SOCIAL USEFULNESS AMONG OLDER ADULTS: MEASURE DEVELOPMENT
AND PRELIMINARY VALIDATION

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For older adults, engaging in prosocial behaviours such as volunteering, caregiving, and informal helping, may contribute to self-perceptions of social usefulness. Limitations of past research on social usefulness include lack of a clear operationalization of the construct and lack of a psychometrically sound measure. To address these issues, study one was conducted to explore the construct of social usefulness through qualitative, semi-structured interviews with 20 older adults, with varying degrees of prosocial engagement. A thematic analysis illustrated various themes that were associated with perceptions of social usefulness that includes: (a) values and beliefs about social usefulness, (b) the personal need and motivation to be socially useful, (c) the amount of perceived personal social usefulness, (d) the perceived quality of personal social usefulness, and (e) the personal outcomes of social usefulness. These themes were used in study 2 as basis for item development for a scale of social usefulness.

In study 2, social usefulness items were developed from the data extracts (i.e., quotes) and themes from study one. The items were administered to 408 older adults, along with preliminary validation measures. Exploratory factor analysis resulted in a three-factor solution that includes: (a) personal motivation to be socially useful, (b)
psychological rewards of social usefulness, and (c) perceived network reliance on special social usefulness. The Older Adult Social Usefulness Scale demonstrated good construct validity, test-retest reliability, and internal consistency. The scale offers an empirically developed measure of social usefulness. The conceptual, theoretical, and practical implications of these findings, along with limitations and future research directions, are discussed.
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Introduction & Overview

Enhancing quality of life for seniors is a key goal of gerontologists. With adults living longer and with the baby boomer generation reaching retirement age, it is imperative that researchers and practitioners understand the biopsychosocial predictors of healthy aging, especially predictors linked to health maintenance and longevity. Older adults have mainly been studied as recipients of support, and as caregivers of family members. The former has demonstrated the stress-buffering effects of perceived support (Gottlieb, 1988) and the latter has investigated the stress processes involved in caregiving, including its burdens (Coyne, Wortman, & Lehman, 1998; Martire, Stephens, Druley, & Wojno, 2002; Zarit, Todd, & Zarit, 1986). With much of the research on caregiving focused on the burden and stress of providing support, surprisingly little attention has been paid to the potential benefits of providing support to others (Penner, Dovidio, Piliavin, & Schroeder, 2004). The current studies focus on examining older adults as providers of support and help, but from a far broader lens than past research on support provision, that includes a greater diversity of recipients, a broader conception of prosocial behaviours than caregiving, and a set of outcomes that are more relevant to the self.

In older adulthood, the provision of support in meaningful relationships and activities goes beyond caregiving and includes volunteering and informal helping. These types of social engagement may be especially pronounced among older adults because of their natural tendency to focus on more emotionally satisfying goals and relationships, as compared to younger adults (Carstensen, 1995; Okun & Schultz, 2003). For older adults, research has demonstrated an association between engaging in prosocial behaviours and
positive health and well-being outcomes (Brown, Smith, Schulz, Kabeto, Ubel, Poulin et al., 2009; Gillespie, Gottlieb, & Maitland, 2011; Gottlieb & Gillespie, 2008; Greenfield & Marks, 2004; Hinterlong, Morrow-Howell, & Rozario, 2007).

An effect of prolonged helping may be the adoption of prosocial self-perceptions; however, it is unclear if over time, these self-perceptions contribute to a prosocial identity. Older adults infer their attitudes and identities from the roles they occupy and from the behaviours they engage in (Bem, 1972). One set of self-perceptions that is gaining attention in gerontological and epidemiological research is the construct of social usefulness (Gruenewald, Karlamangla, Greendale, Singer, & Seeman, 2007, 2009; Okamoto & Tanaka, 2004). A sense of social usefulness may arise from involvement in socially useful behaviours and may contribute to perceptions of being needed and valued. However, to date, measurement of the construct has been crude, partly because it has not yet been the subject of rigorous empirical study, and the meaning and significance of the construct to older adults has not been explored. Hence, the current study aims first, to flesh out the construct of social usefulness by identifying its dimensions or facets, and then developing a measure that faithfully represents them.

Specifically, the overall aim of this dissertation is to use a mixed method design to: 1) qualitatively map the construct of social usefulness; and, 2) develop and preliminarily validate a measure of the construct. Study one consists of semi-structured, in-depth interviews with 20 older adults aimed to explore the construct of social usefulness and its potential dimensions in a grounded, inductive manner. Study two employs an online survey aimed to examine the dimensionality of the newly developed items.
Meaningful Relationships in Older Adulthood

**Socioemotional Selectivity among Older Adults.** Although past researchers have suggested that seniors disengage from social relationships as they age (Cumming & Henry, 1961), current research suggests that older adults’ social networks contract in ways that preserve the most emotionally satisfying social relationships and shed the weaker, less emotionally satisfying ties (Carstensen, Isaacowitz, & Charles, 1999; Carstensen, Mikels, & Mathers, 2006). Socioemotional selectivity theory posits that due to their perceived shorter time horizon, older adults assign priority to more expressive rather than knowledge-related goals (Carstensen et al., 1999). With less perceived time left, seniors become “present-oriented” which “involve[s] goals related to feeling states, deriving emotional meaning, and experiencing emotional satisfaction” (Carstensen et al., 1999, p. 167). Consequently, older adults become more discriminating in the social relationships they choose, and disengage from peripheral contacts who may fulfill certain knowledge related goals (e.g., a business associate), but provide a less satisfying emotional connection (Carstensen et al., 1999). The retained relationships sustain older adults’ emotional well-being (Carstensen et al., 2006; Fung, Carstensen, & Lang, 2001).

Older adults are the focus of the current studies because of the special value and psychological impact of social relationships in late life. These relationships may play an important role in older adults’ self-perceptions, including self-perceptions of social usefulness, which are discussed in the subsequent sections.

Empirical evidence in support of socioemotional selectivity theory includes social network research revealing that seniors occupy small social circles mainly composed of emotionally close relations. Cornwell, Laumann, and Schumm (2008) argue that, as
adults age, there is not a “universal negative influence on social connectedness” (p. 185), but a selective process of culling relationships to maintain only the close ties. The social relationships maintained in late life often consist of family members and close friends (Cornwell et al., 2008; Fung et al., 2001). Fung et al. (2001) found that older adults had a smaller peripheral social network compared to younger adults, other research supported these findings (Lang, 2000; Lang & Carstensen, 1994; Shaw, Krause, Liang, & Bennett, 2007). In support of socioemotional selectivity theory, Gallagher (1994) found that compared to middle age and young adults, older adults were more likely to provide informal help to close family. Moreover, as compared to young adults (participants age 24 to 39), older adults (participants 60 years of age and older) were more likely to engage in socially useful behaviours, such as volunteering for socially motivated reasons (e.g., to enhance social relationships) rather than for personal enhancement (e.g., to gain experience for a future job) (Okun & Schultz, 2003).

**Goals and Motivations for Engaging in Social Relationships and Activities.**

Research on the motives for seniors to volunteer supports the central tenet of socioemotional selectivity theory, namely that aging transforms priorities and goals. Evidence suggests that seniors are more likely to volunteer out of a sense of social responsibility, civic-mindedness, altruism, and concern for humanity compared to younger adults (Chappell & Prince, 1997, Okun, Barr, & Herzog, 1998). These motives are accompanied by generative goals and the wish to enhance ongoing social relationships. Gillespie et al. (2011) found that older adults selectively place a premium on the social goals inherent in volunteer work, and draw more frequently on those personal resources relevant to attaining these social goals. Older adults appear to
maintain social relationships and social activities that fulfill their expressive needs. Focusing on emotionally satisfying goals has been related to more satisfaction with social relationships and less strain associated with them for older adults (Lang & Carstensen, 2002). It is possible that older adults selectively prize and maintain the most valuable and emotionally satisfying close relationships, placing less emphasis on the number of their social ties.

**Meaningful Engagement in Helping Activities**

In older adulthood, meaningful relationships are often developed and maintained through various helping activities. Valued helping activities in older adulthood include involvement in formal volunteer work, informal helping, and the provision of care to a chronically ill relative. Below I discuss the literature on socially meaningful relationships and activities in older age.

**Formal Volunteering.** Research on the benefits of volunteering supports the idea that there is an association between volunteering and positive health and well-being. Research shows that, for older adults, volunteer work contributes to less depressive symptomatology, more positive affect, better rated health and quality of life, more positive life satisfaction and well-being, and reduced mortality rates, as compared to non-volunteers (Adelmann, 1994; Luoh & Herzog, 2002; Morrow-Howell, Hinterlong, Rozario, & Tang, 2003; Musick & Wilson, 2003; Oman, Thoresen, & McMahon, 1999; Tang, 2009; Van Willigen, 2000; Wheeler, Gorey, & Greenblatt, 1998; Windsor, Anstey, & Rodgers, 2008). Furthermore, Greenfield and Marks (2004) reported that volunteering moderates the relationship between loss of roles and purpose in life; those who volunteer reported less decline in purpose in life from role loss compared to non-volunteers.
Although these studies provide evidence for an association between volunteering and health outcomes, these are case-control studies, which preclude conclusions about causality.

Longitudinal evidence supports the long-term benefits of volunteering. The Asset and Health Dynamics among the Oldest Old (AHEAD) Study examined health and mortality of 4860 older adult volunteers over a 7 year period (Luoh & Herzog, 2002). The AHEAD researchers found that, after controlling for health and limitations in daily activities, older adults who volunteered for at least 100 hours per year were significantly less likely to report poor health and limitations in daily living than were older adults who volunteered less than 100 hours (Luoh & Herzog, 2002). Although researchers have identified an association between volunteerism and long-term health and well-being benefits, researchers know far less about how prolonged helping can affect the self, including attitudes, beliefs, and identity.

**Informal Volunteering and Socially Supportive Relationships.** The extensive literature on informal helping and social support has largely devoted attention to the recipient of support (e.g., Gottlieb, 1988) and to the provider’s dilemmas in delivering effective support (Coyne et al., 1998; Martire et al., 2002). Surprisingly little attention has been paid to the benefits that are conferred on support providers by their prosocial activities (Penner et al., 2004) or to the psychological significance or meaning of their role to the self. Midlarsky (1991) suggested that providing support may help the helper in a number of ways, including distraction from personal problems, the strengthening of a sense of value and meaning in life, higher self-esteem, and a higher degree of social integration.
Several studies have demonstrated an association between the provision of informal support and beneficial health outcomes for the provider. Indeed, research shows that the benefits to the helper are stronger than the benefits received by the helpee. In a longitudinal study, Krause (2009a) found that informal helping provided at church was positively correlated with good health. Similarly, Brown, Nesse, Vinokur, and Smith (2003) and Brown et al. (2009) found that giving social support, but not receiving support, was predictive of lower mortality for two large samples of older adults over 5 years and 7 years respectively, even when controlling for relevant demographic and psychosocial variables, including health, socioeconomic status, and age. Specifically, Brown et al. (2003) reported that both instrumental support provided by older adults to family and friends, and emotional support provided by older adults to their romantic partners predicted lower mortality over 5 years. Providing help to family and friends was also associated with a faster reduction in depressive symptoms after the death of a spouse compared to seniors who provided less help to others (Brown, Brown, House, & Smith, 2008). It appears that providing help and support to network associates may have numerous health-protective effects; however, the prolonged effect of these behaviours on self-perceptions and identity are as yet unknown.

**Caregiving.** Another potential avenue for engagement in socially meaningful relationships is caregiving, usually for a family member. Much of the literature on caregiving focuses on the burden and stress of caring for grandchildren (e.g., Sands & Goldberg-Glen, 2000), or chronically ill relatives (e.g., Pinquart & Sorensen, 2003), with less focus on its beneficial aspects (e.g., Cohen, Colantonio, & Vernich, 2002; Kramer, 1997). Research on the latter has found some support for the association between
caregiving and protective effects. Caregivers of older adults in the community who felt there were positive aspects of that role were more likely to report lower depressive symptomatology and had better rated health (Cohen et al., 2002). A longitudinal study found that higher amounts of interspousal caregiving was related to reduced depressive and anxiety symptoms (Beach, Schulz, Yee, & Jackson, 2000). Brown et al. (2009) reported that providing care to a spouse predicted reduced morality, regardless of the spouses level of need or the provider’s self-rated health. However, this study only examined care recipients who were able to complete written questionnaires independently, meaning they did not have severe functional limitations. Providing care to relatives with more severe functional limitations has been linked to more negative outcomes, such as caregiver burden, as compared to caregivers of individuals with less severe functional limitations (Pinquart & Sorensen, 2003). However, especially for less severe cases of functional limitations, the activities involved in providing help to close network members is associated with the physical and psychological health of the helper. What remains unclear is how these activities and roles contribute to self-perceptions, including perceptions of social usefulness.

The Meaning and Measurement of Social Usefulness

People infer their attitudes and identities from the roles they occupy and from the behaviours they engage in (Bem, 1972). The preceding literature demonstrates that engaging in certain socially meaningful helping activities is associated with the health and morale of the help provider. What remain less understood is the association between prolonged helping and the adoption of prosocial self-perceptions, which may contribute to a prosocial identity. One emerging area of research suggests that the socially
meaningful helping roles and relationships discussed in the preceding section may foster a sense of social usefulness for older adults. Intense or prolonged involvement in socially useful behaviours may give rise to self-perceptions as socially useful (Bem, 1972). Although there is little research on the internalization of a socially useful identity, it is likely aided by feedback from others that further buttresses perceptions of being needed and valued.

In recent years, the construct of social usefulness has been introduced in gerontological research (Gruenewald et al., 2007, 2009; Okamoto & Tanaka, 2004). However, it is not well understood and it is crudely measured. On the latter score, the handful of studies that have explicitly focused on the construct of social usefulness have adopted single-item or global measures of the construct that do not do justice to its complexity or psychological importance. Gruenewald et al. (2007) acknowledge that, “there has been surprisingly little research on the role of feelings of value and usefulness to others within more proximal social networks (e.g., family and friends) in older adults” (p. 28). Stevens (1993) assessed characteristics that contribute to a sense of usefulness (such as family and community involvement) and documented the relationship between usefulness and life satisfaction for older adults. Feeling useful, which was defined as feeling needed and productive, significantly predicted life satisfaction (Stevens, 1993). However, the use of a single item measure of usefulness, which lacks multidimensionality, and a relatively small sample size of 108 participants, limits the generalizability of these findings. Heidrich and Ryff (1993) argue that social engagement enhances perceptions that one has meaningful roles (i.e., that one is needed and valued). Having these meaningful roles is associated with protective health effects; they argue that
“elderly persons...who engage in roles they value, or who have positive perceptions of their membership as elderly persons in different social groups would be expected to have higher levels of psychological well-being” (p. 327). The researchers found support for this argument; social integration (partly derived from roles considered both meaningful and valued) was positively associated with well-being and life satisfaction, and was negatively associated with psychological distress, as measured by depression and anxiety levels. Therefore, perceptions that one is valued and needed by others (i.e., social usefulness) may contribute to the adoption of a prosocial identity; however research is needed to address this issue.

Beyond its psychological benefits, the strongest mandate for further research on perceived usefulness is predicated on its link to longevity (Gruenewald et al., 2007, 2009). Even after controlling for demographics, involvement in healthy activities (e.g., exercising), number of social relationships, depressive mood, and self-efficacy, Gruenewald et al. (2007) reported that the likelihood of experiencing increased disability or dying over seven years was significantly greater for seniors who rarely or never felt useful as compared to seniors who frequently felt useful. The former group also reported lower well-being and were less likely to be involved in the community. These findings are supported by empirical research linking increased disability to lower reported usefulness (Grand, Grosclaude, Bocquet, Pous, & Albarede, 1988) and higher perceptions of usefulness to lower mortality rates (Levy, Slade, Kunkel, & Kasl, 2002; Pitkala, Laakkonen, Strandberg, & Tilvis, 2004).

Using the same sample from Gruenewald et al. (2007), Gruenewald et al. (2009) examined the initial 3 years of the study and found that older adults who felt consistently
useful for the 3 years were healthier and more socially active than were those individuals who felt less socially useful over the same period. Seniors were categorized as consistently useful if they reported feeling “frequently useful” on the single item measure of usefulness at the baseline interview and at the subsequent assessments over 3 years. Seniors were categorized as consistently low if they reported feeling “never” or “rarely useful” during the same data collection periods. Moreover, Gruenewald et al. (2009) found that those individuals whose reported usefulness declined over the initial 3 years were more likely to die in the 9 years following compared to those adults who felt consistently useful. However, the relationship between declining health and usefulness is confounded because those individuals who felt less useful were also more likely to have emerging health issues compared to those who felt more useful. That is, declining health may have disrupted or interfered with their ability to be socially useful. Gruenewald et al. (2009) acknowledge the difficulty in assessing the temporal relations between poor health and perceptions of usefulness because of the cross-sectional design of the study. Regrettably, the possible reasons why social usefulness had changed over the 3-year period were not investigated. Even though the exact relationship between these variables is uncertain, perceptions of social usefulness to family and friends may contribute to a prosocial identity for seniors, which merit more in-depth study.

**Development of Perceptions of Social Usefulness**

The current studies are based on the thesis that engaging in socially meaningful and valued relationships and activities on a sustained basis may engender socially useful self-perceptions, which may contribute to identity. Social psychologists examining the effect of behaviours on self-perceptions argue that:
…when individuals engage in new behaviours repeatedly, their behaviour not only provides a clue to others as to who and what they are, but it is also a source of information to the self about who and what the self is, ultimately altering how individuals think of themselves. (Cast, 2003, p. 43)

These behavioural clues contribute to attitudes and beliefs about the self (i.e., self-perceptions) (Bem, 1972). For example, Bandura discussed the development of self-efficacy whereby “efficacious behaviour produces a feeling of efficaciousness in the individual (self-efficacy)” (Cast, 2003, p. 45). Similarly, repeatedly engaging in socially meaningful behaviours may foster self-perceptions of social usefulness. Self-efficacy is not considered a trait, but is rather “a differentiated set of beliefs” (Bandura, 2000, p. 18). Similarly, social usefulness is not a trait, but a set of attitudes and beliefs about the self. It is possible that older adults may obtain health and longevity benefits from engaging in meaningful relationships and activities because self-perceptions of social usefulness are internalized, becoming part of one’s identity. However, the relationship among social engagement, self-perceptions, and health outcomes is as yet unknown. Before any exploration into the processes by which meaningful relationships are potentially protective, it is necessary to first explore the influence of prolonged helping on the self.

Social usefulness is one construct that appears to have relevance to the self. However, to date, there has been no investigation of the self-perceptions that may arise from socially useful activities and relationships among older adults or the dimensions of this construct. Therefore, the purposes of the current studies are to further understand and develop the construct of social usefulness, and to craft a psychometrically sound measure of the construct.
The Measurement of Social Usefulness

A number of studies underscore the need to develop and validate a more differentiated and psychometrically acceptable measure of social usefulness (Gruenewald et al., 2007, 2009; Okamoto & Tanaka, 2004; Ranzijn, Keeves, Luszcz, & Feather, 1998; Stevens, 1993). As previously mentioned, many of these studies have assessed social usefulness with one or two items, which is unlikely to capture the complexity of this construct. For example, past items have included, “I am a useful person to have around” (Ranzijn et al., 1998, p. 97), “In the past six months, how often have you felt needed and productive?” (Stevens, 1993, p. 322), and “How often have you felt useful to family and friends?” (Gruenewald et al., 2007, p. 30). As revealed later, these items do not recognize the construct’s complexity nor its meaning and potential significance for older adults. Moreover, these items do not capture the possible dimensions of social usefulness or the bases on which seniors judge themselves to be socially useful. In addition, these items only capture usefulness to family and friends, without considering usefulness to volunteer organizations, groups, or the community (Gruenewald et al., 2007). Last, although some researchers argue that single item measures are appropriate in some circumstances (Robins, Hendin, & Trzesniewski, 2001), for a complex, possibly multidimensional construct such as social usefulness, a multi-item, more differentiated measure is required.

