5-20-2015 12:00 AM

The Role Of Cultural And Family Values On Social Connectedness In Visible Minority Elders: An Exploratory Study

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THE ROLE OF CULTURAL AND FAMILY VALUES ON SOCIAL CONNECTEDNESS IN VISIBLE MINORITY ELDERS: AN EXPLORATORY STUDY

(Thesis Format: Monograph)

by

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A thesis submitted in partial fulfillment
of the requirements of the degree of
Master of Science

The School of Graduate and Postdoctoral Studies
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Abstract

Assumptions about the family providing enough social support to visible minority elders can be found in the literature, contradicting reported levels of social isolation and loneliness by visible minority elders. While structural barriers have been recognized to influence feelings of isolation and loneliness, limited information exists about the role of cultural factors such as acculturation and family values. Accordingly, this study investigated the role of acculturation and the 'family as referents' dimension of familism, which refers to the belief that family members' behaviour should meet with familial expectations, on isolation and loneliness among visible minority elders ($N = 123$). Analyses using hierarchical regression indicated that participants who highly endorse the family as referents dimension were more likely to feel lonely. This study provides support for the importance of considering cultural values when studying predictors of loneliness among visible minority elders. Implications include the importance of addressing familial expectations in programs aimed at alleviating feelings of loneliness among visible minority elders.

Keywords: social isolation, loneliness, visible minority elders, familism, cultural values, family values

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Chapter 1: Introduction

A growth in population due to immigration and a growth in the aging population are two demographic trends in Canada that are contributing to the increasing population of visible minority elders (Durst, 2005). The operational definition for an individual from a visible minority group, as defined by the *Employment Equity Act* (1995)*,* is 'persons, other than Aboriginal persons, who are non-Caucasian in race or non-white in colour.' The visible minority population consists mainly of the following groups: South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean and Japanese. In 2006, visible minorities made up 16.2% of the total Canadian population (Statistics Canada, 2006), and that number increased to 20.9% by 2011 (Statistics Canada, 2011a). In addition, 10.8% of older adults 65 or older belonged to a visible minority group in 2011 (Statistics Canada, 2011a). As the visible minority population grows, the number of visible minority elders is expected to grow in the future. Despite the rapid increase in visible minority elders, there is a lack of research related to their social and emotional needs and how to address those needs in a culturally sensitive manner. This is concerning since visible minority elders have unique needs, such as the need for formal services that take into account their cultural values, but little is known about how to address those needs appropriately (Lai, 2004; Lai, 2008). The rapid growth among visible minority elders, along with a lack of knowledge about them, makes it imperative to conduct research

aimed at understanding how to help them age well.

Visible minority elders face a number of challenges when living in Canada. Some of these challenges include adjusting to a new culture, overcoming language barriers, being economically disadvantaged, racism, having fewer social support groups than in their native country, and a lack of information about health and community-based services available to them (Suwal, 2011). Furthermore, some visible minority elders become highly dependent on their relatives, both emotionally and socially, when language and cultural barriers make it difficult for them to socialize with the Canadian population (Casado & Leung, 2001). This dependency on their family members, combined with an inability to interact with other members of the Canadian population, puts some visible minority elders at a higher risk of being lonely and having weak social networks. It is important to note that not all visible minority elders will become socially isolated or lonely, but that the factors mentioned above can put them at a higher risk.

The importance of being socially integrated and having social support has been noted across studies (Umberson & Montez, 2010; Fratiglioni et al., 2000; Cacioppo et al., 2011). Social integration refers to overall level of involvement with formal and informal social relationships (Umberson & Montez, 2010). Informal social relationships refer to friends and family, while formal social relationships refer to relationships with places such as volunteer organizations and religious institutions. As defined by Rowe and Kahn (1997), a key element of successful aging is

active engagement with life, along with low probability of disease and high cognitive and physical functional capacity. Active engagement in life is defined by interpersonal relations and by productive activity. Rowe and Kahn's successful aging model (1997) highlights the importance of social engagement and social interaction when considering factors that contribute to aging successfully. Individuals who are socially engaged report greater life satisfaction and overall well-being than individuals with fewer social relationships (Umberson & Montez, 2010). Social involvement and social relationships also greatly benefit the health of individuals. The most powerful evidence of the importance of social integration comes from studies of mortality. These studies are consistent in showing that individuals with low levels of social involvement are more likely to die than those with greater social involvement (Berman & Syme, 1979; Holt-Lunstad, Smith & Layton, 2010).

In addition to greater life expectancy, the provision of social support and social involvement helps maintain the mental and physical well-being of older adults, and delays institutionalization (Fratiglioni et al., 2000; Krause &Borawski-Clark, 1994; Krause &Borawski-Clark, 1994; Seeman, 1996; Wang, Mittleman, & Orth-Gomer, 2005; Nicholson, 2012). Provision of social support improves the mental health of individuals by maintaining their cognitive function (Fratiglioni et al., 2000), by providing them with a sense of control that allows them to cope with life stressors (Krause & Borawski-Clark, 1994), and by acting as a protective

factor against feelings of depression (Seeman, 1996). Similarly, the provision of social support also has important physical benefits. Individuals who report having social support have lower rates of chronic disease development and have more disease-free years than older adults with lower levels of social support (Wang, Mittleman, & Orth-Gomer, 2005). . In addition, social support has been shown to act as a buffer against cardiovascular reactivity to stress (Arthur, 2006). The physical benefits of social support highlight the importance of social engagement on aging successfully, and reinforce Rowe and Kahn's (1997) successful aging model The benefits of social support on the physical health of the individual are particularly important as individuals reach advanced age and experience physical losses. The provision of social support provides older adults with the help that they need to age in place and it has been shown to delay premature institutionalization (Nicholson, 2012). The positive effects of social support reinforce the importance of finding ways to ensure that individuals get the social support that they need, especially as they start moving into old age and as they begin to experience more social and physical losses.

Similarly, a lack of social support and social involvement can result in social isolation and loneliness. Social isolation can be described as the physical separation from other individuals, a state in which the individual lacks a sense of belonging socially, lacks social engagement with others, and has a minimal number of social contacts (Nicholson, 2009). Loneliness, on the other

hand, is a more subjective experience of feeling alone (Tomaka, Thompson, & Palacios, 2006). Loneliness can contribute to increase cortisol levels and poorer sleep patterns, and it affects regulation of blood pressure (Hawkley, Burleson, Berntson, & Cacioppo, 2003). Similarly, social isolation is a significant risk factor for morbidity and mortality (Berman & Syme, 1979). Social isolation is in fact as strong of a predictor of mortality and morbidity as smoking and obesity (Cacioppo, et al., 2011). In addition, social isolation predicts greater vascular resistance, poorer sleep patters, and a sedentary lifestyle (Hawkley, Thisted & Cacioppo, 2009; Hawkley, Preacher & Cacioppo, 2010). The negative health effects of loneliness and social isolation reinforce the importance of studying this phenomenon so that appropriate measures may be taken to help prevent these negative feelings.

Given the negative consequences of social isolation and loneliness, it is concerning that a significant number of visible minority elders report that in their country of origin they received social support from their friends and neighbours, but that structural barriers (such as lack of transportation) and cultural barriers (such as expectations about the family being the primary source of emotional support) prevented them from forming new friendships in their new country (Koehn, 2009). A number of structural reasons explain why visible minority elders are not getting enough social interaction, resulting in weak social networks and in loneliness. Some of these structural barriers include language barriers, employment status, education level, and

difficulty accessing community services that offer social support (Suwal, 2011).

Barriers related to cultural values can also explain why visible minority elders report feeling socially isolated and lonely. Cultural values influence an individuals' belief system and consequently how individuals view the world, how they interact with those around them, and how they live their lives (Frey, 1994). A key distinguishable cultural value related to visible minority elders is familism, which refers to strong identification with the family and strong feelings of loyalty among family members (Sabogal, Marin, Otero-Sabogal, Marin, & Perez-Stable, 1987). Family is an important source of social support, with the family playing a central role in many cultures (Sabogal et al.,1987). Strong family ties can result in visible minority elders having expectations that their relatives will provide the social, emotional and instrumental support that they need.

Assumptions related to visible minority elders getting enough social and emotional support from their family members and not needing formal services because they come from ethnic backgrounds that prioritize the family have been made across studies (Aroian, Wu & Tran, 2005; Tam & Neysmith, 2006). Nonetheless, family members are sometimes too busy to attend to all the needs of visible minority elders, leaving visible minority elders with little opportunity for social interaction with their relatives. A lack of interaction with family members results in visible minority elders reporting high levels of social isolation and loneliness indicating that they are not

getting enough social support at home (Aroian, Wu & Tran, 2005; Tam & Neysmith, 2006).

These findings are inconsistent with assumptions made about the family providing adequate

social and emotional support, creating a gap in the literature. This raises one important question:

is the family (such as their adult children, grandchildren, cousins, and siblings) providing enough

social support for visible minority elders?

While international policy and national health and social strategies, such as the World

Health Organization and the New Horizons initiative, have highlighted the importance of

reducing and preventing feelings of loneliness and social isolation in older adults (World Health

Organizations, 2002; Keefe, Andrew, Fancey & Hall, 2006), there is limited research available

that addresses the possible influence of cultural values on reported feelings of loneliness and

isolation among visible minority elders. In addition, research on visible minority elders in

general is very limited in Canada. It is critical to gain a better understanding of these issues given

the rapidly increasing number of people belonging in this demographic.

Chapter 2: Literature Review

The purpose of this literature review is to bring attention to the problem of social isolation and loneliness among visible minority elders. Visible minority groups refer to "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour" (*Employment Equity Act*, 1995*)*. This literature review outlines structural and cultural factors that contribute to social isolation and loneliness among visible minority elders and highlights the lack of Canadian literature in this field of study. Based on the research available it is proposed that cultural values may play a significant role in levels of social isolation and loneliness reported by visible minority elders.

This literature review begins with an overview of how loneliness and isolation affect the mental and physical health in older adults, with a particular focus on visible minority elders. In addition, structural and cultural contributors of loneliness and isolation are provided, highlighting the lack of research and theory on the role of cultural values on social isolation and loneliness. Lastly, a description of the cultural value of familism will be presented, along with an overview of how this construct has been used across studies. Based on what is known about familism, it is proposed that familial relationships and family expectations might play significant roles on the levels of social isolation and loneliness reported by visible minority elders.

Social Isolation and Loneliness

The following section provides a detailed explanation of loneliness and social isolation, along with their physical and psychological consequences. In addition, this section includes an overview of what is known about social isolation and loneliness among visible minority elders.

Social isolation is defined as a condition in which an individual lacks social engagement, has a minimal number of social contacts, and is physically isolated from others (Nicholson, 2009). Social isolation can affect the psychological well-being and the physical health of an individual, with a great number of negative consequences among the older population (Sorkin, Rook, & Lu, 2002). Social isolation and loneliness, although related, are two different social conditions. While social isolation refers to an *objective* and quantifiable physical separation from other individuals, loneliness is a *subjective* experience of feeling alone and apart from others (Tomaka et al., 2006). Loneliness can also refer to a discrepancy between actual and desired social contact (Tomaka et al., 2006). Some individuals may feel lonely despite being surrounded by a large social network (Routasalo & Pitkala, 2003), while in contrast social isolation may lead to feelings of loneliness in other individuals (Tomaka et al., 2006).

Psychological and Physical Consequences of Social Isolation and Loneliness among Older Adults. Studies on older adults have reported a prevalence of loneliness between 25-45% (Savikko, Routasalo, Tilvis, Strandberg, & Pitkala, 2005; Victor et al., 2006). Even though the

relationship between loneliness and age is unclear, the rising prevalence of loneliness in older

adults is associated with a rising prevalence of the risk factors for loneliness that come with age

(such as physical disability and widowhood), rather than an intrinsic aging effect (Golden et al.,

2009). Furthermore, past research has consistently shown that social isolation and loneliness are

related to negative health outcomes and that social support is related to positive health outcomes

(Stephens, Alpass, Towers, & Stevenson 2011; Luo, Hawkley, Waite & Cacioppo 2012).

Loneliness has been found to contribute to increased cortisol levels, poor sleep patterns and an

increase in blood pressure (Hawkley et al., 2003; Cacioppo & Cacioppo, 2014). In addition,

loneliness is a unique risk factor for depressive symptoms in older adults (Cacioppo, Hughes,

Waite & Hawkley, 2006). Loneliness and depression can act synergistically to diminish the well-

being of older adults. Lastly, loneliness has been associated with morbidity and mortality

(Cacioppo et al., 2006). Although the mechanisms on how loneliness affects health are poorly

understood, researchers have suggested that loneliness has a negative effect on immune

functioning, worsening health over time (Cacioppo & Hawkley, 2003).

The way in which lonely individuals behave may increase the risk of mortality. Lonely

individuals have been found to fear negative evaluations from others and to remember more

negative social events (such as being ridiculed in public for something they said) than non-lonely

individuals (Cacioppo & Hawkley, 2009), resulting in the formation of negative impressions

about others. As a result, lonely individuals are more aware of the negative consequences of social interactions (such as being judged and ridiculed) and they view their social world as threatening (Cacioppo & Hawkley, 2009). Consequently, lonely individuals tend to distance themselves from others, as they view their interaction with other people as threatening and unwanted. This diminishes their participation in social and physical activities, negatively affecting their physical health (Cacioppo & Hawkley, 2009). The negative effects of loneliness on the physical health of individuals also highlight the importance of reducing loneliness among individuals, especially those who suffer from a chronic condition, given that feelings of loneliness could worsen prognosis (Cacioppo & Hawkley, 2009).

Similarly, being socially isolated is associated with self-rated poor health, poor physical health, and an increase in limitations in activities of daily living (de Belvis et al., 2008; Tunstall, 1957). In addition, social isolation is associated to increased morbidity and mortality (Cacioppo et al., 2011), and with having a lower health status and a lower quality of life (Hawton et al., 2011).

Thus, the research shows that loneliness and social isolation play an important role in the physical and psychological health of older adults and finding ways to prevent and reduce these feelings is critical for their overall well-being. Given the negative physical and mental health consequences of feeling lonely and being socially isolated, it is prudent that future research

considers predictors of social isolation and loneliness among visible minority elders.

