# Caregivers' Social Networks and Child Well-Being

by

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#### **Abstract**

In human societies, childcare and provisioning typically rest on primary caregivers; however, support from family, friends and neighbours is critical to family well-being. The frequency and kind of support caregivers receive have been shown to enhance caregiver well-being. However, we know very little about whether caregivers' social networks are associated with child well-being. In this study, I examined whether caregiver social networks and different kinds of support (practical and emotional) are associated with child well-being. Additionally, I examined whether there is a difference in support in urban and rural regions. I examined data from 242 caregivers of children aged 8-12 years, and I conducted a follow-up interview with 35 children (M= 9.99 years). Results indicate that having more social networks and receiving more emotional support and less practical support are positively associated with child well-being. Interestingly, practical support from neighbours that caregivers received was higher in urban than rural areas. These findings help us better understand how children are impacted by caregiver social networks and can potentially impact policies regarding how we structure our neighbourhoods and family resources to better support families in both urban and rural settings.

**Keywords**: child well-being; social networks; emotional support; practical support; urban/rural living

# **Dedication**

This thesis work is wholeheartedly dedicated to my beloved parents, Aysel and Onur, and my sister, Elif, who loved me unconditionally and who always provided their emotional and financial support despite the distance. This work is also dedicated to my beloved friends Yasmin, Sena, Umay and Ceren, who have been a constant support and encouragement during the challenges of graduate school and life. You always inspire me to achieve more, I am truly thankful for having you in my life.

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# **Chapter 1.** Introduction

Children's relationship with their caregivers and siblings plays an important role in children's social, emotional, and cognitive development (Bronfenbrenner, 1986). We also know that the various systems (e.g., neighbourhoods, cultural values) in which the child is embedded influence development throughout the lifespan (Bronfenbrenner, 1977). For example, researchers have found that caregivers' social networks are essential to family and caregiver well-being (McKeown et al., 2003). However, very little research has examined the impact of caregivers' extended family members, friends, or neighbours on children's well-being (Arcaya et al., 2016). Social networks serve as a source of social support for caregivers when they need it (Antonucci, 2001). There are various factors that impact the characteristics of social support received from these networks. For example, researchers found that the kind of support (e.g., emotional, practical) can vary based on geographical proximity (Rodriguez et al., 2003). Additionally, the source of support (e.g., family, friends or neighbours) can change depending on the area of residence (e.g., urban, rural) (Amato, 1993). In light of these findings, it is important to understand how social networks and support characteristics change based on the living area and whether such variations impact child well-being. Therefore, I explored how caregivers' social network and support characteristics affect child well-being in both urban and rural settings.

# 1.1. Social Networks and Caregiver and Child Well-Being

Social networks impact caregiver and child well-being in different ways (Ayton & Joss, 2015; McKeown et al., 2003). Social networks are social structures that refer to interpersonal relationships with individuals other than the nuclear family, such as extended family members, friends, and neighbours (Cochran & Brassard, 1979). Studies linking social networks and well-being indicate that social networks impact individuals' well-being because they provide social support in times of need (Berkman & Glass, 2000; Cohen & Lemay, 2007). Specifically, Cochran and Brassard (1979) have proposed that caregivers' social networks directly and indirectly influence child well-being. Researchers have stated that social networks indirectly affect child well-being through caregivers' mediating influence (Cochran & Brassard, 1979). For example, caregivers'

social networks facilitate emotional and practical support for caregivers (Cochran & Brassard, 1979). Caregivers who received higher levels of social support from their networks experienced lower levels of parenting stress (Maguire-Jack & Wang 2016). As a result, better parental well-being alters the dynamics of parent-child interaction and ultimately affects the child's well-being (Maguire-Jack & Wang, 2016; McKeown et al., 2003). Additionally, caregivers' social networks influence child well-being through parenting characteristics (Marshall et al., 2001). For example, caregivers who receive emotional support from their social networks also show more responsive, warm, and effective parenting characteristics. Moreover, those parents reported that they feel more effective and competent as parents (Marshall et al., 2001). According to the findings of Marshall and colleagues (2001), these parenting characteristics, such as parental efficacy, are also linked to fewer behavioural problems and higher levels of well-being in children. Nevertheless, it is important to note that these findings do not establish causality. While researchers found a mediating effect of parenting characteristics between social network relationships and child well-being, this relationship is complex and consists of an interplay of several factors (Marshall et al., 2001).

On the other hand, the social networks of caregivers may also affect child wellbeing through direct pathways. Direct pathways refer to caregivers' social networks who have contact with children and, as a result, have an impact on children without necessarily implying any mediating influence of caregivers, such as parenting characteristics (Cochran & Brassard, 1979). Researchers have described four possible mechanisms through which caregivers' social networks influence child well-being directly (Cochran & Brassard, 1979). First, caregivers' social networks provide a social environment consisting of social and cognitive stimulation for children. As a result, children can develop social and cognitive abilities with the help of social networks. Second, social networks can act as role models for children. Therefore, children's behaviors can be shaped by social networks through modelling. Third, social networks allow children to observe and practice how to develop social interactions with others. In this way, social networks enable children to improve their social interaction skills. Last, social networks are an additional source of support for children other than caregivers. Although they provide a solid framework for examining these relationships, Cochran and Brassard have not examined the direct impacts and the possible outcomes (1979). Even four decades after the publication of Cochran and Brassard's proposed framework, only

a handful of studies have investigated the association between caregivers' social network characteristics and child well-being (Homel et al., 1987; Marshall et al., 2001).

There are two studies that have examined how caregivers' social networks influence child well-being as an additional source of support for children (Homel et al., 1987; Marshall et al., 2001). In the first study, Homel and colleagues (1987) investigated how caregivers' social networks directly influence children's social and emotional development using Cochran and Brassard's (1979) framework. In this study, they examined the number and strength of caregiver social networks in four categories: friends, kin, neighbours, and organizations. The child's developmental outcomes were also measured based on caregiver reports regarding happiness, experiencing negative feelings, adjustment at school and children's friendship networks. They found that children whose caregivers do not have dependable social networks experience lower levels of happiness and adjustment at school compared to caregivers who have dependable social networks (Homel et al., 1987). In the second study (Marshall et al., 2001), researchers explored the influence of parents' social networks on child well-being regarding children's social competence, behavioural problems, depression, and school performance. They found that caregivers who had stronger ties with neighbours had children who scored higher on social competency and school performance and lower on measures of depressive symptoms (Marshall et al., 2001). While there are several possible explanations for this finding, it does suggest that social networks may play an important role in child and family well-being.

