. In addition, Rook and Schuster (1996) suggest that widows also engage in compensation. This is where new or established social ties enhance well-being (Zettel & Rook, 2004). Widows compensate for their loss by augmenting current relationships in other areas (Ferraro, Multran, & Barresi, 1984). Thus, friendships become important for widows as they are potentially confronted with social isolation (Babchuk & Anderson, 1989; Barrett, 1977).

Friendship in Later Life

Later life adults tend to maintain friends with those within the same cohort as themselves. (Blieszner, 2006; Peters & Kaiser, 1985; Rosow, 1970). They also state that their closest friends are those who live in the same community as they do (Spakes, 1979). Compared to men, women are less likely to rely on their husbands as their sole confidant (Birditt & Antonucci, 2007; Lowenthal & Haven, 1968), and moreover, rate their close confidants (i.e., best friends) as similarly important in their lives (Powers & Bultena, 1976). Women value their friendships for the emotional resources they provide such as: being present for one another, both listening and

sharing feelings within friendships, expressing a commitment to the well-being of the other, and the creation of laughter, particularly when a friend was feeling troubled (Rawlins, 2004; Shearer et al., 2006).

Patrick et al. (2001) found that women are likely to indicate that both family members and friends occupy central roles in their lives. They found that support received from friends enhanced their positive experiences. Rook (1987) suggested that when adult children gave more instrumental support to an elderly woman, she felt less inclined to ask her friends for help with things, thus leaving her time with friends open to leisure and discussion of shared interests. Arling (1979) suggested that older adults interact more with family than friends yet appear to benefit more in terms of their psychological well-being from their interactions with friends. It has been proposed that older adults get less satisfaction out of family interactions because they have become more dependent on family and they feel it is more obligatory for their family to help them and interact with them. Therefore, widowed women benefit psychologically from friend interactions because friendships are nonobligatory and are voluntary (Friedman, 1993) and therefore individuals have free will to choose who they treat as friends and with whom they will be friends (Rawlins, 2004). Given these findings, friendships appear to be crucial in later life as they are enveloped in their search for meaning and fulfillment.

Friendship and Well-Being in Later Life

Well-being is a term that is frequently connected to different constructs within the social and behavioral sciences (Bogunovic, 2011; Diener, 1984; 2010; Ryff, 1989; Ryff, 1995; Ryff & Keyes, 1995). Well-being is a concept that refers to a person's condition or state of being which is based on their assessment or appraisal of their life in the world (Wilcock et al., 1998). Concepts such as happiness, health, prosperity, self-esteem, and sense of belonging represent

aspects of well-being (Ryff, 1995; Wilcock et al., 1998). In later life, varying factors contribute to well-being such as marital status (Bennett, 2005), social support from family and friends (Bennett, 2005), and self-esteem (Lackey & Scoboria, 2005).

A functional contribution to the well-being of an individual in later life is friendship (Rawlins, 2004). Friendship is viewed as having a positive influence on well-being because those involved carry a personal regard for one another as well as care for one another as individuals (Rawlins, 2004). Friendships in later life are viewed as less self-indulgent and shifted toward an expression of help and support (Jerrome, 1981). Theoretically speaking, part of the help and support from friendship is the utilization of emotional support and intimacy as buffers for stress and age-linked social losses (Jerrome, 1981; Rawlins, 2004). Stress-buffering occurs when an individual encounters stressful experiences that they are not emotionally or psychologically able to address (Cohen & Pressman, 2004). The stress is said to be buffered if an individual has a strong social network as the support may intervene between the experience of the stress and the potential negative outcome (Cohen & Pressman, 2004; Cohen & Wills, 1987). This may be particularly important for widows as they no longer have husbands to provide everyday support (Utz, Reidy, Carr, Nesse, & Wortman, 2004).

Distinctions between married and widowed older women. It may seem as though the ways in which social support, friendship, and well-being are utilized by women in later life are similar, but there are some notable differences that should be considered. Married women, despite stereotypes, do not curtail their friendships due to their marriage (Rawlins, 2004). However, women from this era have been socialized to tend to their husbands (Helson & Picano, 1990) and thus feel lonelier as they are prevented from interacting with others outside of the relationship (Rawlins, 2004). Rawlins (2004) claimed that married women, when compared to

widowed and divorced women, have better well-being. The reasons behind this are 1) the marital relationship can be stress-buffering (Shapiro & Keyes, 2008), 2) they still have the companionship and perceived support of their husband (Cornwell, 2012), and 3) the friendships made with other couples help maintain their social and interpersonal bonds with others (Rawlins, 2004). Widows, on the other hand, have their social support change after the death of their spouse as his death may remove her links to his relatives, work associates, mutual friends and the community at large (Barrett, 1977; Rawlins, 2004). Evidence shows that widowhood does indeed lead to a higher risk of social isolation (Barrett, 1977; Golden et al., 2009) because married women are likely to depend on their husbands both socially and financially (Byles, Feldman & Mishra, 1999) and when the widowhood event happens, she loses much of that social and financial support.

Married women in later life show some differing qualities in regards to their social networks and friendships. Married women may take on the identity of a couple and become mutually dependent on the relationship (Babchuk & Anderson, 1989) as they are socialized to become economically, emotionally and socially dependent on their husbands (Bradsher, 2001). The development of intimate relationships such as marriage begins a process of increasing reliance on and time spent with the partner and family relatives and less reliance on and time spent with friends and other non-kin relationships (Liebler & Sandefur, 2002; Shapiro & Keyes, 2008). Additionally, married people tend to participate in fewer activities and when they do, they are family-focused activities (Shapiro & Keyes, 2008).

Later life married women tend to choose other couples as friends and continue to associate as such (Bradsher, 2001). Although some members within the network are considered “true blue” friends – friendships that were established in childhood or adolescence - married

women tend to turn more to their husbands as their confidant and less to their primary friends when they are troubled (Babchuk & Anderson, 1989). Married women are less likely to give or receive emotional or instrumental support with friends, co-workers or neighbors due to their increase of kin in their personal network (Liebler & Sandefur, 2002). In regards to the function of the friendships, married women in later life spend time with other couples engaged in leisure activities. When compared to widows who spend more time and give more practical help to friends, a married woman gives material aid to friends in need as she is more financially stable due to her married status (Bradsher, 2001).

Widows receive support from close family members in the weeks and months after the loss of a spouse; however adult children and other family tend to go back to their lives once the mourning period is over (Ha, 2008), and this is when a widow's friends become even more important (Aday, Kehoe, & Farney, 2008). Earlier studies emphasize continuity in the close friendship patterns of married and widowed women (Atchley et al., 1979; Ferraro & Barresi, 1982; Petrowsky, 1976). Acceptance was noted as a primary aspect of feeling close to someone. Widows reduce interactions with coupled friends and strengthen bonds with single women, increase their daily contact with and receive more help from close friends (Babchuk & Anderson, 1989; Roberto & Scott, 1984-1985), confide more in their trusted friends (Babchuk & Anderson, 1989), and participate in more pleasurable and social activities with friends (Lopata, 1979).

Friendships link widows with the greater social environment which decreases loneliness and increases well-being. They spend many of their moments together engaged in meaningful conversation. For instance, since they typically are in the same age of the life cycle, they reminisce about positive memories, periods of time when they were younger, their spouses and children. Talking with friends is validating for one's identity as it gives the widow a sense of

status and importance (Rawlins, 2004). Overall, the quality of time spent with friends seems to matter more when it comes to influencing well-being.