Social Isolation and Loneliness in Visible Minority Elders. Although research

consistently demonstrates the positive effects of social support and the negative effects of social

isolation on older adults, little is known about their effects on visible minority elders. Social

isolation and loneliness are known to negatively affect the physical health of visible minority

elders by influencing the development of hypertension, heart disease and stroke in visible

minority elders (Tomaka et al., 2006). Visible minority groups are more likely to rely on family

members for social support than Caucasians (Kim & McKenry, 1998; Ajrouch, Antonucci, &

Janevic,, 2001). Due to the central role that family plays in many visible minority cultures it

could be expected that visible minority elders have low levels of social isolation and loneliness;

however, studies show that this is not always the case (Tomaka et al., 2006; LaVeist, Sellers,

Brown & Nickerson, 1997; Gerst-Emerson, Shovali & Markides, 2014). Visible minority elders

report not getting enough social support at home, contradicting assumptions made in the

literature about the family providing enough social support (Aroian et al., 2005; Tam &

Neysmith, 2006).

In a study conducted by Tomaka and colleagues (2006), Hispanic older adults reported

greater social isolation than Caucasians even though they were less likely to live alone.

Caucasian older adults reported greater belongingness support than Hispanics, suggesting that

Hispanic older adults might be lacking a sense of belonging socially, which could explain why they report feeling socially isolated. Even though Hispanics tend to rely on family support more than on outside sources, the low level of belongingness support found in Tomaka and colleagues study (2006), when compared to Caucasian older adults, suggest that despite coming from supportive families Hispanic older adults lack a sense of belonging. These findings suggest that Hispanic older adults might not feel like they belong socially, which is why they may be reporting higher levels of social isolation than Caucasian older adults.

Chinese and Korean older adults have also reported high levels of loneliness (Tam & Neysmith, 2006), especially when they have strong ethnic attachments. Ethnic attachment refers to a subjective identification with their ethnic group resulting in the retention of social and ethnic ties and a refusal to socialize with individuals from other ethnic groups..Older Korean women, women with a strong ethnic attachment reported having weak social networks and feeling extremely lonely (Kim, 1999). Similarly, although the Chinese community typically provides their older adults with strong social support (Tilburg, Havens & de Jong Gierveld, 2004), studies have found that many Chinese immigrants arriving in Canada feel isolated and lonely due to the high dependence on their children who are unable to meet all of their emotional and social needs (Tam & Neysmith, 2006). Taken together, these studies suggest that many visible minority elders have strong beliefs about the family being responsible for providing emotional and social support

(Schwartz, 2007). As a result, a reliance on the family may result in a reluctance to seek social support outside of the family context, even when feeling lonely and isolated.

Given that visible minority elders are not getting the social support that they need from their families (Tam & Neysmith, 2006) or from their community (Tran, Dhooper & McInnis-Dittrich, 2008), visible minority elders are at a high risk for developing feelings of loneliness and isolation (Tam & Neysmith, 2006; Tomaka et al., 2006).

Contributors to Social Isolation and Loneliness among Visible Minority Elders: A Question of Structure or Culture

Social isolation and loneliness arise from not having enough social connections and from being unable to form meaningful relationships that allow the individual to feel socially and emotionally supported. One way in which an individual could build more meaningful social connections is by increasing their social interactions (Cohen-Mansfield & Frank, 2008). Some of the reasons given in the literature as to why visible minority elders are not getting sufficient social interaction include visible minority elders not being aware of their needs (physical, emotional and social), or being reluctant to accept that they need more social interaction (Cohen-Mansfield & Frank, 2008).

Contributors to social isolation and loneliness among visible minority elders can be divided in two primary groups: structural and cultural barriers. Structural barriers refer to factors that are

beyond the control of the individual or part of the context/environment. For example, lack of

accessible transportation is a structural barrier because the individual cannot control whether

public transportation routes will be accessible to him/her or if public transportation will leave

him/her in close proximity to where he/she needs to go. On the other hand, cultural barriers refer

to barriers associated with customs, beliefs and attitudes that influence how individuals feel,

think or behave. For example, family-oriented practices may determine whether caregivers

choose to use home-care services for their older family members or not.

Structural Barriers. Researchers have widely studied structural barriers that prevent

visible minority elders from getting social interaction, resulting in social isolation and loneliness.

The most common barriers to accessing programs that provide social interaction and social

support by visible minority elders found in the literature are: lack of transportation and

accessibility (Aroian, Wu, & Tran, 2005), having a low income (Stephens et al., 2011), services

provided being inadequate (Gerts-Emerson et al., 2014) and services not targeting the needs

faced by visible minority elders (Scharlach et al., 2006). In addition, many visible minority

elders are not aware of places, such as community centers, that provide individuals with the

opportunity to socialize with other people (Tang & Pickard, 2008; Giunta et al., 2012). It has

been found that many service providers do not inform visible minority elders about services

available. Some service providers (such as nurses) believe that visible minority elders are getting

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enough social and emotional support from their families and do not require the social support

that formal services provide (Durst, 2005). This lack of knowledge of available services creates a

major barrier to accessing places that would allow visible minority elders to get the social

support that they need and desire (Gallagher & Truglio-Londrigan, 2004). All of these barriers

prevent individuals from getting enough social interaction and are important contributors to the

development of loneliness and social isolation in visible minority elders.

Cultural Barriers. Culture can be defined as a set of shared values that allow a number of

people to function together (Henry & Schott, 1999). Cultural values influence an individuals'

belief system and consequently how individuals view the world, how they interact with those

around them and how they live their lives. Cultural values establish a disposition to act in a

certain way (Frey, 1994), which could ultimately affect how individuals feel and how they

respond to those feelings. Cultural barriers exist when language, beliefs or traditions become

obstacles. Some of the cultural barriers cited in the literature that prevent visible minority elders

from accessing programs that provide social interaction include: language barriers (Lai, 2008),

lack of trust in service providers from different ethnic backgrounds (Sadavoy, Meier, Mui Ong,

2004) and beliefs that the family should be the one to provide the emotional and social support

that they need (Lai, 2004). On the other hand, religious beliefs (which are associated with

cultural beliefs) and religious attendance have been found to reduce feelings of isolation (Sook

Park, Jang, Lee, Ko, & Chiriboga, 2014). Although very limited information is available

regarding the role that cultural values related to the family play in the development of feelings of

social isolation and loneliness, family values have been speculated to play a major role in using

services that provide social interaction (Lai, 2008). To date, no studies have examined the role of

cultural values related to family values on feelings of loneliness and social isolation.

Familism

The following section will provide a detailed explanation of the cultural value of familism

along with reasons as to why it is important to consider its' relationship with feelings of

loneliness and social isolation reported by visible minority elders.

Many visible minority groups hold strong solidarity and reciprocity among their family

members (Willmoth, 2001). This strong identification with the family is captured in the cultural

value of familism. Familism is defined as a "strong identification and attachment of individuals

and their families, and strong feelings of loyalty, reciprocity and solidarity among members of

the same family" (Sabogal et al.,1987). Those who endorse the value of familism view the family

as the most important source of emotional, social and instrumental support, have strong feelings

of loyalty and solidarity towards their family members, and believe that family members should

be supported and cared for when in need (Heller, 1970; Sabogal, et al., 1987).

Familism was originally viewed as a Hispanic cultural value, which categorized Hispanics

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as tending to prioritize their family over themselves (Santisteban, Muir-Malcolm, Mitrani, & Szapocznik, 2002). However, although familism was primarily seen as being only applicable to Hispanic individuals, researchers have used the cultural value of familism to study other ethnic groups (Knight et al., 2002, Chamberlain, 2003; Youn, Knight, Jeong, & Benton, 1999). For example, familism was highly endorsed by African Americans and Asian Americans (Knight et al., 2002). Furthermore, the cultural value of familism has been used to further understand the role of familism on caregiving burden in Asian caregivers of persons with dementia (Knight, et al., 2002) and to understand the importance of grandparents in childrearing in Caribbean Islanders (Chamberlain, 2003). The use of the cultural value of familism when studying ethnic cultures other than Hispanics illustrates the applicability of familism across ethnic minority groups. As argued by Schwartz (2007), familism can be applicable to any ethnic minority group who holds a collectivist value system.

Dimensions of Familism. Familism has been suggested to be a multidimensional construct. An exploratory factor analysis revealed a three-factor solution for familism: familial obligations, perceived support from the family, and family as referents (Sabogal et al., 1987). This factor analysis was performed on the Sabogal and colleagues (1987) familism scale that measures attitudinal and behavioural aspects of the familism construct. The *familial obligations* factor can be described as the perception that one has regarding the obligation to provide

emotional, social and financial support to family members. An example of an item that corresponds to this factor is "aging parents should live with their relatives." The familial obligations dimension has been found to have negative implications for the individual and for caregivers of older adults (Penley, Tomaka & Wiebe, 2002; Penley, Tomaka & Wiebe, 2002; Sayegh & Knight, 2010). Familial obligation has been found to be associated with avoidant coping, which refers to a maladaptive coping mechanism characterized by the avoidance of dealing with stressors (Penley et al., 2002) among African American caregivers, resulting in poor mental and subjective physical health (Sayegh & Knight, 2010). Similarly, familial obligations have been shown to be associated with dysfunctional thoughts that lead to depressive symptoms among Spanish caregivers (Losada et al., 2010). These results suggest that feelings of obligation may account for some of the negative effects of familism on caregivers' mental and physical health, as high expectations about their caregiver role might lead to feelings of distress.

The *perceived support* factor measures the extent to which an individual expects to receive sufficient social, emotional and financial support from their family members. An example of an item that corresponds to this factor is "one can count on help from his/her relatives to solve most problems." Most of the items associated with this factor deal with the expectation that support will be available when needed. This factor, therefore, is often referred to as "Expected Support from the Family" (Sayegh & Knight, 2010). In a sample of Korean caregivers of stroke survivors

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those who were high on familism but low on perceived social support, were found to have higher

levels of depressive symptoms than those who had higher levels of perceived social support

(Choi-Kwon, et al., 2009). This highlights the importance that individuals place on perceiving

that social support is available if they need it.

Lastly, the *family as referents* factor measures the view of relatives as behavioural and

attitudinal referents. An example of an item that corresponds to this factor is " family should

consult close relatives concerning its important decisions." In a study conducted by Losada et al.

(2010), the family as referents factor was found to negatively affect caregivers by activating

dysfunctional thoughts associated with high expectations about their caregiver role, resulting in

depression.

A strong association has been found between the family as referents factor and the familial

obligations factor (Losada et al., 2008). The perceived support factor has not been found to be

significantly associated with these other two factors (Losada et al., 2008). The possibility of a

two-factor model was tested (family as referents, and the combination of the two other factors),

but poor fit indexes were obtained (Losada et al., 2008). This indicates that familism is a

complex and multidimensional construct, with more studies needed to better understand the

methodological and theoretical difference between these three factors. These three dimensions

highlight the influence that familial relationships have on the individual, and how those

relationships affect how an individual behaves and feels.

Familism and Caregivers. Research on how familism positively or negatively influences

visible minority elders is very limited. However, extensive research has been done in regards to

the positive and negative effects of familism on family caregivers. Negative effects associated

with high levels of familism (Knight et al., 2002) and protective factors associated with this

cultural value (Hoppe & Heller, 1975) have been found for caregivers. Familism has been

associated with poor mental and physical health in a group of Hispanic, African-American,

Korean and Japanese caregivers (Knight et al., 2002). In contrast, familism has also been found

to be a protective factor against feelings of hopelessness and despair (Hoppe & Heller, 1975).

The high association between caregiving for an older adult and burden has resulted in

extensive research on the relationship between cultural values and caregiving burden. It has been

assumed that ethnic groups who hold strong familism values will experience less burden, due to

the support that they are expected to get from their family members (Knigh, et al., 2002).

However, studies have found that Korean and African-American caregivers who hold high

familism values display high levels of burden (Youn, et al., 1999). Similarly, even when

caregivers report low levels of burden, there was a positive association between familism and

depressive symptoms among Latino caregivers (Robinson & Knight, 2004). High burden was

especially prevalent with caregivers who view their role as an obligation rather than as

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something they desired to do (Sayegh & Knight, 2010). Similarly, when caregivers report highly endorsing familism, but had weak social networks, their caregiving burden was higher than caregivers who had strong social networks (Losada et al., 2010). These findings suggest that when caregivers from different visible minority groups feel obligated and pressured to provide support they experience high caregiving burnout and feelings of depression.

Furthermore, researchers have studied the effects of familism on dysfunctional thoughts and caregivers' health outcomes (Losada et al., 2010). Dysfunctional thoughts have the possibility of increasing the likelihood that an individual will experience depression and distress when they are faced with stressful situations, since they are unable to respond effectively to their unrealistic beliefs (Marquez-Gonzalez, Losada, Izal, Perez-Rojo & Montorio, 2007). When caregivers believe that they should be capable of providing adequate care, and are unable to live up to their expectation, they start developing dysfunctional thoughts (Losada et al., 2010). Some of these dysfunctional thoughts are grounded in the cultural value of familism, since those who highly endorse familism believe that they should be able to fulfill their role as a caregiver, as it is expected from them (Losada et al, 2010). Failing to live up to these expectations can cause distress and can lead to depression. Moreover, it has also been found that these caregivers see their caregiving role as a duty, rather than as something they enjoy doing (Parveen, Morrison, & Robinson, 2012). When caregivers view their role as something they are obliged to do, they

increase the likelihood of activating dysfunctional thoughts (such as having to be the only ones

taking care of their family members), making it hard for them to effectively respond to their

unrealistic beliefs (Losada et al., 2010). Depression, loneliness and social isolation are all

negative health outcomes that could arise from dysfunctional thoughts. The relationship between

dysfunctional thoughts and depression among caregivers suggest the possibility of dysfunctional

thoughts related to familial expectations and family relationships influencing the development of

loneliness and social isolation among individuals who endorse the familism cultural value..

Studies of familism on caregivers of visible minority elders groups demonstrate that the

cultural value of familism affects the psychological health of individuals, and it also influences

their decision to seek out social support within and outside the familial context (Losada et al.,

2010; Marquez-Gonzalez et al., 2007; Knight et al., 2002; Youn et al., 1999). From these

findings, it is predicted that familism might have similar effects on the older adult.