# 1.2. Social Support Types and Individuals' Well-Being

Several lines of evidence indicate that social networks enhance well-being by providing social support (Antonucci et al., 2014; Berkman & Glass, 2000). Researchers have classified social support into different kinds (Adams et al., 1996; Antonucci, 2001; Cohen & Wills, 1985). One of the different kinds of social support is *practical* support, defined as providing active aid to people in times of need, such as helping with household chores, child care, or providing financial assistance. Practical support involves solving problems through help (Caplan et al., 1975). The second type of social support is *emotional* support, which refers to expressions of love, empathy, or care. In addition to expressions, emotional support can also include physical comfort, such as

giving a hug or listening to people's problems and showing an empathetic attitude towards someone struggling with a situation. The third one is informational support based on guiding people by sharing information and suggestions with someone to help them solve their problems (Antonucci, 2001; Cohen & Wills, 1985; Sarason et al., 1990). Researchers have found that the kind of social support can vary based on the number and the kind of social networks or the strength of the ties with those networks (Sarason et al., 1997). Therefore, the different kinds of social support provided by social networks can affect well-being in different ways (Li & Zhang, 2015; Litwin & Levinsky, 2021).

Although we know that social support enhances well-being, there are few studies that examine how different types of support affect adults' well-being differently. A literature review conducted by House (1985), examining the kinds of social support and well-being among adults, reported that emotional support is closely associated with higher levels of health and well-being. Consistent with these findings, a study by Israel and Antonucci (1987) investigating different kinds of social support among elderly people found that emotional support, but not practical support, is positively correlated with psychological well-being. Conversely, Seo and colleagues (2017) found that practical support enhances health and well-being among adults. They examined whether emotional or practical support is associated with well-being of Korean immigrant caregivers (Seo et al., 2017). Researchers have found that only practical support positively affects caregivers' well-being six months later, although both practical and emotional support provided by kin are associated with well-being (Seo et al., 2017).

On the other hand, we know very little about how different kinds of caregiver social support are related to child well-being. Turney (2013) states that the positive impacts of social support on caregivers' health and well-being may extend to children as well. Turney (2013) discussed that practical support provided by social networks might impact children's health and well-being directly. For example, providing transportation to doctor's appointments or providing tangible aid to families to afford children's needs is positively associated with child health and well-being (Turney, 2013). Consequently, practical help provided by social networks might be more direct and visible for children. Nevertheless, the findings about the relationship between different kinds of social support and child well-being are still limited (Jackson et al., 2000; Turney, 2013). Therefore, I examined whether different kinds of social support provided by caregivers'

social networks are associated with child well-being in the current study to address this gap in the literature.

# 1.3. Geographical Proximity and Social Network Support

It was previously found that the kind of social support (e.g., emotional, practical) provided by social networks depends on geographical proximity and the number of networks that an individual has (Rodriguez et al., 2003). Regarding the number of social networks, Seeman and Berkman (1988) have found that more social networks result in more emotional and practical support. However, further analysis showed that geographically proximate social networks play an important role in the availability of this support. For example, it is found that both the number of proximal and non-proximal ties are positively associated with the availability of emotional support (Seeman & Berkman, 1988). On the other hand, Seeman and Berkman (1988) found that practical support availability is positively associated with the number of proximal ties. They interpreted this finding as suggesting that face-to-face interaction with networks is necessary for practical support as it requires direct and tangible assistance that can only be provided by someone who is physically present (Seeman & Berkman, 1988). Previous research done by Kana'iaupuni and colleagues (2005) also highlighted that frequent face-to-face contact with support providers is positively correlated with children's health status.

Regarding different kinds of social networks, for example, extended and immediate family members offer practical support for caregivers by helping with household chores such as cooking, cleaning or child care (Thompson & Ontai, 2000). Also, neighbours are more likely to give practical support to individuals due to the advantage of geographic proximity, although their social ties are not strong (Wellman & Wortley, 1990). On the other hand, family or close friends provide more emotional and informational support than neighbours by listening, empathizing, and giving advice (Cohen & Wills, 1985). Furthermore, living in urban or rural areas is associated with the social support received from various kinds of social networks, such as family, friends or neighbours (Amato, 1993; Fisher, 1982). For example, Fisher (1982) suggested that individuals residing in rural settings rely more prominently on family and neighbours for social support due to the dependability and proximity of these networks (1982). Amato's research (1993) on urban-rural differences in sources of support showed that individuals

who live away from their families and relatives tend to prioritize their friends as the main source of support. Furthermore, this study also highlighted that people who live in urban settings turn to their friends more frequently when they seek support since their families live far away compared to rural residents (Amato, 1993). These findings demonstrate that the forms of social support within social networks can vary by region, such as living in urban or rural areas, and by social network characteristics, including number, kind, and geographic proximity of the individuals providing social support.

## 1.4. Caregiver Characteristics and Social Networks

Although caregivers' social networks have been linked to increased caregiver and child well-being (McKeown et al., 2013), there are other possible explanations for this finding (Roberts et al., 2008). Previous research has shown that age, gender, and personality play a significant role in explaining the variation in individuals' well-being (Diener et al., 2003; Ha & Kim, 2013). It is important to consider the impact of these characteristics on social network relationships and child well-being to have a better understanding and interpretation of the present research in the broader context. Hence, to gain a better understanding of the complex nature of factors that affect well-being, I assessed caregiver characteristics, including age, gender, personality, religiosity, and happiness, in the current study.

One factor that has been observed to be linked to one's social networks is personality. Personality refers to one's thoughts, emotions, behaviours, and values (McAdams, 2009). Therefore, personality characteristics such as optimism, locus of control, and self-esteem are important factors that influence individual well-being, which may influence child well-being (Diener et al., 2003). Furthermore, researchers have examined how related Big Five personality characteristics (e.g., extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) and well-being. They have documented that Big Five personality characteristics are strongly associated with well-being regardless of age (Headey et al., 2013; Lampropoulou, 2018). For example, extraversion is positively correlated with higher life satisfaction and well-being (Bostic & Ptacek, 2001), while neuroticism, which includes components such as anxiety, aggressiveness, and emotional instability, is negatively correlated with well-being (Karademas, 2007; Tkach & Lyubomirsky, 2006). Although agreeableness, conscientiousness and openness to experience showed a positive correlation with well-

being (Hayes & Joseph, 2003; Haslam et al., 2009), researchers concluded that extraversion and neuroticism are the more strongly correlated with well-being among Big Five personality characteristics in their study (Hayes & Joseph, 2003). Consistent with previous findings related to Big Five personality traits and well-being (Hayes & Joseph, 2003), later research also found that extraversion of caregivers is positively correlated with children's well-being, whereas neuroticism of caregivers is negatively correlated with children's well-being (Fane et al., 2020). To see whether caregivers' personality characteristics influence child well-being, I briefly assessed caregivers' Big Five personality traits in the current study.