Widows' peers are a major source of support as they navigate widowhood. Women report receiving more support from fellow widows despite a lack of community resources from their larger society (Bradsher, 2001; Ferraro et al., 1984). Resources are obtained through informal networks (friends, friends of friends, etc.) that are made through more formal networks (church, community organizations, etc.) (Bradsher, 2001). Widows use social support as a way to buffer stress and losses (Ferraro et al., 1984). Married women use friends and their husband for social support. Widows have a smaller network of friends as they lose their husband's side of the family and friends as well as the mutual coupled friends they had (Barrett, 1977). Because of their marital status, married women's social circles are larger due to incorporating their husband's friends and family (Cornwell, 2012). Upon widowhood, this network size often decreases, and this decrease in the members within the network has an isolating effect; therefore, increased quality time with current close single and/or widowed friends is vital for the widow's well-being (Utz et al., 2002).

While in general, women are more adept at forming and maintaining friendships than are men, it is as of yet unclear to what extent married and widowed older women differ in their friendships and the implications of those friendships for well-being.

Objectives

The current study examines whether married and widowed women's friendships differ in later life. Specifically, this study examines differences in the inclusion of friends in social network (i.e., number of friends), the frequency of contact with friends, and satisfaction with

friend relationships. Moreover, this study examined whether these characteristics of friendships differentially influence psychological well-being for married and widowed older women.

The first research question is: 1) Do widowed and married women differ in their frequency of contact with friends, their satisfaction with friendships, and the inclusion of friends in their social network? Based on previous research (Ferraro et al., 1984; Jerrome, 1981; Rawlins, 2004; Utz et al., 2004), it was hypothesized that women would be likely to replace spousal support with friendship after widowhood, and thus it is predicted that widowed women will have a greater proportion of their own friends in their social network and greater contact with their friends. Given that widowed women may be relying on their friends more than married women, these relationships may be more satisfying than married women's friendships. For instance, a widowed woman may be more likely to rely on her friends for instrumental support in order to aid her in areas her spouse once did, whereas a married woman may rely on friends more for leisure since she may still rely on her spouse for instrumental support. This hypothesis was supported by Liebler and Sandefur (2002) stating that married women tend to provide less support to friends and use friendship more as a means of leisure, because they rely on their husband to provide social, instrumental and emotional support. It could be implied that married women's relationship satisfaction is not necessarily rooted in having their friendships provide anything more than leisure support. Because widowed women may rely on their friendships in more areas of support than married women, they may put more value and importance into their friendships which would increase their relationship satisfaction. Therefore, it is hypothesized that widowed women will report higher levels of satisfaction with their friendships than married women.

The second research question asks: 2) Are friendship characteristics (number, function, quality) associated with the psychological well-being of widowed and married women in later life (i.e. is friendship protective for well-being for married and/or widowed older women?)? Having someone to confide in (and who in turn provides emotional support) is associated with better well-being in later life (Babchuk & Anderson, 1989; Ferraro, Mutran & Barresi, 1984; Rawlin, 2004). Given the anticipated distinction in the function of friendships of married and widowed older women, it is hypothesized that due to their distinct functions, friendship characteristics will also be differentially associated with well-being among married and widowed women. Married women tend to rely on their husbands for support (Bradsher, 2001); therefore, friendships may be less essential for their well-being. On the other hand, for widows, friends serve a primary function of emotional support and reaffirmation of identity (i.e., confidants) (Rawlins, 2004). Accordingly, it is hypothesized that friendship characteristics will be more strongly associated with well-being for widowed women and thus these friendships are more likely to serve in a protective role for widowed women than they do for married women.

METHODS

This study attempted to explore the association between social integration and well-being among women in later life. The data for this study were taken from the Social Integration and Aging Study (Wave 1 collected in 2013; Fuller-Iglesias & Rajbhandari, 2015). The larger study sought to broaden the operational definition of social integration in later life, explore associations between social relations and social integration, examine patterns of older adults' social integration, and assess links between older adults' social integration and well-being.

Participants were recruited in two ways: 1) by mail from a list obtained through a partnership with a local senior center to help target rural elders and elders who utilize social service programs, and 2) in person at local senior centers, senior living communities, and at senior events. Approximately 68% of the sample was recruited via mail, where the response rate was roughly 34% while in-person surveys accounted for 32% of the sample with a 70% response rate. In order to increase participation, the incentive of a gift card drawing was in place as well as a small gift for participants who were recruited in person. Consent was secured verbally for in person surveys and consent was secured passively for surveys that were returned by mail. This process was approved by NDSU IRB.

The estimated completion time for the survey was between 20 and 30 minutes. The survey assessed four sets of constructs: socio-demographic factors, social network, social integration, and well-being. Examples of socio-demographic factors are age, gender, and marital status.

Sample

For the current study, only female participants who were married/partnered or widowed were selected from the larger sample of 416 adults. The remaining sample was 253 female adults

over the age of 55 from the Fargo-Moorhead community. An overview of the demographic characteristics of the sample is provided in Table 1. The mean age of the sample was 80.6. A total of 88 (27.9%) participants were married/living together –ages ranged from 55 to 92, and 165 (55.6%) were widowed – ages ranged from 60 to 100. This community based sample oversampled retired individuals over the age of 80, therefore it was not truly representative of the population as younger older adults were underrepresented. This is evident in the high rate of widows in the sample given the overrepresentation of individuals over the age of 80. The majority (98.3%) of the participants were White. The sample composition for this study mirrors the population of the Fargo-Moorhead area population for this age group in terms of race (“Population and age”, 2013). Due to lack of variability in race, this variable was not addressed in the analysis.

Measures

The data for this study were collected using an original survey that measured various sociodemographic, relational, and well-being factors of the women’s lives.

Sociodemographic characteristics. Sex was used as a selection variable. Participants indicated their sex as male (0) or female (1) and only female participants were selected. For the sake of analyses, participants were divided into two groups: married and widowed. Participants identified their marital status as married/living with partner, widowed, divorced/separated, and never married. Divorced/separated and never married individuals were not selected for this sample. For the sample, marital status was coded as married/living with partner (1) or widowed (0). Age was a continuous variable that ranged from 55 to 100. Years of education was a continuous variable, with greater numbers indicating higher socioeconomic status. Participants indicated whether they lived with someone (1) or lived alone (0).

Friendship characteristics. Four aspects of friendship were assessed in the survey (See Appendix B). First, respondents were asked about the frequency of two types of contact with friends. They were asked: “How often do you do each of the following: 1) get together with friends, and 2) speak to friends on the phone?” Responses were given on a 5-point Likert scale ranging from *never* (1) to *very frequently* (5). *Frequency of getting together with friends* and *frequency of speaking to friends by phone* will be examined as two distinct variables. Second, respondents were asked about *satisfaction with their friendships*. They were asked: “How satisfied are you with your relationships with your friends?” Responses were given on a 5-point Likert scale ranging from *very dissatisfied* (1) to *very satisfied* (5). Finally, respondents were asked to “Think about the people who are important in your life right now” and to “list the persons who provide personal support to you or are important to you”. This instrument assessed an individual’s perceived personal support network. For each person listed in the personal support network, the relationship to the participant was indicated via an open ended answer and then coded accordingly. *Network proportion of friends* in support network was calculated by dividing the number of support partners identified as friends by the total number in the support network. A simple t-test showed that absolute network size between married and widowed women did not significantly differ from one another.