Gruenewald et al. (2007) reported that, although their item had face validity, the “measure [did] not provide any detailed information on the social targets or criteria upon which individuals judge their level of usefulness, which may limit our understanding of links between perceptions of usefulness and health outcomes” (p. 35). This statement applies to existing studies of social usefulness, all of which used one or two items to
measure this construct. These one or two item measures fail to capture the diverse experiences that may give rise to a sense of social usefulness and fail to capture its multidimensionality. As a whole, the measures applied in these studies lack consistent construct validity because of the varying ways that usefulness is conceptualized (e.g., perceptions of being needed or valued, being productive, generally feeling useful). Further refinement of the construct and its potential dimensions is most productively accomplished by employing in-depth, qualitative interviews focused on older adults’ involvement in socially useful activities. This inductive approach is well suited to capturing self-perceptions of social usefulness, the criteria for judging social usefulness, and other dimensions that are discovered.

The limitations of past research on social usefulness and the measurement weaknesses call for studies that provide a more in-depth examination of the construct. Before exploring the processes by which meaningful relationships and roles are protective, it is necessary to first determine whether older adults adopt self-perceptions of social usefulness. Moreover, because research on social support has already documented the myriad forms and expressions of informal helping, study one does not examine socially useful behaviours per se, but rather explores the meaning and significance of these activities for the self (i.e., social usefulness). Hence, the purpose of study one is construct clarification and exploration of the dimensions of social usefulness relevant to the self, including self-perceptions, rewards, and beliefs and attitudes.

**Study One Overview**

**The Meaning and Dimensions of Social Usefulness.** As discussed previously, the measurement of social usefulness has differed across studies and these studies do not
clearly define the parameters of the construct. Stevens (1993) defined sense of usefulness as feeling “needed and productive” (p. 322) whereas Gruenewald and colleagues (2007, 2009) and Okamoto and Tanaka (2004) left the definition of “usefulness” up to the participant. In these studies, there was no clear definition of social usefulness. Consequently, it is crucial for the current research to have a clear definition of the construct, which could be modified, if needed, based on the findings from study one. Therefore, after reviewing past literature on social usefulness, social usefulness was defined, in study one as, *the perception that one is needed and valued by one or more associates or organizations due to the provisions one supplies to them.*

Study one examines the features of social usefulness that may prove important for conceptualizing the construct. Furthermore, the study may reveal other underlying dimensions that may need to be taken into account, such as beliefs about the personal costs and rewards of social usefulness and evaluations of its quality and sufficiency. For example, internalization of a socially useful identity may hinge on judgments of how irreplaceable or uniquely qualified one is as a helper in a given relationship. Study one explores the potential dimensions of social usefulness relevant to the self. Based on its findings, a pool of items will be created, rated by a sample of older adults, and subjected to empirical analysis and preliminary validation.

**Research Questions.** Current research is lacking a comprehensive and unified definition of a concept that may play an important role in maintaining health and well-being for older adults. In light of the limited understanding of the construct of social usefulness and lack of empirical refinement, the main purpose of study one is to clarify the construct and its facets in order to develop a more nuanced measure of social
usefulness. By beginning with a qualitative, exploratory study that is grounded in the experiences and perceptions of older adults, I use a discovery-oriented approach to map the concept of social usefulness. Research questions focus on what is currently unknown or unclear in the literature, including:

**Research Question 1:** What is the psychological significance of engaging in socially useful behaviours in terms of self-perceptions of and attitudes toward social usefulness?

**Research Question 2:** What are the dimensions of social usefulness for older adults?

Thematic analysis of the study one interviews will identify statements that reflect underlying facets or dimensions of the social usefulness construct. These statements will then be written as declarative items that, in study two, can be administered to a larger sample of older adults to empirically determine their dimensionality and assess their validity and reliability.

**Study Two Overview**

Study two is the first step in scale development and preliminary validation of the social usefulness measure. With the aim of developing and validating a new scale of social usefulness, I administered the pool of items developed in study one, along with validation measures, to 408 Canadian older adults.

To validate the measure of social usefulness, measures selected to demonstrate construct validity are required (Hinkin, 1998). A different but related concept of social usefulness is meaning in life which, similarly to social usefulness, has been linked to a survival advantage for older adults (Krause, 2009b). This construct should correlate
moderately with social usefulness because it makes conceptual sense to assume that people who report a strong sense of social usefulness should also have a sense of meaning in their lives. Furthermore, because the activities these older adults engage in often have a generative or altruistic component, those with a strong sense of social usefulness should score highly on a measure of generativity (which includes generative concern and generative self-concept) (McAdams & de St. Aubin, 1992). Another construct relevant to social usefulness is satisfaction with life. Stevens (1993) found that a sense of usefulness was positively correlated with satisfaction with life for older adults. Therefore, I hypothesize that meaning in life, generativity, and satisfaction with life should positively correlate with the newly developed measure of social usefulness.

In terms of dispositional characteristics that may correlate with social usefulness, Penner et al. (2004) described dispositional empathic concern as “fundamental” to most helping behaviours. Empathic concern is defined as, “the tendency to experience concerned, sympathetic, or compassionate reactive outcomes in response to the needs of others” (Wilhelm & Bekkers, 2010, p. 16). In two large studies of volunteers and non-volunteers, Musick and Wilson (2008) and Penner (2002) both found that empathy was higher for volunteers compared to non-volunteers. Therefore, it makes sense that those individuals high on social usefulness would also report high empathic concern. Moreover, individuals who demonstrate high empathic concern and social usefulness should also have strong positive relations with others. Someone with positive relations with others “has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships” (Ryff, 1989, p. 1072). Older adults with a strong
sense of social usefulness should have strong positive relations with others and have high empathic concern because it is related to the maintenance of close, satisfying relationships. Therefore, I propose that the measure of social usefulness should correlate positively with the measures of empathic concern and positive relations with others.

Another dispositional characteristic that may demonstrate a relationship to social usefulness is self-esteem. Ranzijn et al. (1998) posit that usefulness is a component of self-esteem. Ranzijn et al. (1998) found that, along with self-regard, usefulness was one factor within the larger factor of general self-esteem. Because these authors recognized the need for further study of the relationship between self-esteem and usefulness in older adults, and because self-esteem may be enhanced by feelings of social usefulness, I propose that the measure of social usefulness will have a low to moderate correlation with a measure of self-esteem.

Opposite to the empathy and relationship dispositions mentioned above, avoidant attachment is described as, “the degree to which individuals limit intimacy and maintain psychological and emotional independence from significant others” (Simpson, Rholes, Campbell, Tran & Wilson, 2003, p. 1173). Individuals who score high on this variable tend to be wary of and have difficulty in close social relationships (Simpson et al., 2003). Because of the inherent social nature of the social usefulness construct, the avoidant attachment measure should negatively correlate with the newly developed measure.

Last, because measures with an altruistic or helping focus may be prone to socially desirable responding, it is necessary to show that the measure does not correlate strongly with a measure of social desirability. Therefore, I hypothesize that the social usefulness measures should not correlate strongly with a measure of social desirability.
Study Two Hypotheses

1. The measure of social usefulness is expected to show a moderate positive correlation with meaning in life, generativity, satisfaction with life, empathic concern, positive relations with others, and self-esteem.

2. The measure of social usefulness is expected to show a moderate negative correlation with avoidant attachment.

3. The measure of social usefulness is not expected to correlate strongly (i.e., weak or insignificant correlation) with social desirability.
Manuscript 1: Clarification of the Construct of Social Usefulness

Enhancing quality of life for seniors is a key goal of gerontologists. With adults living longer and with the baby boomer generation reaching retirement age, it is imperative that researchers and practitioners understand the psychosocial resources that are associated with health maintenance and longevity. One potential avenue to healthy aging is for older adults to engage in socially meaningful relationships and activities such as volunteering and informal helping (Gottlieb & Gillespie, 2008; Gillespie, Gottlieb, & Maitland, 2011; Greenfield & Marks, 2004; Hinterlong, Morrow-Howell, & Rozario, 2007). Research shows that, for older adults, volunteer work is associated with less depressive symptomatology, more positive affect, better self-rated health, more positive life satisfaction and well-being, and lower mortality rates, as compared to non-volunteers (Adelmann, 1994; Luoh & Herzog, 2002; Morrow-Howell et al., 2003; Musick & Wilson, 2003; Tang, 2009; Van Willigen, 2000; Windsor et al., 2008). Furthermore, Brown and colleagues have shown that providing informal support in the form of caregiving to friends or family is associated with health-protective effects with respect to depressive symptomatology and mortality (Brown, Brown, House, & Smith, 2008; Brown, Nesse, Vinokur, & Smith, 2003).

Underlying these varied forms of helping is a construct that is beginning to gain empirical attention in gerontological research (e.g., Gruenewald, Karlamangla, Greendale, Singer, & Seeman, 2007, 2009). According to the latter authors, the construct of social usefulness has been overlooked and under-researched: “…there has been surprisingly little research on the role of feelings of value and usefulness to others within more proximal social networks (e.g., family and friends) in older adults” (p. 28). In spite
of the limited amount of past research, the strongest mandate for further research on social usefulness is predicated on its correlation with longevity benefits (Gruenewald et al., 2007, 2009). Even after controlling for demographics, engagement in healthy behaviours (e.g., exercising), number of social relationships, depressive mood, and self-efficacy, Gruenewald et al. (2007) reported that the likelihood of experiencing increased disability or dying over a 7-year period was significantly greater for seniors who rarely or never felt useful, as compared to seniors who frequently felt useful. In a follow-up 2 years later, individuals whose reported usefulness declined over 3 years were more likely to die compared to those adults who felt consistently useful (Gruenewald et al., 2009).

Moreover, these studies revealed that individuals who felt more socially useful were healthier and more socially active than individuals who felt less socially useful. These findings are supported by other empirical research linking increased disability with lower reported usefulness (Grand, Grosclaude, Bocquet, Pous, & Albarede, 1988) and higher perceptions of usefulness to life satisfaction and reduced mortality rates (Levy, Slade, Kunkel, & Kasl, 2002; Pitkala, Laakkonen, Strandberg, & Tilvis, 2004; Stevens, 1993). Although these studies provide evidence for an association between social usefulness and longevity, caution must be taken because these are cohort studies, which preclude conclusions about causality.

Although past research calls attention to the potential epidemiological importance of the construct, the definition and measurement of social usefulness have differed across studies and few studies have ever clearly defined the parameters of the construct. Studies of social usefulness have adopted single-item or global measures of the construct that do not do justice to its complexity or its importance. Stevens (1993) defined sense of
usefulness as feeling “needed and productive” (p. 322) and Gruenewald and colleagues (2007, 2009) and Okamoto and Tanaka (2004) assessed the frequency of “feeling useful,” which left the definition of “usefulness” up to the participant. Heidrich and Ryff (1993) argued that social engagement enhances perceptions that one has meaningful roles (i.e., that one is needed and valued). Without consensus about the meaning and measurement of social usefulness, its bearing on matters of health and longevity cannot be investigated. To date, no qualitative research has explored the construct or dimensions of social usefulness. Based on these limitations, a qualitative exploration of social usefulness is necessary to examine the contexts (i.e., social relationships and activities) in which older adults may report perceived social usefulness. Specifically, the current study addresses perceptions of social usefulness in both relationships with social network members and in volunteer roles for older adults. A qualitative examination will help identify the dimensions that encompass the construct. Krause (2002) recommends the use of qualitative research methods as a first step in exploring domains specific to older adults. Krause (2002) notes:

By allowing people to talk freely without imposing a researchers’ prior assumptions on the study, qualitative methods provide an excellent opportunity for getting direct access to a substantive domain…thereby making it possible to identify key dimensions of a phenomenon that have not appeared previously in the literature. (p. 264)

Self-perceptions of social usefulness may develop from engaging in socially useful behaviours (Bem, 1972). However, the focus of the current research is not the specific behaviours per se, but rather the self-perceptions that may arise from these behaviours
and other attitudes that may accompany such behaviours. Researchers examining the effect of behaviours on self-concept argue that:

when individuals engage in new behaviours repeatedly, their behaviour not only provides a clue to others as to who and what they are, but it is also a source of information to the self about who and what the self is, ultimately altering how individuals think of themselves. (Cast, 2003, p. 43)

Bandura discussed a similar mechanism for self-efficacy whereby “efficacious behaviour produces a feeling of efficaciousness in the individual (self-efficacy)” (Cast, 2003, p. 45). Similarly, it is possible that repeatedly engaging in socially meaningful behaviours will lead individuals to internalize a socially useful identity or self-concept (term interchangeable with identity; Bosson & Swann, 2009). To understand this process better it is necessary to explore the psychological significance of social usefulness for older adults.

In sum, the current study aims to clarify the construct of social usefulness, using the following definition. Social usefulness is defined in the current study as the perception that one is needed and valued by one or more associates or organizations due to the provisions one supplies to them. The relationship between social usefulness and behaviour is most likely bidirectional; socially useful self-perceptions influence socially useful behaviours, and socially useful behaviours influence perceptions of the self as socially useful.

In light of the limited understanding of social usefulness, the main purpose of the current study is to explore the construct with the goal of determining its features in an inductive manner. Specifically, the research questions addressed in study one are:
1. What is the psychological significance of engaging in socially useful behaviours in terms of self-perceptions of social usefulness for older adults?

2. What are the facets or dimensions of social usefulness for older adults?

By employing a qualitative, exploratory method that is grounded in the experiences and perceptions of older adults, a discovery-oriented approach promises to map the concept of social usefulness, as the basis for developing a future measure of the construct.

**Method**

**Participants and Eligibility Criteria**

I conducted private, face-to-face, semi-structured interviews in the residences of 20 older adults who were recruited through community contacts and a seniors housing service. Patton (1987) recommends purposeful sampling to obtain an “information-rich sample.” Specifically, I selected participants who differed in the extent of their social and community engagement. The sample included older adults who were involved in a wide arena of prosocial engagement to older adults who were not formally volunteering and who had a small social network, but were not socially isolated. The older adults selected for participation in the interview ranged in age from 54 to 90 years of age \((M = 70, SD = 8.40)\), were Canadian, and spoke and understood English. Older adults were excluded from participation if they had a cognitive impairment. There were 14 female participants and 6 male participants and all were Caucasian; 17 were retired, 1 was working full-time, and 2 were working part-time.

**Development of Interview Schedule and Procedure**

I developed the interview schedule through an iterative process of working and reworking the questions, based on continuing theoretical discussions with my Advisor.
and examination of past research. Slight modifications were made to the interview schedule during data collection to help improve question clarity (see Appendix A for interview schedule). With approval from the Research Ethics Board at the University of Guelph, I recruited participants through my supervisor’s community contacts and used a snowball sampling method, where participants themselves recommended other older adults (Patton, 1987). With the help of a seniors housing service, I recruited participants who were less engaged in the community (see Appendix B for recruitment phone call transcript).

I began the interviews by soliciting written consent, including consent to audio record the interview (see Appendix C for study one consent form). At the start of the interview, I asked each participant to think of anyone who “you are really there for” or anyone who “needs you or really values you being in their lives.” Participants supplied the individual’s initials, gender, approximate age, and the relationship type and length. Based on time considerations, participants discussed up to a maximum of five people. For each individual the participant mentioned, I asked them to discuss, 1) how and why they perceived themselves to be socially useful toward the individual mentioned, 2) the criteria for judging their social usefulness to others, 3) whether being there for others affected the way they saw themselves, 4) whether they perceived any benefits from being useful or placed any importance on being needed and valued, and 5) any perceived drawbacks of being strongly needed. In the second section, participants discussed their involvement in up to five organizations, clubs, or groups in which they believe they are “strongly needed or counted on.” Participants were asked similar questions regarding
their perceived social usefulness, but specific to community engagement (e.g., volunteering, social groups).

The interview length ranged from 60 to 90 minutes, and took place in the participant’s home. The interviewees received a $15 gift card from a coffee shop for participation. I audio recorded each interview and transcribed the interviews myself, with the help of two undergraduate volunteer research assistants.

Data Management and Analysis

Verbatim transcriptions of the audio recordings were imported into the qualitative analysis software, ATLAS.ti Version 6.0 (ATLAS.ti Scientific Software Development GmbH, Berlin, Germany) to help organize and manage the data. ATLAS.ti allows users to upload and organize transcripts, code data, and organize codes into themes. To analyze the data, I closely followed the methodology recommended by Braun and Clarke for thematic analysis of qualitative data. Generally, the researchers describe thematic analysis as, “a method for identifying, analyzing, and reporting patterns (themes) within the data. It minimally organizes and describes your data set in (rich) detail” (Braun & Clarke, 2006, p. 79). Based on this methodology, a theme is described as, “something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set” (p. 82). A code is defined as, “a feature of the data…that appears interesting to the analyst, and refers to ‘the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon’ (Boyatzis, 1998, p. 63)” (Braun & Clarke, 2006, p. 88). A data extract is defined as a coded piece of data.
Because of the exploratory nature of the study, the goal of the thematic analysis was to identify the themes of social usefulness throughout the entire data set using an inductive approach whereby the themes are grounded in the experiences and perceptions of older adults. I also adopted a semantic approach, meaning the experiences and perceptions of the participants are not interpreted for their latent meaning, but rather are taken at face value, and organized into a broader classification scheme (Braun & Clarke, 2006).

The steps of the recommended methodology (see Braun & Clarke, 2006, for a comprehensive description of the methodological phases) involve reading the transcripts numerous times to become familiar with the content. At this point, I identified ideas about possible codes (both expected codes based on previous research and unexpected codes). I then coded each transcript systematically by reading each individual transcript and assigning codes (e.g., sense of feeling appreciated/valued, general sense of being needed) to each data extract that appeared to concern social usefulness including behaviours, self-perceptions, values, and beliefs. I assigned the same code to each instance of a similar data extract. After coding each transcript, I reviewed the coding numerous times, refining codes and combining codes, until I had succinct and comprehensive coding. After recruiting a second student reader who was supplied with a selection of three transcripts and the list of codes, I compared my coding to the student’s coding to check for inconsistencies (e.g., different coding of the same data extract) and similarities (e.g., the same coding of data extracts) in my coding to improve reliability. I made the final decisions regarding coding, using my extensive knowledge of the data gained from conducting the interviews and transcribing and analyzing them. This phase is
not included in Braun and Clarke’s methodology, but was included as a check of consistency in the coding.

I classified the codes into potential themes using the code manager system within ATLAS.ti. Using this system, I was able to review coded extracts and move codes into various themes, until coherent themes became evident. Finally, I named and defined the themes in terms of social usefulness.

**Results**

**Overview of Themes**

After completing the thematic analysis of the data, I identified five underlying themes associated with perceptions of social usefulness. These five themes illustrated that social usefulness is associated with: (a) values and beliefs about social usefulness, (b) the personal need and motivation to be socially useful, (c) the amount of perceived personal social usefulness, (d) the perceived quality of personal social usefulness, and (e) the personal outcomes of social usefulness (see Table 1 for themes, definitions, and example quotes).

<table>
<thead>
<tr>
<th>Theme</th>
<th>Definition</th>
<th>Example Quotes</th>
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| 1. Value and beliefs about social usefulness | Beliefs about the value and meritoriousness of social usefulness. | • “I see it as that opportunity where I can find meaning to my existence as a retired person. I don’t want to sit around, I had enough television last week of the Olympics to last me a year. I want to die active.”

• “I think being needed and useful is the main reason for being alive and what’s the word I’m trying to think of now, whole,
2. Personal need and motivation to be socially useful

The strength of the need or desire to be socially useful.

- “It’s certainly not a conscious thing. It must be an inner drive of some sort, like a teacher, again.”
- “I think that would be my greatest motivation, just to help people who can use it.”
- “But I’d say that’s been tough to say ‘no’ [to volunteering] because just for much of my life I’ve said ‘yes.’”
- “Well I believe that one of the purposes of life is to find meaning in life and the relationships that I have had with other people have given me meaning and a sense of purpose and joy.”

3. Amount of perceived social usefulness

The perceived amount that one believes they are able to be socially useful.

- “I think you reach a point where you really hope your kids are on their own, and sometimes it is just like endless giving, and it feels like there is no end in sight. Admittedly, I often feel taken for granted and it’s pretty much a one-way street.”
- “No I should do more, I sometimes don’t have time to be a good friend. I could likely do more.”
- “Well I don’t think there is anyone who needs me in a big way anymore…”

4. Perceived quality of social usefulness

The perceived calibre or grade of personal social usefulness.