Another factor that has been associated with individuals' well-being is religiosity (Ellison, 1991). Several studies documented that there is a positive association between religiosity and mental health and well-being (Koenig et al., 2001; Mueller et al., 2001). Researchers explained the positive relationship between religiosity and well-being in different ways. Berkman and colleagues (2000) claimed that religious participation helps people build social networks and receive social support from others through social integration. Thus, religiosity is positively correlated with individuals' mental health and well-being. Furthermore, religiosity may improve mental health and well-being by providing psychological resources such as hope and personal efficacy for individuals (Krause, 1998; Ryan & Francis, 2012). However, there is little research on how parental religiosity influences child well-being because most studies have examined religiosity and adult well-being (Schottenbauer et al., 2007). For example, in a 10-year follow-up study by Miller and colleagues (1997), researchers found that higher levels of maternal religiosity is positively associated with children's well-being. Children whose mothers have higher religiosity experienced lower levels of depression (Miller et al., 1997). Similarly, Schottenbauer and colleagues (2007) reported that children whose families show religious parenting behaviours have higher levels of well-being. To see whether caregivers' religiosity is a factor that affects child well-being, I assessed caregivers' religiosity and religious participation in this study.

Finally, previous studies showed that the well-being of individuals is transmitted within the family; therefore, caregivers' happiness is positively associated with child well-being (Carlsson et al., 2014; Chi et al., 2019; Powdthavee & Vignoles, 2008). For example, Powdthavee and Vignoles (2008) reported that paternal distress and unhappiness are negatively associated with children's well-being. Furthermore, Chi and

colleagues (2019) found that the subjective well-being of caregivers is transmitted within the family. Specifically, they concluded that the happiness level of mothers is positively associated with children's well-being (Chi et al., 2019). To better understand the relationship between caregivers' happiness and child well-being, I also investigated whether caregivers' happiness is associated with child well-being in the current study.

## 1.5. Current Study and Hypotheses

In this study, I aimed to replicate and extend Homel and colleagues' (1987) findings by investigating the role of caregivers' social networks and child well-being. In previous research, Homel and colleagues (1987) found that children report higher levels of happiness and adjustment at school if their caregivers have higher numbers of dependable social networks and stronger ties with their social networks, including friends and neighbours (Homel et al., 1987). Here, I examined the link between the number of social networks and contact frequency of caregivers' social networks and both parent and child-reported child well-being.

In Homel and colleagues' study (1987), child well-being data is only based on caregivers' reports. Differently, in the current study, I incorporated both parent and child reports of child well-being. Previous studies showed that the findings of the agreement between parent proxy reports and child self-reports are inconsistent (Davis et al., 2007). Some studies found disparities between parent reports and child reports on quality of life (QoL) (Theunissen et al., 1998). According to researchers, parents' and children's reasoning and interpretation of events or their response styles are one explanation for this discordance (Jokovic et al., 2004). Factors such as a child's age, communication skills, or cognitive ability are suggested to be essential in shaping child self-reports (Davis et al., 2007). On the other hand, a systemic review of (Eiser & Morse, 2001) revealed an agreement on child well-being reports for parent proxy and child reports, especially in some domains of QoL measurement. For instance, the agreement on parent and child reports was higher in physical well-being compared to the emotional and social well-being of children in most of the studies that were reviewed (Eiser & Morse, 2001). Aligning with these findings, Barbosa and Gavião (2015) also found that the concordance between parent and child reports was higher for physical functioning domains but substantial for the emotional and social well-being of children. Given the

mixed findings of previous research, the current study examined the relationship between parent and child reports regarding child well-being to capture the nuances of child well-being by investigating both perspectives.

In the current study, I also examined whether emotional and practical support is associated with child well-being. Previous research has shown that different kinds of support might serve different functions on health; therefore, it is worth examining the association between different kinds of support and well-being (Schaefer et al., 1981). We also know that the providers of social support can be different in urban and rural settings (Amato, 1993; Rodriguez et al., 2003). Notably, the geographic dispersion from these support providers holds particular significance regarding the kind of social support received (Fisher, 1982; Thompson & Ontai, 2000). Here, I investigated whether social network characteristics and the kind of social support provided by social networks are linked to urban/rural living by examining families living in British Columbia and Nova Scotia.

#### 1.5.1. Hypothesis 1

In line with previous research that found children whose caregivers have higher numbers of dependable social networks have higher levels of well-being (Homel et al., 1987), I expect that the higher number of total caregiver social networks of any kind (e.g., friends, family/relatives, neighbours) will be positively associated with child well-being.

## 1.5.2. Hypothesis 2

In line with previous research (Kana'iaupuni et al., 2005), I expect that the frequency of contact of caregivers with their social networks of any kind (e.g., friends, family/relatives, neighbours) will be positively associated with child well-being.

# 1.5.3. Hypothesis 3

In line with previous research, which pointed out that practical support from social networks is associated with child health and well-being (Turney, 2013), I expect a positive association between the practical support that caregivers receive from their

networks and child well-being. Although both practical and emotional support for caregivers is expected to be related to child well-being, receiving practical support will be more strongly associated with child well-being than emotional support.

#### 1.5.4. Hypothesis 4

Although the findings are mixed with respect to the concordance between caregiver and child well-being scores (see Davis et al., 2007; Eiser & Morse, 2001), I expect that caregiver-reported and child-reported child well-being will be positively correlated, considering that parents report can complement the child's evaluation (Barbosa & Gavião, 2015) and given that caregiver-reported child well-being is a valid measurement of child well-being.

# Chapter 2. Method

## 2.1. Participants

Prior to beginning data collection, I conducted a power analysis for a Linear Multiple Regression using G\*Power 3.1 software (Faul et al., 2009) to have a power of 0.80, with a moderate effect size ( $f^2$  = .15), an error probability ( $\alpha$ ) of 0.05. This power analysis indicated that a minimum of 157 caregiver participants are needed to achieve 95% power for the planned analyses. On the other hand, I did not conduct a power analysis for the child interviews phase of the study, as this phase was made optional, allowing participants to decide whether or not they wanted to continue to participate.