Well-being. Respondents were asked about life in general, including happiness, life satisfaction and self-esteem. For *happiness*, they were asked: “Taking all things together, how would you say things are these days? [How] do you feel?” The three available responses were *not too happy* (1), *pretty happy* (2), and *very happy* (3). The happiness score was then used as a one-item variable. *Life satisfaction* was assessed with the 5-item Life Satisfaction Scale (Diener, Emmons, Larsen, & Griffin, 1985). The five items were: a) in most ways my life is close to

ideal, b) the conditions of my life are excellent, c) I am satisfied with my life, d) so far, I have gotten the important things I want in my life, and e) if I could live my life over, I would change almost nothing. Responses were given on a 5-point Likert-type scale and they were *strongly disagree* (1), *disagree* (2), *neutral* (3), *agree* (4), and *strongly agree* (5). The five items were then summed to create an overall life satisfaction score (Alpha = .86). *Self-esteem* was assessed with Rosenberg's 10-item Self-Esteem scale (Rosenberg, 1965). The ten items included: a) On the whole, I am satisfied with myself. b) At times I think I am no good at all. c) I feel that I have a number of good qualities. d) I am able to do things as well as most other people. e) I feel I do not have much to be proud of. f) I certainly feel useless at times. g) I feel that I'm a person of worth, at least on an equal plane with others. h) I wish I could have more respect for myself. i) All in all, I am inclined to feel that I am a failure. j) I take a positive attitude toward myself. Responses were given on a 5-point Likert-type scale with categories of *strongly disagree* (1), *disagree* (2), *neutral* (3), *agree* (4), and *strongly agree* (5). Items were backwards coded as necessary to create positive statements. These ten items were then summed to create an overall self-esteem score (Alpha = .85) (See Appendix C).

RESULTS

Descriptive Statistics

Descriptive statistics were conducted in order to determine the means and standard deviations of all study variables for married and widowed women separately, as well as the combined overall sample of women (See Table 1). Additionally, a Pearson's correlation was conducted in order to assess relationships among sociodemographic characteristics, friendship variables and well-being variables (See Table 2). Greater age was related to having a greater proportion of friends in network and higher self-esteem. Greater education level was associated with higher frequency of getting together with friends and higher self-esteem. Friendship variables were overall highly inter-correlated, however frequency of getting together was not associated with network proportion of friends. All friendship variables were associated with well-being except for network proportion friends. Finally, well-being variables (happiness, life satisfaction, and self-esteem) were highly correlated.

Research Question 1

To address the first research question, T-tests were conducted to compare differences between married and widowed women in terms of the frequency of contact with friends, their satisfaction with friendships, and their proportion of friends in their social network. Results for research question 1 are presented in Table 3. There were no significant differences identified between married and widowed women in terms of frequency of in-person or phone contact with friends, satisfaction with the quality of their friendships, or the proportion of friends in their networks.

Research Question 2

The second research question asked: Are friendship characteristics associated with the well-being of widowed and married women in later life? To address this question, regression analyses were conducted separately for married and widowed women in order to examine whether friendship variables were associated with well-being variables. Sociodemographic variables (age, education, and lives alone) were included as covariates in all analyses. Results of regression analyses are presented in Table 4 for married women and Table 5 for widowed women.

Frequency of contact in-person and by phone. For married women frequency of in-person contact with friends was significantly associated with happiness ($b = .38, p \leq .01$) and life satisfaction ($b = .40, p \leq .01$), but not with self-esteem. Greater frequency of in-person contact indicated greater levels of happiness and life satisfaction. In contrast, for widowed women, the frequency of in-person contact with friends did not predict well-being. With regards to phone contact, for married women, the frequency of phone contact with friends was not associated to well-being; however, for widowed women, there was a trend in which greater frequency of phone contact was associated with better life satisfaction ($b = .18, p \leq .10$). Among widowed women, frequency of phone contact was not associated with happiness or self-esteem.

Relationship satisfaction. For married women, friendship satisfaction had no significance on their well-being. In contrast, for widowed women, happiness ($b = .28, p \leq .01$) and self-esteem ($b = .27, p \leq .01$) were significantly associated with their well-being. Among widowed women, relationship satisfaction was not associated to life satisfaction.

Network proportion of friends. The network proportion of friends had no significance on well-being for married women. For widowed women, happiness and life satisfaction had no

association with network proportion of friends. However, self-esteem was negatively associated with network proportion of friends for widowed women ($b = -.22, p \leq .05$).

DISCUSSION

Previous research has highlighted gender differences in the effect of widowhood on well-being (e.g. Bennett & Hughes, 2004; Bennett & Soulsby, 2012; Chen & Chan, 2006). The goal of the present study was to further this work by examining well-being specifically among women in order to further substantiate current research on the well-being of older women across the marital spectrum. The present study examined differences in the utilization and importance of friend relationships between married and widowed older women as well as the impact of friendship characteristics on well-being for each of these groups. The specific goal was to address whether friendship characteristics served as a protective barrier against negative psychological well-being for either married or widowed women.

Differences between Widowed and Married Women's Friendships

It was hypothesized that married and widowed women would differ in terms of their friendship characteristics, consistent with previous research that indicated that widowed women are more invested in their friendships than married women (Liebler & Sandefur, 2002). However, contrary to this hypothesis, the current findings do not support the expectation that widowed women would have greater frequency of contact, increased satisfaction with their friendships, or a greater proportion of friends in their social network. It was anticipated that widowed women would be in more frequent contact with their friends due to a greater likelihood of exchanging both instrumental and emotional support with their friends (when married women can still rely on their spouse); yet, the lack of differences between married and widowed women suggest that either the function of these friendships do not differ or that the frequency of contact remains the same despite different functions (i.e. leisure vs instrumental support). In terms of friendship satisfaction, we expected widows would be more satisfied with their friendships

because they would be engaged in more intimate support exchanges with their friends. The findings, however, suggest that the perceived satisfaction with friendships did not differ between married and widowed women, regardless of the function or type of support exchanged. Future research should go into much more detail examining the types of support exchanged and the functionality to further explore this issue. Finally, perhaps most surprising was that married and widowed women did not differ in terms of the proportion of friends in their network. Previous research has consistently demonstrated that married individuals have larger networks, comprised of more family because they incorporate spouse and in-laws into their social support networks (Cornwell, 2012). The current findings indicate no differences between married and widowed women in terms of the proportion of friends in their network. It may be the case that married women have larger overall networks that incorporate a similar proportion of family and friends as widowed women. Earlier literature stated that widows decrease their quantity of married friends and increase their circle with widowed and never married friends, as this is typically the expectation and the steps taken to decrease the chances of social isolation (Lopata, 1979). This would imply that widowed women would eventually have a larger proportion of friends when compared to married women. However, it appears the married women in this study incorporate into their network not only their spouse and in-laws but their spouse's friends (Cornwell, 2013). This would explain the lack of difference in the proportion of friends. Overall, these findings indicate that, regardless of marital status, friendships matter to women in later life.