- “She’s had some long standing health issues for the past 10 years of various severity and I think I’m the only person that she tells details and counts on to be there to do thing with.”
- “I feel I’m important in this person’s life.”
- “Well, first is kind of, I don’t deserve this, you know, like a humbleness kind of. But in contrast to that is yes I do have gifts and experiences that other people haven’t had and that I put them together in ways that other people have not put them together”
and I think I need to be available to those who could use those.”

- “I may be quite wrong but I think I’m somehow am filling a niche as a daughter. Their daughter doesn’t have the same relationship.”

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<th>5. Personal outcomes of social usefulness</th>
<th>The personal benefits and costs of social usefulness.</th>
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<td>“I think it keeps me young, I believe that age is a matter of perception it’s what you think you are, not what you are.”</td>
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<td>“I have come to the conclusion that there are many lonely people in this world and so you reach out to them, you share your humanity with them. And I would be lonely too if I didn’t do it.”</td>
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<td>“Well I think just feeling good about yourself and the interaction.”</td>
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<td>“Well I think because I derive a fair amount of my own self-value and then all of a sudden, let’s say, things changed where I wasn’t able to do the things that I do, or L [my wife] became interested and excelled in the things that I did and more or less took them over, then it would diminish my own sense of esteem or feeling valuable, it would diminish that.”</td>
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<td></td>
<td>“Well I always come away feeling better, you know, like that I’ve in some ways been there for him if he needed me, you know, that kind of thing. And like, you know I mean it happens in a lot of different ways.”</td>
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<td>“Well, when you look at helping others, it’s not possible really to help someone else without helping yourself. Or if you say, ‘look, I want to do something and make sure nothing comes back to me’, won't happen. The only way it will happen is if you don't do anything, and then it will happen, it won't come back to you.”</td>
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“It’s probably because of the relationship [with my wife] that makes me feel good, and worthwhile that I spend time giving back to other people.”

“It’s a purpose, I gain purpose for living, keeping oneself going and not becoming depressed and a hermit.”

Values and Beliefs about Social Usefulness

The first dimension of social usefulness focuses on values and beliefs about social usefulness. This theme is defined as beliefs about the perceived value and meritoriousness of social usefulness. Being socially useful (i.e., needed and valued) in older life was nominated by many participants, especially the most socially engaged, as an important value or belief they held. Participant 10 (male, age 77) stated, “I think being needed and useful is the main reason for being alive and what’s the word I’m trying to think of now, whole, purpose, you get the idea.” Participants also noted the importance placed on being useful in older age. Participant 6 (female, age 74) explained, “I like being thought of as being useful or someone who has the knowledge and that fills a role for me.” Several participants made similar statements acknowledging the importance of being useful to others in older age. As illustrated, the older adults in the current study who were socially engaged valued being useful to others.

Participants not only discussed the inherent value of being useful, but also the satisfaction gained from helping others. Participant 14 (male, age 69) explained:

“Yeah, I don’t think I would be content just doing the golfing and biking and things that are pleasurable, but aren’t really that satisfying. You feel good about yourself, and there’s just so many things [referring to various causes and volunteer organizations] out there that need help.”
Furthermore, participant 19 (female, age 54) noted, “So it makes me feel good that we’re helping people who really need help; it makes me feel really good. Because, like I said, it’s so good to help people.” This statement not only refers to the positive affect associated with the process of being useful, but also expresses what most of the participants believed, namely, that helping others is inherently valuable.

Support for the contribution of social usefulness to the adoption of a prosocial identity comes from statements about the value of being useful to others and the internalization of these beliefs. For some older adults, beliefs about being socially useful became internalized, as participant 4 (female, age 70) explained:

Well, health and sustainability in a community is really important to me and both those issues are very much a part of both those groups so if I didn’t have them there’s no doubt I would be involved in another group somewhere trying to further those issues for sure as long as I can.

Moreover, as participant 4 also explained, “These issues well, they are part of who I am and what my community values are.” This quote demonstrates the finding that participants, who were the most socially engaged, may have internalized beliefs about being socially useful. A number of participants explained that being there for others was “part of who they were.” Participant 4 (female, age 70) observed:

I’m not a religious person at all but I would say my belief is in doing good, just making, ya I suppose it’s being a do-gooder. Some people make fun of that but for sure I think it’s just, I don’t know, it’s maybe a gene I’m born with because I have about three sisters and they’re all the same.

Furthermore, participants stated that they believed their social usefulness gave them a personal sense of purpose and meaning in life, along with an outlet for active living. As participant 11 (male, age 81) explained:
I see it [being socially useful] as that opportunity where I can find meaning to my existence as a retired person. I don’t want to sit around, I had enough television last week of the Olympics to last me a year. I want to die active.

Another female participant noted that being there for others was a key value for her, “It’s a core value [helping others]. I just have to go back to that, you have to know what is at the centre of your purpose in life.” Similarly, participant 20 (male, age 58) discussed his belief that being there for others was a direct contributor to his sense of self-worth:

Well, I think a lot of times I get my sense of worth by how valuable am I to other people, and/or what can I contribute. If myself I have nothing to offer, then I would possibly internalize it and come to a conclusion that I’m less valuable than I otherwise would be.

This theme encompasses not only beliefs and values about social usefulness, but also may include the internalization of usefulness.

**Personal Need and Motivation to be Socially Useful**

The second theme I identified is the *personal need/motivation to be socially useful*, which requires no further definition. Based on the analysis, it is apparent that older adults differ in the extent of their motivation to be socially useful to others. Some participants had a strong motivation to be there for specific people or groups, as participant 15 (male, age 70) described, “I think that would be my greatest motivation, just to help people who can use it.” Participant 16 (female, age 59) described herself as someone who has a strong motivation to be there for others by seeking out individuals she believes would benefit from support, as she explained, “Well, it’s just that I’ve always had some older person that I’ve kind of ‘adopted’ and it’s just generosity. I always adopt someone who’s not looking.” Some participants involved with volunteer organizations expressed a strong desire and commitment to be there for an organization. For example, participant 12 (female, age 74) explained:
If I’m going to volunteer for something, then I volunteer. If I don’t think that I want to do it, then I don’t do it. You know it’s very difficult if you get into volunteer work because everyone wants to do it, but they don’t want the responsibility. It’s strange you know, they’re all, ‘well I’ll help.’ But sometimes it’s not the help you need, you just need someone to take the reins and go ahead and do it. Some people can’t do that and other people can.

A few participants reported that their social usefulness was motivated by a sense that being there for the other person was part of the relationship. For example, participant 17 (female, age 65) explained regarding her husband:

He has said to me a couple of times, thank you for doing this or thank you for doing that and I sort of think, oh, well, why wouldn’t I, you know, it’s just that’s what I am there for. It’s a case of, it’s not a job, but it’s just part of the relationship; you’re there for the other person when they need you.

Other participants described less motivation to be there for certain individuals; the motivation depended on the type of relationship between the individuals. Participant 10 (male, age 77) discussed a fellow volunteer who he helped perform his volunteer role and stated that, “In this particular case, it’s not a strong feeling [motivation to be there for him]. I mean I don’t feel as strong of a commitment to him as I do to family.” In this case, the motivation to be there was lower because of the type of relationship.

Some older adults also maintained that the need or motivation to be there for others changes based on life circumstances, especially as one ages. For example, participant 15 (male, age 70) who was trying to step back from volunteering roles to spend more time with his wife stated, “But I’d say that’s been tough to say ‘no’ [to volunteering] because just for much of my life I’ve said ‘yes.’” However, this participant felt the need to change his level of being there for outside groups, so that he could focus on being there for his wife. Overall, this theme demonstrates the different levels of motivation to be useful to others.
Amount of Social Usefulness

The third dimension of the construct of social usefulness concerns the *amount of perceived personal social usefulness to others*. This dimension does not reflect the number of social relationships and activities one engages in, rather it reflects the idea that participants weighed the extent of their involvement in being socially useful to others, with some participants believing that they were doing the right amount for others, and other participants stating that they could be doing more in certain relationships. For example, participant 6 (female, age 74) felt that she was not providing enough support to her close friend, “No I should do more, I sometimes don’t have time to be a good friend. I could likely do more.” This under-investment was described by participants who had numerous obligations, but felt that they should be doing more to be there for others. In contrast, some participants explained that certain relationships and volunteer roles required too much of them. For example, participant 16 (female, age 59) discussed her adult daughter, who she believed needed her too much, “I think you reach a point where you really hope your kids are on their own, and sometimes it is just like endless giving, and it feels like there is no end in sight.” Similarly, participant 9 (female, age 71) discussed the dilemma of being too needed by a volunteer group (group plans events for a retirement community) she feels obliged to help:

> We just you know get to the point and say we just can't have a meeting this time and you know but yeah so that's a situation where you kind of feel you're trapped in a corner because you're needed and at the same time I hate to see it disintegrate.

A number of participants who were strongly invested in an organization touched on this idea of over-investment when they talked about the dilemma of being strongly needed but there being no one to take their place.
Only two participants stated that no one needed them. Participant 2 (female, age 66) stated, “Well I don’t think there’s anybody in my life that needs me in a big way anymore.” This quotation demonstrates that opportunities to be socially useful change over time and the life course, with some participants reporting more avenues for social usefulness than others. Sometimes the extent of investment depends on the life course opportunities one is afforded. For example, participant 12 (female, age 74) acknowledged that she had a “good life” and had been, “given the opportunity to be able to do these things.” As she explained, “I honestly do think that your life sort of unfolds in front of you and you take the advantages and you come to a fork and you go one way or you go another way and that’s what determines how you are.” Therefore, the extent of social usefulness may not depend simply on the motivation to be there for others, it also depends on the life course opportunities experienced by these older adults. Some individuals have more opportunities to be socially useful than others.

It was also noted that the extent to which one is useful and types of social usefulness may change over time depending on the relationship. As participant 12 (female, age 74) mentioned regarding her children:

It would be very gratifying if your kids were there for you when you needed them. I mean, it’s a two way street. There’s going to come a day when I’m going to need her more than she’s going to need me and I think the fact that over the years I have been there for her and I don’t think there would be any question, I know there wouldn’t be any question in any one of the three of them.

This example not only demonstrates the changing nature of social usefulness, but also demonstrates the reciprocity and equity associated with socially useful interactions. Consistent with the previous quotation, other participants mentioned a similar expectation
that being socially useful to others may be reciprocated in the future, as participant 12 (female, age 74) described:

Well it’s, it’s important and it’s a feeling that somehow or another maybe you have instilled this within them [her children] so that they’re going to look after you. But I mean you don’t do it because you want them back at you, I don’t mean that. That was an attitude of the nineteenth century, love your kids because that way when you’re old they’ll look after you, I don’t feel that. But I think it’s important and I don’t think, I know that all three of them would be there.

Even though there is an expectation of future reciprocity, sometimes there is not equity in such relationships, as explained by participant 14 (male, age 69) whose wife required a great deal of support, “You know, as I say, she supported me first and then I took over and then she didn’t take her turn back.” Similarly, participant 16 (female, age 59) explained:

Almost in every respect I feel great about it [being socially useful to her husband]. The only thing is I think, ‘when is my time?’ When do I get my turn to be weak, because in most of my relationships people see me as strong, but there are days when I would just love somebody to look after me, you know, that would be the only negative. I’ve never really had a moment to be weak.

The inequity of some socially useful relationships may cause some strain on the individual providing the support, nevertheless the individuals were still strongly committed to being there for the other person.

Some participants reported perceiving that they had control over the amount they invested in being socially useful. Participant 16 (female, age 59) voiced the idea that she had control over her involvement in volunteering, choosing when to intensify and when to cut down:

Well you get to a point sometimes where you say ‘you’ve done your time,’ and you step back so someone else can take over, and that’s part of the learning curve too. As long as you’re willing to do it, people are usually willing to let you, so sometimes you pull back because it’s somebody else’s turn. I’ve been there done it,
and maybe after a while some of it’s not new, so you have to sort of move on to another level of involvement.

This theme demonstrates the nature of older adults’ social relationships, which differ in terms of the extent of perceived social usefulness depending on the qualities of the relationship and life course opportunities. The extent of social usefulness, which includes over-, and under- investment, also depends on the type of relationship and level of the recipient’s need, which may be inequitable or change over time. When older adults are strongly needed there is an expectation of future reciprocity, which at times may not be met. However, even when participants believed their usefulness would not be reciprocated in the future, the older adults maintain their level of support, demonstrating the dedication and obligation to be there for others in these close relationships. Overall, this theme illustrates participants’ awareness and regulation of their investment in social usefulness, along with considerations of equity and reciprocity in its expression.

**Perceived Quality of Social Usefulness**

The fourth dimension I identified is the *perceived quality of social usefulness*, which is defined as the perceived calibre and grade of personal social usefulness. Participants discussed such qualities of their social usefulness as being there for someone unconditionally and offering unique and irreplaceable resources to others. For example, participant 14 (male, age 69) discussed the uniqueness and irreplaceability of his usefulness to his wife:

She’s had some long standing health issues for the past ten years of various severity and I think I’m the only person that she tells details and counts on to be there to do things with…So I think she’d say the fact that she counts on me more than vice versa, you know, because she only has a couple other reasonably close friends in [city name removed] and doesn’t feel, you know, that attachment to [city name removed] and those friends.
Because of his wife’s health problems and his relationship with her, participant 14 believed he offered something that no one else could offer. Some participants were able to explain the unique qualities they offered. For example, participant 1 (male, age 72) was able to describe the unique quality of his own social usefulness to individuals he mentors:

Well, first is kind of, I don’t deserve this, you know, like a humbleness kind of. But in contrast to that is yes, I do have gifts and experiences that other people haven’t had and that I put them together in ways that other people have not put them together and I think I need to be available to those who could use those.

A number of participants were able to acknowledge that they assumed a unique role for the individual who needed them. For example, participant 13 (female, age 63) discussed the unique role she assumed for a close friend, “I may be quite wrong but I think I’m somehow filling a niche as a daughter. Their daughter doesn’t have the same relationship.”

On the other hand, it should be noted that some participants indicated that they did not assume a unique role or provide special resources; the help they offered could be done by anyone. Furthermore, a few participants indicated that they felt that their usefulness was replaceable. This idea was expressed in relation to volunteer roles; someone else could fill their shoes if they were unable to continue volunteering. However, this was not the case for more demanding roles with greater responsibilities (e.g., president of a volunteer organization); participants in such roles believed it would be difficult for the organization to find an individual to replace him or her. Therefore, it is important to note that the perceived quality of social usefulness differs based on each unique role or relationship. This theme demonstrates that many older adults are aware of and regulate the quality of their socially useful roles and relationships. The quality may
refer to the manner in which they demonstrate social usefulness or the personal qualities that make them socially useful in particular relationships.

**Personal Outcomes of Social Usefulness**

The fifth dimension, *personal outcomes of social usefulness*, is defined as the perceived benefits and costs of social usefulness. The main consensus among participants, especially highly involved older adults, was that helping others helps oneself. Participant 20 (male, age 58) stated:

> Well, when you look at helping others, it’s not possible really to help someone else without helping yourself. Or if you say, "look, I want to do something and make sure nothing comes back to me," won’t happen. The only way it will happen is if you don't do anything, and then it will happen, it won't come back to you.

Participants also believed that being useful to others contributed to their general mental and physical well-being. Participants acknowledged that helping others makes them feel good about themselves. For example, participant 1 (male, age 72) noted about a friend he mentored:

> Well I always come away feeling better, you know, like that I’ve in some ways been there for him if he needed me, you know, that kind of thing. And like, you know I mean it happens in a lot of different ways.

Participant 11 (male, age 81) believed that being useful to others contributed to less loneliness, “I have come to the conclusion that there are many lonely people in this world and so you reach out to them, you share your humanity with them. And I would be lonely too if I didn’t do it.” In terms of physical health, participant 10 (male, age 77) explained about his volunteering roles, “I think it keeps me young, I believe that age is a matter of perception it’s what you think you are, not what you are.” For some participants, such as participant 10, being there for others was a means to maintain vitality.
Participants were also able to explain the perceived psychological benefits of social usefulness to the self, specifically the idea that being socially useful contributes to feeling valued. As participant 20 (male, age 58) observed:

Well I think because I derive a fair amount of my own self-value and then all of a sudden, let’s say, things changed where I wasn’t able to do the things that I do, or L [wife] became interested and excelled in the things that I did and more or less took them over, then it would diminish my own sense of esteem or feeling valuable, it would diminish that.

Among participants, there was a strong sense that being socially useful contributes to a sense of personal value and worth. Many of the participants used the word “worthwhile” to explain how being useful to others makes them see themselves, as participant 14 (male, age 69) explained about his wife, “It’s probably because of the relationship [with my wife] that makes me feel good and worthwhile that I spend time giving back to other people.” Other participants believed that being useful to others gave purpose and meaning to their lives. Participant 10 (male, age 77) described how being useful to a friend affected the way he saw himself, “It’s a purpose, I gain purpose for living, keeping oneself going and not becoming depressed and a hermit.” This theme illustrates that many older adults believe that social usefulness contributes to positive personal outcomes, including a sense of value, self-worth, and purpose in life.

Although most participants described the perceived positive outcomes of social usefulness, a few participants described the perceived costs and burdens associated with being too needed. For example, as participant 10 (male, age 77) observed: “It takes a lot of time…but he [a friend] needs me, so I put myself out. It becomes a conflict between going out with him to support him and leaving M [his wife] at home…it’s a conflict between two needs.” When an individual is too needed, there may be conflicts between
who to be there for (e.g., family member or friend; family member or volunteer role). Moreover, sometimes these types of relationships and roles may deplete resources, as participant 10 described, “It takes me a lot of time, energy, dedication. It takes me away from other things that I could be doing.” Being too needed may also contribute to a sense of being taken for granted, as participant 16 (female, age 59) described about her daughter who required constant support, “Well the negative is the feeling that you are sort of utterly taken for granted, that there’s no end to how good you can be. I think she just kind of takes us for granted.” Because of the relationship (e.g., mother-daughter), there is an obligation to maintain the social usefulness even if there are negative outcomes, which could contribute to stress. However, the majority of relationships were deemed to contribute to a range of important positive personal outcomes.

**Discussion**

This qualitative study provides a newly clarified picture of the construct of social usefulness. Evidence from older adults’ experiences demonstrates that there are five possible dimensions relevant to the construct of social usefulness that can be considered for future measurement. Like several other psychosocial constructs (e.g., generativity, attachment), social usefulness is not a unitary construct but a:

…relational and multiply contextualized construct[s] that requires the scientist to operate simultaneously on a number of different levels and to take into consideration the particular relation or fit between the person and the environment…[and] links the person and the social world. (McAdams & de St. Aubin, 1992, p. 1004)
Social usefulness appears to be a complex and possibly multidimensional construct, comprised of beliefs and values about social usefulness, the need and motivation to be useful, and a largely rewarding set of personal outcomes, which are all interrelated. Furthermore, older adults make judgments about and modify the quality and quantity of their socially useful behaviours and show awareness of the personal qualities that make them more and less useful to others. Because of the social nature of social usefulness, its form and expression reflect the interplay between the person and environment. Equally important, the fact that each dimension is distinct suggests that this construct is more complex than previous conceptualizations (Gruenewald et al., 2007, 2009; Okamoto & Tanaka, 2004; Stevens, 1993).

**Socially Useful Beliefs, Values, and Motivations**

Based on the analysis, it is apparent that highly socially engaged older adults have strong beliefs and values about being there for others. The belief that one is needed and valued is a central theme that emerged from the interview protocols, and supports conceptualizations from previous research (Heidrich & Ryff, 1993; Stevens, 1998). Furthermore, older adults who were highly engaged in social and community activities and relationships describe a strong personal motivation to be useful, selectively placing a premium on the social goals inherent in these activities and relationships. This finding is supported by previous research with older adults on the role of social goals in motivations to volunteer and to provide support to family and friends (Gillespie, Gottlieb, & Maitland, 2011; Lang & Carstensen, 2002; Omoto, Snyder, & Martino, 2000).
Quality and Quantity of Social Relationships

The theme of *quality and quantity of social usefulness* suggests that a measure of social usefulness should include assessments of its quality and quantity. Gruenewald and colleagues (2007, 2009) and Okamoto and Tanaka (2004) assessed the frequency of “feeling useful” but did not specify the various types of social relationships that may contribute to feeling useful. Older adults in the current study were not only able to discuss the extent of their social usefulness and types of relationships in which they felt useful, but also the perceived quality of the help and support provided. Because the perceived quality of social usefulness (e.g., the unique role, special personal qualities, ways of demonstrating social usefulness) is a relevant component of the construct, it too is a candidate for potential measurement and future study.