Acculturation

The relationships among family members of visible minority groups could change when

individuals migrate into a new country. As individuals begin to adjust to a new country, their

beliefs might change to better fit the customs of their host country (Cuellar, Arnold, &

Maldonado, 1995). Acculturation is defined as a process that takes place when immigrants settle

in a new country (Berry, 2005). It is a process that happens when two different cultural groups

are in contact, and the interaction between the two results in numerous cultural changes in one or

both parties (Chiriboga, 2004). Higher levels of acculturation are associated with individuals

having better mental health than those who have low levels of acculturation (Myers &

Rodriguez, 2003). Moreover, visible minority elders and their caregivers have been found to

utilize formal services more often when they have high acculturation levels (Lai, 2004).

Many visible minority elders worry that through acculturation the younger generations are

going to forget how important family is to individuals from their ethnic background, and that

they will forget that family comes first (Scharlach, et al., 2006). In addition, Latin American

women report feeling lonely and isolated due to family separation resulting from moving to the

United States (Hurtado-de-Mendoza, Gonzales, Serrano & Kaltman, 2014). This attachment to

cultural values might prevent some of visible minority elders from adapting to their new host

country, as they are afraid that in doing so they might lose important cultural values. As

individuals from an ethnic minority group become more acculturated, it has been found that their

score on the 'family as referents' factor decreases (Sabogal et al., 1987). Nonetheless, it has also

been found that an increase in acculturation is not necessarily associated with a decrease in

family values (Rodrıguez & Kosloski, 1998; Schwartz, 2007), and so it is not always the case

that adaptability to a new country translates into having a whole new set of cultural values. It is

important to highlight that an increase in acculturation does not necessarily result in a decrease in

endorsing familism (Sabogal et al., 1987), as this indicates that even after residing in Canada for

a large number of years, individuals may still highly endorse cultural values that originate from

their ethnic background. This indicates that whether one migrated to Canada at a young or at an

older age, familism could influence how individuals feel and behave throughout their entire life

course. Consequently, familism has the possibility of influencing the development of negative

health outcomes, such as loneliness and social isolation, among visible minority elders,

regardless of when they migrated to Canada (Rodriguez et al., 2007).

The Role of Familism on Seeking Social Support Outside the Family Context

Most of what is known about the role of familism on social connectedness among visible

minority elders comes from studies that have looked at how family values influence the decision

of seeking social support outside of the family context.

Utilizing services that provide social support, such as community centers, decreases social

isolation and improves the overall health of users (Tran et al., 2008). In an investigation

conducted by Turner (2004), Caucasian and visible minority elders using a senior center stated

that the primary reason for attending the center was to become socially engaged. Similarly, in a

study conducted by Fullbright (2010), senior center users said that the main reason for their

satisfaction with the center was the development of meaningful relationships at the center.

Despite the benefits associated with using formal services (such as community centers) visible

minority elders have been found to seldom seek social support outside of the family context

(Crist, Kim, Pasvogel & Velazquez, 2009; Tran et al., 2008, Lai, 2001, Chang & Moon, 1997).

Visible minority elders who highly endorse the cultural value of familism internalize the

belief that family members should be the ones providing the care that they require and that

family caregivers provide better care than outsiders (Sabogal et al., 1987). Furthermore, a sense

of mistrust and fear when someone who is not a family member provides care was reported by

Mexican older adults (Crist, Velazquez, Ramirez Figueroa & Durnan, 2006). This mistrust of

service providers has been cited as one of the reasons why Hispanic older adults have low levels

of home care service use.

Moreover, Latino families view having a mental illness as a sign of weakness in character

(Frevert & Miranda, 1998), and those who have high levels of familism view seeking

professional psychological help as being a sign of weakness as well (Keefe, 1982). As a result,

individuals from visible minority groups who hold high levels of familism tend to stray away

from using mental health services. These individuals rely on the family for support, and delay

seeking professional help since they believe the support received at home is good enough

(Kouyoumdijan, Zamboanga, & Hansen, 2003). Lastly, in a study conducted in Canada,

researchers found that even though cultural values influence the utilization of mental health

services by visible minority elders, more would utilize the services available if more

professionals from visible minorities were trained in the field (Sadavoy et al., 2004). This

highlights the importance of having professionals from different ethnic backgrounds and for

having adequate services for visible minorities.

Although Canadian studies on service use by older adults from visible minorities are

scarce, underutilization of services was reported by those who have conducted research in this

area (Sadovoy et al., 2004; Lai, 2004). In Canada, visible minority elders have mentioned not

wanting to cause family conflict by reaching out for help as one of the reasons for service

underutilization (Sadovoy et al., 2004). In addition, among the Chinese community, Chinese

older adults report a strong expectation of having their children taking care of them (Lai, 2004),

and they have also been found to be low users of senior centers (Lai, 2001).

Although visible minority elders are thought to come from supportive families, families

often do not provide as much emotional and social support as is expected (Delgado & Tennstedt,

1997; Wong, Yoo & Stewart, 2005). As explained above, strong beliefs about the family being

responsible for providing emotional, social and instrumental support was reported as being a

reason why visible minority elders are not seeking social support outside of the family context

despite reporting feeling lonely and socially isolated. This raises an intriguing question: Could

expectations about the family being the main source of social and emotional support be related to

feelings of social isolation and loneliness reported by visible minority elders?

As previously noted, although the relationship between familism and social connectedness

has not been studied, an association between familism and formal service use has been reported.

An individual's choice to seek social interaction and social support outside of the family context

may be influenced by structural and by cultural factors. If the expectation that the family should

be the one looking after the emotional and social needs of it's members influences the decision

of visible minority elders to seek out social support, then cultural values surrounding familial

expectations may be preventing individuals from getting the social interaction that they need.

Consequently, familial expectations might be related to the levels of social isolation and

loneliness found in visible minority elders by providing them with expectations about the family

being the one who should provide the support that they need. If the family is not providing

enough social support, and the older adult is not reaching out for help, the result is a group of

individuals that, due to structural and cultural barriers, is at risk of feeling lonely and of having

weak social networks

Theories

Three main theoretical perspectives exist that focus on visible minority elders: the double

jeopardy hypothesis, the multiple hierarchy stratification and the life course perspective.

The double jeopardy hypothesis refers to the additive negative effect of advanced age and

belonging to a visible minority group on indicators of quality of life such as life satisfaction

(Dowd &Bengtson, 1978). The double jeopardy hypothesis has been mainly used to study

physical health outcomes, with little research done on social connectedness as an outcome

(Carreon & Noymer, 2011). The multiple hierarchy stratification perspective views visible

minority status as another source of inequality (along with class, gender and age), that puts

visible minority elders at a greater risk of lower quality of life in old age (Markides, Liang &

Jackson, 1990). The multiple hierarchy stratification perspective has been mainly used to study

negative mental health outcomes (such as depression), inequality of life, and health outcomes

(such as development of chronic diseases) (Schieman & Plickert, 2007). Lastly, based on the life

course perspective, an individual's life course is shaped by social conditions, by the constraints

created by these conditions and by the life choices that they make (Edmonston, 2013). The life

course perspective has been used to study an array of factors, but limited research exists on how

family values affect an individual across the life course, particularly at old age.

Although the double jeopardy hypothesis, the multiple hierarchy stratification perspective

and the life course perspective have all been used to gather important information about visible

minority elders, none of these theories focus on the importance of considering cultural values

when studying predictors of quality of life such as social connectedness. A lack of theories that

focus on the study of visible minority elders has been noted as a problem in this field of study

(Durst & Maclean, 2010). Moreover, as noted by Dilworth-Anderson and Cohen (2009),

minority status has been used across studies as a demographic variable without taking into

consideration that the cultural values that visible minorities hold greatly influence health related

outcomes. In addition, as the sociocultural perspective states, meaningful experiences are

interpreted within the culture of an individual, and humans cannot be understood apart from their

culture (Vygotsky, 1986). As highlighted by the sociocultural perspective, consideration of

cultural values is essential to fully understand an individual. Despite the importance of

considering cultural values when studying visible minority elders, there is a lack of theories and

a lack of studies that include cultural values in their model.

Nonetheless, theories that take into consideration the importance of cultural values have

been used to study caregivers of visible minority elders. One of those theories is the sociocultural

stress and coping model (Aranda & Knight, 1997). Knight and Sayegh (2009) updated the

sociocultural stress and coping model to include cultural values. In the updated model, cultural

values are thought to influence coping resources (such as social support) and coping styles which

in turn influence the caregiver's health (Knight & Sayegh, 2009). The updated model

hypothesizes that cultural values influence the use of social support, both formal and informal,

how much support the caregiver receives, and how the caregiver perceives the social support

given to him/her. The social support that caregivers receive, and how they perceive it, has then

the possibility of either reducing or increasing the negative effects of caregiving on physical

health outcomes. The updated sociocultural stress and coping model informed the present study

by acknowledging that cultural values have the possibility of influencing reported social support.

The quality and quantity of that social support can in turn affect reported feelings of social

isolation and loneliness among visible minority elders.

Purpose of Study

The purpose of this study was to investigate if familial relationships and family

expectations serve as a facilitator or as a protective factor against developing feelings of

loneliness and having weak/strong social networks. Specifically, this study explored the

relationships between the cultural value of familism and loneliness and social network. This was

done in order to gain a better understanding as to why a high number of visible minority elders

report feeling lonely and socially isolated. Given that there is very limited information on this

topic, the findings are likely to help family members and service providers assist visible minority

elders in getting the social support that they need within and outside the familial context.

Understanding the influence that family expectations and family relationships have on these

negative outcomes can help guide future research aimed at investigating how the family might be

influencing the development of these feelings. Moreover, this information could be the first step

towards creating educational programs that will teach older adults and their family members

about social isolation and loneliness, how family expectations are related to these feelings, and

about services available to help visible minority elders get the social and emotional support that they need.

Concluding thoughts

The literature is consistent in showing that despite coming from families that value strong familial relationships, a significant number of visible minority elders are not getting enough social support at home, and are reporting being socially isolated and feeling lonely. These findings are inconsistent with assumptions made about the family providing enough social support, creating a gap in the literature. Provided that there is limited information regarding the role of cultural values on reported feelings of social isolation and loneliness among visible minority elders, this study will address the following research questions:

Research Question 1: Do familial relationships and family expectations grounded on the cultural value of familism influence the development of feelings of loneliness among visible minority elders?

Research Question 2: Do familial relationships and family expectations grounded on the cultural value of familism influence the development of feelings of social isolation among visible minority elders?

Research Question 3: Does acculturation influence the development of feelings of loneliness among visible minority elders?

Research Question 4: Does acculturation influence the development of feelings of social

isolation among visible minority elders?

Research Question 5: Does an interaction between acculturation and familism predict social

isolation?

Research Question 6: Does an interaction between acculturation and familism predict loneliness?

This was an exploratory study. The purpose was to gain a better understanding as to why a

high number of older adults from visible ethnic minority groups report such high levels of social

isolation and loneliness while others do not. This study specifically looked at the relationship

between familism and loneliness and social isolation.

Chapter 3: Method

Participants

Adults ages 50 and over belonging to a visible ethnic minority group were recruited for this study. The operational definition for an individual from a visible minority group, as defined by the *Employment Equity Act,* is 'persons, other than Aboriginal persons, who are non-Caucasian in race or non-white in colour.' The visible minority population consists mainly of the following groups: South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean and Japanese. Inclusion criteria for this study were: an age of 50 years or older, being literate, having the cognitive ability to participate in data collection, being a member of a visible minority group and the ability to read and understand English. Being able to read the letter of information and to fill out the consent form was considered a sign that the participant was literate and was able to read and understand English. The inclusion criteria of having cognitive ability to participate in data collection was satisfied by recruiting participants at places that held activities (such as English classes) for individuals who were able to interact with others and who did not have a cognitive impairment. Given that life expectancy for visible minorities has been found to be greater than for the rest of the Canadian population (Chen, Wilkins & Ng, 1996), it was considered appropriate to recruit individuals close to retirement age (individuals between ages 50-64), along with individuals 65 and over. Their longer life

expectancy makes it crucial to investigate predictors associated with negative psychological outcomes, such as loneliness and social isolation, to ensure that appropriate programs are available upon retirement.

Research Design

An a priori analysis, using G*Power 3.01 (Faul, Erdfelder, Buchner & Lang, 2009), was conducted to determine the number of participants needed to achieve adequate power with a medium effect size. Results from the a priori analysis with 9 predictors (familism, acculturation to Canada, acculturation to country of origin, income, education level, employment status, enjoy spending time alone, English proficiency, years in Canada) indicated that a sample size of 114 was needed to achieve power of .80.

The aim of this exploratory study was to explore the relationship between cultural values related to family relationships and expectations and social isolation and loneliness among visible minority elders. A quantitative study using established measures allowed for the exploration of the relationships among the key constructs statistically.

Participant recruitment

Ethics approval for this study was obtained from Western University's Research Ethics Board (Appendix A). Participant recruitment took place in London and in Toronto, Ontario. Eighteen percent of London's population and 43% of Toronto's population belong to a visible

minority group (Statistics Canada, 2011 b). London and Toronto have well-established ethnic

communities making them ideal locations for recruiting individuals from a variety of ethnic

backgrounds. Individuals were recruited at places that offer non-medical services to visible

minority elders such as community centers, churches, and libraries. Managers at all of the

locations were informed about the study and provided with promotional flyers advertising the

study and with sign-up sheets. Individuals who expressed interest in participating, and who met

the inclusion criteria, were given a letter of information (Appendix B), a consent form (Appendix

C), and a pen and paper questionnaire (Appendix D). Participants had the choice of either

completing the questionnaire after their scheduled activities, to take the questionnaire home, or

to complete the questionnaire online and email it to the research team. Participants who chose to

take the questionnaire home were able to return it in two different ways. For the first option, each

location was assigned a return day. During this day the researcher was present to collect

questionnaires and to answer participant questions. For the second option, participants could

have mailed the questionnaire to Western University. In this case they were provided with a

postage-paid envelope. Those who chose to complete the questionnaire online were asked for

their email address. The researcher created a fillable PDF form, which was then emailed to

participants. Once completed, the participant was instructed to return the questionnaire via email.

Measures

The questionnaire used for this study was composed of established measures that measured familism, acculturation, loneliness and social network. In addition, the questionnaire also included general socio-demographic questions.

Independent Variables.