The fact that married and widowed women's friendships in later life were not found to be different is not only intriguing but also important. This implies that women's friendships may play a role in improving their resiliency in later life. Despite marital status, older women had better well-being when they were better connected to friends. This could be valuable information

for professionals working with older adults (i.e. physicians, therapists, social workers, etc.) as this information can inform treatment plans, care coordination, social activities, etc. This also implies that, even after major life stressors (such as the widowhood event), older women can still maintain high levels of well-being, which are benefitted by maintaining connections with friends. Given the small amount of research available regarding older women's well-being and friendships, understanding that there are no differences regardless of marital status opens the doors for research involving women of other marital statuses (i.e. divorced, never married, etc.) as well as men. This study was unable to include the latter as there were not enough men in the sample to be representative.

Friendships and Well-Being among Married and Widowed Women

The second research question explored whether friendship characteristics are linked to well-being among married and widowed older women. It was hypothesized that friendship characteristics would be more influential for widowed women as compared to married women because widows' friendships would serve in a protective role for their well-being, whereas married women could rely more on family (i.e. spouse).

Happiness. For married women, greater frequency of in-person contact predicted greater happiness, whereas for widowed women better relationship satisfaction predicted greater happiness. This distinction is interesting because for married women, a concrete factor (getting together and being in each another's physical presence) predicted happiness, whereas for widowed women a more subjective factor (relationship satisfaction) was important for happiness. Married women may find solace and comfort in being able to confide in someone other than their husbands. Older married women may also find getting together in person with their friends gives them the opportunity to connect with other women from their cohort where they may possibly

reminisce and understand one another without question (Rook, 1987). Thus, in-person contact with friends may have implications for married women's happiness because it is indicative of independence. Given that friendship satisfaction was not associated with married women's well-being, it may be the case that friendship satisfaction is less important than marital satisfaction for well-being among these married women. This may indicate that married women engage in more leisure activities with their friends, and less for emotional support which would be expected to have a greater association to well-being. It could be the case that widowed women rely more on the quality of their friendships to determine their happiness, whereas married women rely more on the quality of their spousal relationship. Widowed women may determine the quality of their friendships by participating in substitution and compensation (Zettel & Rook, 2004). Widowed women substitute friends in place of their spouse and may rely on the quality of their friendships to maintain their happiness because they are more likely to deal with social isolation. The increased time together and reliance on friends may also indicate more intimacy and emotional investment; therefore, they may place more value on their friendships in order to maintain their social networks. Widowed women might also substitute friends to fill in for the responsibilities of their late spouse. In order to do so, they may need to know that their friendships are strongly connected and reliable, thus placing more value and trust in those relationships and increasing their relational satisfaction.

Life satisfaction. For married women, frequency of in-person contact predicted life satisfaction, whereas for widowed women frequency of phone contact was associated with life satisfaction. Because married women are more likely to engage in leisure activities with their friends (Liebler & Sandefur, 2002; Rawlins, 2004), in-person contact may be essential to fulfill these leisure activities (e.g. playing games). In essence, it could be the case that the leisure

activities have a positive association to their life satisfaction. Married women understand that they have family (spouse, children, etc.) who provide support, therefore it may be possible that in-person contact with friends holds less importance in regards to their life satisfaction, as it is provided by her family; however in-person contact is still important to their social and self-identity needs. Given that married women tend to adopt the identity of the couple (Helson & Picano, 1990), having in-person contact possibly gives her the space to express her own individuality. Widows, on the other hand, could perceive phone contact as a sufficient means of interaction allowing their friendships to act as a stress buffer. Given that it is common for older widows to live close to family members, namely children, (Shearer et al., 2006) she may have an adequate amount of in-person contact thus making phone contact with friends suitably equal.

It should be noted that relationship satisfaction and proportion of friends were not associated with life satisfaction for either married or widowed women. This may be due to other factors outside of friendships bearing more importance on their life satisfaction. Given this study only examined the influence of friendship characteristics on well-being with a small sample of women, it can be assumed that many other factors play into married and widowed women's lives, especially in later life when so many life experiences have accumulated. This is an area that can be examined further in future studies on larger, nationally representative populations in order to examine a greater number of characteristics, factors, qualities, and concepts that contribute to life satisfaction for married and widowed women in later life. Information such as knowing that older married women have greater happiness and life satisfaction when they are able to get together with friends more often might be beneficial to retirement and senior communities and centers. They could work to ensure the in-person contact for married women. Individuals who work at the retirement centers with this knowledge can set up times for games

and recreation in order for older married women to socialize. Widows, on the other hand, seem to have better life satisfaction when they have the option for contacting friends via telephone. This may be due to longtime friends with whom they feel most comfortable talking with despite living farther away. They may feel secure in their friendship and know that they are not obligated to anyone else's schedule which makes for a less stressful life. Given the importance of phone contact for widowed women, aging professionals might seek ways to help encourage phone conversations and help them to remember all of their contacts.

Self-esteem. For married women, friendship characteristics were not associated with self-esteem. The concept of role centrality may play a role (Martire, Stephens, & Townsend, 2000), which suggests that people give greater centrality to roles that they felt defined them and they felt were central to who they are as a person. For married women, the role of friend may not be central to them, and hence this could indicate that married women do not place a specific value or measurable importance on their friendships in determining their own self-worth.

In contrast, for widowed women, relationship satisfaction was positively associated with self-esteem while proportion of friends was negatively associated with self-esteem. One possible explanation for the positive association between relationship satisfaction and self-esteem could be that widowed women may feel good about themselves due to perceiving her friendships as highly satisfying. For instance, she may feel that her friends are willing to support her when she needs them. This could imply that, since these friendships are reliable, the widow regards these relationships highly and gives them greater value. This may lead her to believe her friends reciprocate this sentiment (Patrick et al., 2001). The quality of the support appears to be more impactful to the widow when the presence of the husband is no longer there. Since widowed

women no longer have their spouses for social support, their friendship ties seem to become more central to their quality of life.

The negative link between proportion of friends and self-esteem was counterintuitive. We expected that having more friends in the network would be linked to better well-being and self-esteem given that friendship has previously been demonstrated as a positive influence on well-being (Rawlins, 2004). However, widows with a greater proportion of friends in their network have lower self-esteem and widows with lower proportions of friends have higher self-esteem. This could indicate that having significant family support is important for a widow's self-esteem. A potential explanation for this could be that widowed women still want to feel needed, consistent with societal gender norms of kin-keeping (Gallagher and Gerstel, 1993), in order to feel good about herself. She may garner increased self-esteem by having more family in her network as could imply more people needing caretaking and support whereas friendships may not necessarily constitute these same caretaking needs.

Limitations

Despite the contributions of these findings, it is important to note that there are some limitations to the current study. While the current sample was an age diverse sample, given the location of sampling, this sample is limited on being fully representative of several ethnic groups. Lack of racial and ethnic diversity was a limitation as the sample race majority was White (98.3%). Moreover, as a primarily urban sample in a Midwestern region, these friendships may not be directly applicable to other ethnic groups and geographic regions (i.e. rural). Future studies should attempt to include a more ethnically diverse sample of women and specifically address the cultural context of friendship in later life. One step to further understand this cultural context would be to examine ethnicity of the friends within their network in order to gain a better

understanding of the composition of older women's social networks. Future studies should examine how men's friendships affect their well-being/quality of life. Finally, there were insufficient numbers of single/divorced/never married women (16.5%) to examine within this sample; therefore their experiences were not assessed in this thesis. Future research should seek to determine if single, divorced, and never married women's friendship patterns align with widowed older women (i.e., explained strictly by the lack of a spouse) or if they are distinct (i.e. indicating distinct patterns across marital statuses).