Personal Outcomes of Socially Useful Behaviours

Consistent with previous quantitative studies, the overwhelming majority of older adults in the current study maintained that being useful to others contributed to their psychological well-being, purpose in life and satisfaction with life (Stevens, 1993), helped them to remain or become active and healthy (Grand et al., 1988; Gruenewald et al., 2007, 2009), and contributed to positive affect and self-worth (Windsor et al., 2008). The role that social usefulness plays in shaping perceptions of self-worth and life satisfaction was strongly evident in the data. Again, a future measure of social usefulness could assess the variety of personal outcomes described by participants, including implications for self-worth, meaning in life, and satisfaction with life.
Limitations and Next Steps

Among the current study’s limitations, perhaps the most consequential is the non-random selection of participants. Although the participants were recruited by snowball referrals and self-selected, they were chosen based on purposeful sampling for a range of levels of social participation and income. All participants were Caucasian older adults, which limits the generalizability of these findings. However, past research suggests that Black and Hispanic older adults may place even more value on being useful to their kith and kin compared to Caucasian older adults (Burr & Mutchler, 1999), hence this construct may have relevance to a more diverse range of older adults than those who participated in this study. The next step is to use these dimensions of social usefulness to develop a psychometrically sound measure.
Manuscript 2: Social Usefulness among Older Adults: Measure Development and Preliminary Validation

With the influx of baby boomers reaching older adulthood, one of the cornerstones of gerontological research is to understand the psychosocial predictors of healthy aging, especially predictors linked to longevity. One domain that shows promise in understanding why some older adults lead healthier and longer lives is engagement in socially meaningful relationships and activities, including volunteering, informal helping, and caregiving (Brown, Smith, Schulz, Kabeto, Ubel, Poulin et al., 2009; Gillespie, Gottlieb, & Maitland, 2011; Hinterlong, Morrow-Howell, & Rozario, 2007). Specifically, the provision of informal support and helping in these types of relationships and activities is associated with better physical and mental health and longevity (Brown et al., 2009; Hao, 2008).

It is possible that by engaging in these prosocial behaviours, socially useful self-perceptions will arise and contribute to self-concept, however more research is needed in this domain. In recent years, the construct of social usefulness has gained empirical support in gerontological research (Gruenewald et al., 2007, 2009; Okamoto & Tanaka, 2004). One limitation of past research is a failure to provide a clear operationalization of the construct. Therefore, based on a qualitative analysis of the topic from study one and review of past research, social usefulness is defined in the current study as, the perception of being needed and valued by one or more associates or organizations due to the provisions one supplies to them. Social usefulness is considered a set of perceptions towards the self, which includes beliefs and attitudes about social usefulness that potentially could contribute to a socially useful identity.
Past Research on Social Usefulness

Few studies have examined the association between psychological benefits and social usefulness. Stevens (1993) assessed characteristics that contribute to a sense of usefulness (such as family and community involvement), defined as feeling needed and productive, and found social usefulness predicted life satisfaction. However, a relatively small sample size of 108 participants limits the generalizability of these findings.

Heidrich and Ryff (1993) argued that social engagement enhances perceptions that one has meaningful roles (i.e., that one is needed and valued) and these meaningful roles are correlated with psychological well-being. The researchers found support for this argument; social integration (partly derived from roles considered both meaningful and valued) was positively associated with well-being and life satisfaction, and was negatively associated with psychological distress, as measured by depression and anxiety levels. Therefore, perceptions that one is of value and is needed by others (i.e., social usefulness) may contribute to psychological well-being and the adoption of a socially useful identity; however, research is needed to support this relationship.

Beyond its psychological benefits, the strongest mandate for further research on social usefulness is predicated on its potential association with longevity benefits (Gruenewald, Karlamangla, Greendale, Singer, & Seeman, 2007, 2009). Even after controlling for demographics, involvement in healthy activities (e.g., exercising), number of social relationships, depressive mood, and self-efficacy, Gruenewald et al. (2007) reported that the likelihood of experiencing disability or dying over seven years was significantly greater for seniors who rarely or never felt socially useful as compared to seniors who frequently felt useful. The former group also reported lower well-being and
were less likely to be involved in the community. At follow-up 2 years later, Gruenewald et al. (2009) found that older adults who felt consistently useful were healthier and more socially active than were those individuals who felt less socially useful (i.e., those who reported feeling “never” or “rarely” useful during the same collection period). These findings are supported by empirical research linking increased disability with lower reported usefulness (Grand, Grosclaude, Bocquet, Pous, & Albarede, 1988) and higher perceptions of usefulness to reduced mortality rates (Levy, Slade, Kunkel, & Kasl, 2002). Research linking social usefulness to positive health outcomes provides a compelling reason to explore the construct; however, because of the correlational nature of these studies and measurement limitations, which are discussed in the next section, more research is required.

**The Measurement of Social Usefulness**

The preceding studies underscore the need to develop and validate a more differentiated and psychometrically acceptable measure of social usefulness (Gruenewald et al., 2007, 2009; Okamoto & Tanaka, 2004, Ranzijn, Keeves, Luszcz, & Feather, 1998; Stevens, 1993). The existing measures are composed of only one or two items that assess social usefulness generally or the extent of social usefulness and therefore do not take account of the construct’s complexity or meaning. For example, past items have included, “I am a useful person to have around” (Ranzijn et al., 1998, p. 97) and “How often have you felt useful to family and friends?” (Gruenewald et al., 2007, p. 30). Gruenewald et al. (2007) acknowledged that, although their item had face validity, it did not capture the bases for judging social usefulness (e.g., usefulness because of one’s unique qualities) and only captured usefulness to family and friends, without considering volunteer
organizations, groups, or the community. Past measures have explored usefulness in a global fashion without capturing the potential facets of the construct (e.g., motivations to be socially useful). Although single item measures are appropriate in some circumstances (Robins et al., 2001), for a complex, possibly multidimensional construct, a multi-item measure is required. Based on the measurement limitations of social usefulness to date, and in light of the findings from study one, an exploratory study was conducted to empirically assess the dimensions and psychometric properties of the construct of social usefulness.

**First Phase of Research**

Prior to the current study, I conducted semi-structured interviews with older adults to explore the dimensions of the construct of social usefulness in study one. The findings from the qualitative study were used to develop items for a measure of social usefulness. Krause (2002) recommends the use of qualitative methods for item development because these methods “capture the words and phrases that older adults use when talking...these words and phrases provide excellent raw grist for writing closed-ended question stems” (p. 264). A thematic analysis illustrated different themes that were associated with the notion of social usefulness by participants that include: (a) values and beliefs about social usefulness, (b) the personal need and motivation to be socially useful, (c) the amount of perceived personal social usefulness, (d) the perceived quality of personal social usefulness, and (e) the personal outcomes of social usefulness. Using these findings, a pool of items was developed for each dimension (see method section for more details).
Current Study

The current study is the next step in scale development and preliminary validation of a social usefulness measure. To explore the factor structure of the social usefulness items, an exploratory factor analysis was conducted. To determine construct validity, validation measures were selected from research on social engagement (e.g., volunteerism) and social roles (e.g., altruistic helping) and include meaning in life, satisfaction with life, self-esteem, empathic concern, positive relations with others, and generativity. These measures are hypothesized to moderately and positively correlate with social usefulness, thereby demonstrating that social usefulness is a related, but distinct construct. Because of the inherent social nature of the social usefulness construct, a measure of avoidant attachment was selected to demonstrate a negative correlation. Last, because measures with an altruistic or helping focus may be prone to socially desirable responding, a measure of social desirability was included and is hypothesized to show a weak or insignificant correlation with social usefulness.

Method

Participants

Participants were recruited to complete an online survey distributed through email, listservs, and websites for older adults. Participants were required to live in Canada, speak and understand English, and have no major health problems or limitations that severely restricted their daily life. A final sample of 408 participants was included in the analyses after 5 cases were removed due to blank or multiple submissions and 12 cases were removed due to 9% or more missing data on the social usefulness items.
The mean age of participants for the current study was 68 years of age ($SD = 6.49$), with a wide range in age from 50 to 95. Approximately 97% of the sample was 60 years of age or older, with 10 participants aged 50-59 (2.5%), 131 aged 60-64 (32%), 216 aged 65-75 (53%), 43 aged 76-85 (10.5%), and 6 aged 86 and older (1.5%) (2 did not report). Of the sample, 62% were female and 37% were male (see Table 2 for demographics). The majority of participants were married or common-law (75.5%) and retired (74.5%). In terms of household composition, 21% were living alone, 76% were living with a spouse or common-law partner, 8% were living with children, and 6% were living with siblings, parents/in-laws, or others (e.g., tenants). On average, participants rated their health as 3.56 on a 5 point scale from poor to excellent ($SD = 0.82$).

Table 2

*Sample Demographics ($n = 408$)*

<table>
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<tr>
<th>Characteristics</th>
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<tbody>
<tr>
<td><strong>Educational Level</strong></td>
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<tr>
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<tr>
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</tr>
<tr>
<td>Completed graduate degree</td>
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</tr>
<tr>
<td>Did not report</td>
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</tr>
<tr>
<td><strong>Employment Status</strong></td>
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</tr>
<tr>
<td>Retired</td>
<td>74</td>
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</table>
Table 2

Sample Demographics \((n = 408)\)

<table>
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<th>Characteristics</th>
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<tbody>
<tr>
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<tr>
<td>Working Full-time</td>
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<tr>
<td>Unemployed or other</td>
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<tr>
<td>Did not report</td>
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Total Annual Household Income

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<th>Income Range</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>Between $20,000 - $39,999</td>
<td>15</td>
</tr>
<tr>
<td>Between $40,000 - $49,999</td>
<td>12</td>
</tr>
<tr>
<td>Between $50,000 - $69,999</td>
<td>22</td>
</tr>
<tr>
<td>Between $70,000-$99,999</td>
<td>20</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>16</td>
</tr>
<tr>
<td>Did not report or other</td>
<td>13</td>
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</table>

Marital Status

<table>
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<tr>
<th>Marital Status</th>
<th>%</th>
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<tbody>
<tr>
<td>Married/common-law</td>
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<tr>
<td>Widowed</td>
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<tr>
<td>Separated/Divorced</td>
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<tr>
<td>Never Married</td>
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<tr>
<td>Did not report</td>
<td>1</td>
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</table>
Approximately 66% of the sample had participated in volunteer work in the past month. These participants volunteered between 1 and 200 hours a month ($M = 14.66$ hours, $SD = 23.79$). Approximately 75% reported usefulness to family members or relatives by giving advice, practical help or emotional support. On average, participants perceived themselves to be useful to 2 people ($SD = 3.66$) and were spending 18.57 hours a month ($SD = 58.89$) in socially useful ways. Similarly, for friends, neighbours or acquaintances, 67% reported perceptions of being useful in at least one of these types of relationships over the past month. On average, they helped 3 people ($SD = 5.26$) and spent 7 hours doing this over the past month ($SD = 11.35$).

**Measures**

**Social Usefulness.** The 64 newly developed social usefulness items were included (see Appendix D for pool of social usefulness items). Respondents rated their agreement or disagreement with each statement on a 5-point scale (1 = strongly disagree, 5 = strongly agree), with higher scores representing greater social usefulness.

**Meaning in Life.** The Meaning in Life Scale (Krause, 2009b) is an 8-item scale that assesses meaning in life. It includes items such as “I feel like I am living fully” and “I have a system of values and beliefs that guide my daily activities” (see Appendix E for all validation measures). Respondents indicate on a 5-point scale (1 = strongly disagree, 5 = strongly agree) how much they agree or disagree with these statements, with higher scores representing greater meaning in life. Possible scores range from 8 to 40. In accordance with previous studies (Krause, 2009b), the current sample showed good internal consistency (Cronbach’s alpha = .86).
**Generativity.** The Loyola Generativity Scale (McAdams & de St. Aubin, 1992) includes 20-items to tap generative concern and self-concept. Items on the generativity scale include: “I feel as though I have made a difference to many people” and “Others would say that I have made unique contributions to society.” Response options are provided on a 4-point scale (0 = the statement never applies to you, 3 = the statement applies to you very often or nearly always). Six items on the scale are reverse scored. Higher scores represent a stronger sense of generativity (possible scores range from 0 to 80). The Cronbach’s alpha for the current study was good (α = .86), similar to previous studies (McAdams & de St. Aubin, 1992).

**Empathic Concern.** The Empathic Concern Scale (Wilhelm & Bekkers, 2010) measures “the tendency to experience concerned, sympathetic, or compassionate reactive outcomes in response to the needs of others” (p. 16). This measure consists of 7 items that assess the respondents’ empathic concern for others. Participants indicate on a 5-point scale how much the statements are true of them (1 = never true, 5 = almost always true). Example items include, “I often have tender, concerned feelings for people less fortunate than me” and “I would describe myself as a pretty soft-hearted person.” Three items on the scale are negatively worded, requiring reverse coding. Higher scores represent a stronger empathic concern. Wilhelm and Bekkers (2010) reported an acceptable Cronbach’s alpha value of .74 (α = .78 for current study).

**The Satisfaction with Life Scale.** The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) consists of five items that assess the respondents’ overall satisfaction with life. Participants indicate on a 5-point scale how much they agree or disagree with the statements (1 = strongly disagree, 5 = strongly agree), with higher
scores representing stronger life satisfaction. Example items include, “In most ways my life is close to my ideal” and “I am satisfied with life.” Diener et al. (1985) reported high test-retest reliability and a good Cronbach’s alpha of .87, similar to the alpha of the current study (α = .86).

**Positive Relations with Others Scale.** The Positive Relations with Others subscale of Ryff’s Psychological Well-being Scale (Ryff, 1989) consists of nine items that assess positive relationships with others. A respondent who scores highly on the positive relations scale generally has close and trusting relationships and is concerned for others’ well-being (Ryff, 1989). Participants indicate on a 5-point scale how much they agree or disagree with the statements from strongly disagree (1) to strongly agree (5) (e.g., “People would describe me as a giving person, willing to share my time with others”). Five items on the scale are negatively worded, requiring reverse coding. Higher scores represent stronger positive relations with others. Ryff (1989) reported high test-retest reliability and an excellent Cronbach’s alpha value of .91 for the subscale. The current study had a good Cronbach’s alpha of .83.

**Self-Esteem.** To assess self-esteem, I employed the Rosenberg Self-Esteem Scale (Rosenberg, 1979). The scale includes 10 items that tap self-esteem. Items on the scale include, “I feel I’m a person of worth” and “I take a positive attitude toward myself.” Respondents reported on a 5-point scale (1 = strongly disagree, 5 = strongly agree) how much they agreed or disagreed with these statements. Five items are reverse scored. Higher scores represent higher self-esteem. Ranzijn et al. (1998) reported an acceptable Cronbach’s alpha of .73. The current study had a good Cronbach’s alpha of .88.
**Avoidant Attachment Scale.** The Avoidant Attachment subscale of the Adult Attachment Questionnaire (Simpson, Rholes, & Phillips, 1996) consists of eight items that assess the respondents’ level of avoidant attachment. Participants indicate on a 5-point scale how much they agree or disagree with the statements (1 = strongly disagree, 5 = strongly agree). Example items include, “I’m not very comfortable having to depend on other people” and “I don’t like people getting too close to me.” Two items are reverse scored. Higher scores represent a stronger avoidant attachment style. Simpson, Rholes, Campbell, Tran, and Wilson (2003) reported a Cronbach’s alpha value of .79 for men and .82 for women. The Cronbach’s alpha for the current study was good at .82.

**Impression Management Scale.** To assess socially desirable responding, I employed the 20 item Impression Management Scale (Paulhus, 1994) which is one subscale, of two, included in the Balanced Inventory of Desirable Responding (Version 7). Items on the scale include, “I never cover up my mistakes” and “I never take things that don’t belong to me.” Respondents report on a 5-point scale (1 = strongly disagree, 5 = strongly agree) how much they agree or disagree with these statements. Ten items are reverse scored. Higher scores represent stronger social desirability. Stober, Dette, and Musch (2002) reported an acceptable Cronbach’s alpha of .73 and the current study had a slightly higher Cronbach’s alpha of .78.

**Demographics and Other Information**

Participants reported their gender, age, education level, employment status, household composition, total household income, and marital status. Participants also rated their overall health on a scale from poor (1) to excellent (5). Participants indicated whether, in the past month, they had volunteered or had provided unpaid help or gave
advice, practical help or emotional support to friends, family, or neighbours, along with the number of hours spent on these activities (see Appendix F for demographics).

**Procedure**

**Measure Development and Refinement.** The five social usefulness themes presented in study one were the basis for development of the social usefulness items in the current study. Item development was based on data extracts (i.e., quotes from participants) and theme definitions. For example, the data extract, “I think it [being there for others] enriches my life” was written as: “Being there for others enriches my life.” Items developed to capture the theme “personal need and motivation to be socially useful” included, “I have a desire to be there for others” and “I welcome opportunities to help others.” Item development was an iterative process of writing and reviewing items to ensure that each captured the main idea of an excerpt and the particular dimension of social usefulness. Items were reworded or removed based on this process until a comprehensive list of 140 items was generated.

As a means of preliminary item classification and reduction, a convenience sample of four undergraduate student judges and then four older adult judges who participated in study one were recruited. The judges were provided theme definitions and were asked to classify the randomized items into one or more of the themes, or into a miscellaneous category if the item did not conceptually fit any previously identified category. The judges were asked to take the items at face value when sorting, rather than trying to interpret the meaning of the items. Based on the sorting by both sets of judges, items with the same categorization by three of four judges were maintained. Any item that was sorted into different categories by three of four judges was removed. After reviewing the
seniors judges’ responses, it was apparent that the judges felt the negatively worded items were difficult to classify (i.e., most were categorized into the miscellaneous category). Consequently, a final review of items was conducted to remove the negatively worded items along with any redundant items\(^3\). The judging rounds left 98 items and the final measure included 64 items after the last review by the researchers (see Appendix G for a detailed description of measure development).

**Recruitment and Survey.** Two approaches were used to recruit survey participants: (1) a manager of volunteers from a large community support agency sent an email invitation to senior volunteers to participate in the survey; (2) organizations with older adult members (e.g., regional CARP [Canadian Association of Retired Persons] chapters, seniors retirement community website) were contacted to seek permission to advertise the survey to their members. Interested organizations either posted the survey link on their website or emailed the survey description and link to their members via their email listserv. The survey was available online from November 2010 to February 2011. Participants logged onto the survey by clicking a link included in an email or on a website (see Appendix H for recruitment email). A wide range of organizations from various regions in Canada were contacted to post the link or email their members in an attempt to obtain a diverse sample (e.g., age, gender).

The online survey was distributed by email, with snowball sampling (Patton, 1987), allowing individuals to forward the survey link to other individuals who may fit the inclusion criteria. Because of the snowball technique, it was not possible to determine how many individuals were contacted to complete the survey. Response rates and quality of responses (i.e., completing at least 95% of the survey) have been shown to be
relatively similar between e-mail and mailed versions of surveys (Schaefer & Dillman, 1998). It should be noted the seniors who have access to the Internet are most likely younger, healthier, more highly educated, and of higher socioeconomic status, compared to those seniors without Internet access (Cotten & Gupta, 2004; Statistics Canada, 2009). Consequently, I conducted targeted recruitment of a diverse range of seniors by distributing the survey link to large regional CARP chapters from socioeconomically diverse areas, including Hamilton and Sudbury, Ontario.

The online survey was created using Remark Web Survey (Gravic, Inc., 2011) with 1024-bit encryption of the survey data. This software is adaptable, allowing for development of a survey that fits the requirements of an older population (e.g., large text size). When participants clicked on the survey link, they were brought to the consent form (see Appendix I for study two consent form). Those individuals who consented selected a “yes” box and then a “next” button that brought them to the survey (non-consenters were sent to a thank you page). Throughout the survey, participants were asked to select the response that best represented them. The survey took approximately 25-30 minutes to complete and included social usefulness items, validation measures, and demographic variables. Participants were required to select “submit” at the end of the survey to submit their responses.