Although the initial goal for the sample size was a minimum of 157 participants, I extended the recruitment process to achieve a balanced number of participants from urban and rural areas. Ultimately, the sample of the first phase included 242 participants. Initially, I recruited 270 caregivers whose children were between 8 and 12 years old. I decided to conduct this study with school-aged children because, during this time period, children become more independent from their immediate family (Allen & Kelly, 2015). Lois (2022) stated that the role and function of social networks in children's lives change with children's age. In early childhood, children mostly interact with their immediate family, including parents and grandparents (Levitt et al., 1993). With an increase in age, they start developing social interactions outside of their family with their peers, neighbours, teachers or their caregivers' social networks (Levitt et al., 1993). Aligning with this, a longitudinal study by Feiring and Lewis (1991a) found that there is an expansion in the number of social networks of school-aged children, accompanied by an increase in social interaction with those networks. Furthermore, social support received from social networks also increases with children's age as children interact with various network circles, such as peers, caregivers' friends, and neighbours (Bost et al., 2004). Hence, the current study explored the association between caregivers' social networks, social support and the well-being of children aged 8 to 12, considering the developmental shift towards developing more social interactions beyond immediate family during middle childhood.

Subsequently, I excluded 17 participants (6.3%) who commenced the online questionnaire but discontinued their participation before completing the demographic questions. Additionally, I excluded one participant who completed the questionnaire based on two children instead of one focal child. Furthermore, 3 participants (1.1%) were excluded because happiness questionnaire answers were missing.

After the exclusion criteria were applied, the data consisted of 242 caregiver participants aged between 26 and 62 years (M = 42 years). The majority of the caregiver participants self-identified as female (94.2%), 13 as male (5.4%) and 1 person as non-binary (0.4%). Furthermore, 108 (45%) caregivers identified their children as female, 116 (48%) identified as male and 2 identified as non-binary (1%). Additionally, 16 caregivers (6 %) did not identify their child's gender. Lastly, 231 participants (95.5 %) were living in British Columbia or Nova Scotia in Canada and 11 participants were from different countries (n = 10) or regions in Canada (n = 1). Among 242 participants, 57.9% resided in rural areas (n = 140), while 42.1% resided in urban areas (n = 102).

At the end of the caregiver questionnaire, caregivers were invited to provide details about child well-being from their perspective and invited to be contacted to participate at a later date with their child. Of the 242 caregivers, 35 caregivers provided information and joined another Zoom session at a later date to allow their child to answer questions directly. The child participants were, on average, 10 years old (range: 8 - 12). Among 35 participants, more than half of them were living in rural regions of Canada (60%).

#### 2.2. Recruitment

#### 2.2.1. Caregiver Questionnaire (Phase 1)

To ensure a diverse participant pool, I employed a snowball sampling technique and advertised on Facebook groups and Instagram pages. To streamline the process, I provided participants with an online questionnaire link and QR code, both of which were created using Qualtrics. By clicking the link or scanning the code, participants were able to access the online questionnaire for the study. All recruitment and data collection procedures were approved by the Office of Research Ethics at Simon Fraser University.

Participants who completed the study's first phase were incentivized through inclusion in a draw for an iPad.

#### 2.2.2. Child Video Interview (Phase 2)

I recruited children aged between 8 and 12 years whose caregivers agreed to continue the video interview phase of the study after completing the questionnaire. I sent an e-mail to each of the participants to schedule a time for an interview on Zoom. Based on the participants' availability, I sent our personal SFU Zoom link via e-mail to conduct interviews with children. Participants who completed the video interview phase of the study were incentivized through inclusion in another draw for Beats Headphones, respectively.

#### 2.3. Materials

#### 2.3.1. Family Demographics Questionnaire

I developed a series of questions for caregivers, including children's age and gender, caregivers' age and gender, and families' living area (urban/rural). In this study, participants were asked to name and describe their living area in four categories (e.g., rural area, small town, suburban area, urban area). According to Statistics Canada (2016), rural and small towns encompass residents in towns and municipalities outside the commuting zone of larger urban centers consisting of 10,000 or more population. Therefore, participants who reported their living area as either rural or small town were classified as rural residents, whereas the ones who identified as suburban and urban were classified as urban residents in this study.

## 2.3.2. Personality Traits of Caregivers

To assess caregivers' personality, I used the Big Five Inventory-10 (BFI-10) (Rammstedt & John, 2007). The Big Five Inventory-10 scale includes five personality dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience, with 10 items (see Appendix A for the full questionnaire). BFI-

10 has been used and validated in different studies with different participants such as German, the USA, and Chinese (Carciofo et al., 2016; Thalmayer et al., 2011).

#### 2.3.3. Happiness of Caregivers

To assess caregivers' happiness, I asked caregivers specifically about their happiness in the past seven days, by using the Short Depression-Happiness Scale (SDHS; Joseph et al., 2004). The SDHS was developed from its original version, The Depression-Happiness Scale (DHS; Joseph & Lewis, 1998), to measure happiness and depression (Joseph et al., 2004). In this shorter version, this scale includes 6 items that refer to 3 positive and 3 negative statements (see Appendix A for the full questionnaire). SDHS is translated and used in different languages (e.g., Spanish, Turkish, Arabic) by various populations (Yıldırım & Balahmar, 2020; Sapmaz & Temizel, 2013). Joseph and colleagues (2004) have documented that SDHS has good internal consistency reliability (Cronbach's alpha's = .77-.92) and good reliability coefficient (r = .86).

#### 2.3.4. Religiosity of Caregivers

To assess caregivers' religiosity and religious participation, I used the Duke University Religion Index (Koenig & Büssing, 2010). This index includes 3 subscales which are organizational religious activity (ORA), (e.g., attending religious services), nonorganizational religious activity (NORA), (e.g., being a prayer) and intrinsic religiosity (IR), (e.g., a subjective commitment to the religion). The scores of each subscale were examined independently rather than having an overall religiosity score by summing all items (see Appendix A for the full questionnaire). This scale is validated with more than 100 studies and the results demonstrated that DUREL has good internal consistency (Cronbach's alpha's = 0.78–0.91), and high test-retest reliability (intra-class correlation = 0.91).

## 2.3.5. Caregiver Social Networks and Social Support

To assess the size, kind of social networks and the frequency of contact with social networks and different kinds of social support, I used a questionnaire adapted from an interview in the study of Homel and colleagues (1987). Questions were asked to caregivers about three network domains: friends, family/relatives, and neighbours. For

each domain, a questionnaire included the questions "How many friends/family or relatives/neighbours live in their local area?" (None, some, almost, all) "How many that would be?" (0, 1, 2-3, 4-9, 10-19, 20+) "How often do you see your many friends/family or relatives/neighbours? (Weekly or more often, once or twice a month, less than monthly). Additionally, questions related to the kind of social support (emotional and practical support) and its frequency were added to this questionnaire. There were two questions and two follow-ups for each kind of social support and the frequency that caregivers receive. For example, to measure practical support, caregivers were asked, "Thinking all of your friends/family or relatives/neighbours, do you have any dependable friends/family or relatives/neighbours that you see regularly, that you can call in a case of need/help (stress or crises etc.)?" "How many friends/family or relatives/neighbours do you have like that?" (0, 1, 2-3, 4-9, 10-19, 20+). Questions for measuring emotional support were presented in the same format (see Appendix A for the full questionnaire).