Familism. The Familism scale by Sabogal et al. (1987) was used to measure participants' endorsement of familism. This scale was derived from the Triandis, Marin, Betancourt, Lisansky & Chang (1982) and Bardis (1959) familism scales and was validated in a confirmatory factor analysis by Losada et al. (2008) (CFI = 0.96; RMSEA = 0.06). The scale consists of fourteen items ranging from one (strongly disagree) to five (strongly agree) that measure three main factors: *familial obligations*, composed of six items (e.g., "Aging parents should live with their relatives"); *perceived support from the family,* composed of three items (e.g., "When someone has problems s/he can count on help from his/her relatives"); and *family as referents,* composed of five items (e.g. "Much of what a son or daughter does should be done to please the parents"). The internal consistency for the three factors in this study was 0.66, 0.65, and 0.77 respectively. The internal consistency of the entire scale was 0.85. A higher mean score indicates higher endorsement of the cultural value of familism.

Acculturation. Acculturation is the process of change that happens when two different cultural groups are in contact, and the interaction between the two results in numerous cultural changes (i.e.: change in customs and beliefs) in one or both parties (Chiriboga, 2004). Two sub-scales of a modified version of the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II) (Cuellar et al.,1995) were used for this study. The original scale was designed for Mexicans living in the United States. The ARSMA-II scale was chosen because a significant number of Latin American and Hispanics were anticipated to participate in the study. Furthermore, since the sample of interest included visible minority elders from a variety of ethnicities living in Canada, the research team considered it appropriate to modify the sub-scales so that they could be used with the sample of interest. The two sub-scales used for this study were modified with references to any country of origin (i.e., not solely Mexico) and Canada as the comparison country. The two sub-scales used were the Anglo marginality (ANGMAR) subscale and the Mexican Marginality (MEXMAR) subscale, consisting of a total of 12 items. Sample items in the original measures include "I have difficulty accepting certain practices and customs commonly found in some Mexicans" and "I have difficulty accepting certain attitudes held by Anglos." Items were modified as followed: "I have difficulty accepting certain practices and customs commonly found in *individuals from my country of origin*" and "I have difficulty accepting certain attitudes held by *Canadians*." Each item ranged from zero (not at all) to five

(extremely often or almost always). The internal consistency of the ANGMAR scale was 0.87

and the internal consistency of the MEXMAR scale was 0.86. A higher mean score on the

ANGMAR scale reflects not being acculturated to the Canadian culture, while a higher mean

score on the MEXMAR scale reflects not being acculturated to one's country of origin.

Dependent Variables.

Loneliness. Loneliness was measured using Version 1 of the University of California Los

Angeles (UCLA) Loneliness Scale (Russell, Peplau & Ferguson, 1978). Although a revised

version of the UCLA scale exists (Russell, Peplau, & Cutrona, 1980), older adults have reported

issues understanding the wording of the revised version, resulting in low reliability of the

measure when the scale is used to assess loneliness among older adults (Russell, 1996). For this

reason it was decided to use the UCLA Version 1. This scale has twenty items ranging from one

(I often feel this way) to four (I never feel this way). Sample items include "I have nobody to talk

to," and "I feel isolated from others." The internal consistency of items on the scale was 0.93.

Scores ranged from 0-60, with a higher sum score indicating higher levels of loneliness.

Social Network. Social Network was measured using the Revised Lubben Social

Network Scale (LSNS-R). The LSNS-R scale (derived from Lubben's original scale) (Lubben,

1988) consists of 12 items that distinguishes between the social network of friends and that of

family (Lubben & Gironda, 2003). Sample items include "How many relatives do you feel close

to such that you could call on them for help?" and "How many of your friends do you see or hear from at least once a month?" The LSNS-R consists of six items related to family, and six items related to friends. Each item ranged from zero (none) to five (always). The degree of support from an individual's social network is ranked from zero to sixty points. The internal consistency of the items was 0.79. Scores ranged from 0-60, with a higher sum score indicating a higher level of support from one's social network.

In order to get a better understanding of participants' levels of social interactions four general questions were asked about participants' daily activities and interaction with their family members. Participants were asked to indicate how often they leave their household and for what reasons (i.e., to go grocery shopping). Furthermore, participants were asked how often they talked to their family members and how their interaction with their family members took place (i.e., in person, over the phone, etc.). Given that interaction with family members could be dependent on whether or not the family is in close geographic proximity, participants were also asked if they have family members who live in Canada and if so, where these family members lived, for example, within an hour of the participants' home or elsewhere in Canada. In addition, participants were asked to indicate if they wish they could spend more time with others. Lastly, participants were asked to indicate if they enjoy spending time alone on a Likert-type scale

ranging from: (1) not at all, (2) very little, (3) moderately and (4) almost always, to (5) very much.

Given that loneliness can be a temporary feeling which may be affected by life events, participants were also asked if they had experienced one or more significant life events during the past six months. These events were taken from the Life Change Index Scale (Holmes & Rahe, 1967). The Life Change Index Scales consists of thirteen events and includes, for example, such statements as "I got diagnosed with an illness" and "My spouse passed away." The Life Change Index Scale assigns an impact score to each event, which reflects the relative amount of stress the event causes. Given that stress is cumulative, the values of each stressful event experienced by participants in the past six months were added. As indicated by Holmes and Rahe (1967), a score of less than 150 indicates 30% likelihood of illness in the near future. A score of 150-299 indicates a 50% likelihood of illness in the near future. A score of 300+ indicates 80% likelihood of illness in the near future. Having experienced one or more of these events could affect respondents' answers, since these events could cause depression, stress, and withdrawal from society.

Socio-Demographic Information.

Income. Participants were asked to rate themselves on a scale of one (not enough income to do what I want) to six (more than enough income to do what I want). Participants were also

asked to indicate if they have enough income to do the things they would want to do. If they

selected that they do not have enough income, they were provided with an open-ended question

to specify which things they would want to do that they are unable to do with their current

income.

Number of years in Canada. If they were born outside of Canada, participants were

asked to indicate which year they arrived in Canada. The number of years participants lived in

Canada was calculated by subtracting 2014 from their year of arrival.

Education. Participants were asked to report their education level by choosing one of six

options: elementary school, high school, university/college, graduate school, or professional

education (i.e., physician), PhD.

English Proficiency. Participants were asked to indicate how well they speak English on

a scale from one (I can say a few things in English) to four (I speak English completely fluently).

Using the same scale, participants were also asked to indicate how well they understand English.

*Employment Status***.** Participants were asked to indicate their employment status by

choosing one of seven options: work full-time, work part-time, retired but work part-time, fully

retired, homemaker, unemployed or other.

Living Arrangement. Participants were asked to indicate their living arrangement by

choosing one of five choices: I live alone in my own home, I live in my house with my

partner/spouse, I live with other family members, I live in a group environment with assistance

or I live in a nursing home.

Year of Birth, Gender and Ethnicity. Participants were asked to indicate their year of

birth, gender and race/ethnicity. They were also asked to indicate which country they were born

in, and which country they immigrated from.

Canadian residency status. Participants were asked to select their Canadian residency

status from three options: Canadian citizen, Canadian resident or other.

Procedure

Prior to signing the consent form, participants were given the opportunity to ask

questions and were reminded that all their answers would remain confidential. Once consent was

obtained, participants completed the questionnaire. Participants took on average 30-40 minutes

to complete the questionnaire. Participants who had difficulty completing the questionnaire

because of a language barrier were provided with help translating the questions. Translators

included individuals who spoke Arabic, Spanish and Tamil. After completing the questionnaire,

participants were thanked for their time. All participation was voluntary and participants were

not provided with any compensation.

Data Preparation

Multicollinearity was assessed by conducting Pearson bivariate correlations among the dependent, independent and control variables. Linearity was assessed with the use of scatter plots. Univariate normality was assessed by looking at the kurtosis and skewness of each variable. If the absolute value of the z-score for kurtosis and skewness of a variable is above 1.96 it is considered significant at the $p < .05$, suggesting that data for that variable is not normally distributed (Fields, 2009).

Missing Data. Responses for each measure were screened for missing data. Three percent of data was missing in this study. Expectation maximization (EM) was used to impute the values for missing data (Dempster, Laird & Rubin, 1977). As stated by Fichman and Cummings (2003) if there is minimal missing data (less than 5%), it is advisable to use EM to compute missing values. EM computes probabilities for missing data using the parameters of reported data. First, the E (expectation or estimation) step imputes missing data numerous times. Second, the M (maximization) step uses maximum likelihood estimation to re-estimate the model parameters using data on step one. Both steps are repeated until the imputed estimates do not differ between iterations. The EM procedure was chosen because it generates realistic imputed estimates and because it preserves the relationship between variables (Little & Rubin, 1987; Dempster et al.1977).

Regression Analyses

Two hierarchal multiple regression analyses were run to examine the relationship

between cultural factors of familism and acculturation and outcomes of social network and

loneliness. Income, number of years in Canada, education level, English proficiency,

employment status and enjoy spending time alone served as control variables. All of these

control variables have been documented in the literature as being related to feelings of loneliness

and of weak social networks (Lai, 2008; Aroian et al., 2005; Burnette, 1999; Scharlach et al.,

2006). Since this study looked at the relationship between cultural barriers and social

connectedness, these control variables were measured to control for the effect of structural

barriers on the dependent variables. Control variables were entered in Step 1. Acculturation to

Canada, acculturation to country of origin and family as referents were entered in Step 2.

Data Analyses. Upon examination of the Pearson bivariate correlations, the living

arrangements variable was removed from the analyses because it was not significantly correlated

with either loneliness or social network $(p < .05)$. Life satisfaction was also removed from the

analyses due to low reliability ($\alpha = 0.54$). Lastly, for the purpose of parsimony, "understand

English" was also removed from the study. Instead, "spoken English" was used as a measure of

English proficiency because of its wide use in the literature (Lai, 2008; Kuo, Torres-Gil, 2001).

Chapter 4: Results

The purpose of this study was to explore the relationship between familism and social connectedness. The present study employed two sets of hierarchical multiple linear regression analyses to assess the unique effect of familism on loneliness and on strength of support from one's social network. Structural variables were inputted into the analyses to control for their effect on the dependent variables. Analyses were performed using SPSS version 22.0.

Participants

Table 1 provides descriptive data for the 123 participants in this study. Participants ranged in age from 50-93, with an average of 69 years. Sixty two percent of the sample participants (76) were from London and 38.0% (47 participants) from Toronto. Of the total sample, 70.6% were female and 29.4% were male. This is in accordance with past research that found that females are more likely than males to utilize community-based services (Turner, 2004). In terms of ethnicity, participants in this study were predominantly Latin American (31.2%) and Asian (40.5%), with Black Canadian, European and Middle Eastern comprising the remainder of the sample (28.3%). All participants were born outside of Canada. Most participants in this study had a high school or a University Degree/College diploma (70.6%). Employment status varied, with 50.0% of participants fully retired, 17.5% homemakers, 11.4% unemployed, and the remainder employed on a full-or part-time basis (21.1%). Most participants

were Canadian citizens (83.9%), and the remainder were Canadian residents (16.1%). The

majority of participants came to Canada in the last twenty years (58.0%) and the remainder

arriving between 1950-1994 (42.0%). The majority of participants live with their spouse or other

family members (80.5%), and the remainder live alone or in a group environment (19.5%). Most

participants reported being able to speak and understand "a few things in English" (56.0%), and

the remainder (44.0%) reported being able to speak and understand English well. Forty percent

of participants reported not having enough income to do the things they would want to do, 43.0%

reporting having moderate income, and the remaining reported having a sufficient income to do

the things they want to do (17.0%). Lastly, over half of the participants reported their health as

being good (55.3%) while the remaining (45.5%) reported their health being "not so good."

Eighty five percent of the participants completed the questionnaire after their scheduled

activities, 15.0% took the questionnaire home and none of the participants completed the

questionnaire online.

Table 1

Description of the Sample

Variable	N	%
Age		
50-64	51	32.9%
65-74	68	41.7%
75-84	26	19.6%
85+	10	6.2%
Gender		
Male	52	32.7%
Female	107	67.3%
Canadian Residency Status		
Citizen	125	84.5%
Resident	16	10.1%
Other	6	3.8%
Year arrived in Canada		
1950-1964	5	3.2%
1965-1979	13	8.2%
1980-1994	61	39.2%
1995-2005	36	23.1%
2005-2014	40	25.8%
Employment Status		
Work Full-Time	15	10.0%
Work Part-Time	6	4.0%
Retired, but work part-time	6	4.0%
Fully Retired	69	46.0%
Homemaker	24	16.0%
Unemployed	18	12.0%
Other	12	8.0%
Education Level		
Elementary School	24	19.0%
High School	42	33.3%
University Degree/College Diploma	47	37.3%
Masters Degree	8	6.3%
Professional School	4	3.2%
PhD	1	0.9%
Living Arrangement		
Alone	21	13.6%
With Partner	65	42.2%
With other family members	64	41.6%
In a group environment	3	1.9%
In a nursing home	1	0.7%
Ethnicity		
Black Canadian	4	2.6%
Latin American or Hispanic	48	31.2%
European	11	7.7%

Variable	N	%
Asian	71	46.7%
Middle Eastern	18	11.8%
Subjective Health		
Good	85	55.3%
Not so good	71	44.7%
English Proficiency-*Speak*		
Can say a few things in English	49	31.8%
Can make simple sentences, but need more vocabulary	29	18.8%
Speaks well, but is misunderstood occasionally	32	20.8%
Speaks English completely fluently	44	28.6%
English Proficiency-*Understand*		
Understands a few things in English	38	24.1%
Understands the main points of a conversation, but needs more vocabulary	39	24.6%
Understands well, but still makes some mistakes	33	20.9%
Understands English completely fluently	48	30.4%

Sources of Social Interaction

The following section reports findings regarding social interaction among visible minority

elders.

Community-based Services. Participants were asked if they used any community-based

services (such as the library and senior centers). Participants who indicated that they used

community-based services were asked to specify if they were satisfied with the services they

utilize, how they heard about given services, and if they think services are appealing to older

adults from visible ethnic minority. All participants indicated using one or more community-

based services. The public library and religious facilities were reported as being the two places

that most participants use on a regular basis (refer to Table 2). A majority of participants (77.8%)

indicated that the reason why they were using the given service was because the services were

specific to visible minority elders. Moreover, a majority of participants (96.7%) reported that

community-based services are appealing to individuals from their ethnic background which

suggests that services found in the community are offering programs that visible minority elders

enjoy attending. However, no data was recorded in regards to what made services appealing.