The data were saved on the secure host website and directly uploaded into data analysis software. A separate final page, not linked to the survey responses, allowed participants to indicate their interest in completing a shorter follow-up survey a few months later. Of the participants who agreed to future contact, I randomly selected a subset of 51 participants to complete the social usefulness measure again 2-5 months later.
to measure test-retest reliability. A unique identification code provided by participants allowed linking of responses from time one and two. The respondents received a $5 gift card from a coffee shop for participation in the survey and another $5 gift card if selected for the test-retest reliability survey.

Data Analysis

To determine the factor structure of the social usefulness items, exploratory factor analysis (EFA) was undertaken using PASW Statistics 18 for Windows. An exploratory factor analysis is often “performed in the early stages of research, when it provides a tool for consolidating variables and for generating hypotheses about underlying processes” (Tabachnick & Fidell, 2007, p. 609). EFA was selected over principal components analysis because I was interested in the underlying constructs of social usefulness. In EFA, the underlying constructs, “are expected to produce scores on your observed variables” (Tabachnick & Fidell, 2007, p. 635). Principal axis factoring with promax rotation was selected based on the assumption that the factors would be correlated. All assumptions for factor analysis including multicollinearity, singularity, and factorability were met. Prior to EFA, a square root transformation was performed on all social usefulness items because the data was negatively skewed. The transformed data was used in the EFA.

Prior to any analyses, 7 items that remained highly skewed after the transformation were removed, 6 negatively worded items were removed, 1 item that had more than 1.5% missing data was removed, and 1 item that was too highly correlated with another item was removed. The remaining 49 items were entered into the first factor analysis. Item removal was based on the recommendations from Tabachnick and Fidell (2007). I
systematically removed items in subsequent analyses based on communalities less than .3, double loadings, factor loadings less than .4, and one or two item factors. Because of the exploratory nature of the current study, I did not specify the number of factors. A variety of solutions were examined including two- and four-factor solutions. The final solution was chosen because it was the most conceptually meaningful, had no double loadings, no loadings less than .4, eigenvalues of at least 1, and supported the scree plot recommendations.

Finally, internal consistency for each study measure was determined by Cronbach’s alpha and test-retest reliability was assessed by examining the correlations between factors at time 1 and time 2 for a subsample (n = 51) of the larger sample. Because the factors were correlated, I used Bartlett’s method to create factor score coefficients, which were used to assess preliminary validity of the social usefulness measures with the validation measures.

**Results**

**Exploratory Factor Analysis**

Prior to selecting the final solution, both a two- and four-factor solution were considered. The four-factor solution was not selected because the final factor of the solution was considered unstable at three items (Costello & Osborne, 2005) and was less conceptually meaningful than the rest of the factors. Moreover, this factor only accounted for approximately 4% additional variance. The three-item factor was related to doing the “right” amount of social usefulness. No items in this factor were related to over- or under-investment, which limited the importance of this factor to social usefulness. A two-factor solution was also considered, but unlike the three-factor solution, this solution did
not include a “special social usefulness” factor. This third factor was considered conceptually meaningful and relevant to social usefulness. Moreover, the third factor explained almost an additional 6% of the variance.

The final solution of the exploratory factor analysis yielded three factors (see Table 3 for final solution). These three factors collectively accounted for 53.4% of the total variance. Both the scree plot and Kaiser criterion of eigenvalues greater than 1 suggested that a three-factor solution was acceptable. This solution was the most conceptually meaningful solution that had no double-loadings or low loading items. Furthermore, each of the three factors included more than three items; anything less could be unstable (Costello & Osborne, 2005). Tabachnick and Fidell (2007) recommend maintaining loadings at .32 or greater. For the current analysis, no loadings under .4 were maintained in the analysis. The majority of loadings (73%) were considered between “good” and “excellent” based on the guidelines of Comrey and Lee (1992). Six items met the “fair” criterion, 5 items met the “good” criterion, 11 items met the “very good” criterion, and 3 items met the “excellent” criterion. Of the 26 items, 20 had communalities of .4 or higher, which is considered moderate (Costello & Osborne, 2005), with a range from .33 to .67.

The first factor was labelled “Personal motivation to be socially useful.” This factor included 14 items that reflect a personal need, motivation and drive to be useful to others. Items in this factor include, “I strive to be of service to others,” and “I go out of my way to be there for other people.” A higher score on this factor reflects a strong motivation to be there for others. Factor 1 was highly correlated with factor 2 ($r = .72$) and
### Table 3

*Item Means, Standard Deviations, Factor Loadings and Variance Percentages for Social Usefulness Items (n = 408)*

<table>
<thead>
<tr>
<th>Social Usefulness Items</th>
<th>Mean($SD^a$)</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>SMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>I strive to be of service to others.</td>
<td>3.43(0.76)</td>
<td>0.85</td>
<td>-</td>
<td>-</td>
<td>.60</td>
</tr>
<tr>
<td>I welcome opportunities to help others.</td>
<td>3.78(0.64)</td>
<td>0.81</td>
<td>-</td>
<td>-</td>
<td>.54</td>
</tr>
<tr>
<td>Being useful to others is part of who I am as a person.</td>
<td>3.79(0.76)</td>
<td>0.77</td>
<td>-</td>
<td>-</td>
<td>.60</td>
</tr>
<tr>
<td>I am motivated to help people when I can.</td>
<td>4.00(0.57)</td>
<td>0.69</td>
<td>-</td>
<td>-</td>
<td>.52</td>
</tr>
<tr>
<td>I have a personal drive to be useful to others.</td>
<td>3.40(0.85)</td>
<td>0.67</td>
<td>-</td>
<td>-</td>
<td>.57</td>
</tr>
<tr>
<td>I go out of my way to be there for other people.</td>
<td>3.39(0.82)</td>
<td>0.66</td>
<td>-</td>
<td>-</td>
<td>.50</td>
</tr>
<tr>
<td>I am motivated to be positively involved in the community.</td>
<td>3.60(0.88)</td>
<td>0.66</td>
<td>-</td>
<td>-</td>
<td>.35</td>
</tr>
<tr>
<td>I have a desire to be there for others.</td>
<td>3.78(0.71)</td>
<td>0.64</td>
<td>-</td>
<td>-</td>
<td>.67</td>
</tr>
<tr>
<td>I see myself as someone who is generous towards others.</td>
<td>3.72(0.72)</td>
<td>0.59</td>
<td>-</td>
<td>-</td>
<td>.42</td>
</tr>
<tr>
<td>I am one of those people who think it's important to help others.</td>
<td>4.05(0.70)</td>
<td>0.58</td>
<td>-</td>
<td>-</td>
<td>.61</td>
</tr>
<tr>
<td>Being useful to others gives my life purpose.</td>
<td>3.61(0.85)</td>
<td>0.56</td>
<td>-</td>
<td>-</td>
<td>.58</td>
</tr>
<tr>
<td>Helping others is one of the most admirable ways to spend one's time and energy.</td>
<td>3.74(0.72)</td>
<td>0.47</td>
<td>-</td>
<td>-</td>
<td>.45</td>
</tr>
<tr>
<td>Social Usefulness Items</td>
<td>Mean(SD)</td>
<td>Factor 1</td>
<td>Factor 2</td>
<td>Factor 3</td>
<td>SMC</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>-----</td>
</tr>
<tr>
<td>I get a sense of fulfillment when I am able to be useful to others.</td>
<td>4.01(0.61)</td>
<td>0.46</td>
<td>-</td>
<td>-</td>
<td>.52</td>
</tr>
<tr>
<td>I feel a moral obligation to help others.</td>
<td>3.66(0.90)</td>
<td>0.44</td>
<td>-</td>
<td>-</td>
<td>.45</td>
</tr>
<tr>
<td>To do good for someone is to feel good about oneself.</td>
<td>4.04(0.68)</td>
<td>-</td>
<td>0.69</td>
<td>-</td>
<td>.40</td>
</tr>
<tr>
<td>To help others is to be truly a person of value.</td>
<td>4.09(0.74)</td>
<td>-</td>
<td>0.68</td>
<td>-</td>
<td>.43</td>
</tr>
<tr>
<td>I feel a sense of pride from knowing that I have been there for someone.</td>
<td>4.43(0.58)</td>
<td>-</td>
<td>0.66</td>
<td>-</td>
<td>.36</td>
</tr>
<tr>
<td>I like to feel needed by others.</td>
<td>3.74(0.84)</td>
<td>-</td>
<td>0.63</td>
<td>-</td>
<td>.34</td>
</tr>
<tr>
<td>My sense of worth comes in part from helping others.</td>
<td>3.90(0.80)</td>
<td>-</td>
<td>0.56</td>
<td>-</td>
<td>.51</td>
</tr>
<tr>
<td>I gain a sense of value from being useful to others.</td>
<td>4.28(0.62)</td>
<td>-</td>
<td>0.54</td>
<td>-</td>
<td>.42</td>
</tr>
<tr>
<td>I respect people who are there for others.</td>
<td>4.35(0.58)</td>
<td>-</td>
<td>0.54</td>
<td>-</td>
<td>.37</td>
</tr>
<tr>
<td>I feel a sense of satisfaction from being useful to others.</td>
<td>4.15(0.58)</td>
<td>-</td>
<td>0.51</td>
<td>-</td>
<td>.56</td>
</tr>
<tr>
<td>I offer a special relationship that makes me irreplaceable.</td>
<td>3.11(1.13)</td>
<td>-</td>
<td>-</td>
<td>0.70</td>
<td>.33</td>
</tr>
<tr>
<td>Someone I know counts on me for the special support I provide.</td>
<td>3.79(0.89)</td>
<td>-</td>
<td>-</td>
<td>0.69</td>
<td>.52</td>
</tr>
</tbody>
</table>
### Table 3

*Item Means, Standard Deviations, Factor Loadings and Variance Percentages for Social Usefulness Items (n = 408)*

<table>
<thead>
<tr>
<th>Social Usefulness Items</th>
<th>Mean (SD)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>SMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several people rely on me to be there for them.</td>
<td>3.44 (0.94)</td>
<td>-</td>
<td>-</td>
<td>0.64</td>
<td>.49</td>
</tr>
<tr>
<td>I have my own special ways of being helpful to others.</td>
<td>3.61 (0.76)</td>
<td>-</td>
<td>-</td>
<td>0.46</td>
<td>.36</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td></td>
<td>10.60</td>
<td>1.82</td>
<td>1.47</td>
<td></td>
</tr>
<tr>
<td>% Variance</td>
<td></td>
<td>40.77</td>
<td>6.98</td>
<td>5.65</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> untransformed means and standard deviation presented here.

Note: Pairwise deletion was employed. Loadings under .40 not displayed. *Item shortened for table, see Appendix D for exact wording. SMC = squared multiple correlations.
moderately correlated with factor 3 ($r = .54$). The Cronbach’s alpha for this factor was excellent at .92.

The second factor entitled, “Psychological rewards of social usefulness” included eight items that tap the perceived psychological rewards of social usefulness. Items in this factor include, “My sense of worth comes in part from helping others,” and “To do good for others is to feel good about oneself.” High scores reflect greater psychological rewards from being socially useful. The psychological rewards factor was moderately correlated with the special social usefulness factor ($r = .39$). The Cronbach’s alpha for this factor was good at .84.

The third factor was entitled, “Perceived Network Reliance on Special Social Usefulness.” Four items comprised the factor that assesses the perception that one is uniquely needed by one or more individuals. An example of this type of item is “For certain people in my life, I offer a special relationship that makes me irreplaceable.” Items also assess the perception that one’s social usefulness (e.g., the help or support one provides) is unique or special. An example item of this nature is, “I have my own special ways of being helpful to others.” Higher scores on this factor reflect stronger perceptions that one offers a unique relationship or unique role to someone in terms of social usefulness. The Cronbach’s alpha for this factor was acceptable at .74.

**Test-Retest Reliability**

Table 4 presents the means, standard deviations and correlations for the factors at time one and time two for the social usefulness measure. The factors had similar means and standard deviations between time one and time two and demonstrated adequate test-
Table 4

Test-retest Reliability (n = 51)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Time 1</th>
<th>Time 2</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean(SD)a</td>
<td>Mean(SD)b</td>
<td></td>
</tr>
<tr>
<td>Motivations to be socially useful</td>
<td>3.80(0.52)</td>
<td>3.81(0.50)</td>
<td>.67**</td>
</tr>
<tr>
<td>Rewards of social usefulness</td>
<td>4.17(0.44)</td>
<td>4.17(0.47)</td>
<td>.67**</td>
</tr>
<tr>
<td>Special social usefulness</td>
<td>3.63(0.81)</td>
<td>3.62(0.72)</td>
<td>.66**</td>
</tr>
</tbody>
</table>

Note: Pairwise deletion was employed. *Untransformed means and standard deviations presented. **p < .01.

Retest reliability, given the length of time between administrations (i.e., 2 to 5 months) (Anastasi & Urbina, 1997).

Construct Validity

All correlations among factors and validity measures were in the expected direction and none was too highly intercorrelated (i.e., .7 or above). All correlations were statistically significant unless otherwise stated (see Table 5 for correlations). The motivation factor was moderately, positively correlated with empathic concern, positive relations with others, meaning in life, generativity and self-esteem. The motivation factor had a weaker, but still significant, correlation with life satisfaction. As predicted, the motivation factor was negatively correlated with avoidant attachment. The rewards factor was moderately, positively correlated with empathic concern, positive relations, meaning in life, life satisfaction, generativity and self-esteem. As predicted, the rewards factor was negatively correlated with avoidant attachment. The special social usefulness factor
Table 5

*Correlations among Factor Scores and Validation Measures (n = 408)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>A</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Mot.*</td>
<td>3.71</td>
<td>0.53</td>
<td>.92</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Rewards*</td>
<td>4.11</td>
<td>0.46</td>
<td>.84</td>
<td>0.63**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Special SU*</td>
<td>3.49</td>
<td>0.70</td>
<td>.74</td>
<td>0.45**</td>
<td>0.31**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Pos. Relations</td>
<td>34.40</td>
<td>4.93</td>
<td>.83</td>
<td>0.34**</td>
<td>0.27**</td>
<td>0.28**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Emp. Concern</td>
<td>27.06</td>
<td>3.54</td>
<td>.78</td>
<td>0.45**</td>
<td>0.37**</td>
<td>0.29**</td>
<td>0.37**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Mean. in Life</td>
<td>30.72</td>
<td>4.43</td>
<td>.86</td>
<td>0.34**</td>
<td>0.27**</td>
<td>0.39**</td>
<td>0.45**</td>
<td>0.26**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Life Sat.</td>
<td>18.17</td>
<td>3.36</td>
<td>.86</td>
<td>0.13*</td>
<td>0.12*</td>
<td>0.12*</td>
<td>0.30**</td>
<td>0.13**</td>
<td>0.59**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Generativity</td>
<td>37.87</td>
<td>8.28</td>
<td>.86</td>
<td>0.53**</td>
<td>0.36**</td>
<td>0.45**</td>
<td>0.46**</td>
<td>0.45**</td>
<td>0.50**</td>
<td>0.27**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Self-Esteem</td>
<td>40.76</td>
<td>4.73</td>
<td>.88</td>
<td>0.17**</td>
<td>0.25**</td>
<td>0.22**</td>
<td>0.45**</td>
<td>0.20**</td>
<td>0.54**</td>
<td>0.43**</td>
<td>0.45**</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

*a Significantly different from 1.00 (p < 0.05)
Table 5

*Correlations among Factor Scores and Validation Measures (n = 408)*

| Variables       | M     | SD    | A   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|-----------------|-------|-------|-----|------|------|------|------|------|------|------|------|------|------|------|
| 10. Soc. Desir. | 63.21 | 7.93  | .78 | 0.17**| 0.13**| 0.03 | 0.15**| 0.29**| 0.26**| 0.16**| 0.14**| 0.24**| -    |
| 11. Avoid. Attach. | 20.70 | 4.67  | .82 | -0.35**| -0.26**| -0.18**| -0.59**| -0.32**| -0.36**| -0.30**| -0.44**| -0.42**| -0.21**|

Note: Pairwise deletion was employed. See Method section for full variable names. *Untransformed means and standard deviations presented. α = Cronbach’s alpha. *p < .05, **p < .01.
was moderately, positively correlated with empathic concern, positive relations, meaning in life, generativity, and self-esteem, with a weaker, but still significant correlation with life satisfaction. As with the first two factors, the third factor was negatively correlated with avoidant attachment. Although both the motivation and reward factors were significantly correlated with social desirability, none exceeded .17, which was similar to or lower than the majority of the validation measures. The special social usefulness factor was not significantly correlated with social desirability.

**Discussion**

The current research is a development and validation study of the Older Adult Social Usefulness Scale (OASUS), conceptualized on the basis of study one and past research on social usefulness (Gruenewald et al., 2007, 2009; Okamoto & Tanaka, 2004). Generally, these findings add to the growing area of literature on social usefulness and contribute an empirically developed measure of the construct. The current findings lend support to the findings from study one that social usefulness is potentially a multidimensional construct. Four of the five themes from study one were evident in the factor structure of the social usefulness measure.

The *personal motivation to be socially useful* factor from the current study supports the findings from study one that motivations to be socially useful are a dimension of social usefulness, as described by the older adult participants. Moreover, the *values/beliefs* theme from study one has similarities to this factor because of the inclusion of items that address the inherent value of social usefulness (e.g., “I am one of those people who think it’s important to help others”); a concept also reported by the senior participants in the qualitative study of this construct. The motivation factor supports past
research demonstrating that older adults have a desire or motivation to be socially useful (Okun, 1994; Stevens, 1993). Similarly, the psychological rewards factor supports the findings from study one and past research that demonstrates the perceived personal and psychological rewards of social usefulness (Heidrich & Ryff, 1993; Stevens, 1993). Although the motivation and psychological rewards factors are highly associated, this finding is not surprising given that most individuals who are highly motivated to be useful would also perceive many rewards associated with it. However, future research is required to provide further support that the two factors are in fact distinct.

The perceived network reliance on special social usefulness factor also supports the findings from study one. The inclusion of this factor and the exclusion of the “amount of social usefulness” theme from study one, may speak to the relative importance of each to social usefulness. Specifically, the perceived qualities of social roles and relationships may be more relevant to social usefulness than the number of such roles and relationships (i.e., quality over quantity), as found by past research (Baruch & Barnett, 1986).

The current validation of this measure is only preliminary, requiring caution when interpreting the results. However, the findings demonstrate the expected relationships among factors and the conceptually relevant measures. In particular, the current data show the strongest association among the social usefulness factors, generativity, and empathic concern. These findings are not surprising, because older adults express generativity and empathy through generative behaviours that nurture family and community relationships and may give older adults a sense of social usefulness (McAdams, de St Aubin, & Logan, 1993; Musick & Wilson, 2008; Penner, 2002). The
moderate association between the construct validity measures and the social usefulness factors suggests that social usefulness is a related, but distinct construct.

The strong internal consistency and test-retest reliability of the social usefulness measure, along with the preliminary validation of the measure, support the value of adopting the current measure for use in future studies. The final version of the OASUS is relatively brief and takes only 5 to 10 minutes. A final four items that loaded less than .5 in the EFA were removed from the final version. The subscales for the OASUS include 11 items for the motivation subscale, 8 items for the rewards subscale, and 3 items for the perceived network reliance on special social usefulness subscale (see Appendix J for measure and scoring details). A strength of the newly created measure is the ability to measure social usefulness at a general level (i.e., overall social usefulness) and at the dimension-specific level using the subscales. Practically speaking, this measure could be adopted for use in organizations with older adult members to identify those individuals who would benefit from further social involvement. Empirically, the newly developed measure would contribute to future research on the psychosocial resources that predict health maintenance and longevity for older adults.