#### 2.3.6. Children's Well-Being (Caregiver/Child Versions)

To assess children's well-being, I used KIDSCREEN-27 (Ravens-Sieberer et al., 2005). In the first phase, KIDSCREEN-27 (Caregiver version) was filled out by caregivers to assess child well-being based on the caregivers' perspective. In the second phase, I conducted KIDSCREEN-27 (Child version) with children as an online interview on Zoom to assess child well-being based on children's perspectives. KIDSCREEN-27 is a 27-item self-report questionnaire developed as the short version of KIDSCREEN-54 (Ravens-Sieberer et al., 2005) to assess children's and adolescents' well-being (Ravens-Sieberer et al., 2005). KIDSCREEN-27 has a multifaced approach that includes five domains: Physical well-being, psychological well-being, family and free time, friends, and school environment (see Appendix A for the full questionnaire). It is also standardized with larger populations in different European countries (Austria, Czech Republic, France, Germany, Greece, Hungary, Ireland, Poland, Spain, Sweden, Switzerland, The Netherlands, and the United Kingdom) (Ravens-Sieberer et al., 2005) with good construct validity and internal consistency for each of the five domains (Cronbach's  $\alpha > .70$ ), intraclass correlation coefficients (ICC > .61, ICC < .74), inter-scale correlation (r > /= .36, r < /= .59).

#### 2.4. Procedure

#### 2.4.1. Caregiver Questionnaire (Phase 1)

For the first phase of our study, I invited caregivers to complete an online Qualtrics software questionnaire (Qualtrics, 2023), exploring their social networks and their potential influence on child well-being through a hyperlink. Before starting the questionnaire, caregivers had to complete CAPTCHA, which is a challenge-response test to distinguish between humans and computers (Google Inc., 2020). I added CAPTCHA to the questionnaire to prevent bot accounts. For participants who completed CAPTCHA, an online informed consent form was presented before starting the study questionnaire. After completing the consent form, the questionnaire consisted of seven parts: socio-demographic information (the age of the caregiver and the child, the gender of the caregiver and the child, the region in which they live) (see Appendix A for the demographics), a questionnaire to assess caregiver characteristics such as personality (Big Five Inventory-10), happiness (The Short Depression-Happiness Scale), and religiosity (Duke University Religion Index), caregivers' social networks and social support (modified version of Homel et al., 1987), and caregiver-report children's wellbeing (caregiver version; KIDSCREEN-27). Caregivers received these questionnaires sequentially, and the completion of the questionnaire took approximately 15 minutes in total. After they completed the questionnaires, caregivers were asked if they wanted to continue the study by including their children through an online interview at a later date.

# 2.4.2. Child Video Interview (Phase 2)

For the second phase of our study, I invited caregivers who agreed to continue participating in the video interview phase with their children via email. I provided a link that took participants to an SFU Zoom link for our scheduled online interview. At the beginning of each interview session, I asked for verbal child assent from children after briefly introducing myself and my study. After obtaining the child's assent, I displaced two 5-point Likert scales to the children to enhance clarity and comprehension. Once the procedure and scales were straightforward for participants, I asked the children questions from the KIDSCREEN-27 (child version; Ravens-Sieberer et al., 2005) to assess their well-being (see Appendix B for the full questionnaire). I delivered all

questions verbally to each child during the interview session to ensure that the child participant understood what was asked clearly. All questions and 5-point Likert scales were also presented on the screen as PowerPoint slides to the children at the same time. Each online interview session took approximately 15 to 20 minutes.

# Chapter 3. Results

# 3.1. Missing Data

I analyzed the data using IBM SPSS Statistics Version 29. Among 242 participants, the caregivers of 10 children did not report their child's age, and one caregiver did not report their age. I separately computed the mean age of children and caregivers and assigned these means to the missing age data of 10 children and one caregiver. This approach did not yield any significant difference in the results. Caregivers' age did not significantly influence child well-being both before (p = .671) and after (p = .786) completing the missing age data. Similarly, children's age was not significantly associated with child well-being either before (p = .691) or after (p = .743) the data completion. Child gender was missing for 16 children therefore, I created a new category as "not identified" and assigned the missing child's gender data to this new category.

Out of the total sample of 242 participants, there were missing answers in a few of the caregiver-reported child well-being questionnaire and the values of the missing data were missing at random (MAR). From 27 questions in the caregiver-reported child well-being questionnaire, eight participants did not answer two questions about their child's friends. Moreover, three participants did not answer two questions about their child's school and learning. Last, one participant did not answer one question regarding their financials and expenses. I used calculated proportions as an imputation method (van Buuren, 2018). In this method, I computed a mean score of caregiver-reported child well-being for each individual based on the participant's answers as a first step. Then, I completed each missing answer based on this computed mean. After finishing imputing the missing data, I calculated the total child well-being score for each individual. For example, for the participant who did not answer two questions about their child's friends, I computed a mean of 25 questions instead of 27. Then, I imputed this computed mean two times regarding those two missing questions under the child's friends category. In the end, I calculated the total child well-being score by summing all scores after the imputation. In this way, I proportionally increased the percentages of the questions that

participants answered while completing the missing data in the caregiver-reported child well-being questionnaire.

## 3.2. Descriptive Statistics

A caregiver questionnaire was conducted with 242 participants, 94.2% identified as female (n = 228), 5.4% identified as male (n = 13) and as non-binary (n = 1). The average age of caregivers was 42 years (SD = 4.97), ranging from 26 to 62 years and 44.6% of caregivers identified their children as female (n = 108), 47.9% as male (n = 116), 0.8% as non-binary (n = 2), and 6.6% did not report (n = 16). The mean age of children was 10 years (SD = 1.39), ranging from 8 to 13, with the majority falling between 9 and 11 years. Among 242 participants, 95.5% resided in either British Columbia or Nova Scotia in Canada (n = 231), whereas 1 resided in New Brunswick, Canada and 10 in the U.S. More than half of the participants resided in rural areas (n = 140), and 42.1% in urban areas (n = 102).

Child well-being interviews were conducted with 35 participants. Fifty-five percent of the participants identified as female (n = 19) and forty-five percent identified as male (n = 16). The average age of children was 9.99 years (SD = 1.41), ranging from 8 to 12. Among 35 participants, 60% lived in rural areas (n = 21), and 40% lived in urban areas (n = 14) of British Columbia and Nova Scotia.

#### 3.3. Inferential Statistics

## 3.3.1. Parent-Reported Child Well-Being

I conducted a hierarchical multiple regression to determine whether caregivers' social network (e.g., number of social networks, frequency of contact) and support characteristics (e.g., practical support, emotional support) were associated with caregiver-reported child well-being as expected in *Hypothesis 1*, *Hypothesis 2* and *Hypothesis 3*.