Most importantly, 98.4% of participants reported being satisfied with services. In addition, 90%

of participants reported hearing about services available in the community from a family member

or a friend. Very few participants (15.8%) reported hearing about available services via service

providers (such as family doctors or case workers). See Table 2 for summary of results.

Table 2

Community-based Service Use

Variable	N	%
Use services because they are specific for ethnic minority elders		
Yes	98	77.8%
No	28	22.2%
Satisfied with services		
Yes	124	98.4%
No	2	1.6%
How they heard about services		
Family member	34	27.0%
Friend	80	63.5%
Family Doctor	7	5.6%
Case Worker	12	9.5%
Advertisement	8	6.3%
Other	14	11.1%
Are services appealing to ethnic minority elders?		
Yes	118	96.7%
No	4	3.3%

Interaction with Family Members. Most participants indicated that they talk to their

family members on a daily basis (64.1%); less than 10.0% do not talk to their family members on

a weekly basis. Given that 94.0% of participants reported having family members in Canada,

with 84.0% having family members within an hour of their household, it is not surprising that a

majority of participants reported their interaction with their family members being either face-to-

face or over the phone (92.9%). This information indicates that a majority of participants came

from families that are in close geographic proximity and that are actively communicating with

each other. See Table 3 for summary of results.

Table 3

Interaction with Family Members

Variable	N	%
How often they talk to their family members		
Daily	100	64.1%
Two or more times a week	16	10.3%
Once a week	27	17.3%
Two or more times a month	4	2.6%
Once a month	7	4.5%
Only on special occasions	1	0.6%
Haven't talked to family members in years	1	0.6%
Interaction with family members		
Face-to-face	58	37.4%
Over the phone	86	55.5%
Over the internet	10	6.5%
Email	1	0.6%
Other family members living in Canada		
Yes	148	94.3%
No	9	5.7%
Do family members live within an hour of your household?		
Yes	126	84.0%
No	24	16.0%

Social Involvement Outside of the Home. A majority of participants reported leaving

their homes at least once a day (59.6%), while only a small percentage reported leaving their

house less than once a month (0.6%). The main reasons for leaving the house included grocery

shopping, medical appointments, attending religious services and social gatherings. Lastly, only

a small percentage of participants reported leaving their homes for doing things that involved

money (movies, dinner and gym). While the amount and quality of social interaction when they

leave their house was not directly measured, results indicate that the study's sample is composed

of individuals who are actively surrounded by other people. See Table 4 for summary of results.

Table 4

Reasons for Leaving Household

Variable	N	%
How often they leave their household		
More than once a day	48	30.8%
Once a day	45	28.8%
Two or more times a week	46	29.5%
Once a week	11	7.2%
Two or more times a month	4	2.5%
Once a month	1	0.6%
Never	1	0.6%
Main reasons for leaving household		
Medical appointments	134	85.4%
Grocery shopping	127	80.9%
Attend religious services	122	77.7%
Visit friends and family	119	75.8%
Mall	109	69.4%
Attend social gatherings	106	67.5%
Dinner	62	39.5%
Library	52	33.1%
Gym	34	21.7%
Movies	34	21.7%

Regression Analyses

Descriptive Statistics and Tests of Normality. Examination of the skewness and kurtosis

for each variable revealed that the assumption of univariate normality was not met. The

distribution for loneliness (Skewness = 5.21, *SE* = 0.19), for acculturation to Canada (Skewness

= 2.11, *SE* = 0.20) and for education level (Skewness = 3.5, *SE* = 0.18) were significantly

positively skewed. In other words, the majority of the scores were on the lower side of the scale,

such as a majority of participants reported not feeling lonely, having a low education level, and

being acculturated to Canada. The distribution for Spoken English Proficiency (Kurtosis = -3.8,

SE = 0.38) was significantly platykurtic, meaning that scores on this variable were highly

dispersed, resulting in a lower peak than that of a normal distribution. Although transformations

were available to normalize the variables, the decision was made to not transform these data

because the construct being transformed would no longer be comparable to other variables,

making interpretation difficult (Grayson, 2004). The assumption of singularity was met as an

assessment of Pearson bivariate correlations revealed that the dimensions of familism (family as

referents, familial obligations and perceived support), acculturation, English proficiency, income,

employment status, years in Canada, and enjoys spending time alone were not a combination of

each other (refer to Table 5). The assumption of multicollinearity was met as an assessment of

Pearson bivariate correlations (refer to Table 5) revealed that no independent variables were

highly correlated with each other. Lastly, scatter plots indicated that the assumptions of linearity

and homoscedasticity were all met.

Table 5

Intercorrelations Among Measured Variables

Variable	Loneliness	Social Network	Familism	Acculturation-*Canada*	Acculturation-*Country of origin*	English Proficiency	Income	Employment	Education	Years in Canada	Enjoy spending time alone
Loneliness	1.00										
Social Network	-0.30**	1.00									
Familism	0.18*	-0.08	1.00								
Acculturation-*Canada*	0.30**	-0.12	0.06	1.00							
Acculturation-*Country of origin*	0.27**	-0.14	0.09	0.38**	1.00						
English Proficiency	-0.21*	0.22*	-0.31**	-0.07	-0.08	1.00					
Income	-0.35**	0.17	0.39**	-0.20*	-0.14	0.43**	1.00				
Employment	0.18*	-0.14	-0.13	0.10	0.07	-0.40**	-0.39**	1.00			
Education	-0.05	0.25**	-0.34**	-0.10	0.02	0.56**	0.37**	-0.47**	1.00		
Years in Canada	-0.10	0.19*	0.19*	-0.09	-0.11	0.11	0.12	0.03	0.12	1.00	
Enjoy spending time alone	-0.14	0.25**	-0.19*	-0.04	-0.17	0.32**	0.13	-0.12	0.17	0.04	1.00

Note: ** Correlation is significant at the .01 level

* Correlation is significant at the .05 level

Preliminary analysis. To control for the effect that life events could have on participants' responses, participants were asked if they had experienced any of the thirteen life changing events in the past six months. Responses on the Life Change Index Scale indicated that 80% of participants were not under a significant amount of distress. Table 6 shows that a relationship between the Life Change Index scale and the dependent variables was not significant.

Furthermore, as can be seen on Table 7, there was little variance on familism [mean score ($SD = 0.57$)], with a majority of participants highly endorsing the familism cultural value. This creates a ceiling effect, as variance in familism is no longer being measured. By examining each individual dimension of familism, the family as referents dimension had the highest variance among all three factors ($M = 3.88$, $SD = 0.80$) and the highest alpha ($\alpha = 0.77$). Given that hierarchical multiple regression analyses aim to explain some of the variance in measured constructs, it was decided to use the family as referents as the independent variable due to its' variance, reliability and theoretical significance. Theoretically, the family as referents dimension assesses the belief that relatives guide attitudes and behaviour. Unlike the familial obligations and perceived support dimensions, which assess obligations and expectations related to the family, the 'family as referents' dimension taps into the possibility of family values influencing social relationships by how individuals behave outside of the family circle.

Table 6

Correlations Between Stressful Events and Loneliness and Social Network

Variable	Stressful Events	Loneliness	Social Network
Stressful Events	1.00		
Loneliness	0.07	1.00	
Social Network	-0.05	-0.30**	1.00

Note: ** *Correlation is significant at the .01 level*
　　Correlation is significant at the .05 level

Table 7

Descriptive Statistics of the Major Study Variables

Variable	M	SD	Observed Range	α
Control Variables				
Employment Status	4.53	1.34	1-7	--
Education Level	2.42	1.16	1-7	--
Years in Canada	18.52	13.85	0-93	--
Subjective Income	2.54	1.27	1-5	--
English Proficiency	2.30	1.19	1-4	--
Enjoys spending time alone	2.55	1.27	1-5	--
Independent Variables				
Familism	4.07	0.57	2.21-5	0.85
Obligations	4.20	0.56	2.83-5	0.66
Support	4.14	0.68	1.67-5	0.65
Referents	3.88	0.80	1.4-5	0.77
Acculturation-Canadian Culture	2.39	1.00	1-5	0.87
Acculturation-Country of Origin	2.25	0.93	1-5	0.86
Dependent Variables				
Loneliness	14.82	13.02	0-55	0.93
Social Network	29.40	9.09	7.47-52	0.79

Loneliness. Table 8 outlines the results for the regression analysis on predictors of loneliness. In step 1, subjective income was a significant predictor of loneliness $F_{(6,116)}$ = 3.56, $p < .05$. Lower income was associated with higher levels of loneliness. For example, participants who reported not having enough income to do the things they would like to do reported higher levels of loneliness. In Step 2, acculturation to Canada

and family as referents were significant predictors of loneliness, F (9,113) = 4.29, $p < .05$. Participants who were not highly acculturated to Canada and who felt that the family was an extension of their identity reported higher levels of loneliness. A third step was added to investigate if an interaction between acculturation to Canada, family as referents and loneliness existed. The interaction was not statistically significant.

Social Network. Table 8 outlines the results for the regression analysis on predictors of social network. In Step 1, years in Canada and enjoys spending time alone were significant predictors of social network, F (6,116) = 3.32, $p < .05$. For example, individuals who reported enjoying spending time alone were found to report higher levels of social support from their social network, and fewer years living in Canada was associated with lower support from one's social network. Neither acculturation nor family as referents were significant predictors of social network in Step 2, F (9,113) = 2.39, $p < .05$. A third step was added to investigate if an interaction between acculturation to Canada, family as referents and social network existed. The interaction was not statistically significant.

Table 8

Hierarchical Regression Analysis Predicting Loneliness and Social Network

Predictor Variable	Loneliness [a]				Social Network [b]		
	B	*SE B*	*β*		*B*	*SE B*	*β*
Step 1							
Years in Canada	0.04	0.09	0.05		-0.14	0.06	-0.22*
Employment Status	0.94	1.01	0.10		-0.33	0.71	-0.05
Education Level	2.26	1.27	0.20		0.96	0.89	0.12
English Proficiency	-1.50	1.29	-0.14		0.75	0.90	0.10
Subjective Income	-2.76	0.84	-0.31*		0.48	0.59	0.08
Enjoys spending time alone	-0.87	0.93	-0.08		1.58	0.65	0.22*
Step 2							
Acculturation-*Canada*	2.62	1.18	0.21*		-0.49	0.87	-0.05
Acculturation-*Country of Origin*	1.45	1.27	0.10		-0.88	0.94	-0.09
Family as Referents	3.14	1.51	0.20*		-0.88	1.11	-0.06

[a] For the regression predicting loneliness, $R^2 = 0.16$ for Step 1 ($p < .01$); $\Delta R^2 = 0.10$ for Step 2 ($p < .01$).

[b] For the regression predicting social network, $R^2 = 0.13$ for Step 1 ($p < .05$); $\Delta R^2 = 0.01$ for Step 2 ($p = .68$).

Chapter 5: Discussion

Visible minority elders report high levels of social isolation and loneliness (Tomaka et al., 2006; LaVeist et al.,1997; Gerst-Emerson et al., 2014) which could be attributed to factors related to structural and/or cultural barriers. The goal of this study was to examine the role of the cultural value of familism on feelings of loneliness and of social isolation among visible minority elders.

Predictors of Social Network and Loneliness

Social Network. The regression analysis revealed that more years spent in Canada was associated with lower levels of perceived social network support from friends and family. To our knowledge past research has not examined how the number of years living in Canada affects an individual's perceived social support from friends and family. Family separation after migrating to a new country has been reported as a reason why Latin American women feel socially isolated (Hurtado-de-Mendoza, Gonzales, Serrano & Kaltman, 2014). It could be that with many years of living in a country that values independence (such as Canada), family members begin to put their own needs, such as the need to be actively involved in the community, over the needs of the family. This could result in less supportive families. In addition, the regression analysis also revealed that enjoying spending time alone is a predictor of high levels of perceived social support. Individuals who enjoy spending time alone are satisfied carrying out leisure activities in isolation (Hills & Argyle, 2001). While individuals who like spending time with others tend to have larger social networks, individuals who enjoy alone time tend to be more selective about their friendships and experience greater levels of empathy with the few close relationships that they have (Hills & Argyle, 2001). It is possible that individuals who report enjoying spending time alone have supportive relationships

because they take the time to build meaningful relationships within their social networks, resulting in higher perceived social support from friends and family. This highlights the importance that older adults place on the quality of their social relationships and not on the quantity.

The regression analysis did not find familism to be a unique predictor of perceived social network support. This indicates that having strong beliefs about the family being the main source of social, emotional and instrumental support was not associated with having higher or lower perceived support from friends and family. Lastly, contrary to past research which has found that highly acculturated visible minorities have larger and more supportive social networks (Griffith & Villavicencio, 1985), the present study did not find highly acculturated visible minority elders to have more (or less) perceived support from friends and family than less acculturated individuals.

Loneliness. The regression analysis revealed that having a lower subjective income is a predictor of higher levels of loneliness in visible minority elders. This is in accord with past research that has found an association between poor income and loneliness (Chang & Yang, 1999). This is particularly concerning among visible minorities. The 2006 census showed that the incidence of poverty among visible minorities was 22%, compared to the national average of 11%, with rates as high as 40% among Koreans (Statistics Canada, 2009), highlighting that visible minorities are at a higher risk of developing loneliness than Caucasians. A lower income not only predicts loneliness, but it also prevents visible minority elders from accessing certain programs (such as classes that require a fee) that would allow them to get the social interaction that they need. Moreover, Statistics Canada (2010) reported that income decreases with advancing age.

Thirty three percent of the current study's sample was composed of individuals between the ages 50-64. As these relatively young individuals continue to age they are at a higher risk of reporting low income, both from an aging and a visible minority perspective.

Furthermore, not being highly acculturated to the Canadian culture was a predictor of high levels of loneliness. This is in accord with past research that has found that being acculturated to the host country can alleviate loneliness (Lin & Kingminghae, 2014). This finding is particularly concerning for visible minority elders given that people are most likely to be acculturated with a host culture the longer their exposure to it, but only if this exposure happens when they are relatively young (Cheung, Chudek, Heine, 2011). Cultural beliefs and values are more entrenched by the time people reach old age, making it harder for visible minorities to change their beliefs as they age (Cheung et al., 2011). As visible minority elders grow even older it will be harder to help them become acculturated to the Canadian culture, furthering increasing their risk for loneliness. This makes it imperative to work towards ensuring that there are programs available to help visible minorities become acculturated to the Canadian culture, as a preventive measure for loneliness in their later years.