Now, more than in previous years, the use of Internet-based surveys for older adults is a viable option for data collection. In Canada, seniors are the fastest growing segment of Internet users, with 45% of those age 65-74 using the Internet, up from 11% in 2000 (Statistics Canada, 2009). Furthermore, Internet surveys often reduce social desirability and may reach individuals who are less involved in the community (Gosling, Vazire, Srivastava, & John, 2004). Nevertheless, there are limitations of using Internet-based surveys. Common to all age groups is the disparity in Internet use by income and
education level (Statistics Canada, 2009). The sample in the current study was mainly composed of socially engaged, educated, middle to high-income older adults; there were few participants who reported low levels of engagement. Consequently, it is important to validate the measure with older adults who are hypothesized to have lower or higher scores on the OASUS. Future studies should adopt both Internet and non-Internet based recruitment methods to validate the measure in this manner. Moreover, recruiting participants through collaboration with volunteer agencies, nursing homes, or aging at home programs may contribute to a better understanding of the differences among older adults in settings that allow for more and less social participation. By recruiting these types of participants, validation could also entail examining the changes in social usefulness scores before and after volunteering or after a transition from community living to long-term care. Examination with these types of participants would also demonstrate the ways and types of people who may score high on one subscale but low on another (e.g., highly motivated with low perceived psychological rewards).

A second limitation is the exploratory and preliminary nature of the current study, which is based on an exploratory factor analysis. Although this study is a crucial step in development, further research should include a confirmatory factor analysis to confirm the factor structure of the measure, demonstrating that the three factors are in fact distinct (Floyd & Widaman, 1995). Specifically, it could provide support for the inclusion of the separate motivation and psychological rewards factors, even with the high correlation between the two. Nevertheless, the limitations of this study do not cancel the benefits of this newly developed measure, including the inductive nature of item development.
The social usefulness measure developed in this study is the first empirically developed, multi-item measure to assess the construct of social usefulness. These benefits include a short and comprehensive measure of social usefulness with valuable subscales. After further validation, the OASUS should be applied to future research examining the predictive validity of the overall measure and subscales for health and morale benefits.
General Discussion

The overarching goal of the current research program was to develop and preliminarily validate a measure of social usefulness. In past research, older adults had mainly been studied as recipients of support, and as caregivers of family members, with little attention being paid to the potential benefits of providing support to others (Penner et al., 2004). Moreover, research demonstrating an association between social usefulness and positive health outcomes provided a compelling reason to explore the construct. The value of the current studies is that the focus is on the provider of support, and more specifically the influence of providing support on the self. The emphasis on the influence of socially meaningful relationships and roles on the self has only been examined by a handful of studies, often with measurement limitations. Therefore, the current study was a novel and valuable addition to the social usefulness research domain.

A strength of the current research lies in its mixed-method approach. Beginning with a qualitative, exploratory interview that was grounded in the experiences and perceptions of older adults, I employed a discovery-oriented approach to map the concept of social usefulness. I used participants' own words and experiences to develop items that were meaningful and relevant to older adults. Using these newly developed items, I then conducted a quantitative study to assess the structure and validity of the measure. To examine the factor structure of social usefulness, exploratory factor analysis was undertaken. The factor structure of the measure provides support for the multidimensional nature of social usefulness and has implications for future research. Generally, these findings add to the growing body of research on social usefulness by
contributing an empirically developed measure of the construct labeled the Older Adults Social Usefulness Scale (OASUS).

Both studies bring new findings to the social usefulness construct. In particular, the findings from both studies suggest that social usefulness is a far more complex construct than previously acknowledged. Moreover, the newly developed measure contributes to a better understanding of how to gauge social usefulness. The conceptual status of the construct, the uses and applications of the measure, along with its empirical and practical implications, are discussed in the next section. Following that, I explore how perceptions of social usefulness arise and contribute to self-concept, and its implications for health and well-being outcomes. I conclude by discussing limitations of the two studies and recommendations for future research.

**Conceptualizing Social Usefulness**

In past research, conceptualizations of social usefulness have been simplistic, leaving unanswered questions about the construct. These questions mainly focus on the scope and dimensions of social usefulness (Gruenewald et al., 2007, 2009). Study one and two demonstrated that social usefulness is a multidimensional construct. As a construct, social usefulness has similarities to the constructs of generativity and attachment; These constructs are:

…not readily construed as a single structured concept located “within” the individual. It is rather more like the construct of attachment (Bowlby) and certain other relational and multiply contextualized construct[s] that require the scientist to operate simultaneously on a number of different levels and to take into consideration the particular relation or fit between the person and the
Generativity is based on the person and environment, and encompasses behaviours, motivations, inner desires, beliefs, concerns, and cultural demands (McAdams & de St. Aubin, 1992). Similarly, based on study one and two, social usefulness is a complex, multidimensional set of attitudes to the self and beliefs that promote socially useful behaviours such as volunteering, caregiving, and informal helping. Because the social support literature already demonstrates the forms of social usefulness that underlie volunteering, caregiving, and informal helping (e.g., Brown et al., 2009; Greenfield & Marks, 2004), the focus of the current studies was on the beliefs and self-perceptions of social usefulness developed from these roles. These self-perceptions, which are discussed in more detail in the next section, are comprised of attitudes and beliefs, including the perceived network reliance on one’s special social usefulness and perceptions of the rewards associated with social usefulness, along with the motivations to be socially useful. Over time, these self-perceptions may contribute to the formation of a socially useful identity or self-concept, however this link is preliminary and requires future study. This process of internalizing a socially useful identity is likely aided by behavioural and environmental cues including feedback from others that may further buttress perceptions of being needed and valued.

Because of the social nature of the construct, the internalization of perceptions of social usefulness is most likely based on the interaction of self-perceptions of social usefulness (person), behaviour, and the social environment. Figure one, adapted from Swann, Chang-Schneider, and Larsen McClarty (2007), illustrates the reciprocal
influence of the social environment, behaviour, and social usefulness, which influence each other in complex ways. Study one demonstrated that a broad range of prosocial

Figure 1. The Interaction of the Social Environment, Behaviour, and Perceptions of Social Usefulness (Adapted from Swann et al., 2007).

behaviours may contribute to perceptions of social usefulness, including those that underlie caregiving, informal helping, and volunteering. Moreover, study one demonstrated that some older adults internalize perceptions of social usefulness. The most socially engaged participants from study one often reported that being socially useful to others was “part of who they were,” a statement regarding their identity. In study two, the item “Being useful to others is part of who I am as a person” captures this statement. As theorized by Bem (1972), repeatedly engaging in these socially meaningful behaviours may give rise to self-perceptions of social usefulness, which over time may be internalized. Furthermore, internalization of a socially useful identity may influence more engagement in socially useful behaviours. However, the association between self-perceptions and identity is preliminary and requires extensive research. Moreover, if self-
perceptions are internalized, the time it takes to internalize these self-perceptions is unknown; future research is required to explore these issues.

As McAdams and de St. Aubin (1992) described above, it is crucial to also consider the influence of the environment, along with the person and behaviours, when understanding these types of social constructs. The environment is important to consider when understanding the development of socially useful self-perceptions, which may contribute to overall social identity. For example, in study one, some participants discussed the role of the environment in terms of the life course opportunities afforded to them that influenced their ability to engage in socially useful behaviours. These types of environmental factors, along with behavioural factors, may play a role in adoption of certain self-views such as social usefulness and in engagement in socially useful behaviours (Swann et al., 2007), by providing clues to the self about identity.

**The Dimensions of Social Usefulness**

**Motivation to be Socially Useful.** Based on the results from the current two studies, it is apparent that many socially engaged older adults have strong motivations and desires to be there for others. The motivation component of social usefulness supports past research that demonstrated that older adults have a desire or motivation to be socially useful (Okun, 1994: Stevens, 1993). In study one, older adults who were highly engaged in social activities and relationships described a strong personal motivation to be useful, placing a premium on the social goals inherent in these activities and relationships. This finding, along with the finding from study two that motivation is a facet of social usefulness, is supported by previous research with older adults on the role of social goals in motivations to volunteer and to provide support to family and friends.
Older adults appear to maintain social relationships and social activities that fulfill their expressive need to be socially useful, which is in accordance with the central tenets of socioemotional selectivity theory (Carstensen, 1995), namely, that older adults are motivated to maintain the most highly valued and meaningful social roles (Carstensen et al., 1999). Over time, continually fulfilling these motivations to be socially useful may provide information to the self about one’s identity (Markus & Wurf, 1987), which may contribute to adoption of a socially useful identity, however more research is required on this topic.

Quality vs. Quantity of Social Roles and Relationships. Past attempts to measure social usefulness have not taken into account the appraisals that people make of their own usefulness; most measures only assess the frequency of feeling useful (Gruenewald et al., 2007, 2009; Okamoto & Tanaka, 2004). In the current study, the quality of perceived social usefulness (e.g., the unique role or special relationship one provides) proved to be a dimension of the construct. The quantity or amount of social usefulness did not prove to be as important. This finding is consistent with previous research that demonstrates that the perceived quality of one’s social roles and relationships is more relevant to social usefulness than the number of such roles and relationships (i.e., quality over quantity) (Baruch & Barnett, 1986). In sum, the current study reveals that quality is perceived to be a more salient facet of social usefulness than quantity. This is consistent with socioemotional selectivity theory, which postulates that older adults will restrict their social field to the ties that are closest and most emotionally gratifying. Future research with younger samples of adults is needed to determine whether the perceived quality of
their social usefulness proves to be equally salient compared to its quantity. Research could explore which is the best predictor of social usefulness, the special social usefulness subscale or the number of one’s close social ties.

**Psychological Rewards of Social Usefulness.** The final dimension of social usefulness is its rewards, both personal and psychological. This dimension may be the most important because it demonstrates that older adults perceive that social usefulness contributes to personal rewards. As previously discussed, little attention had been paid to the potential benefits of providing support to others, especially the psychosocial benefits (Penner et al., 2004). Therefore, the current studies are a first step in linking social usefulness to the positive outcomes from previous research (Gruenewald et al., 2007, 2009; Heidrich & Ryff, 1993; Stevens, 1993) and contribute to understanding the psychological rewards of social engagement. In study one, participants reported that their social usefulness, including being there for family and friends, and volunteering, contributed to their self-concept. Similar to past research (Midlarsky, 1991; Stevens, 1993), they talked about gaining a sense of value, worth, and satisfaction from being socially useful. These findings also dovetail with research addressing the importance of maintaining highly valued roles in older adulthood (Benyamini & Lomranz, 2004; Duke, Leventhal, Brownlee, & Leventhal, 2002), and research based on socioemotional selectivity theory, which shows that there are personal benefits from maintaining highly valued roles for older adults (Carstensen, 1995). However, caution must be taken when interpreting these findings because although participants perceived certain rewards, it is not necessarily the case that these rewards were actually achieved.
Contribution to Understanding the Measurement of Social Usefulness

The results from the current studies not only contribute to and support past research on social usefulness, but also contribute to an understanding of how to best measure the construct. The three-factor solution of the exploratory factor analysis demonstrated that social usefulness is a multifaceted construct, whose measurement requires multiple items for each dimension. Therefore, the three-factor solution was used to create three subscales to assess the construct, contributing to the most comprehensive measurement of social usefulness to date.

Motivation to Be Socially Useful. The results of a motivation to be useful factor from the exploratory factor analysis (EFA) supports the adoption of this subscale to measure the factor. Items for this subscale assess an individual’s motivation or desire to be socially useful to others (e.g., “I strive to be of service to others”; “I am motivated to be positively involved in the community”). Moreover, this subscale includes items that assess the perception that usefulness is part of one’s self-concept (e.g., “Being useful to others is part of who I am as a person”; “I see myself as someone who is generous towards others”). The items used in this subscale are not similar to any past measures, which did not focus on motivations to be useful to others; hence, the first subscale adds a novel approach to assessing this dimension of social usefulness.

Personal and Psychological Rewards of Social Usefulness. Similarly, the finding of a psychological rewards factor from the EFA supports the use of a second subscale to measure the factor. Items on this subscale assess an individual’s perceptions associated with the rewards of social usefulness, and include, “I feel a sense of pride from knowing that I have been there for someone” and “My sense of worth comes in part from helping
others.” Similar to the motivation subscale, the rewards of social usefulness have not been directly measured in any social usefulness research thus far; therefore, the second factor adds another facet of the construct.

**Perceived Network Reliance on Special Social Usefulness.** The third subscale, perceived network reliance on special social usefulness, assesses the perception that one is uniquely needed by another person (e.g., “Someone I know counts on me for the special support I provide”). Items also assess the perception that the social usefulness one provides is unique or special (e.g., “For certain people in my life, I offer a special relationship that makes me irreplaceable”). The special social usefulness subscale is the only subscale that has a similar item to one used in past research. The item “I am a useful person to have around” (Ranzijn et al., 1998, p. 97), speaks to the special social usefulness dimension. Specifically, if an older adult believes he or she is useful to have around, it must be because of something about him or herself (i.e., I am uniquely needed). Generally, this subscale addresses limitations of past measurement of social usefulness that did not take into account this type of appraisal.

**Social Usefulness Measurement and Preliminary Validity.** Lending further support to the three-factor solution of social usefulness, all the factors from study two were significantly correlated in the anticipated direction with the validation measures. Specifically, the factors correlated between .13 and .53 with the six validation measures related to social relationships and roles, demonstrating preliminary construct validity. Most interesting were the moderate correlations among all three factors and empathic concern and generativity, which supports past research showing the fundamental relationship of generativity and empathic concern to helping behaviours (McAdams & de
St. Aubin, 1992; Penner et al., 2004). It is not surprising that those individuals who have prosocial characteristics such as empathic concern and generativity would also be highly motivated to be useful to others, would perceive rewards associated with social usefulness, and would perceive their social usefulness as unique and special. The association between the three factors and generativity and empathic concern supports the mainly altruistic nature of social usefulness. In the next section, I discuss why social usefulness is not always entirely altruistic. Additionally, the moderate relationships among the factors and the positive relations with others scale, and the negative association with avoidant attachment, support the highly social nature of social usefulness. Generally, these findings add to the research on social usefulness and align with past research on these helping characteristics (Musick & Wilson, 2008; Wilhelm & Bekkers, 2010).

Although the current studies are preliminary and are not an evaluation of the relevance of social usefulness to health and well-being related outcomes, study two provides a preliminary understanding of the relationship between social usefulness and well-being. Specifically, there were positive relationships among the meaning in life scale and the social usefulness factors. Nonetheless, it remains unclear whether social usefulness is a predictor of meaning in life. The weaker association between life satisfaction and the factors is not surprising, given that the life satisfaction measure is a more global measure of overall satisfaction with life, whereas motivation is a domain-specific measure. The association between social usefulness and the psychosocial validation measures provides the first preliminary indications of support for the link between social usefulness and positive outcomes for older adults (Brown et al., 2009;
Krause, 2009b; Van Willigen, 2000). However, the validation findings are only a first step; extensive future exploration into the contribution of social usefulness to health and well-being outcomes is required.

**Psychometric Strength of the Older Adult Social Usefulness Scale.** In terms of psychometrics, one of the strengths of the present studies is that the measure’s items were developed inductively through an exploratory, qualitative study and then examined quantitatively. This mixed-methodology provides a more rigorous approach to measure development than simply developing items based on past research (Krause, 2002). To my knowledge, there has been no qualitative exploration into the construct of social usefulness prior to the current study. Moreover, the use of a diverse age range for study two (i.e., the majority of participants between 60 and 95 years of age) provides support for the generalizability of the measure to older adults. The use of the participants’ own words and phrases to develop the items makes the measure more user-friendly for older adults.

**Using the Older Adult Social Usefulness Scale**

Compared to previous measurement of the construct, the OASUS demonstrated strong reliability and preliminary validity, suggesting the value of further development and application of the measure. The OASUS is a 22-item, multidimensional measure. It takes only 5 to 10 minutes to complete and includes three subscales that add to the validity of the measure. The OASUS may be applied as a general measure of social usefulness (i.e., overall social usefulness) or at the dimension-specific level. The subscales would be appropriate to utilize if the goal of the research were to examine how the dimensions relate to psychosocial characteristics (e.g., gender, SES, personality
characteristics). These subscales would also be valuable in predicting proximal measures of health (e.g., frequency of doctors’ visits). Such research would provide support for the relationships among the subscales, psychosocial characteristics, and proximal health outcomes. The overall OASUS would be a better fit if the goal of the research were to understand how a general sense of social usefulness is associated with the aforementioned long-term health and well-being outcomes.

**Practical Applications.** Because of the simplicity and clarity of the items, the measure may be used in both applied (e.g., volunteer organizations, community interventions) and basic research settings. Practically speaking, the OASUS could be adopted for use in community organizations and agencies that provide community interventions to support the health and well-being of older adults or rely on the involvement of seniors as volunteers. For example, the OASUS and its subscales could be used in community interventions, such as aging at home programs that attempt to improve social involvement for older adults living at home. If the goal of the intervention was to first increase the motivation to be socially useful and increase the perceived psychological rewards of social usefulness then the subscales could be used pre- and post-intervention. These programs could use the overall OASUS measure to identify those clients who may benefit from engaging in socially useful activities and roles. These organizations could recommend volunteer positions or could provide clients with opportunities to help others who require support (i.e., making the individual the supporter rather than the supported). To examine the changes in social usefulness levels after increasing social involvement, the OASUS could be used to assess social usefulness scores before and after becoming involved in volunteering. Similarly, community
organizations that rely on older adult volunteers could adopt this measure to assess social usefulness scores pre- and post-volunteering to lend support to the benefits of community involvement.

**Development of Perceptions of Social Usefulness and Its Link to Protective Health Effects**

The assumption of the current two studies was that social usefulness develops from involvement in socially useful behaviours such as volunteering and informal helping. The results of study one aligns with this assumption; older adults believed that these types of activities and roles contributed to perceptions of being useful and needed. These findings support empirical research and theory that behaviours influence perceptions of the self (Bem, 1972). Similar to self-efficacy (Bandura, 1986, 1995), repeatedly engaging in socially meaningful behaviours may foster perceptions of social usefulness in the individual. Moreover, as previously mentioned, being continually motivated to be socially useful to others and perceiving rewards associated with such usefulness, may provides clues to the self about identity. These internalized self-perceptions (i.e., socially useful identity) may be one process that contributes to the health and longevity benefits that arise from engaging in socially useful behaviours, by way of, for example, motivating greater self-care behaviours for the sake of supporting others (Brown et al., 2009; Greenfield & Marks, 2004; Hinterlong et al., 2007), although further research is needed to explore this finding.

Older adults often maintain social relationships and activities that fulfill their expressive needs (Gillespie et al., 2011; Omoto et al., 2000). Although social usefulness may be based on some altruistic and expressive motivations, the motivation to be there
for others is not purely an altruistic act. Older adults acknowledged that the motivation to be there for certain people might be the result of a duty or obligation based on the relationship. Similarly, study one found that some older adult participants reported that being there for certain groups or individuals was motivated by a sense of obligation or duty. Moreover, study two included an item that reflected this motivation (i.e., “I have a moral obligation to help others”). These findings reiterate my belief that, like generativity, the person and environment are relevant when examining social usefulness. Therefore, it is necessary to understand the context of the relationship between the individuals or the individual and organization to understand social usefulness. Although it might seem that helping others based on obligation would not be associated with health protective effects, the opposite is true. Greenfield (2009) found that felt obligation was associated with positive health. Therefore, even if social usefulness arises from a sense of obligation or duty, the aforementioned health and morale benefits may still apply.

The processes by which the aforementioned health and morale benefits occur may in part be explained by the gradual development of a socially useful identity from prolonged expression of socially useful behaviours. Past research has disclosed processes that might explain why social engagement is protective, including strengthening of a sense of personal value and meaning in life (Midlarsky, 1991). This finding was supported by study one and two, in that older adults perceived personal and psychological rewards associated with the social usefulness they provided. These rewards included a sense of value and satisfaction from being socially useful and a sense of worth, all of which support previous research on the processes that underlie the health and morale benefits of prosocial activities and relationships (Adelmann, 1994; Midlarsky, 1991;
Piliavin & Siegl, 2007; Stevens, 1993). Although the current findings are a crucial first step in understanding the process by which health outcomes occur, the preliminary and cross-sectional nature of these studies limits any causal links between social usefulness and beneficial health outcomes. Future research, especially longitudinal studies, should explore the relationship between social usefulness and the health and longevity benefits of social engagement for older adults.