**Model 1:** In the first model, I included the number of social networks and the frequency of contact with social networks as independent variables. At the same time, I included the caregiver's gender, caregiver's age, child's gender, child's age, urban/rural

living, extraversion, neuroticism, agreeableness, conscientiousness, openness to experience, organizational religious activity (ORA), non-organizational religious activity (NORA), intrinsic religiosity (IR), and caregivers' happiness to the first model as control variables. The first model of hierarchical multiple regression revealed an overall significant main effect, F (16, 225) = 2.169, p = .007. All independent variables in the first model explained 13.4% of the variance in caregiver-reported child well-being. The results showed that child's gender (b = .162, t (225) = 2.421, p = .016), the caregiver's conscientiousness (b = -.143, t (225) = -2.175, p = .031), and the number of social networks (b = .217, t (225) = 3.276, p = .001) were linked with caregiver-reported child well-being. Close inspection revealed that more conscientiousness of caregivers was associated with 0.14 units lower scores of child well-being (t (225) = -2.175, p = .031), and more social networks resulted in 0.22 units higher scores of child well-being (t (225) = 3.276, p = .001)

Model 2: In the second hierarchical regression model, I added the number of people providing practical support and frequency of practical support to the model in addition to the variables of demographics, caregiver characteristics (e.g., personality, religiosity) and social network characteristics (e.g., number, frequency of contact). The second model of hierarchical multiple regression revealed significant change from the first model,  $\Delta F$  (2, 223) = 6.777, p = .001. All independent variables in the second model explained 18.3% of the variance in caregiver-reported child well-being, meaning that practical support explained an additional 5% of the variance. To my surprise, there was a negative association between the frequency of practical support (b = -.275, t(223) = -3.671, p < .001) and caregiver-reported child well-being scores. The results also showed that child's gender (b = .15, t (223) = 2.294, p = .023), the caregiver's conscientiousness (b = -.143, t(223) = -2.240, p = .026), and the number of social networks (b = .210, t)(223) = 3.004, p = .003) remained as significant variables in the second model. Different from the first model, the living area (e.g., urban, rural) demonstrated a positive trend (b =.128, t (223) = 1.947, p = .05) in the second model, meaning that children living in urban areas 0.128 units higher well-being scores than children living in rural areas, on average.

**Model 3:** In the final model, I added the number of people providing emotional support and the frequency of emotional support to the model to examine whether emotional support uniquely contributes to caregiver-reported child well-being. These variables were added to the regression model along with demographics, caregiver

characteristics (e.g., personality, religiosity) and social network characteristics (e.g., number, frequency of contact), and practical support (e.g., number, frequency) as the last step. Adding the number of people and the frequency of emotional support revealed a significant change from the second model,  $\Delta F$  (2,221) = 4.12, p = .018,  $\Delta R^2$ = .029. The final model accounted for approximately 21.3% of the variance in caregiver-reported child well-being, F(20, 221) = 2.984, p < .001, meaning that emotional support explained an additional 2.9% of the variance. The child's gender (b = .135, t (221) = 2.076, p = .135.039), the caregiver's conscientiousness (b = -.142, t (221) = 2.249, p = .026), the number of social networks (b = .187, t(221) = 2.672, p = .008), and the frequency of practical support (b = -.247, t (221) = -3.011, p = .003) remained significantly associated with caregiver-reported child well-being in the final model. Different from previous models, the results of the final model showed that the number of people providing practical support was negatively associated with caregiver-reported child well-being (b = -242, t(221) = -2.333, p = .021). Whereas the number of people providing emotional support (b = .302, t (221) = 2.865, p = .005.) was positively associated with caregiverreported child well-being. Similar to the second model, the living area (e.g., urban, rural) was marginally significant (b = .125, t (221) = 1.195, p = .055) in the final model, meaning that on average, children in urban areas have a child well-being score that is 0.13 units higher than children in rural areas while holding other predictors constant. The final model is shown in Table 1.

Table 1. A Table of Final Model of Hierarchical Multiple Regression with Demographics, Caregiver Characteristics, Social Network Characteristics and Social Support Type

	β	SE B	95% CI		р
	-		LL	UL	
Constant (Intercept)		13.78	76.157	130.455	<.001
Demographic Variables					
Caregiver's Gender	03	2.94	-7.360	4.226	.595
Caregiver's Age	02	.15	345	.262	.786
Urban/Rural Living	.13	1.59	073	6.195	.055
Child's Age	.02	.56	926	1.295	.743
Child's Gender	.14	.55	.058	2.212	.039*
BFI-10					
Extraversion	04	.62	-1.557	.883	.587
Agreeableness	10	.54	-1.912	.228	.122
Conscientiousness	14	.55	-2.312	152	.026*
Neuroticism	.03	.59	908	1.428	.661
Openness to Experience	002	.46	922	.894	.976

SDHS					
Total Score	.08	.40	297	1.275	.222
DUREL					
ORA	12	.83	-2.958	.327	.116
NORA	.07	.59	609	1.697	.353
IR	.07	.28	296	.820	.356
Social Network Characteristics					
Number	.19	.39	.273	1.808	.008*
Contact Frequency	.05	.60	761	1.608	.482
Kinds of Social Support					
Practical Support					
Number	24	.58	-2.509	211	.021*
Frequency	25	.47	-2.349	491	.003**
Emotional Support					
Number	.30	.61	.544	2.942	.005**
Frequency	.04	.56	816	1.394	.607

Note: F (20, 221) = 2.984, p < .001,  $R^2$ = 0.213, N = 242, CI = confidence interval; LL = lower limit; UL = upper limit. \*p < .05. \*\*p < .01

Examining urban and rural differences in the number of social networks, the frequency of practical support, and the number of practical and emotional support. After the final hierarchical multiple regression model showed that the number of social networks, the frequency of practical support, and the number of practical and emotional support were associated with caregiver-reported child well-being, I conducted independent samples T-tests to examine whether these variables are significantly different in urban and rural areas The only significant difference in urban and rural areas was found in the frequency of practical support, t (240) = 2.16, p = .032. The results showed that the frequency of practical support provided by friends, family and neighbours overall was higher in urban areas (M = 8.10, SD = 2.09) compared to rural areas (M = 7.51, SD = 2.11) (Table 2).