Loneliness and Family as Referents. The regression analysis also revealed that endorsing family as referents was a significant predictor of loneliness among visible minority elders. While the relationship between family as referents and loneliness has not been previously studied, past research has found that individuals who come from collectivistic societies report higher levels of loneliness than individuals who come from individualistic societies (Lykes & Kemmelmeier, 2014). Family as referents is defined as "the belief that family members' behaviours should meet with familial expectations. The

family is viewed as an extension of oneself such that the behaviour of an individual is a reflection of the whole family" (German, Gonzales & Dumka, 2009). Even though participants were recruited at organizations that provide social interaction, some participants reported feeling lonely despite being surrounded by other people, suggesting that it is not enough to be socially engaged to diminish feelings of loneliness.

The sociocultural perspective acknowledges that people's beahviours are shaped in part by their culture and beliefs associated with that culture (Grau & Padgett, 1988). One explanation of the previous findings is that believing that one's behaviour is a reflection of the whole family could make some individuals very cautious about how they behave, influencing how they behave in social situations (i.e.: being more reserved). This in turn may prevent individuals from being able to form supportive relationships outside of the home. Family as referents has been found to be associated with dysfunctional thoughts related to high expectations about the care that caregivers should be providing their older adults (such as setting aside their interests and focusing solely on the older adults), resulting in depression among family caregivers (Losada et al., 2010). Similarly, the family as referents factor might be indirectly associated with loneliness through dysfunctional thoughts about how individuals should be behaving in social situations, making it harder for visible minority elders to form meaningful social relationships outside the familial context, resulting in visible minority elders feeling lonely. Although previous studies have not looked at dysfunctional thoughts related to family as referents in visible minority elders, there are a number of dysfunctional thoughts that visible minority elders might have. Visible minority elders might think that if they express that they need social support others might think that their family is not properly attending to

their needs, or that their family does not care about them. Moreover, visible minority elders might also think that their needs do not matter and that they should focus on ensuring their relatives' needs are being met. Similarly, visible minority elders might think that if they focus on their own needs others might think they do not value their family and that they are selfish for not looking after their family members' needs.

Another explanation as to why endorsing the family as referents factor might be a predictor of loneliness is that the family members of visible minority elders (such as their children) might not be living up to the expectations that older adults have of them. While the relationship between unfulfilled expectations of family members and loneliness has not been studied previously, past research has found that unfulfilled expectations of contacts with friends is a powerful predictor of loneliness (Routasalo, Savikko, Tilvis, Strandberg & Pitkala, 2006). Past research has reported that visible minority elders expect their children to take care of them as they age (Lai, 2004). Even though the majority of participants reported seeing family members daily, this does not mean that family members are attending to their needs. If family members are not living up to the expectations that visible minority elders have of them, this could result in feelings of loneliness among visible minority elders. Individuals who hold collectivist values have reported lower levels of loneliness when they have meaningful interactions with family members, but friendships have little or no association with reported levels of loneliness (Lykes & Kemmelmeier, 2014), highlighting the critical importance of family ties for the well-being of individuals who endorse collectivist values. This is in accord with the updated sociocultural stress and coping model (Knight & Sayegh, 2009), which acknowledges that cultural values influence coping resources, which in turn influence

health outcomes. In this case, family values may be influencing the importance that visible minority elders place on the social support that they get from different groups of individuals (such as friends and family), which in turn influences reported feelings of loneliness. It could be that because of strong family values the social interaction that visible minority elders get at community-based services is not enough to alleviate their feelings of loneliness, since the friendships formed at given services are not as highly valued as familial relationships. Given that this is the first study that has found a relationship between loneliness and family as referents, additional studies need to be conducted before final conclusions are drawn.

Implications

The present study's findings highlight the importance of considering cultural values when studying loneliness among visible minority elders. Loneliness has detrimental effects on the psychological (risk for depression) and physical health (increase in blood pressure) of the body (Hawkley et al., 2003; Cacioppo et al., 2006), highlighting the importance of reducing its prevalence among visible minority elders. Provided that the population of visible minority elders is expected to grow, and that their life expectancy is greater than that of Caucasian older adults (Chen et al.,1996), it is of vital importance that future research focuses on finding ways to alleviate loneliness among visible minority elders.

Family as referents was a significant predictor of loneliness, but not of perceived social support from friends and family, highlighting the importance of considering cultural factors as predictors of loneliness. It is not argued that cultural values play a more important role than structural barriers on feelings of loneliness, but rather that they

should be considered in conjunction with structural predictors of loneliness when studying reasons why visible minority elders report feeling lonely. Culture is not being blamed for causing loneliness. It is important to understand how culture can negatively affect psychological outcomes so that culturally sensitive programs and interventions can address the problem adequately.

Furthermore, 78% of participants reported attending services because they were specific to visible minority elders (refer to Table 2). This highlights the importance of investing in programs and services specially tailored for visible minority elders. Given that males belonging to a visible minority group live on average 6.7 years longer than Canadian-born males, and females belonging to a visible minority group live on average 5.4 years longer than Canadian-born females (Chen et al.,1996), it is particularly important to invest in community-based services that are appealing to visible minority elders, since utilization of given services delays nursing home placement (Gaugler, Kane, Kane & Newcomer, 2005).

In addition, in a systematic review conducted by Cattan, White, Bond, and Learmouth (2005), group interventions with an educational component demonstrated a reduction in loneliness among older adults. Similarly, Seniors CAN, a 16-week interventional educational program that promotes health and quality of life by enhancing mastery, resulted in a decrease in loneliness and quality of life in visible minority elders (Collins & Benedict, 2006). These findings highlight the effectiveness of educational programs in reducing loneliness among older adults. Findings from the present study are recommended to be used in educational programs for visible minority elders and their family members. Specifically, teaching visible minority families about the role of cultural

values on feelings of loneliness could help them discuss expectations that they have of each other. This in turn could create dialogue about strategies that visible minority families could use to ensure that all family members are getting the social and emotional support that they need, taking into account that expectations might not always be met feasibly. It is particularly important that educational programs for visible minority elders highlight the importance of having family members, especially adult-children attend educational programs along with the older adult, as findings from this study demonstrate that familial relationships and family expectations play an important role on feelings of loneliness.

Moreover, perceived social support and loneliness were found to have a moderate association ($r = -.30$, p <.01). In the current study, social isolation was assessed using the Lubben social network scale, which is a reputable measure for assessing social isolation among older adults (Lubben & Gironda, 2003). In accord with past research (Tomaka et al., 2006; Routasalo et al., 2006), these results highlight that although related, loneliness and social isolation are two independent constructs. It is important that service providers, policy makers and researchers differentiate between social isolation and loneliness when studying social connectedness among visible minority elders, as a measure of one will not necessarily predict the other. The finding that loneliness is a separate concept from social isolation has important implications for practice and care of visible minority elders. In order to alleviate feelings of loneliness and prevent its poor prognostic outcomes, it is inefficient to focus solely on increasing the number of social contacts of lonely visible minority elders. One intervention that focused on alleviating feelings of loneliness among older adults showed that an increase in social network was not associated with a decrease

in inner feelings of loneliness (Clarke, Clarke & Jagger, 1992). This highlights the importance of also focusing on inner expectations about familial ties, along with working on increasing social networks, in interventions aimed at reducing and preventing loneliness among visible minority elders. Older adults focus on preserving the quality of their social relationships, often resulting in smaller social networks, but the relationships that they have tend to be of better quality (Cartensen, Isaacowitz & Charles, 1999). This emphasizes the importance of helping visible minority elders form meaningful relationships rather than solely focusing on increasing their social network.

Lastly, as highlighted by the sociocultural perspective (Vygotsky, 1986), the present study reinforces the idea that individuals cannot be understood apart from their culture. In order to fully understand visible minority elders, researchers need to take into consideration how cultural values may be influencing health related outcomes. In addition, as stated by the updated sociocultural stress and coping model (Knight & Sayegh, 2009), the present study reinforces the idea that cultural values influence coping resources (such as by how much importance the individual places on the support that she/he gets from different individuals). These coping resources, in turn, influence health related outcomes (such as loneliness). This emphasizes the unique contribution that cultural values bring to the study of visible minority elders, and it highlights the importance of considering cultural values when studying health related outcomes in visible minority elders.

Limitations

Although the current study contributes to the scant literature on loneliness and social isolation in visible minority elders residing in Canada, its limitations should be

noted. First, this study's inclusion criteria was 50 years of age or older, being literate, and having the cognitive ability to participate in data collection, being a member of a visible minority group and the ability to read and understand English. Therefore, the sample does not include visible minority elders who may not speak or understand English. Due to time and resources available it was decided to not translate the questionnaire into any other languages. Consequently, having the questionnaire in English restricted both the sample size and the composition of the sample. Moreover, although researcher assistants were provided with training on how to administer the questionnaire when translation was needed, there was no way of ensuring that translation was appropriate. This creates a limitation in the study as the researcher could have interpreted questions differently and the meaning of questions may not have carried over from language to language. Forty five percent of the participants required help translating the questionnaire. The presence of the researcher could have created a social desirability bias, which refers to a response bias that influences the denial of undesirable traits (such as being lonely and not having a strong social network) and the reporting of socially desirable traits (Furnham, 1986). In order to minimize bias, participants were reminded that their responses were confidential and that there were no right or wrong answers.

In addition, participants were recruited at places that offer social interaction and social support. Provided that the population of interest was visible minority elders feeling lonely and not having supportive social networks, community centers may not have been the best place to recruit sample of interest. It is very challenging to recruit isolated individuals, as they often do not leave their homes. Due to the time frame under which the study had to be completed, it was deemed appropriate to go to places were

participants would be more accessible. Even though participants were recruited at places

that offer social interaction, results showed a range in reported feelings of loneliness and

in strength of social network (refer to Table 3), with some individuals reporting being

lonely and not having a strong social network, and other individuals reporting the

opposite. Moreover, the goal of the current study was to examine the role of family-

related cultural values on social network and isolation. Although these key outcomes can

be addressed by participating in non-medical community services, the role of cultural

values related to family were unknown prior to this study.

Directions for Future Research

This study provides some initial support for the possibility of cultural values,

specifically family as referents, playing an important role in the development of feelings

of loneliness. To get a better understanding of findings, it is recommended that future

research explore the association between unfilled expectations of family members and

reported feelings of loneliness among visible minority elders. Insights as to how family

expectations may be influencing the development of feelings of loneliness could be

obtained through qualitative research As explained by Watkins (2012), to get a complete

picture of a phenomenon it is imperative to conduct qualitative research, as quantitative

research only tells a part of the story. Multimethod approaches are helpful when

theorizing about diverse cultures as each approach provides different types and levels of

information (Dilworth-Anderson, Williams & Gibson, 2002). A qualitative study would

allow researchers to ask visible minority elders what they expect from their family

members and if those expectations are being met. In addition, qualitative research would

allow researchers to better understand how familial expectations are influencing the

development of loneliness among visible minority elders. Qualitative research would complement findings from quantitative studies by providing explanations of how loneliness and family values influence each other, resulting in a better understanding of the role of cultural values on feelings of loneliness among visible minority elders.

An important finding of this study is that service providers (such as family physicians) are not informing visible minority elders about services available. Future research should focus on investigating the extent to which health care providers are informed about available services that address social interaction needs of older adults from visible minority populations. A report by Mental Health Commission of Canada highlighted the growing need to raise awareness among health and social service providers about the importance of identifying the signs and symptoms associated with social isolation and loneliness (MacCourt, Wilson & Tourigny-Rivard, 2011). However, early detection of symptoms associated with isolation and loneliness, without awareness of services available to help visible minority elders, is an ineffective strategy in reducing feelings of loneliness and isolation reported by visible minority elders. This makes it imperative to ensure that service providers become aware of services available to visible minority elders, as they may be the only people whom these older adults see on a regular basis.

Furthermore, Sabogal et al.'s (1987) familism scale was chosen for this study because the majority of the research that examined the effect of familism on psychological outcomes (such as depression and anxiety) used this scale to measure familism (Koemer & Shirai, 2012; Knight et al., 2002; Sayegh & Knight, 2010). However, the scale has been mainly used with family caregivers and not as widely used

with older adults as the population sample. An important issue that was noticed during the process of data collection and data interpretation was that while the scale used to measure familism provided valuable information, future research should consider developing a familism scale specifically for older adults. Many of the questions from Sabogal et al.'s (1987) familism scale are about expectations that older adults have about their family members (such as "aging parents should live with their family members" and "much of what a son or daughter does should be done to please the parents"), with limited questions about expectations regarding the older adult's role within the family circle. Future research should focus on developing a familism scale that captures the unique role of older adults within the family circle, especially if the question of interest has to do with expectations that older adults have about how they should behave.

Given that the present study highlighted the unique role of family relationships and familial expectations on feelings of loneliness, future research should also consider investigating how much family members know about the topic of social isolation and loneliness. This information, in conjunction with present findings, could be used to help create education programs aimed at educating visible minority families about the loneliness and isolation experienced by their older adults.

Furthermore, while the present study did not look at factors that affect service use it is still important to consider how influential cultural factors are when deciding to seek social support outside of the family context. Provided that community-based services that offer social interaction and social support delay institutionalization and increase the well-being of those who use them (Fitzpatrick, Gitelson, Andereck, & Mesbur, 2005; Patrick, Cottrell, & Barnes, 2001), it is important to look at ways to increase service utilization.

Visible minority elders have reported not using formal services because they do not want to cause family conflict (Sadavoy et al., 2004) and because they expect that their children will be taking care of them (Lai, 2004). These results imply that family values are associated with the decision to seek support outside of the family context, thus future research should focus on studying how family values may be preventing individuals from accessing the help that they need. Information about the role of family values on service use, in conjunction with current findings, will provide researchers, service providers and policy makers a clearer picture of why individuals are feeling lonely and isolated. This information could then be used to create a culturally sensitive action plan that will adequately cater to the needs of visible minority elders.