**Social Usefulness and Personality.** Beyond the psychological rewards, although social usefulness is not a personality trait per se, the perception that one is socially useful may contribute to a prosocial personality (Penner, Fritzsche, Craiger, & Freifeld, 1995). In study one, a number of participants mentioned being useful was “part of who they were” and this statement is captured by the item “Being useful to others is part of who I am as a person” from the motivation dimension of study two. Although these statements relate to a prosocial identity, they also support research from Penner and colleagues (1995, 2004) that certain individuals have what can be described as a “prosocial personality.” Someone with this type of personality would demonstrate traits such as “other-oriented empathy” and would perceive themselves to be helpful, a construct similar to social usefulness (Penner et al., 2004). Although many of the socially engaged older adults from study one could likely be described as having a prosocial personality, more research is required to make a strong link between social usefulness and personality.

**The Downside of Social Usefulness.** The focus of the current studies was on positive aspects of social usefulness, including the psychological rewards of social usefulness. It is important, however, to also note the downside of social usefulness,
namely when social usefulness is not developed or becomes extreme (i.e., being too needed). Perceptions of social usefulness may not develop if the volunteer roles or informal helping provided to others is considered trivial, meaningless, or for some individuals, if the volunteer work does not have a known beneficiary (e.g., administrative work) or is viewed as unhelpful to clients (Tang, Morrow-Howell, & Choi, 2010; Wheeler et al., 1998). Conversely, when older adults become too needed the rewards of social usefulness are often precluded. In study one, a few participants described being too needed and the costs or burdens associated with this level of need. These types of relationships and roles may deplete resources such as energy because of the level of effort involved. Moreover, some participants on the extreme end of being socially useful reported a sense of being taken for granted or used. When one is too needed, there may be conflicts between who to be there for. Often because of the relationship (e.g., mother-daughter), there is an obligation to maintain the social usefulness even if there are negative outcomes, which could contribute to stress. Even with some downsides to social usefulness, the main focus is on the rewards of these self-perceptions, which greatly outweigh, for most individuals, the potential negatives.

**Limitations and Directions for Future Research**

Although the current studies are the first to develop an empirically derived measure of social usefulness, a few limitations are noteworthy. The first main limitation of the current studies is their exploratory nature. The findings from study two, specifically the three-factor solution, are based on an exploratory factor analysis, which is only the first step in understanding the factor structure of a construct (Tabachnick & Fidell, 2007). Confirmatory factor analysis (CFA) with a large and diverse sample of
older adults is the next step in this program of research and is required for psychometrically sound measure development (Floyd & Widaman, 1995). A CFA would retest the factor structure of the measure, demonstrating there are three factors. Specifically, it could provide support for the inclusion of the separate motivation and psychological rewards factors, even with the high correlation between the two \((r = .72, p < .001)\). Nevertheless, even with this limitation, the inductive and psychometrically sound nature of item development and the use of rigorous empirical analysis for study two supports the validity of the new measure of social usefulness developed in the current research.

The second limitation is the unknown external validity of the findings. Both studies used a Canadian sample, which limits the generalizability to collectivist cultures. However, past research suggests that individuals from collectivist cultures have stronger altruistic motivations to volunteer compared to individuals from individualist cultures (Finkelstein, 2010, 2011). Moreover, lack of ethnic diversity in the sample limits the generalizability of the measure. However, past research suggests that Black and Hispanic older adults may place even more value on being useful to their kith and kin compared to Caucasian older adults (Burr & Mutchler, 1999). Hence, social usefulness may have relevance to a more diverse range of older adults, including older adults from both individualist and collectivist cultures, than those who participated in study one and two. Future research should explore the construct of social usefulness in terms of individualist and collectivist cultures, along with the significance of the construct for a more ethnically diverse sample.
Even within the limitations of non-random, self-selected, sampling, a strength of this method is that I was able to interview, both male and female older adults with diverse levels of social involvement (e.g., one participant reported not being needed by anyone, while another was volunteering almost full time). Purposeful sampling is valuable for qualitative research because it allows the researcher to select individuals who fit various categories, in this case low and high social involvement, which contributes to an “information-rich sample” (Patton, 1987). Because I interviewed seniors with diverse perceptions and experiences, this method contributed to a measure that was developed directly from language that older adults use, a valuable tool for measure development (Krause, 2002).

Because the measure was developed with older adults, caution must be taken when generalizing to younger adults. However, because of the general nature of the items (e.g., none specifically relating to retirement or aging), the OASUS could be adopted for use with younger adults as well. An examination of the similarities and differences between younger and older adults would provide a valuable contribution to the social usefulness literature, which has mainly been examined with older adults. For example, younger adults may have lower scores on motivations to be socially useful because as people age motives for volunteering become less self-oriented and become more socially oriented (Okun & Schultz, 2003). Future studies should examine the scores on the OASUS with older and younger adults to provide evidence for the developmental significance of social usefulness.

The OASUS was developed and preliminarily validated with both male and female older adult participants; thus, the measure is appropriate for use with both genders.
Gender differences were not the focus of the current studies, but differences were noted in the scores on the social usefulness subscales. T-tests were conducted with the subscale scores; men had significantly lower scores than women on the motivation to be socially useful subscale, $t(374) = -3.23$, $p = .001$, $d = -.34$, the rewards subscale, $t(386) = -2.71$, $p = .007$, $d = -.28$, and the specialness of social usefulness subscale, $t(397) = -3.58$, $p < .001$, $d = -.36$. Based on Cohen’s (1988) recommendations, these effect sizes are small; however, these findings provide some support for gender differences in social usefulness.

There were no obvious gender differences from the qualitative interview study, with both men and women reporting perceptions of social usefulness. Gruenewald et al. (2007) reported comparable scores on social usefulness for men and women. However, unlike the OASUS, social usefulness was measured with one item that did not differentiate among dimensions of social usefulness. Gender differences in the dimensions may result from differences in the types (e.g., board members; friendly visitors), motivations for, and meaning of volunteering (i.e., instrumental; expressive) for men and women, respectively (Musick & Wilson, 2008). The expressive and social nature of women’s involvement may contribute to stronger perceptions of being socially useful to others compared to men. However, because of the lack of diversity in study two and the small effect sizes, gender differences require further study with a large, diverse sample of older adult to explore if there are significant gender and other demographic differences on the subscales of the OASUS.

The sample size of study two ($n = 408$) demonstrates that the Internet is becoming a viable option for data collection for older adults. However, the use of an Internet-based sample for study two does limit the representativeness of the sample. Snowball sampling
was used to recruit participants, which confined the sample to mainly educated and middle to high-income older adults. The lack of diversity in socioeconomic status may limit the generalizability. A majority of participants were socially engaged to some extent. Although only 66% of the sample for study two had volunteered, 67% to 75% reported involvement in helping or supporting others, including friends, family and neighbours. Because the majority of participants were socially engaged, the social usefulness items from study two were negatively skewed, meaning there were few participants who reported low levels of social usefulness. This finding is not surprising given the method of data collection and the nature of this research; Gruenewald et al. (2007, 2009) reported only a small minority of participants who had low social usefulness scores. However, it is possible to obtain a diverse range of scores if a broad sampling procedure is used, as demonstrated by Okamoto and Tanaka (2004).

Future studies should adopt both Internet and non-Internet based recruitment methods to validate the OASUS with a sample of older adults who are hypothesized to have lower or higher scores on the OASUS. Recruiting participants through collaboration with volunteer agencies, nursing homes, or aging at home programs may contribute to a better understanding of the differences among older adults in settings that allow for more and less social participation. By recruiting these types of participants, validation could also entail examining the changes in social usefulness scores before and after volunteering or after a transition from community living to long-term care. Research with these types of participants would also demonstrate the ways and types of people who may score high on one subscale but low on another (e.g., highly motivated with low perceived psychological rewards).
The limitations of the current studies are not surprising, given the novel and exploratory nature of this research. Nonetheless, the OASUS is already more psychometrically sound than social usefulness measures used in previous studies (e.g., Gruenewald et al., 2007; Okamoto & Tanaka, 2004). To address the limitations and provide additional support for the measure, further research is necessary. Therefore, the next steps in this program of research require conducting a confirmatory factor analysis study to confirm the factor structure from study two. More generally, after further validation, the OASUS should be applied to future research examining the changes in social usefulness scores because of more or less social involvement.

**Concluding Remarks**

The current studies were undertaken to explore the construct of social usefulness with the goal of developing and preliminarily validating a measure of the construct. Social usefulness research to date has often relied on one- or two-item measures, which ignored the complexity of the construct. Even with the measurement limitations of past research, the findings that social usefulness was associated with health and longevity benefits was reason enough to explore the construct further. However, because of the psychometric issues, the first step required for any new research on social usefulness was to explore the construct and its dimensions, and then develop a psychometrically sound measure.

Both studies support the relevance of social usefulness to older adults. The findings from the qualitative study demonstrate that socially engaged older adults often perceive themselves to be socially useful. Moreover, older adults are often motivated to be useful to others and perceive rewards associated with social usefulness. The second study was
the first of its kind to develop an empirically based measure of social usefulness. The factor structure of the measure lends support to the multidimensionality of social usefulness and has implications for future research, namely the exploration of changes in social usefulness based on more or less community involvement.

Practically speaking, the benefits of the OASUS are both its brevity and the fact that it differentiates important dimensions of social usefulness. This measure could be applied for use in community organizations or agencies with older adult members. Theoretically, these findings add to the growing area of literature on social usefulness and contribute an empirically developed measure of the construct, not done in previous studies. Both of the studies add a new perspective to the social usefulness construct, most importantly demonstrating that social usefulness is a complex, multidimensional construct that develops from social engagement.
References


Footnotes

1Household composition does not sum to 100% because participants could select more than one option.

2Judging by the older adults was based on three judges because one judge was removed due to the amount of multiple category ratings (23%).

3Six negatively worded items were maintained in the final list of social usefulness items to make sure participants were reading items carefully.

4I identified 16 univariate and 23 multivariate outliers, which were maintained in the analysis because they were deemed true responses and removal would result in substantial loss of cases.

5A mean substitution procedure was used for the validation measures. A participant’s mean score for a scale replaced missing scores based on the following criteria, a) if the scale contained 10 or fewer items overall, one missing score was replaced; b) if the scale contained 11 to 20 items overall, 2 missing values were replaced. More than two missing scores were excluded by pairwise deletion in the analysis.
Appendix A: Interview Schedule

Our conversation today is going to be about any involvement you may have with people and organizations that are important to you. In particular, I will be asking you whether there are any people in your life who you think need you a lot or count on you to just be there for them. If there are such people, we’ll talk about your relationship with them and what you mean to them, and that will help me understand why they are an important part of your life. We’ll also talk about your involvement with any clubs, groups, or organizations and what they mean to you. After that, we’ll talk about whether these involvements you have affect the way you think of yourself OR your self-image.

SECTION 1: Participant’s Social Usefulness to Network Members

So why don’t we begin BY YOU TAKING A MINUTE TO THINK CAREFULLY ABOUT ANY people you feel you are really there for (NOTE: RECORD INITIALS, RELATIONSHIP, DURATION, GENDER, AGE CATEGORY). Again, try to think of people who need you or really value you being in their lives. They can be any age, live anywhere in the world, but what they have in common is that they really value you because of who you are or what you do. Please don’t try to be modest about this.

Ok, now let’s talk about *insert name* who you said really values you being in his/her life.

1. Thinking of ______, can you describe an instance when you felt really needed or useful by this organization? (walk me through it from beginning)
   - What happened?
   - How did you feel when that happened?
   - Can you say more about how that made you feel?
   - What was it that made you feel that way?

1. Why do you think this person really needs or values you?
   - PROBES: Does it have anything to do with special things you do for or with this person, or some special role you have in this person’s life, etc?
   - Are there any ways in which you think you are useful to this person? PROBE: do you have a skill, a role you occupy, a status.
     - And what did (your doing that) tell you about yourself

Behaviours

2. If you weren’t around in (name of person)’s life, what do you think he/she would miss or want for?

Irreplaceability/Uniqueness
3. What is it about you or about what you have to offer that makes you particularly valuable or useful to this person?
   - PROBE: Would you say there is anything special or unique about you or about what you have to offer to this person? What makes you uniquely valuable to (name of person)?

Details about Relationship

4. How long have you been there for (name of person)?
5. How or why did you become so important to (name of person)?

Self-Attitude

Now let’s talk about the ways your involvement with these people might affect the way you see yourself.

6. Thinking about *insert name* has your importance to him/her affected the way you see yourself?
   - PROBE: Have you learned anything about yourself from your usefulness to this person
   - Being involved with this person or group makes you see yourself as ________?
   - If I had to say what my involvement with these people says about me as a person, I would say that it says I am a “blank” person.
   - When you are there for ______ what thoughts and feelings does it leave you with about yourself (as a person)?
   - Does your usefulness to this person say anything to you about the kind of person you are?
   - If you were to complete this sentence, what would you say/write? “My involvement with the people who I mean a lot to has shown me that I am a (blank) person”

7. It’s been said that helping others helps oneself. Maybe it even changes the way you see yourself. Can you talk about that a bit?
8. Does your usefulness to (name) come from the kind of person you are? If so, can you tell me more about the kind of person you are and how that affects your usefulness to others?

Importance to Self

9. If you no longer had the opportunity to be of value or useful to ________ how would this affect you?

10. And finally, is there anything negative at all about your usefulness to others?
    PROBES: Do you feel burdened? Too responsible? Exploited?
SECTION 2: Participant’s Usefulness to Groups, Organizations, Clubs

Now I want to ask you some more about you’re involvement with organizations that are important to you. In particular, I want to know whether there are any groups, clubs, or organizations that strongly need or count on you for your participation.

1. Why do you think this club, group, or organization really needs or values you?
   - PROBE: Does it have something to do with what you do for this group/organization or something you bring (e.g., service, energy)?
   - Are there any ways in which you feel useful to this group/organization? Probe: do you have a skill, a role you occupy, a status

Behaviours

2. In what ways have you been valuable to this group/organization? If you weren’t able to participate in this group/organization, what do you think they would miss about you?

Irreplaceability/Uniqueness

3. What is it about you or about what you have to offer that makes you particularly valuable or useful to this group/organization?
   - PROBE: Would you say there is anything special or unique about you or about what you offer to this group/organization? What makes you uniquely valuable to this group/organization.

Details about Relationship

4. How long have you been involved with (group name)?
5. How did you become so important to (group name)?

Self-Attitudes

Now let’s talk about the ways your involvement with these groups might affect the way you see yourself.

6. Thinking about this groups, has your importance to this group/organization affected the way you see yourself?
   - PROBE: Have you learned anything about yourself from your usefulness to this group/organization?
   - Being involved with this group makes me feel ________?
   - If I had to say what my involvement with this group says about me as a person, I would say that it says I am a “blank” person.
   - When you are there for ______ what thoughts and feelings does it leave you with about yourself (as a person)?
• Does your usefulness to this group/organization say anything to you about the kind of person you are?
• If you were to complete this sentence, what would you say/write? “My involvement with this group/organization has shown me that I am a (blank) person”

7. It’s been said that helping others helps oneself. Maybe it even changes the way you see yourself. Can you talk about that a bit?

8. Does your usefulness to this group/organization come from the kind of person you are? If so, can you tell me more about the kind of person you are and how that affects your usefulness to others?

**Importance to the Self**
9. If you no longer had the opportunity to be of value or useful to __________ how would this affect you?

10. And finally, is there anything negative at all about your usefulness to this organization/group/club? PROBES: Do you feel burdened? Too responsible? Exploited?

11. Thinking of (one group)______ , can you describe an instance when you felt really needed or useful by this organization? (walk me through it from beginning)
   • What happened (describe from start)
   • How did you feel when that happened?
   • Can you say more about how that made you feel?
   • What was it that made you feel that way?
Appendix B: Phone Call Transcript

Hello, my name is Alayna Gillespie and I’m calling from the University of Guelph. I got your contact information from ________ who indicated that you agreed to being contacted to find out more about a study I am doing on people’s social life and self-image.

If you agree to be interviewed, it would take about 60-90 minutes of your time, and I would do the interview in-person at your home. Most of the interview will be about any involvement you may have with people and organizations and about how those involvements might influence the way you see yourself.

If you decide to participate, I would like to give you a $15 gift card at the end of the interview as thanks for your time. Of course, although we hope you do participate, there are absolutely no penalties or consequences for you if you do not want to.

Do you have any questions about the study, your role in it, or anything else at this time? Do you wish to be interviewed for this study or not?

If No: That’s OK. Thank you very much for your time and consideration. If you have any question about the study, please do not hesitate to contact me by email (agillesp@uoguelph.ca) or by phone. Good-bye

If Yes: Great! Can we set up an appointment now?
You are invited to participate in a research study conducted by Alayna Gillespie, a graduate student and Dr. Benjamin Gottlieb from the Department of Psychology at the University of Guelph.

PURPOSE OF THE STUDY
The study’s main purpose is to learn about the different kinds of social worlds that people participate in. Some people are very involved with several people and organizations while others tend to be less socially active. So in this study we are interviewing people about their social involvements, especially any involvements they may have with people and groups that mean a lot to them. We are also interested in any ways that these social involvements affect the way people see themselves. So this study is all about the special relationships and groups people may be part of, and how they affect the way they see themselves.

WHAT’S INVOLVED
If you consent to participate in this study, we would have contact with you twice. Our first contact with you would involve a private interview in which we discuss any people and organizations you participate in and value. The interview will take about 60-90 minutes of your time. The second contact with you would be much shorter, probably no more than 15 minutes. On that occasion, we will give you a number of descriptions of ways people see themselves and ask you whether they apply to you. You will be asked whether you wish to receive a copy of the study results. If so, a hard copy of the results will be sent by mail unless you prefer to receive it as an e-mail attachment.

POTENTIAL RISKS AND DISCOMFORTS
We realize that people have different lifestyles, with some people having a great deal of social involvement and others having relatively little. Because we don’t think that one lifestyle is better than another--it’s just a matter of what suits people--we have no reason to believe that our questions could cause you any embarrassment or discomfort. But you always have the right not to answer any questions you prefer not to answer. And of course, all the information you provide will be kept confidential, and you
can refuse to participate or even withdraw from the study at any time, even after you have started to complete the survey.

POTENTIAL BENEFITS
As I just mentioned, by participating in this research project, you will have an opportunity to share your personal experiences and beliefs about yourself and any social involvements you may have.

AS THANKS
You will receive a $15 gift card of their choice for participation in this research project.

CONFIDENTIALITY
Everything you say will be held in the strictest confidence. The audio tape of your interview will not have your name or any identifying information on it because we will substitute a code number that is known only to the two research people involved in the study who will store your name and code in a locked cabinet at the University of Guelph. The audio tapes, consent forms, and questionnaire will be identified by a number only and will be stored in a locked cabinet at the University of Guelph for a minimum of 5 years. After this period of time, paper files will be shredded and audiotapes will be destroyed. Only Dr. Benjamin Gottlieb (Faculty Supervisor at the University of Guelph) will have access to the data.

Your name will never appear in connection with this study. The results will be combined and summarised across all participants. Participants will not be permitted to have access to individual results. Selected verbatim quotations may be used in the final analysis; however, no identifying information will be attached to the questions, and none will be used that poses any risk of identifying the participant

With your permission, the interview will be audio-recorded.

PARTICIPATION AND WITHDRAWAL
You can choose whether to be in this study or not. If you agree to be in this study, you may withdraw at any time without consequences of any kind. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don’t want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so. You will still receive a $15 gift card if you withdraw from the interview.

If you have any questions or concerns about the research, please feel free to contact Dr. Benjamin Gottlieb, the Faculty Supervisor, at (519) 824-4120 ext. 53513 (email: bgottlie@uoguelph.ca) or Alayna Gillespie, the Student Investigator, at agillesp@uoguelph.ca).

This study has been reviewed and received ethics clearance from the University of Guelph’s Research Ethics Board. If you have questions regarding your rights as a research participant, contact:
SIGNATURE OF RESEARCH PARTICIPANT/LEGAL PRESENTATIVE

I have read the information provided for the study “Outside In: Social Life and Self-Image” as described above. My questions have been answered to my satisfaction, and I agree to participate in this study and have my interview audio-taped. I have been given a copy of this form. I also grant permission for you to contact me again so that I can participate in the second part of this study.