A possible limitation is the quality of support married women received from their husbands. The support may not actually be of high quality if the husband is sick, and thus married women can be burdened by caregiving (Wright and Aquilino, 1998). Married women may have less time for friends and may seek to replace their spousal support with support from friends via in-person contact. Future studies should further investigate how friendships compensate for the lack of support by ailing husbands or if/how family gives support during this time.

As with any survey, there are limitations of bias inherent in the self-report method. While we employed standardized scales with multiple items to improve validity where possible, the extent of measures included in the survey was limited. The happiness measure, for instance, was a one-item measure, and thus was limited in terms of its comprehensiveness. Future studies should seek to use more comprehensive measures of happiness and quality of life. Depending on the health or physical status of the participant while completing the survey, the answers may have impacted their answers to produce honest outcomes. Future studies should seek to provide questions that inquire about the participant's life satisfaction over a certain period of time (i.e. over the last 10 years). Only three questions about friendship were included in the dataset. Future

studies should include questions with greater depth and breadth that ask about what types of friends they have, how they utilize different friends and how the different categories of friends affect their friendship satisfaction. Network proportion of friends was calculated by dividing the number of support partners identified as friends in the section where they list the people who are important to them. Additionally, technology is ever growing and aging women are adapting with it, thus future studies would benefit from examining not only in-person and phone communication, but also phone communication via text messages, internet and social media.

Due to the cross-sectional nature of this study, we cannot determine causal relationships. It is also important to note the potential limitations related to response rates in survey data. The data is affected by response bias, given participants who returned surveys willingly filled them out completely and were healthy enough to do so. Therefore, this study had to be interpreted within the context of a biased sample. Given this was a biased community based sample, the values that are viewed as important here may show in the findings even though the findings may not transfer between other cultures or communities.

With the wide age range of participants, answers may be affected by differing cohort effects, and thus may be differently impacted by historical events (i.e., civil rights movement). Their lived experiences influence how they view friendship and support and thus their answers may reflect those.

Implications for Future Research

Based on the findings of this study, there are many opportunities for further research in the area of aging women and their friendships. The results for the first research question showed no significant differences between married and widowed older women in terms of frequency of in-person or phone contact with friends, satisfaction with the quality of their friendships, or the

proportion of friends in their networks. This non-finding is important for future research as it leaves the opportunity open for research on aging women's utilization of friendships. The next step in research for understanding this question could be to seek out what the similarities are between married and widowed older women in terms of friendship contact, satisfaction and proportion of friends and what makes them so similar despite the range in ages for the sample.

According to the findings, in-person contact with friends did not predict well-being for widowed women; however, increased phone contact with friends was associated with better life satisfaction. Future research should seek to examine the underlying reasons for the differences in association between in-person contact and phone contact for widowed women and their well-being. For married women, friendship satisfaction had no significance on their well-being despite increased frequency of in-person contact being significantly associated with their happiness. Future research should seek to investigate what other types of relationships are associated with their well-being, given it was not friendships as shown in this study. For widowed women, the friendship factors associated with well-being were quite complex: satisfaction was associated with happiness and self-esteem, contact frequency was associated with life satisfaction, and quantity was negatively associated with self-esteem. This complexity suggests little overlap between the components of well-being in terms of their associations with friendship characteristics. This intricacy suggests that there may be a missing piece to fully understanding the links between widowed women's friendships and well-being. Thus, future research should seek to further explore how varying aspects of friendship are linked to well-being. More in-depth measures of friendship and broader assessments of well-being should be investigated to include positive and negative aspects (such as depression) of emotional well-being, and aspects related to physical and cognitive well-being as well.

Going forward, research opportunities on aging women, friendships and well-being seem limitless given the advancing technologies of today. Future research could certainly examine well-being based on how older women keep in touch – text messages, email, chat, social media – and how often. Future studies could also look at how older women define friendship, given that social media allows one to have thousands of “friends”, and how they spend their time with friends. If looking at well-being through platonic relationships, future studies could examine how growing up during a time period that has never been deprived of rapidly advancing technology has had an effect on how they understand, perceive and show emotions, care, love, and support. Those studies could also look at how those aging cohorts delineate friends and friendship and look into how they utilize friends and friendships.

Subsequent research could focus on recruiting a varied sample of individuals that includes greater diversity in sex and gender, ethnicity and race, and sexual orientation. Including men in research on friendships would be beneficial as it may help decrease stigma around men having intimate friendships with other men (Shaw, Gullifer & Shaw, 2014), thus giving room for more exploratory research on aging men and friendships. Moreover, as discussed previously, future research could examine friendships among aging women across different cultures and ethnic backgrounds. This could further the body of research on cross-cultural friendships, their uniqueness and their advantages for older women.

These findings could help frame experiences of older women who were not included in this study. Future research should seek to examine similar issues among women who identify as lesbian, bisexual or transwomen. In the future, research on friendship in later life could be expanded to include same-sex marriages (and their eventual widowhood), as there could be other areas of research that can be explored more deeply, especially now that same-sex marriage is

legal across all 50 U.S. states. Research could seek to look at the composition of a married lesbian's social network and that of a widowed lesbian to see if there are differences in the composition of their friendship groups (i.e. mostly women, mostly men, predominantly cross-orientation, etc.), differences in their relational satisfaction with friends and look at how friendships are managed if the couple share or shared most of their friend group.

CONCLUSION

This study makes an interesting contribution to the body of research and literature on aging women. The lack of differences in married and widowed women's friendship characteristics was unexpected, yet encouraging as it implies that friendships bear importance to women's lives in one way or another. Additionally, this study's conclusions suggest that, though important, married and widowed women's friendships affect their well-being in different manners. For married women, higher levels of in-person contact with their friends leads to higher friendship satisfaction. Widowed women gained greater self-esteem and happiness when they had higher relationship satisfaction in their friendships. These findings are important as they suggest that women do, in fact, need more friendships for their well-being, even while married and especially after the widowhood event. My hope is that this study serves as a catalyst for future studies on aging women and friendships. The body of research on this population needs to continue to grow as this population of people will continue to grow as well and their needs will remain just as important. Hopefully this study is a step in the right direction toward ensuring aging women's positive well-being by helping others learn that their friendships and their perceived friendship satisfaction matter a great deal for their well-being.