In addition, the present study found an association between low income and loneliness. Given the high rate of poverty among visible minorities, and the expected growth of the visible minority population (and that with age income decreases) it is imperative for future research and health and social national strategies to consider ways to diminish poverty among visible minorities as this would aid in lowering loneliness among visible minority elders. Moreover, not being highly acculturated to the Canadian culture was found to be a predictor of loneliness. Similarly, lower levels of acculturation are associated with higher likelihood of depressive symptoms among Korean older adults (Jang, Kim & Chiriboga, 2005), highlighting the negative psychological effects of having low acculturation levels. Based on these findings, and on the positive psychological effect of acculturation, it is recommended that health promotion strategies focus on finding ways to facilitate adaptation to the Canadian culture.

Furthermore, an endorsement of the family as referents factor was found to be a

significant predictor of loneliness. Future research should consider studying the possibility of dysfunctional thoughts related to family expectations of how visible minority elders should behave (such as believing that they should prioritize their family members' needs above their own) influencing the development of feelings of loneliness. Dysfunctional beliefs have been treatment targets in intervention studies (Marquez-Gonzalez et al., 2007). Dysfunctional thoughts guide behaviour in a maladaptive way by giving individuals unreal and maladaptive goals and standards of behaviour (Marquez-Gonzalez et al., 2007). Reducing dysfunctional thoughts related to caregiving for dementia patients, such as having to dedicate one's entire time to care for someone with dementia, has been found to lower levels of depression among caregivers (Marquez-Gonzalez et al., 2007). Similarly, cultural values that negatively affect visible minority elders' psychological health should be the focus of future research in search for therapeutic tools that could help visible minority elders highlight the positive effects of cultural values, and reduce the impact of the negative effects on their subjective feelings.

Additionally, it is important to note that a significant number of the sample (33%) were 50-64 years of age. The mean score on loneliness for this age group was 20.17 ($SD = 15.55$) which was significantly higher than the mean score on loneliness for individuals age 65 and older (12.94 ($SD = 11.79$), $t(121) = 2.61$, $p = .010$). As these individuals start moving into advanced old age they will begin to experience more physical and social losses making it harder to stay socially connected. If loneliness is a problem for this group, the problem could exacerbate as they age, due to the losses associated with old age. Future research should focus on finding ways to reduce the loneliness reported by visible minorities reaching retirement. Provided that it may be more difficult to alleviate

feelings of loneliness with advanced age, finding ways to reduce feelings of loneliness in younger visible minorities can act as a preventive measure against heightened feelings of loneliness in visible minorities as they age.

Moreover, more years spent in Canada was associated with less perceived support from friends and family. To better understand the relationship found, it is recommended for future research to conduct a longitudinal study that examines how perceived social network support changes over time among visible minorities. In addition, contrary to past research, an association between being acculturated to Canada and perceived support from family and friends was not found. Given the discrepancy in results, it is recommended that future research explore how acculturation affects the strength of visible minorities' social networks.

Lastly, the present study was informed by the updated sociocultural stress and coping model (Knight & Sayegh, 2009). The sociocultural stress and coping model was developed for the study of family caregivers. Provided that the visible minority elder population is expected to keep growing, there is a pressing need for future research to focus on developing theories for the study of visible minority elders. As noted by Dilworth-Anderson and Cohen (2009), minority status is often used in studies as a demographic variable without taking into consideration the importance that cultural values have on physical and mental health outcomes. In addition, as highlighted by the sociocultural perspective, culture, and the values associated with that culture, is essential to fully understand an individual (Vygotsky, 1986). Due to the lack of theoretical models that take into consideration the importance of including cultural values when studying diverse populations, it is specifically recommended that future research include cultural

values in their theoretical models in order to get a deeper understanding of visible minority elders.

Conclusion

The present study examined the possibility of cultural values, specifically family values, playing a significant role in feelings of loneliness and in strength of social network. Family as referents, which measures the view of relatives as behavioural and attitudinal referents, was a significant predictor of loneliness among visible minority elders. While more research needs to be conducted to better understand how the family as referents dimension influences the development of feelings of loneliness, two possible mechanisms were proposed. Endorsing the family as referents belief could be causing some dysfunctional thoughts (such as believing that if they ask for help it will look bad on their family members) amongst visible minority elders of how they should behave in social situations. These dysfunctional thoughts may in turn be preventing individuals from forming meaningful relationships, despite being socially active, resulting in feelings of loneliness. Another possible explanation is that perhaps family members of visible minority elders are not living up to the expectations that visible minority elders have of them, for example, family members being the ones taking care of them as they age. As a result, visible minority elders could be reporting feeling lonely since their relatives are not meeting their expectations of them. Implications of findings are provided, which highlight the importance of considering cultural factors when studying loneliness and when creating interventions or programs to alleviate feelings of loneliness among visible minority elders. Lastly, given that the visible minority elder population is expected to keep growing, there is a pressing need to develop theories that take into account the

unique contribution that cultural values bring to the understanding of visible minority elders' mental and physical health outcomes.

The present study contributes to the literature of loneliness and social isolation among visible minority groups living in Canada. Provided that visible minority elders are at a high risk of developing feelings of loneliness and social isolation, it is imperative that future research focuses on better understanding predictors of loneliness and social isolation among visible minorities, so that appropriate measures are taken to alleviate reported feelings. To our knowledge, the present study is the first study that has found an association between cultural values related to familial relationships and family expectations and loneliness. The results of this study suggest that there is a need for future research to focus on better understanding how family values influence the development of feelings of loneliness. By understanding how family values negatively affect visible minority elders, appropriate interventions can be implemented that take into account not only structural, but also cultural factors associated with feelings of loneliness. The present study was conducted in order to help improve the well being of visible minority elders living in Canada.

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Appendices

Appendix A: Ethics Approval Form

Western Research

Western University Health Science Research Ethics Board
NMREB Delegated Initial Approval Notice

Principal Investigator: Dr. Marie Savundranayagam
Department & Institution: Health Sciences, Western University

NMREB File Number: 105468
Study Title: The Role of Cultural and Family Values on Social Connectedness in Older Adults From Ethnic Minority Groups: An Exploratory Study
Sponsor:

NMREB Initial Approval Date: July 31, 2014
NMREB Expiry Date: September 30, 2015

Documents Approved and/or Received for Information:

Document Name	Comments	Version Date
Advertisement	Recruitment flyer	
Recruitment Items	Sign-up Sheet (distributed to individuals)	2014/06/11
Letter of Information	LOI	2014/06/12
Letter of Information & Consent	Consent form	2014/06/12
Revised Western University Protocol	Revised Western University protocol-clean version	2014/07/03
Response to Board Recommendations	Response to board recommendations	2014/07/03
Instruments	Revised Questionnaire-clean version (pdf file)	2014/07/02

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the above named study, as of the HSREB Initial Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of HSREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Ethics Officer, on behalf of Riley Hinson, NMREB Chair

Ethics Officer to Contact for Further Information

Erika Basile	Grace Kelly	Mina Mekhail	Vikki Tran

This is an official document. Please retain the original in your files.

Appendix B: Letter of Information

Western
HealthSciences

Project Title: The Role of Cultural and Family Values on Social Connectedness in Older Adults From Ethnic Minority Groups: An Exploratory Study

Principal Investigator:
Marie Savundranayagam, PhD, Western University

Letter of Information

1. Invitation to Participate
You are being invited to participate in this research study investigating the relationship between social connectedness and cultural and family values

2. Purpose of the Letter
The purpose of this letter is to provide you with information required for you to make an informed decision regarding participation in this research.

3. Purpose of this Study
The purpose of this study is to explore the relationships between cultural values regarding family and social support. Given that there is very limited information on this topic, the study's results are likely to help family members and service providers assist older adults from ethnic minority groups in getting social support within and outside the familial context.

4. Inclusion Criteria
Participants who fit the following three criteria are eligible to participate in this study: fifty years or older, can read and understand English, and from an ethnic minority group. This includes individuals, other than Aboriginal persons, who are non-Caucasian in race or non-white in colour. The population consists mainly of the following groups: South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean and Japanese.

5. Exclusion Criteria
Individuals who do who do not belong to an ethnic minority group, who cannot read and understand English, who are under the age of 50 are not eligible to participate in this study.

6. Study Procedures
If you agree to participate, you will be asked to complete a pen and paper questionnaire. You can take the questionnaire home if you wish, and we will provide you with a date and place where to drop it off once you are done completing it. It is anticipated that completing the questionnaire will take approximately thirty minutes. There will be a total of approximately 200 participants taking part in this study.

7. Possible Risks and Harms
There are no known or anticipated risks or discomforts associated with participating in this study.

Participant Initials: _____   Version Date 03-07-14

Western
HealthSciences

8. Possible Benefits

You may not directly benefit from participating in this study, but information gathered may provide benefits to society as a whole which include increased knowledge regarding older adults from ethnic minority groups. This study's findings may benefit older adults from ethnic minority groups by helping them find ways to increase the amount of social interaction they receive from within and outside of the family setting.

9. Compensation

You will not be compensated for your participation in this research.

10. Voluntary Participation

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your future employment.

11. Confidentiality

All data collected will remain confidential and accessible only to the investigators of this study. If the results are published, your name will not be used. If you choose to withdraw from this study, your data will be removed and destroyed from our database.

12. Contacts for Further Information

If you require any further information regarding this research project or your participation in the study you may contact the Principal Investigator, Dr. Marie Savundranayagam or the student researcher, Laura Garcia. If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics.

13. Publication

If the results of the study are published, your name will not be used. If you would like to receive a copy of any potential study results, please provide your name and contact number on a piece of paper separate from the Consent Form.

14. Consent

If you choose to participate, you will be asked to sign a written consent form indicating this.

This letter is yours to keep for future reference

Appendix C: Consent Form

Western HealthSciences

Consent Form

Project Title: The Role of Cultural and Family Values on Social Connectedness in Older Adults from Ethnic Minority Groups: An Exploratory Study

Study Investigator's Name: Dr. Marie Savundranayagam, PhD, Laura Garcia Diaz, MSC Candidate

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction.

Participant's Name (please print):

_____

Participant's Signature: _____

Date: _____

Person Obtaining Informed Consent (please print):_____

Signature:
_____

Date: _____

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Appendix D: Questionnaire

Western
HealthSciences

"The Role of Cultural and Family Values on Social Connectedness in Older Adults From Ethnic Minority Groups: An Exploratory Study"

Thank you for agreeing to participate in this study. You must be 50 years of age, or older, to participate, and you must belong to an ethnic minority group. The information you provide will remain confidential. Also, your participation is completely voluntary. You may choose not to answer any question(s) you may find inappropriate or don't feel comfortable answering, and you may withdraw from the study at anytime without penalty. If you have any questions or concerns about this research project, you can contact us at: ████████████████████████████████

In this study you will be asked questions about social isolation, loneliness, cultural values, and use of non-medical services. The purpose of this study is to investigate the relationship between the cultural value of familism and levels of social isolation and loneliness found among a number of older adults from ethnic minority groups. This study will take approximately 30-40 minutes to complete. We would like to thank you for your participation. Your help is greatly appreciated and will be extremely valuable in our effort to begin to understand why a great number of older adults from ethnic minority groups report high levels of isolation and loneliness.

I understand the nature of the study and I agree to participate.   I agree ☐

Please turn to the next page and begin the survey.

We would be happy to share the survey with you beforehand, and share the results with you after the study is completed. If you have any questions and/or require further information about this study, you are welcome to contact Dr. Marie Y. Savundranayagam ████████████████ or Laura Diaz ████████████.

For office use only
Participant ID number
☐ ☐ – ☐ ☐ ☐

Formal Non-medical Services

1: Do you use any non-medical services (such as senior centers, programs offered at the library, recreational programs, educational programs, etc.)?

☐ Yes

☐ No

<u>If your answer was "yes," please answer questions 2, 3, 4, 5, 6, 7 and 8. If your answer was "no" proceed to question 9.</u>

2: Which of the following services do you use on a regular basis? Please select all that apply:

☐ London Public Library   ☐ YMCA

☐ Religious facilities   ☐ South London Community Centre

☐ Hamilton Rd. Seniors' Centre   ☐ Horton St. Seniors' Centre

☐ Kiwanis Seniors' Community Centre   ☐ Other_____

☐ London Intercommunity Health Centre

3: Are the services that you are using specific to ethnic minority elders?

☐ Yes

☐ No

4: Do you use the services because they work with ethnic minority elders?

☐ Yes

☐ No

5: Are you satisfied with the services that you are using?

☐ Yes

☐ No

If NO was your answer, please explain:

_____
_____
_____
_____

6: How did you hear about the services you are currently using?
(please check all that apply)

☐ Family member ☐ Case worker

☐ Friend ☐ Advertisement

☐ Family doctor ☐ Other, please specify_____

7: Do you think that the community services available are appealing to individuals from your ethnic background?

☐ Yes

☐ No

If your answer was "no," please answer question 8. If your answer was "yes" proceed to question 9

8: What should be done to make existing available services appealing to individuals from your ethnic background?

_____
_____
_____
_____
_____
_____
_____
_____

Culture

9: What language do you speak at home? _____

10: On a scale of 1 (I can say a few things in English) to 4 (I speak English completely fluently), how well do you **speak** English?

1☐ I can say a few things in English.
2☐ I can make simple sentences, but need more vocabulary.
3☐ I speak well, but still fail to make myself understood occasionally.
4☐ I speak English completely fluently.

11: On a scale of 1 (I can understand a few things in English) to 4 (I understand English completely fluently), how well do you **understand** English when it is spoken to you?

1 ☐ I can understand a few things in English.
2 ☐ I can understand the main points of a conversation, but need more vocabulary.
3 ☐ I understand well, but still make mistakes.
4 ☐ I understand English completely fluently.