________________________________________
Name of Participant (please print)

________________________________________
Signature of Participant                                                                 Date

SIGNATURE OF WITNESS

________________________________________
Name of Witness (please print)

________________________________________
Signature of Witness                                                                 Date
Appendix D: Pool of Social Usefulness Items

Response scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Please indicate on the scale below from 1 (strongly disagree) to 5 (strongly agree), how much you disagree or agree with the following statements.

1. Being there for others gives life meaning.
2. I feel a sense of pride from knowing that I have been there for someone.
3. The world would be a better place if there were fewer do-gooders.
4. Helping certain people I know has actually helped me.
5. I am helping people about as much as I can.
6. I gain a sense of value from being useful to others.
7. To help others is to be truly a person of value.
8. I like to feel needed by others.
9. I respect people who are there for others.
10. My sense of worth comes in part from helping others.
11. The trouble with helping others is that people will take and take.
12. To do good for someone is to feel good about oneself.
13. I have taken on just the right amount of responsibility for helping others.
14. It’s hard for me to turn down someone who needs my help.
15. My life satisfaction comes in part from being there for certain people.
16. People should avoid getting involved in other people’s problems.
17. I make an important contribution to someone’s life.
18. I bring something special or unique to the people I help.
20. I have room in my life to be of more service to others.
21. I feel a moral obligation to help others.
22. I feel a sense of satisfaction from being useful to others.
23. I am one of those people who think it’s important to help others.
24. Money cannot buy the kinds of help that I give certain people.
25. I make a unique contribution in my helping/service roles.
26. Someone I know counts of me for the special support I provide.
27. Being there for others keeps me going.
28. I have a desire to be there for others.
29. I am motivated to be helpful to others.
30. Modesty aside, I think I’m a great helper.
31. As far as helping people, no one else could substitute for me.
32. Helping others is one activity that gives my life purpose and meaning.
33. When it comes to helping people, I know just how much to give.
34. It’s better for people to be self-reliant than to help them.
35. Being there for certain people has taught me a lot about myself.
36. I get a sense of fulfillment when I am able to be useful to others.
37. I feel over-burdened by what I do to help others.
38. I have ways of helping people that make my help acceptable to them.
39. I welcome opportunities to help others.
40. I feel badly when I am not able to be there for someone.
41. Helping others makes me feel valued and appreciated.
42. I am motivated to help people when I can.
43. I believe you gain more than you give when you are there for others.
44. I go out of my way to be there for other people.
45. I always come away feeling better when I am able to be there for others.
46. For certain people in my life, I offer a special relationship that makes me irreplaceable.
47. Helping others is risky because people may take advantage of you.
48. Helping others is one of the most admirable ways to spend one’s time and energy.
49. I strive to be of service to others.
50. Being useful to others is part of who I am as a person.
51. At this point I am doing enough to be of help to others.
52. Several people rely on me to be there for them.
53. I have my own special ways of being helpful to others.
54. I have always been a generous person.
55. I am motivated to be positively involved in the community.
56. I find ways to help people that make me irreplaceable.
57. I tend to give too much of myself to others.
58. I like having other people lean on me.
59. I am ready to give more of my time to helping others.
60. I have a sense of responsibility to be there for someone.
61. I have a personal drive to be useful to others.
62. I need to reduce my involvement in helping others.
63. Being useful to others gives my life purpose.
64. Helping others is a slippery slope; before you know it, you are drained.
Appendix E: Validation Measures

Meaning in Life Scale
(Krause, 2009)

Response scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

1. I have a system of values and beliefs that guide my daily activities.
2. I have a philosophy of life that helps me understand who I am.
3. I feel like I am living fully.
4. I feel I have found a really significant meaning in my life.
5. In my life, I have clear goals and aims.
6. I have a sense of direction and purpose in life.
7. I feel good when I think of what I have done in the past.
8. I am at peace with my past.

Loyola Generativity Scale
(McAdams & de St. Aubin, 1992)

Response scale: 0 = never applies to you, 1 = occasionally or seldom applies to you, 2 = applies to you fairly often, 3 = applies to you very often or nearly always

Please rate on the scale below how much each of the following statements applies to you generally. The rating is on a scale from 0 (never applies to you) to 3 (applies to you very often or nearly always).

1. I try to pass along the knowledge I have gained through my experiences.
2. I do not feel that other people need me.
3. I think I would like the work of a teacher.
4. I feel as though I have made a difference to many people.
5. I do not volunteer to work for a charity.
6. I have made and created things that have had an impact on other people.
7. I try to be creative in most things that I do.
8. I think that I will be remembered for a long time after I die.
9. I believe that society cannot be responsible for providing food and shelter for all homeless people.
10. Others would say that I have made unique contributions to society.
11. If I were unable to have children of my own, I would like to adopt children.
12. I have important skills that I try to teach others.
13. I feel that I have done nothing that will survive after I die.
14. In general, my actions do not have a positive effect on other people.
15. I feel as though I have done nothing of worth to contribute to others.
16. I have made many commitments to many different kinds of people, groups, and activities in my life.
17. Other people say that I am a very productive person.
18. I have a responsibility to improve the neighbourhood in which I live.
19. People come to me for advice.
20. I feel as though my contributions will exist after I die.

**Empathetic Concern Scale**  
(Wilhelm & Bekkers, 2010)

Response scale: 1 = never true, 2 = rarely true, 3 = sometimes true, 4 = often true, 5 = almost always true

*Please indicate on the scale below from 1 (Never true of you) to 5 (Almost always true of you), how much the following statements describe you.*

1. I often have tender, concerned feelings for people less fortunate than me.
2. Sometimes I don’t feel very sorry for other people when they are having problems.
3. When I see someone being taken advantage of, I feel kind of protective towards them.
4. Other people’s misfortunes do not usually disturb me a great deal.
5. When I see someone being treated unfairly, I sometimes don’t feel very much pity for them.
6. I am often quite touched by things that I see happen.
7. I would describe myself as a pretty soft-hearted person.

**The Satisfaction with Life Scale**  
(Diener et al., 1985)

Response scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with 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.

**Positive Relations with Others**  
(Ryff, 1989)

Response scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

*Please circle on the scale below from 1 (strongly disagree) to 5 (strongly agree), how much you disagree or agree with the following statements.*

1. I don’t have many people who want to listen when I need to talk.
2. I enjoy personal and mutual conversations with family members and friends.
3. I often feel lonely because I have few close friends with whom to share my concerns.
4. It seems to me that most other people have more friends than I do.
5. People would describe me as a giving person, willing to share my time with others.
6. Most people see me as loving and affectionate.
7. I know I can trust my friends, and they know they can trust me.
8. Maintaining close relationships has been difficult and frustrating for me.
9. I have not experienced many warm and trusting relationships with others.

**Rosenberg Self-Esteem Scale**

*(Rosenberg, 1979)*

Response scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

1. I feel that I’m a person of worth.
2. I feel that I have a number of good qualities.
3. I am able to do things as well as most people.
4. I feel I do not have much to be proud of.
5. I take a positive attitude toward myself.
6. Sometimes I think I am no good at all.
7. On the whole, I am satisfied with myself.
8. I certainly feel useless at times.
9. I wish I could have more respect for myself.
10. All in all, I am inclined to feel that I am a failure.

**Avoidant Attachment**

*(Simpson et al., 1996)*

Response scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

1. I find it relatively easy to get close to others.
2. I’m not very comfortable having to depend on other people.
3. I’m comfortable having others depend on me.
4. I don’t like people getting too close to me.
5. I'm somewhat uncomfortable being too close to others.
6. I find it difficult to trust others completely.
7. I’m nervous whenever anyone gets too close to me.
8. Others often want me to be more intimate than I feel comfortable being
Impression Management Scale
(Paulhus, 1994)

Response scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

1. I sometimes tell lies if I have to.
2. I never cover up my mistakes.
3. There have been occasions when I have taken advantage of someone.
4. I never swear.
5. I sometimes try to get even rather than forgive and forget.
6. I always obey laws, even if I’m unlikely to get caught.
7. I have said something bad about a friend behind his or her back.
8. When I hear people talking privately, I avoid listening.
9. I have received too much change from a salesperson without telling him or her.
10. I always declare everything at customs.
11. When I was young I sometimes stole things.
12. I have never dropped litter on the street.
13. I sometimes drive faster than the speed limit.
14. I never read sexy books or magazines.
15. I have done things that I don’t tell other people about.
16. I never take things that don’t belong to me.
17. I have taken sick-leave from work or school even though I wasn’t really sick.
18. I have never damaged a library book or store merchandise without reporting it.
19. I have some pretty awful habits.
20. I don’t gossip about other people’s business.
Appendix F: Demographic Questions

This final section of the survey asks about your background and life situation. Your answers will help us develop a profile of participants.

1. What is your gender?
   - [ ] Male
   - [ ] Female

2. What year were you born? Please specify: _______________

3. What is the highest level of education you have completed?
   - [ ] Completed elementary school
   - [ ] Some high school
   - [ ] Completed high school
   - [ ] Some college or university
   - [ ] Completed college or university undergraduate degree
   - [ ] Some graduate studies
   - [ ] Completed Graduate Degree

4. Are you currently?
   - [ ] Employed full-time
   - [ ] Employed part-time
   - [ ] Retired and not employed
   - [ ] Unemployed and looking for paid employment
   - [ ] Other; Please specify:_______________________________________

5. What is your household composition?
Living alone

Living with (please indicate numbers beside applicable lines):
  Spouse/common law partner: ____
  Children: _____
  Siblings:____
  Parents/in-laws:____
  Other (Please specify):____

6. Is your total annual household income:
   - Less than $20,000
   - $20,000-$39,999
   - $40,000-$49,999
   - $50,000-$59,999
   - $60,000-$69,999
   - $70,000-$79,999
   - $80,000-$99,999
   - $100,000 or more
   - Other (please specify) ____________________

7. Are you currently:
   - Married
   - Separated/Divorced
   - Never married
   - Widowed or widowered

8. How in general would you rate your health?

<table>
<thead>
<tr>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
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9. **a)** In the past month, have you done any volunteer work for any organization, clubs, or community groups?

   - [ ] Yes ; If yes: How many groups have you volunteered for in the past month?: ____
   - [ ] No (go to 10)

**b)** About **how many hours** did you spend on volunteer work of [this kind/these kinds] during the past month:
Number of hours: __________

10. **a)** In the past month have you been involved in helping any adult family members or relatives by giving them advice, and/or practical help, and/or emotional support.

   - [ ] Yes, I have been helping or providing support to _____ (Indicate number) people like that. [if yes, go to 10 (b)]
   - [ ] No [if no, go to 11]

**b)** About **how many hours** did you spend helping or providing support to any adult family members or relatives in the past month?
Number of hours: ________

11. **a)** What about friends, neighbours, and acquaintances? During the past month, were you involved in helping or providing support to any of them?

   - [ ] Yes I have been helping or providing support ____ (indicate number) people like that
   - [ ] No (skip 10b)

**b)** About **how many hours** did you spend helping or providing support to friends, neighbours, or acquaintances in the past month?
Number of hours: ______________
Appendix G: Detailed Description of Item Development and Reduction

After completing phases 1 to 5 of Braun and Clarke’s (2006) thematic analysis methodology, I drew on the final themes to generate items for the social usefulness measure. To begin, I reviewed the data extracts (i.e., quotes from participants) for each theme. The data extract wording was used to develop short items for the social usefulness measure in the form of declarative statements. For example, the data extract, “I think it enriches my life [participant is referring to being there for others]” was transformed into the item, “Being there for others enriches my life.” After developing items based on the data extracts, my Advisor and I generated additional items based on the theme definitions. For example, the theme, amount of perceived social usefulness, was used to generate the items, “I am helping people about as much as I can” and “I am helping about as many people as I can.” The item development was an iterative process of writing and reviewing items to ensure the items captured social usefulness specific to the particular dimension. Items were reworded or removed based on this process until a comprehensive list of 140 items was generated.

As a means of preliminary item classification and reduction, a convenience sample of four undergraduate student judges was recruited and provided with the themes and the theme definitions, and given the list of 140 items in random order. The student judges were asked to classify the items into the five themes or into a miscellaneous category if the item did not conceptually fit any of the five themes. If an item fit more than one theme the judges were asked to place it in all the themes it fit. The judges were told it was not a test and there were no correct or incorrect answers. The judges were asked not to
“read into” the items, but to take them at face value when sorting them into the dimensions.

Based on the sorting by the student judges, items that were categorized in the same category by 3 of 4 judges were maintained in the theme. Any item that sorted into different categories by 3 of 4 judges was removed. This process left 128 items remaining.

As a means of final item refinement and classification, 4 older adult judges were selected from the sample of initial interviewees. The judges were sent the 128 remaining items in random order. The same instructions were provided to these judges. One judge was removed from the final selection process because 23% of the items were given multiple ratings by this judge, a rate more than double the other judges. The same rules for maintaining and removing items were applied; however, decisions were based on only 3 judges. After reviewing the judges’ responses, it was apparent that the judges felt the negatively worded items were difficult to classify. At least 2 of the 3 judges categorized all the negatively worded items into the miscellaneous category. Consequently, a review of items was conducted to remove negatively worded items along with any redundant items. This second classification process left 98 items after the seniors judging. The final measure included 64 items after the final review by the researchers.
Appendix H: Recruitment Email

Hello,

My name is Alayna Gillespie. I am a doctoral student in Psychology at the University of Guelph under the supervision of Dr. Benjamin Gottlieb. As part of my studies, I am conducting research about the ways people prefer to be involved with other people. Some older adults prefer to keep to themselves and not get involved much in meeting other people’s needs, whereas other older adults prefer to be quite involved in the community and in meeting other people’s needs. So this survey asks you about your own preferences for involvement with others.

You are eligible to participate in this survey if you live in Canada, are 60 years of age or older, and do not have any major health problems or limitations that restrict your ability to move around and do things. The survey will take approximately 25-30 minutes of your time. To thank you for your time and effort, anyone who completes the survey will receive a $5 Tim Hortons gift card.

If you would like to participate, please access the survey by selecting this hyperlink: [hyperlink]
If the hyperlink does not direct you to the survey webpage, you can copy and paste the information in the hyperlink to your Internet browser’s address bar.

The University of Guelph’s Research Ethics Board has cleared this research. If you agree to participate, you can withdraw from it at any time. If you do complete the survey, all information you provide will be kept confidential, meaning that neither your name nor other identifying information will be attached to your responses. The results will be combined and summarized across all of the participants.

By participating in this survey, you will have a chance to think about the kind of person you are, and you may find that interesting. We also hope that what we learn about the social involvements of older adults will help us appreciate both their unique and common social lifestyles. Please do not hesitate to contact me with any questions or concerns by email (agillesp@uoguelph.ca).

Thank you in advance for your cooperation in this research study. If you know of anyone else who would be interested in completing this survey (who is 60 years of age and older and lives in Canada), we ask that you please forward this email on to them.

Regards,
Alayna
Appendix I: Study Two Consent Form

Preferences for Involvement with Others

Greetings! We kindly invite you to participate in a survey conducted by Alayna Gillespie, a doctoral student, and Dr. Benjamin Gottlieb from the Department of Psychology at the University of Guelph.

PURPOSE OF THE STUDY

The purpose of this survey is to gain information about the ways older adults prefer to be involved with other people. Some older adults prefer to keep to themselves and not get involved much in meeting other people’s needs, whereas other older adults prefer to be quite involved in the community and in meeting other people’s needs. So this survey asks you about your own preferences for involvement with others.

WHAT’S INVOLVED

If you consent to participate in this survey, you will read a number of statements about different ways people prefer to be involved with others, and then indicate how much you personally agree or disagree with each statement. You will also be asked for some information about your background, such as your education and social contacts. The survey will take about 25-30 minutes of your time.

POTENTIAL RISKS

We realize that people have different lifestyles, with some people having a great deal of social involvement and others having relatively little. Because we don’t think that one
lifestyle is better than another--it’s just a matter of what suits people--we have no reason to believe that our questions could cause you any embarrassment or discomfort. But you always have the right not to answer any questions you prefer not to answer. And of course, all the information you provide will be kept confidential, and you can refuse to participate or even withdraw from the study at any time, even after you have started to complete the survey.

POTENTIAL BENEFITS

As I just mentioned, by participating in this survey, you will have a chance to think about the kind of person you are, and you may find that interesting. We also hope to learn about both the unique and the common ways older adults prefer to be involved with others.

AS THANKS

Participants will receive a $5 gift card from Tim Horton's for participation in this research project.

CONFIDENTIALITY

Your answers to this survey will be held in the strictest confidence and your name, e-mail address, and any other identifying information about you will be replaced with a code number. All information provided will be kept confidential. The consent forms and questionnaires will be stored electronically in password protected files. Only the faculty supervisor and student investigator will know the password and have access to the files. The password protected files will be stored on the student investigator’s removable hard drive for a minimum of 5 years after the completion of the study. After this period, the files will be deleted. The results will be combined and summarised across all participants so that no one's personal answers will ever appear on their own.
PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don’t want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so. You will still receive a gift card for participation in the study if you withdraw. If you don’t want your answers to be included in the study, please email Alayna Gillespie at agillesp@uoguelph.ca so your answers can be deleted.

If you have any questions or concerns about the research, please feel free to contact Dr. Benjamin Gottlieb, the Faculty Supervisor, at (519) 824-4120 ext 53513 (email: bgottlie@uoguelph.ca) or Alayna Gillespie, the Student Investigator, at agillesp@uoguelph.ca.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:

Research Ethics Officer
University of Guelph
437 University Centre
Guelph, ON N1G 2W1

Telephone: (519) 824-4120 ext. 56606
E-mail: sauld@uoguelph.ca
Fax: (519) 821-5236
If you agree to the above conditions and wish to participate in this survey, then please check the circle marked “Yes, I understand the conditions and wish to participate in the survey.” Selecting this circle signifies that you have read and understood the above information, and have consented to participate in the survey. (this question is required in order to move on)

- Yes, I understand the conditions and wish to participate in this survey
- No, I do not wish to participate in this survey.
Appendix J: Social Usefulness Measure and Scoring Key

Please read each of the following statements carefully and then select the option that best describes how much you disagree or agree with them. There are no right or wrong answers; it’s just a matter of your personal opinion.

<table>
<thead>
<tr>
<th>Strongly Disagree 1</th>
<th>Disagree 2</th>
<th>Neutral 3</th>
<th>Agree 4</th>
<th>Strongly Agree 5</th>
</tr>
</thead>
</table>

1. I feel a sense of satisfaction from being useful to others.
2. My sense of worth comes in part from helping others.
3. I am motivated to help people when I can.
4. Being useful to others is part of who I am as a person.
5. I am motivated to be positively involved in the community.
6. I go out of my way to be there for other people.
7. To do good for someone is to feel good about oneself.
8. I gain a sense of value from being useful to others.
9. To help others is to be truly a person of value.
10. I have a personal drive to be useful to others.
11. For certain people in my life, I offer a special relationship that makes me irreplaceable.
12. Someone I know counts on me for the special support I provide.
13. I see myself as someone who is generous towards others.
14. I welcome opportunities to help others.
15. I strive to be of service to others.
16. I feel a sense of pride from knowing that I have been there for someone.
17. I am one of those people who think it's important to help others.
18. Being useful to others gives my life purpose.
19. I respect people who are there for others.
20. I have a desire to be there for others.
21. I like to feel needed by others.
22. Several people rely on me to be there for them.

**Scoring Key for the Social Usefulness Measure**

**Subscales**

1. **Personal Motivation to be Socially Useful**
   - Sum items: 3, 4, 5, 6, 10, 13, 14, 15, 17, 18, 20 (minimum = 11; maximum = 55) for total score
   - Divide summed total for items by 11 for mean score

2. **Psychological Rewards of Social Usefulness**
   - Sum items: 1, 2, 7, 8, 9, 16, 19, 21 (minimum = 8; maximum = 40) for total score
   - Divide summed total for items by 8 for mean score

3. **Perceived Network Reliance on Special Social Usefulness**
   - Sum items: 11, 12, 22 (minimum = 3, maximum = 15) for total score
   - Divide summed total for items by 3 for mean score

**Overall Scoring**

- Sum the 22 items for the entire scale (minimum = 22; maximum = 110)
- Divide summed total by 22 for overall mean score