REFERENCES

- Aday, R. H., Kehoe, G. C., & Farney, L. A. (2008). Impact of senior center friendships on aging women who live alone. *Journal of Women & Aging, 18*(1), 57-73. doi: 10.1300/J074v18n01_05
- Administration on Aging. (2013). A profile of older Americans. Retrieved from http://www.aoa.acl.gov/Aging_Statistics/Profile/2013/docs/2013_Profile.pdf
- Antonucci, T. C., & Akiyama, H. (1987). Social networks in adult life and a preliminary examination of the convoy model. *Journal of Gerontology, 42*, 519-527. doi: 10.1093/geronj/42.5.519
- Antonucci, T. C. (1985). Personal characteristics, social networks, and social behavior. In R. H. Binstock & E. Shanas (Eds.), *Handbook of aging and the social sciences* (2nd ed.). New York: Van Nostrand Reinhold.
- Antonucci, T. C., Ajrouch, K. J. & Birditt, K. S. (2013). The convoy model: Explaining social relations from a multidisciplinary perspective. *The Gerontologist, 54*(1), 82-92. doi: 10.1093/geront/gnt118
- Arling, G. (1979). Family and friendship in old age. In E. Corfman (Ed.), *Families Today, 1*, 185-202. Washington, DC: U.S. Government Printing Office.
- Baarsen, B., & Broese van Groenou, M. I. (2001) Partner loss in later life: Gender differences in coping shortly after bereavement. *Journal of Loss and Trauma: International Perspectives on Stress & Coping, 6*(3), 243-262, doi: 10.1080/108114401753201688
- Babchuk, N., & Anderson, T. B. (1989). Older widows and married women: Their intimates and confidants. *International Journal of Aging and Human Development, 9*(137-151). doi: 10.2190/npea-2j32-5cv3-rug7

- Barrett, C. J. (1977). Women in widowhood. *Signs*, 2(4), 856-868. doi: 10.1086/493415
- Bennett, M., & Soulsby, L. (2012). Wellbeing in bereavement and widowhood. *Illness, Crisis & Loss*, 20(4), 321-337. doi: org.ezproxy.lib.ndsu.nodak.edu/10.2190/IL.20.4.b
- Bennett, K., Smith, P., & Hughes, G. (2004). Coping, depressive feelings and gender differences in later life widowhood. *Aging & Mental Health*, 9(4), 348-353. doi: 10.1080/13607860500089609
- Berkman, L., Glass, T., Brissette, I., Seeman, T. (2000). From social integration to health: Durkheim in the new millennium. *Social Science and Medicine*, 51, 843-857. doi: 10.1016/s0277-9536(00)00065-4
- Birditt, K. S. & Antonucci, T. C. (2007). Relationship quality profiles and well-being among married adults. *Journal of Family Psychology*, 21(4), 595-604. doi: 10.1037/0893-3200.21.4.595
- Blieszner, R. (2006). A lifetime of caring: Dimensions and dynamics in late-life close relationships. *Personal Relationships*, 13(1), 1-18. doi: 10.1111/j.1475-6811.2006.00101.x
- Bogunovic, O. (2011). Women and aging. *Harvard Review of Psychiatry*, 19(6), 321-324. doi: 10.3109/10673229.2011.630821
- Bradsher, J. E. (2001). Older women and widowhood. In J. M. Joyle (Ed.) , *Handbook on women and aging* (pp. 418-429). Westport, Connecticut: Praeger.
- Byles, J. E., Feldman, S., & Mishra, G. (1999). For richer, for poorer, in sickness and in health: Older widowed women's health, relationships and financial security. *Women & Health*, 29(1), 15-30. doi: 10.1300/J013v29n01_02

- Cheng, S., & Chan, A. (2006). Relationship with others and life satisfaction in later life: Do gender and widowhood make a difference? *Journal of Gerontology: Psychological Sciences*, *61B*(1), 46-53 doi: 10.1093/geronb/61.1.p46
- Cohen, S. & Pressman, S. (2004). Stress-Buffering Hypothesis. In *Encyclopedia of Health & Behavior 2*. (Vol. 2, pp. 780-782). Thousand Oaks, CA: Sage Publications.
- Cohen, S. & Wills, T. A. (1985). Stress, social support, and the Buffering Hypothesis. *Psychological Bulletin*, *98*(2), 310-357. doi: 10.1037/0033-2909.98.2.310
- Cornwell, B. (2012). Spousal network overlap as a basis for spousal support. *Journal of Marriage and Family*, *17*, 299-238. doi: 10.1111/j.1741-3737.2012.00959.x
- Davidson, Kate. (2006). Flying solo in old age: Widowed and divorced men and women in later life. In J. A. Vincent, C. Phillipson, & M. Downs (Eds.) *The futures of old age* (pp.172-179). Thousand Oaks, CA: Sage Publications.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, *95*, 542-575.
- Diener, E. (2010). Subjective well-being: A general overview. *South African Journal of Psychology*, *39*(4), 391-406. doi:10.5502/ijw.v2i1.3
- Ferraro, K. F., & Barresi, C. M. (1982). Impact of widowhood on the social relations of older persons. *Research on Aging*, *4*(2), 227-247. doi: 10.1177/0164027582004002005
- Ferraro, K. F., Mutran, E., & Barresi, C. M. (1984). Widowhood, health, and friendship support in later life. *Journal of Health and Social Behavior*, *25*(3), 246-259. doi: 10.2307/2136423
- Friedman, M. (1993). Social support sources and psychological well-being in older women with heart disease. *Research in Nursing & Health*, *16*(6), 405-413. doi: 10.1002/nur.4770160604

- Fuller-Iglesias, H.R., & Rajbhandari, S. (2015). Development of a multi-dimensional scale of social integration in late-life. *Research on Aging*, 38(1), 3-25 doi: 10.1177/0164027514568324
- Gallagher, S. K. & Gerstel, N. (1993). Kinkeeping and friend keeping among older women: The effect of marriage. *The Gerontologist*, 33(5), 675-681. doi: 10.1093/geront/33.5.675
- Golden, J., Conroy, R. M., Bruse, I., Denihan, A., Greene, E., Kirby, M., & Lawlor, B. A. (2009). Loneliness, social support networks, mood and well-being in community-dwelling elderly. *International Journal of Geriatric Psychiatry*, 24(7), 694-700. doi: 10.1002/gps.2181
- Harvey, I. S. & Alexander, K. (2012). Perceived social support and preventive health behavioral outcomes among older women. *Journal of Cross Cultural Gerontology*, 27, 275–290. doi: 10.1007/s10823-012-9172-3
- Helson, R. & Picano, J. (1990). Is the traditional role bad for women? *Journal of Personality and Social Psychology*, 59(2), 311-320. doi: 10.1037//0022-3514.59.2.311
- Jerrome, D. (1981). The significance of friendship for women in later life. *Ageing and Society*, 1(2), 175-197. doi: 10.1017/S0144686X00008746
- Jeste, D. V., Salva, G. N., Thompson, W. K., Vahia, I. V., Glorioso, D. K., Martin, A. S... Depp, C. A. (2013). Association between older age and more successful aging: Critical role of resilience and depression. *The American Journal of Psychiatry*, 170(2), 188-196. doi: 10.1176/appi.ajp.2012.12030386
- Kincel, B. (2014). The centenarian population: 2007-2011. Retrieved from <http://www.census.gov/prod/2014pubs/acsbr12-18.pdf>