Table 2. A Table of Results of Independent Samples T-Test Examining the Difference in the Number of Social Networks, Number of People Providing Practical and Emotional Support, and Frequency of Practical Support between Urban and Rural Areas

		Urban n = 102		Rural <i>n</i> = 140			
	М	SD	М	SD	t (240)	p	Cohen's d
Number of social networks Number of people	8.18	1.92	8.60	2.35	1.49	.14	.194
providing practical support	8.28	1.89	8.61	2.34	1.47	.25	.149

Number of people providing emotional	7.51	1.94	7.76	2.22	.90	.37	.117	
support Frequency of practical support	8.10	2.09	7.51	2.11	-2.16	.03*	281	

Note. \*p < .05.

In addition, upon discovering disparities in the frequency of practical support between urban and rural areas, another independent samples T-test was conducted to investigate further whether there are urban-rural area differences in the source (e.g., friends, relatives, neighbours) of the frequency of practical support. The results indicated that neighbours were the only source that was significantly different in urban and rural areas providing the frequency of practical support, t (240) = 2.21, p = .028. As seen in Table 3, neighbours provide more frequent practical support in urban areas (M = 3.15, SD = .83) compared to rural areas (M = 2.89, SD = .93).

Table 3. A Table of Results of Independent Samples T-Test Examining the Difference in Source of Practical Support Frequency between Urban and Rural Areas

		Urban n = 102		Rural n = 140			
	М	SD	М	SD	t (240)	p	Cohen's d
Friends	2.47	.97	2.39	1.02	65	.51	085
Family/Relatives	2.48	1.10	2.23	1.17	-1.70	.09	221
Neighbours	3.15	.83	2.89	.93	-2.21	.03*	287

Note. \*p < .05.

#### 3.3.2. Child-Reported Child Well-Being

# **Examining the association between caregiver and child reports in child well-being.** Regarding child-reported child well-being scores, I conducted a separate multiple hierarchical analysis to examine whether caregivers' social network and support characteristics are associated with child-reported child well-being in this model. However, all three models demonstrated negative adjusted R-squared values (Model 1: $adj R^2 = -.284$ , Model 2: $adj R^2 = -.424$ , Model 3: $adj R^2 = -.327$ ), indicating that this model is not a good fit for the data due to small sample size (N = 35) and a relatively large number of predictors (n = 20). Therefore, I examined caregiver-reported and child-reported well-being scores to determine whether they were correlated. I conducted a bivariate Pearson correlation analysis and found that there was a positive correlation

between the two variables (r(33) = .53, p = .001), as expected in *Hypothesis 4*. This finding indicated that the association between caregivers' evaluation of their child's well-being and children's evaluation of their well-being is meaningful (*Figure 1*).

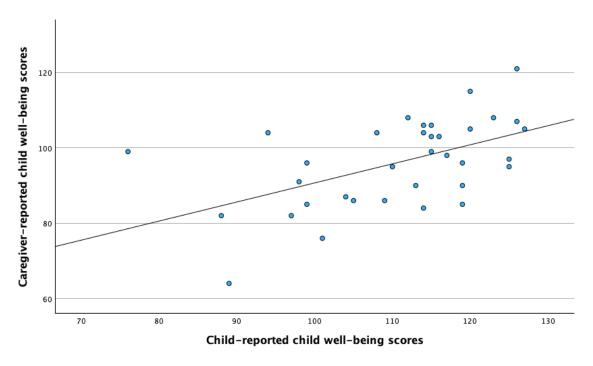


Figure 1. Relationship between Caregiver and Child Reported Child Well-Being. Pearson's r = .001

# Chapter 4. Discussion

The purpose of this study was to examine the potential role of the different characteristics of the caregivers' social networks (e.g., number, kind, frequency of contact) and the kinds of social support (e.g., practical and emotional) provided by those networks in children's well-being based on caregivers and children's reports. Throughout this research, I also aimed to investigate whether there is a difference in who caregivers rely on for support in urban and rural regions, and therefore, I conducted this study with both urban and rural residents of British Columbia and Nova Scotia in Canada. More specifically, I examined four hypotheses in current research regarding caregivers' social network characteristics, the kind of social support and child well-being: (*H1*) more social networks will be associated with higher child well-being scores, (*H2*) the frequency of contact of caregivers with their social networks will be positively associated with child well-being, (*H3*) within these social networks, it is the practical support that will be positively associated with child well-being more than emotional support, (*H4*) there will be a significant positive association between caregiver-reported and child-reported child well-being.

The findings showed that the higher number of caregivers' social networks, regardless of their kind, was associated with higher caregiver-reported child well-being scores, as expected in *Hypothesis 1*. This result is consistent with Homel et al.'s (1987) study, which also examined the impact of the number of social networks and the strength of the relationship on children's happiness and adjustment at school. They reported that children whose parents have more dependable social networks have higher levels of happiness and adjustment at school (Homel et al., 1987). Other studies with diverse samples have similarly found a positive association between the number of social networks and child well-being (Wang, 2016). They have reported that a smaller number of social networks is significantly associated with lower levels of psychological well-being (Levitt et al., 1985), and a larger number of social networks is associated with higher levels of life satisfaction (Heller & Mansbach, 1984).

Contrary to expectations in *Hypothesis 2*, the frequency of contact with social networks, including friends, relatives, and neighbours, was not associated with caregiver-reported child well-being. This result did not support the previous findings of Marshall et al.'s study (2001), which found that children whose caregivers had stronger

ties with their social networks had higher levels of well-being. On the other hand, there are two previous studies found that the overall frequency of contact with social networks was not associated with psychological well-being (Griffith, 1985; Israel & Antonucci, 1987). Interestingly, one study (Rook, 1984) reported that the frequency of contact for the purpose of receiving social support was not associated with individuals' well-being. On the contrary, individuals who frequently engaged with their social networks for the purpose of socializing had higher levels of well-being (Rook, 1984). Hence, investigating the purpose of the contact frequency might be crucial for future studies.

In examining the social support characteristics, the results of the current study highlighted that the number of people providing practical support and the frequency of practical support were negatively associated with caregiver-reported child well-being. Child well-being scores reported by caregivers were lower when caregivers reported a larger number of practical support networks and more frequent practical support within these networks. Although the association between practical support and child well-being was expected in *Hypothesis 3*, the negative association was a surprise. This finding may be explained by the idea that receiving practical support might cause the occurrence of negative feelings of becoming a burden (Bolger et al., 2000; Reinhardt et al., 2006). Some earlier studies have found that when people receive 'visible' help from their social networks, like financial or childcare support, they might feel less competent and overly dependent (Bolger & Amarel, 2007). In line with these findings, Fisher et al. (1982) also noted that getting practical support can lead to lower self-esteem, which can harm a person's overall well-being. Furthermore, these negative outcomes tend to be reported more among support recipients, especially if they haven't had a chance to give that favour back (Gleason et al., 2008). On the contrary, the number of people providing emotional support but not the frequency of emotional support was positively associated with caregiver-reported child well-being in the current study. This pattern of results is consistent with the findings of Israel and Antonucci's study (1987) which reported that emotional but not practical support was positively associated with psychological wellbeing in both their original and replication studies. In alignment with these findings, House and colleagues' literature review (1985) about social support concluded emotional support is more positively associated with individuals' health and well-being.