12: The following questions ask about your beliefs about familial responsibilities. Please indicate how much you agree or disagree with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a) One should make great sacrifices in order to guarantee a good education for his/her children.	○	○	○	○	○
b) One should help economically with the support of younger brothers and sisters.	○	○	○	○	○
c) I would help as much as I could if a family member told me he/she is in financial difficulty.	○	○	○	○	○
d) One should have the hope of living long enough to see his/her grandchildren grow up.	○	○	○	○	○
e) Aging parents should live with their family members.	○	○	○	○	○
f) A person should share his/her home with uncles, aunts or first cousins if they are in need.	○	○	○	○	○
g) When someone has problems she/he can count on help from his/her relatives.	○	○	○	○	○
h) When I have a problem, I can count on the help of my family members.	○	○	○	○	○

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
i) One can count on help from his/her relatives to solve most problems.	○	○	○	○	○
j) Much of what a son or daughter does should be done to please the parents.	○	○	○	○	○
k) The family should consult close relatives (uncles, aunts) concerning its important decisions.	○	○	○	○	○
l) One should be embarrassed about the bad things done by his/her brothers or sisters.	○	○	○	○	○
m) Children should live in their parents' house until they get married.	○	○	○	○	○
n) One of the most important goals in life is to have children.	○	○	○	○	○

13: The following questions ask about your acceptance of Canadian values, and acceptance of values from your country of origin. Please indicate how much the following statements apply to you:

	Not at all	Very little or not very often	Moderately	Much or very often	Extremely often or almost always
a) I have difficulty accepting some ideas held by Canadians.	○	○	○	○	○
b) I have difficulty accepting certain attitudes held by Canadians.	○	○	○	○	○
c) I have difficulty accepting some behaviours exhibited by Canadians.	○	○	○	○	○
d) I have difficulty accepting some values held by some Canadians.	○	○	○	○	○
e) I have difficulty accepting certain practices and customs commonly found in some Canadians.	○	○	○	○	○

	Not at all	Very little or not very often	Moderately	Much or very often	Extremely often or almost always
f) I have, or think I would have, difficulty accepting Canadians as close friends.	○	○	○	○	○
g) I have difficulties accepting ideas held by individuals from my country of origin.	○	○	○	○	○
h) I have difficulties accepting certain attitudes held by individuals from my country of origin.	○	○	○	○	○
i) I have difficulty accepting some behaviours exhibited by individuals from my country of origin.	○	○	○	○	○
j) I have difficulty accepting some values held by some individuals from my country of origin.	○	○	○	○	○
k) I have difficulty accepting certain practices and customs commonly found in some individuals from my country of origin.	○	○	○	○	○
l) I have, or think I would have, difficulty accepting individuals from my country of origin as close friends.	○	○	○	○	○

Health and Life Satisfaction

14: The following statements ask questions about your personal health, and about your life satisfaction. Please answer the following statements:

a) Things keep getting worse as I get older.	Yes ☐	No ☐
b) I see enough of my friends and relatives.	Yes ☐	No ☐
c) As you get older you are less useful.	Yes ☐	No ☐
d) If you could live where you wanted, where would you live?	Here ☐	Elsewhere ☐
e) I am as happy now as when I was younger.	Yes ☐	No ☐

f) Most days I have plenty to do.	Yes ☐ No ☐
g) My health is.	Good ☐ Not so good ☐
h) Life is hard for me most of the time.	Yes ☐ No ☐
i) How satisfied are you with life today?	Satisfied ☐ Not Satisfied ☐

15: In the past six months have you experienced any of the following events? Please select ALL that apply

☐ My spouse passed away.
☐ I got a divorce.
☐ A close relative passed away.
☐ I got diagnosed with an illness
    or got injured.
☐ I got fired at work.
☐ I retired.
☐ A close friend or relative got
    diagnosed with an illness.

☐ A close friend passed away.
☐ I switched jobs.
☐ My spouse retired.
☐ I moved houses.
☐ My sleeping habits have changed
    (less or more hours of sleep at
    night, disrupted sleep, etc.).
☐ My eating habits have
    changed (I now eat less/more).

In the following section, you will be asked questions about your social interaction with other people, and questions about your satisfaction with the amount of social interaction you receive.

16: How often do you talk to your <u>family members</u>?

○ Daily.
○ Once a week.
○ Two or more times a week.
○ Once a month.

○ Two or more times a month.
○ On special occasions only (birthdays,
    holidays, etc).
○ I have not talked to my family
    members in years.

17: Which of the following best describes your interaction with your <u>family members</u>?

○ We usually have face-to-face interaction (in person).
○ Our interaction is mostly over the phone.
○ Our interaction is mostly over the internet (Skype, Facebook, email).
○ Our interaction is mostly via mail (letter writing).

18:The following questions ask about your relationship and interaction with your <u>family members</u>. Answer the following questions considering the people to whom you are related (your family members):

a) How many relatives do you see or hear from at least once a month?

○ None   ○ One   ○ Two   ○ Three or four   ○ Five-Eight   ○ Nine or more

b) How often do you see or hear from the relative with whom you have the most contact?

○ Less than monthly   ○ Monthly   ○ Few times a month   ○ Weekly   ○ Few times a week

c) How many relatives do you feel close to such that you could call them for help?

○ None   ○ One   ○ Two   ○ Three or four   ○ Five-Eight   ○ Nine or more

d) When one of your relatives has an important decision to make, how often do they talk to you about it?

○ Never   ○ Seldom   ○ Sometimes   ○ Often   ○ Very often   ○ Always

e) How often is one of your relatives available for you to talk to when you have an important decision to make?

○ Never   ○ Seldom   ○ Sometimes   ○ Often   ○ Very often   ○ Always

f) How many relatives do you feel at ease with that you can talk to about private matters?

○ None   ○ One   ○ Two   ○ Three or four   ○ Five-Eight   ○ Nine or more

19: How often do you leave your household (e.g., to get groceries, to go to medical appointments, to go visit a friend, etc.)?

○ More than once a day.   ○ Two or more times a month.

○ Once a day.   ○ Once a month.

○ Two or more times a week.   ○ I never leave my apartment.

○ Once a week.

20: Do you have other family members that live in Canada?

☐ Yes

☐ No

<u>If your answer was "yes", please answer question 21. If the answer was "no" proceed to question 22.</u>

21: Do your family members live within an hour of London?

☐ Yes   ☐ No

22: What are the main reasons you leave your home? Please select ALL that apply:

☐ To go grocery shopping. ☐ To go to the movie theatre.

☐ For medical appointments. ☐ To go out for dinner.

☐ To visit friends and family. ☐ To go to the gym.

☐ To attend religious services. ☐ To go to the library.

☐ To attend social gatherings. ☐ To attend activities held at

☐ To go to the mall.   the community center.

☐ Other, please specify _____

_____

23: The following questions ask about your relationship and interaction with your <u>friends</u>. Answer the following questions considering all of your friends including those who live in your neighborhood.

a) How many of your friends do you hear from at least once a month?

○ None ○ One ○ Two ○ Three or four ○ Five-Eight ○ Nine or more

b) How often do you see or hear from the friend with whom you have the most contact?

○ Less than monthly ○ Monthly ○ Few times a month ○ Weekly ○ Few times a week

c) How many friends do you feel at ease with that you can talk about private matters?

○ None ○ One ○ Two ○ Three or four ○ Five-Eight ○ Nine or more

d) How many friends do you feel close to such that you could call on them for help?

○ None ○ One ○ Two ○ Three or four ○ Five-Eight ○ Nine or more

e) When one of your friends has an important decision to make, how often do they talk to you about it?

○ Never ○ Seldom ○ Sometimes ○ Often ○ Very often ○ Always

f) How often is one of your friends available to talk to you when you have an important decision to make?

○ Never ○ Seldom ○ Sometimes ○ Often ○ Very often ○ Always

24: The following questions ask about your social interaction with those around you, and how the amount of social interaction makes you feel. Please indicate how often each of the statements below applies to you:

	I often feel this way	I sometimes feel this way	I rarely feel this way	I never feel this way
a) I am unhappy doing so many things alone.	○	○	○	○
b) I have nobody to talk to.	○	○	○	○
c) I cannot tolerate being so alone.	○	○	○	○
d) I lack companionship.	○	○	○	○
e) I feel as if nobody really understands me.	○	○	○	○
f) I find myself waiting for people to call me or write to me.	○	○	○	○
g) There is no one I can turn to.	○	○	○	○
h) I am no longer close to anyone.	○	○	○	○
i) My interests and ideas are not shared by those around me.	○	○	○	○
j) I feel left out.	○	○	○	○
k) I feel completely alone.	○	○	○	○
l) I am unable to reach out and communicate with those around me.	○	○	○	○
m) My social relationships are superficial.	○	○	○	○
n) I feel starved for company.	○	○	○	○
o) I am unhappy being so withdrawn.	○	○	○	○
p) It is difficult for me to make friends.	○	○	○	○

	I often feel this way	I sometimes feel this way	I rarely feel this way	I never feel this way
q) I feel shut out and excluded by others.	○	○	○	○
r) People are around me but not with me.	○	○	○	○
s) No one really knows me well.	○	○	○	○
t) I feel isolated from others.	○	○	○	○

25: Do you enjoy spending time alone?

☐ Not at all ☐ Very little ☐ Moderately ☐ Almost always ☐ Very much

26: Do you wish you could spend more time with others?

☐ Yes

☐ No

Sociodemographic Information

27: What year were you born in? _____

Year

28: What is your gender? ○ Male ○ Female

29: Were you born in Canada? ☐ Yes ☐ No

If your answer was "no," please answer questions 30, 31, 32, and 33. If your answer was "yes," proceed to question 34.

30: Which country were you born in? _____

31: Which country did you immigrate to Canada from? _____

32: Which year did you arrive to Canada? _____

Year

33: What is your Canadian residency status?

○ I am a Canadian citizen

○ I am a Canadian permanent resident

○ Other, please specify_____

34: What is your race/ethnicity?

(share ALL that apply)   ○ Black Canadian

○ Latin American or Hispanic

○ European

○ Asian

○ Aboriginal

○ Middle Eastern

○ Other, please specify _____

35: Generally speaking, do you usually have sufficient income to do the things you want to do?

☐ Yes

☐ No

If your answer was "no," what would you want to do that you cannot do with your current income?

_____

_____

_____

_____

_____

_____

36: Please tell me where you would rate yourself on a scale of 1 (not enough income to do what I want) to 6 (more than enough income to do what I want):

1[_____] 2[_____] 3[_____] 4[_____] 5[_____] 6[_____]

Not enough
income to do
the things I
want to do

More than enough
income to do the
things I want to do

37: What is your employment status?

○ Work full-time
○ Work part-time
○ Retired but work part-time
○ Fully retired
○ Homemaker
○ Unemployed
○ Other

38: What is your education level?

○ Elementary school
○ High school
○ University degree/
○ College diploma
○ Masters degree
○ Professional school
   (i.e: Medical School)
○ PhD

39: What is your living arrangement?

○ I live alone in my own home.
○ I live in my house with my partner/spouse.
○ I live with other family members.
○ I live in a group environment with assistance
   (not a nursing home).
○ I live in a nursing home.

Your participation in this study is very important to us. We thank you for your time in answering the questions!

Western HealthSciences

Curriculum Vitae

Curriculum Vitae: Laura Garcia Diaz

Education

Candidate for Master of Science, Health and Rehabilitation Sciences, Western University, 2015

- Concentrations: Health and Aging
- Thesis: The role of Cultural and Family values on Social Connectedness in Visible Minority Elders: An Exploratory Study

Honor Bachelor of Arts- Specialization in Psychology, minor in Philosophy, Western University, 2013

- Graduated with Distinction

Research Experience

Masters Thesis- Western University, Sept 2013-Present

- Supervisor: Dr. Marie Savundranayagam
- Title: *The Role of Cultural and Family Values on Social Connectedness in Visible Minority Elders: An exploratory Study*
- Investigated if cultural values related to familial relationships and family expectations predicted reported levels of loneliness and of social isolation among visible minority elders

Honors Thesis- Western University, Sept 2012-April 2013

- Supervisor: Dr. Riley Hinson
- Title: *Cognitive Processing as Related to the use of Drugs*
- Investigated the relationship between participants' levels of reported energy drink consumption and an attentioanl bias towards target words related to energy drinks

Independent Study-Western University, Sept 2011- Dec 2011

- Supervisor: Dr. Scott MacDougall-Shackleton
- Title: *The Effect of Nutritional Stress at Different Stages of Development on Spatial Memory in Zebra Finches*
- Investigated potential trade-offs between physiological and cognitive development on the Zebra Finch, with an emphasis placed on the cognitive development of the birds

Sanofi-Aventis BioTalent Challenge- Western University, Jan 2008-May 2010

- Supervisor: Dr. Cristina Iosef
- Title: *Examining the Effects of RNA Interference of Fyn Kinase on the IGF-1 Signalling Loop*
- Investigated how the fate of stem cells can be affected by the manipulation of RNA interference on the IGF-1 signalling loop

Teaching Assistant Experience
• *The Aging Mind* – Marked group presentations and provided assistance to students who were struggling with class material, Winter 2015
• *Physical Therapy: Therapeutic Modalities* - taught students how to use a number of therapeutic modalities to treat patients and assisted with marking, Fall 2013
• *Curriculum Development - The Aging Body* - created an online module for one of the class sections, assisted with marking, and held

Research Skills
• Extensive knowledge of SPSS
• Extensive experience with literature research

Presentations
•Garcia Laura (March 2015). The Role of Cultural and Family Values on Social Connectedness in Visible Minority Elders: An Exploratory Study. Poster presentation at the Faculty of Health Sciences Research Day at Western University.
• Garcia Laura (February 2015). The Role of Cultural and Family Values on Social Connectedness in Visible Minority Elders: An Exploratory Study. Oral presentation at the Health and Rehabilitation Sciences Graduate Research Conference at Western University.

Publications
• Kriengwatana, B., Farrell, T., Aitken, S., Garcia, L., MacDougall-Shackleton, S. (2015). Early life nutritional stress affects associative learning and spatial memory but not performance on a novel object test. *Behaviour, 152*, 195-218.

Awards and Distinctions
• Western Graduate Research Scholarship, 2013-2015
• UWO In-Course Scholarships Year III, 2011
• Dean's List (80% average) in 2010, 2011, 2012 and 2013
• Western Scholarship of Distinction: Entrance Scholarship (80% grade 12 average),2009

Volunteer Experience
• Alzheimer Society, June 2014-Present
• London Intercommunity Health Centre, May 2014-Present
• Canadian Mental Health Association: Wait-List Clinic, 2011-2012
• London and District Distress Centre, 2010-2012

Skills and Qualifications
• Experience with database management
• Strong computer skills and working knowledge of MS Word, Excel, and PowerPoint
• Fluent in Spanish and English