- Lakey, B. & Scoboria, A. (2005). The relative contribution of trait and social influences to the links among perceived social support, affect, and self-esteem. *Journal of Personality*, 73(2), 361-388. doi: 10.1111/j.1467-6494.2005.00312.x
- Liebler, C. A. & Sandefur, G. D. (2002). Gender differences in the exchange of social support with friends, neighbors, and co-workers at mid-life. *Social Science Research*, 31(3), 364-391. doi: 10.1007/s11205-007-9194-3
- Lopata, H. (1979). *Women as widows: Support systems*. New York: Elsevier.
- Lowenthal, M., F., & Haven. C. (1968). Interaction and adaptation: Intimacy as a critical variable. In B. L. Neugarten (Ed.), *Middle age and aging* (pp. 390-400). Chicago: University of Chicago Press.
- Martire, L. M., Stephens, M. P., & Townsend, A. L. (2000). Centrality of women's multiple roles: Beneficial and detrimental consequences for psychological well-being. *Psychology and Aging*, 15(1), 148-156. doi: 10.1037//0882-7974.15.1.148
- North Dakota Compass. (2013). *Population by age and race: North Dakota 2000-2014* [Data file]. Retrieved from: <http://www.ndcompass.org/demographics/key-measures.php?km=age#0-6609-d>
- Ortman, J. M., Velkoff, V. A., & Hogan, H. (2014). *An aging nation: The older population in the United States*. Retrieved from <http://www.census.gov/prod/2014pubs/p25-1140.pdf>
- Patrick, J., Cottrell, L., & Barnes, K. (2001). Gender, emotional support, and well-being among the rural elderly. *Sex Roles* 45, 15-25. doi: 10.1023/A:1013056116857
- Peters, G. R., & Kaiser, M, A. (1985). The role of friends and neighbors in providing social support. In W. J. Sauer & R. T. Coward (Eds.), *Social support networks and the care of the elderly* (pp. 123-158). New York: Springer.

- Petrowsky, M. (1976). Marital status, sex and the social networks of the elderly. *Journal of Marriage and the Family*, 5(749-756). doi: 10.2307/350694
- Powers, E. A., & Bultena, G. L. (1976). Sex differences in intimate friendships in old age. *Journal of Marriage and the Family*, 38(739-749). doi: 10.2307/350693
- Rawlins, W. (2004). Friendships in later life. In J. F. Nussbaum, & J. Coupland (Eds.), *Handbook of communication and aging research* (pp. 273-299). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Roberto, K. A., & Scott, J. P. (1984-1985). Friendship patterns among older women. *International Journal of Aging and Human Development*, 19(1-10). doi: 10.2190/0ub8-gjgx-3qmp-8x1f
- Rook, K. S. & Schuster, T. L. (1996). Compensatory processes in the social networks of older adults. In G. R. Pierce, B. R. Sarason, & I. G. Sarason, (Eds.), *Handbook of social support and the family* (219-248). New York, NY: Plenum Press.
- Rook, K. S. (1987). Reciprocity of social exchange and social satisfaction among older women. *Journal of Personality and Social Psychology*, 52, 145-154. doi: 10.1037//0022-3514.52.1.145
- Rosow, I. (1970). Old people: Their friends and neighbors. *American Behavioral Scientist*, 14(1), 59-69. doi: 10.1177/000276427001400106
- Ryff, C. D. (1989). Happiness is everything or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069-1081. doi: 10.1037/0022-3514.57.6.1069
- Ryff, C. D. (1995a). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4(4), 99-104. doi: 10.1111/1467-8721.ep10772395

- Ryff, C. D., & Keyes, C. L. M. (1995b). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727. doi: 10.1037/0022-3514.69.4.719
- Shapiro, A. & Keyes, C. M. (2008). Marital status and social well-being: Are the married always better off? *Social Indicators Research*, 88(2), 329-346. doi: 10.1007/s11205-007-9194-3
- Shaw, R., Gullifer, J., & Shaw, R. (2014). "I think it's a communal thing": Men's friendships in later life. *The Journal of Men's Studies*, 22(1), 34-52. doi: 10.3149/jms.2201.34
- Shearer, N. & Fleury, J. (2006). Social support promoting health in older women. *Journal of Women and Aging*, 18(4), 3-17. Doi: 10.1300/J074v18n04_02
- Spakes, P., R. (1979). Family, friendship, and community interaction as related to life satisfaction of the elderly. *Journal of Gerontological Social Work*. 1(4), 279-293. doi: 10.1300/j083v01n04_03
- Utz, R. L., Carr, D., Nesse, R. & Wortman, C. B. (2002). The effect of widowhood on older adults' social participation: An evaluation of activity, disengagement and continuity theories. *The Gerontologist*, 42(4), 522-533. doi: 10.1093/geront/42.4.522
- Utz, R. L., Reidy, E. B., Carr, D., Nesse, R. & Wortman, C. (2004). The daily consequences of widowhood: The role of gender and intergenerational transfers on subsequent housework performance. *Journal of Family Issues*, 25(5). 683-712. doi: 10.1177/0192513X03257717
- Vaillant, G. E. & Mukamal, K. (2001). Successful aging. *The American Journal of Psychiatry*, 158(6), 839-847. doi: 10.1176/appi.ajp.158.6.839

Wilcock, A. A., van der Arend, H., Darling, K., Scholz, J., Siddall, R., Snigg, C., & Stephens, J. (1998). An exploratory study of people's perceptions and experiences of well-being.

British Journal of Occupational Therapy, 61(2), 75-82. doi:

10.1177/030802269806100206

Wright, D. L. & Aquilino, W. S. (1998). Influence of emotional support exchange in marriage on caregiving wives' burden and marital satisfaction. *Family Relations*, 47(2), 195-204. doi:

10.2307/585624

Wrzus, C., Hänel, M., Wagner, J., & Neyer, F.J. (2013). Social network changes and life events across the life span: A meta-analysis. *Psychological Bulletin*, 139(1), 53-80. doi:

10.1037/a0028601

Zettel, L. A. & Rook, K. S. (2004). Substitution and compensation in the social networks of older widowed women. *Psychology and Aging*, 19(3), 433-443. doi: 10.1037/0882-

7974.19.3.433

APPENDIX A

Tables

Table A1

Means, Standard Deviations, and T-tests of Study Variables among Married and Widowed Women.

| | Married <i>N</i> = 88 | | Widowed <i>N</i> = 165 | | T-test |
|------------------------------|--------------------------|------|---------------------------|------|--------|
| | Mean | SD | Mean | SD | |
| Demographic Variables | | | | | |
| Age | 75.5 | 7.7 | 83.4 | 7.1 | .000 |
| Years of Education | 13.2 | 1.7 | 12.7 | 2.1 | .000 |
| Years of | 47.7 | 16.8 | 14.8 | 12.7 | .000 |
| Marriage/Widowhood | | | | | |
| Lives Alone | 4.5% | | 81.8% | | n.s. |
| Friendship Variables | | | | | |
| Frequency get together | 3.7 | 0.9 | 3.8 | 0.9 | n.s. |
| Frequency phone contact | 3.7 | 0.8 | 3.7 | 0.9 | n.s. |
| Satisfaction | 4.3 | 0.7 | 4.3 | 0.7 | n.s. |
| Proportion of friends | 22.8% | | 23.4% | | n.s. |
| Well-being Variables | | | | | |
| Happiness | 2.2 | 0.6 | 2.3 | 0.5 | |
| Life Satisfaction | 19.2 | 3.3 | 18.5 | 4.2 | |
| Self-Esteem | 42.1 | 7.0 | 40.3 | 8.1 | |

Table A2

Pearson's Correlation Matrix of Study Variables.

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------------------------|-------------|------------|-------------|------|------------|------------|------------|------------|------------|------------|
| 1. Age | - | | | | | | | | | |
| 2. Education | -.19 | - | | | | | | | | |
| 3. Living alone | .29 | -.11 | - | | | | | | | |
| 4. Married | -.46 | .15 | -.74 | - | | | | | | |
| 5. Frequency Get together | .01 | .05 | .09 | -.05 | - | | | | | |
| 6. Frequency Phone | -.05 | -.01 | .03 | .02 | .48 | - | | | | |
| 7. Relationship Satisfaction | -.04 | .04 | .01 | -.02 | .48 | .26 | - | | | |
| 8. Network Prop friend | -.21 | .12 | .03 | -.01 | .09 | .22 | .14 | - | | |
| 9. Happiness | .01 | .03 | .03 | -.03 | .30 | .07 | .32 | .45 | - | |
| 10. Life Satisfaction | -.01 | .12 | -.11 | .08 | .23 | .14 | .25 | .04 | .46 | - |
| 11. Self Esteem | -.17 | .13 | .06 | .11 | .20 | .04 | .33 | -.07 | .38 | .54 |

Note. Significant two-tailed correlations are in boldface. Correlations between .13 and .16 are significant at the $p \leq .05$ level; correlations between .17 and .20 are significant at the $p \leq .01$ level; correlations .21 and above are significant at the $p \leq .001$ level

Table A3

Results of Regression Analyses of Well-Being Variables of Married Women (N = 88)

| | <i>Happiness</i> | | | <i>Life Satisfaction</i> | | | <i>Self-esteem</i> | | |
|--------------------------------------|------------------|-----------|----------|--------------------------|-----------|----------|--------------------|-----------|----------|
| | <i>B</i> | <i>SE</i> | <i>b</i> | <i>B</i> | <i>SE</i> | <i>b</i> | <i>B</i> | <i>SE</i> | <i>b</i> |
| Age | .01 | .01 | .12 | .04 | .05 | .10 | -.10 | -.12 | -.11 |
| Education | .04 | .05 | .11 | .49 | .25 | .23 | .54 | .54 | .12 |
| Lives alone | -.20 | .32 | -.07 | .80 | 1.7 | .06 | 3.2 | 3.7 | .11 |
| Frequency gets together with friends | .26 | .10 | .38** | 1.3 | .50 | .40** | 1.5 | 1.1 | .19 |
| Frequency speaks to friends on phone | -.08 | .10 | -.10 | .10 | .53 | .03 | -1.3 | 1.2 | -.15 |
| Friend relationship satisfaction | .07 | .12 | .09 | -.05 | .61 | -.01 | 1.3 | 1.3 | .13 |
| Network proportion friends | .41 | .32 | .15 | -.02 | 1.7 | -.001 | 1.3 | 3.7 | .05 |
| | R ² | .20* | | R ² | .20* | | R ² | .11 | |

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

Table A4

Results of Regression Analyses of Well-Being Variables of Widowed Women (N = 253)

| | <i>Happiness</i> | | | <i>Life Satisfaction</i> | | | <i>Self-esteem</i> | | |
|--------------------------------------|-----------------------|-----------|----------|--------------------------|-----------|----------|-----------------------|-----------|----------|
| | <i>B</i> | <i>SE</i> | <i>b</i> | <i>B</i> | <i>SE</i> | <i>b</i> | <i>B</i> | <i>SE</i> | <i>b</i> |
| Age | -.002 | .01 | -.02 | .04 | .05 | .07 | -.11 | .08 | -.12 |
| Education | -.02 | .02 | -.09 | .15 | .16 | .08 | .21 | .27 | .07 |
| Lives alone | -.03 | .12 | -.02 | -1.2 | .86 | -.13 | .18 | 1.5 | .01 |
| Frequency gets together with friends | .05 | .07 | .09 | .20 | .47 | .05 | .47 | .82 | .06 |
| Frequency speaks to friends on phone | -.03 | .06 | -.04 | .76 | .43 | .18† | .17 | .76 | .02 |
| Friend relationship satisfaction | .21 | .07 | .28** | .77 | .52 | .14 | 2.7 | .91 | .27** |
| Network proportion friends | -.03 | .18 | -.02 | -1.8 | 1.3 | -.13 | -5.6 | 2.2 | -.22* |
| | <i>R</i> ² | | | <i>R</i> ² | | | <i>R</i> ² | | |
| | | .10† | | | .11* | | | .15** | |

Note. † $p \leq .10$, * $p \leq .05$, ** $p \leq .01$.

APPENDIX B

Friendship Measures

Frequency of contact with friends.

| How often do you do each of the following: | Never | Rarely | Occasionally | Frequently | Very Frequently |
|--|-------|--------|--------------|------------|-----------------|
| 5. Get together with friends? | | | | | |
| 8. Speak to friends on the phone? | | | | | |

Satisfaction with friends.

| How satisfied are you with... | Very Dissatisfied | Dissatisfied | Neutral | Satisfied | Very Satisfied |
|-------------------------------------|-------------------|--------------|---------|-----------|----------------|
| 3. Your relationships with friends? | | | | | |

Proportion of friends.

Calculated by summing the total network members identified as “friend” under “relationship to you”.

Social Support Network.

In the next section, please think about the people who are important in your life right now. Please list all of the persons who provide personal support to you or who are important to you.

You do not have to use all of the provided spaces. Use only as many spaces as you need.

| First Name | Age | Gender Male/Female | Relationship to you | Years Known | Do they live within 30 minutes of you? |
|------------|-----|---|---------------------|-------------|--|
| 1. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 4. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |

| First Name | Age | Gender Male/Female | Relationship to you | Years Known | Do they live within 30 minutes of you? |
|-------------------|------------|---|----------------------------|--------------------|--|
| 5. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 6. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 8. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 9. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 10. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 11. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 12. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 13. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 14. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 15. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 16. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 17. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 18. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 19. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 20. | | <input type="checkbox"/> M <input type="checkbox"/> F | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |

APPENDIX C

Well-Being Measures

Life satisfaction.

| Think about your life currently and answer how much you agree with the following statements: | STRONGLY AGREE | AGREE | UNSURE | DISAGREE | STRONGLY DISAGREE |
|---|-----------------------|--------------|---------------|-----------------|--------------------------|
| 1. In most ways my life is close to ideal. | | | | | |
| 2. The conditions of my life are excellent. | | | | | |
| 3. I am satisfied with my life. | | | | | |
| 4. So far I have gotten the important things I want in life. | | | | | |
| 5. If I could live my life over, I would change almost nothing | | | | | |

Happiness.

1. Taking all things together, how would you say things are these days? Do you feel?

- Very happy
- Pretty happy
- Not too happy

Self-esteem.

| Think about your life currently and answer how much you agree with the following statements: | STRONGLY AGREE | AGREE | UNSURE | DISAGREE | STRONGLY DISAGREE |
|---|-----------------------|--------------|---------------|-----------------|--------------------------|
| 1. On the whole, I am satisfied with myself. | | | | | |
| 2. At times I think I am no good at all. | | | | | |
| 3. I feel that I have a number of good qualities. | | | | | |
| 4. I am able to do things as well as most other people. | | | | | |
| 5. I feel I do not have much to be proud of. | | | | | |
| 6. I certainly feel useless at times. | | | | | |
| 7. I feel that I'm a person of worth, at least on an equal plane with others. | | | | | |
| 8. I wish I could have more respect for myself. | | | | | |
| 9. All in all, I am inclined to feel that I am a failure. | | | | | |
| 10. I take a positive attitude toward myself. | | | | | |