In addition to the findings of the current study, acknowledging research findings on different kinds of social support and their association with well-being is essential to

highlight the complexity of this relationship. For example, in a previous study, Israel and colleagues (2002) found that emotional support was negatively associated with depressive symptoms until practical support was included in the analysis. When they assessed both practical and emotional support simultaneously, practical support had a stronger negative association with parents' depressive symptoms than emotional support, contrary to prior studies. However, in that study, Israel et al. (2002) examined the social support and well-being of African-American women with lower socio-economic status. Consequently, they concluded that this finding might be attributed to the influence of socioeconomic status or race on the connection between social support characteristics and well-being, aligning with the conclusion presented by Schaefer et al. (1981).

Next, in addressing the differences in social network characteristics and kinds of social support between urban and rural areas, the results showed that the frequency of practical support provided by neighbours was significantly higher in urban than rural areas. From Fisher's (1982) perspective, neighbourhood and geographic proximity can be essential in receiving support for caregivers, the elderly or individuals with limited mobility because they can access help in a shorter time when they need it. Previous research also documented that urban residents have larger social networks consisting of a higher proportion of non-kin relationships (e.g., neighbours, friends) than rural residents (Fisher, 1982; Wellman, 1979). In conclusion, the current study highlights the essential role of neighbourhood ties in urban areas in providing practical support for caregivers and children, emphasizing the relevance of these factors for future research and policy consideration.

Last, in examining child reports of well-being, the results showed a poor model fit because of the small sample. Consequently, none of the independent variables explained the variance in child-reported child well-being. Therefore, I examined whether caregiver and child reports of well-being are associated. The results showed that there was a strong positive correlation between caregiver and child reports, indicating that children's perception of their well-being is parallel with caregivers' perception of their child's well-being.

#### 4.1. Limitations and Future Studies

There are several limitations of the current study. One limitation of this study is associated with conducting a cross-sectional design. This design allows us to capture children's well-being at a specific time point instead of assessing child well-being over a longer period of time. Therefore, it restricts the ability to find causality and draw inferences about the long-term effects of social networks and support characteristics on child well-being. Furthermore, the reverse transmission effect (Homel et al., 1987) was not considered in this study. While I focused on how caregivers create an environment for their children to interact with others and build networks, children also contribute to expanding caregivers' social networks through interactions with neighbours, school, extracurricular activities, playmates and their parents (Homel et al., 1987). This interaction impacts the development of social support networks for caregivers. For example, Ishii-Kuntz and Seccombe (1989) found that childless families receive less support, especially from neighbours, than families with children. Although the present study cannot rule out these effects, future research examining social network characteristics and child well-being may provide insights into the reverse transmission effect, causality and long-term effects by considering adopting a longitudinal design.

A second limitation is geographical scope, as this study was conducted in urban and rural areas of British Columbia and Nova Scotia in Canada. Although some differences were found in social networks and support characteristics between those regions, there were no significant differences in child well-being in urban and rural areas. Thus, the geographic scope of this study may limit the generalizability of the findings in other areas or cultures worldwide. It is important to note that there is no agreement on the distinct definitions of urban and rural areas (Rees et al., 2017). In the current study, my participants self-described their living area; therefore, the definition of urban and rural areas can vary based on their reports. Additionally, we attributed any geographic differences in geography when, in fact, there are several other differences between these societies that could impact social networks, caregiver characteristics and child well-being. For example, family relationships, children's friendships, the number of children in the household or living with extended family are some of the factors that can be different in urban and rural settings that affect social network characteristics and child well-being (Lannoo et al., 2011; Rees et al., 2017). In a study that was conducted in

urban and rural areas of Korea, Romania, South Africa, and Argentina, Rees and colleagues found that children living in rural parts of Korea, Romania and Argentina have grandparents living in their homes (2017). In the same study, they also found that children who live in rural areas of Romania spent more time doing family activities than in urban areas (Rees et al., 2017). Furthermore, single parenting due to divorce, separation, or loss of a parent has an impact on families' social support systems and family well-being (Chavda & Nisarga, 2023). Researchers found that single parents receive more social support from their networks, and this support has a positive impact on both caregivers and children's well-being (Chavda & Nisarga, 2023). For future studies, examining other factors that vary with urban and rural family settings, such as the number of children in the household, single parenting and other factors, can contribute to a better understanding of this complex relationship (Chavda & Nisarga, 2023; Seeman & Berkman, 1988). Notably, the impact of the duration of residency in the living area (Ishii-Kuntz & Seccombe, 1989) and migration background (Fierloos et al., 2022) should also be considered while examining caregivers' social network and support characteristics. Previous research found that newcomers have smaller social network circles, and they receive less support from those networks (Fierloos et al., 2022). Therefore, it is particularly important to examine these factors for future studies, especially conducted in multicultural societies.

Another potential limitation of this study is the controlling mediating factors that might affect the results of the current study. Although I found that caregivers' social networks have an impact on child well-being, it still remains unclear whether this impact on children is direct or mediated through their caregivers. For example, Marshall and colleagues (2001) found that caregivers who received more emotional support reported higher levels of parental efficacy. Furthermore, children of those caregivers experienced fewer behavioural problems and higher levels of well-being. Therefore, for future studies, it is crucial to examine the mediating factors such as parenting style and characteristics to better explain the complex relationship between social networks, support characteristics and child well-being.

Despite these limitations, there are four major strengths of this study which should be highlighted. Despite the bulk of the study being based on parent report data, I did find a strong association between child reports and caregiver reports. Additionally, this study focused on the well-being effects on the child and not the caregiver. Lastly, I

examined two regions that can be described as quite different family lifestyles. Taken together, we can draw a few important conclusions:

- The broader social environment of parents impacts children's lives, as proposed in Bronfenbrenner's Ecological System Model (1986).
- 2) Social support is important not only for caregiver well-being but also child well-being.
- 3) Parent report of child well-being is a valid measurement of child well-being.
- 4) This research appears generalizable within the North American context.

In conclusion, in the current study, I aimed to investigate the role of caregivers' social networks and the kinds of social support provided by these networks in child wellbeing. In addition, I examined the differences in social network and support characteristics between urban and rural settings. I found that having larger numbers of social networks and receiving more emotional support and less practical support are positively associated with child well-being. Furthermore, caregivers received more frequent practical support from their neighbours in urban than rural areas. These findings help us better understand how caregivers' social networks impact children, considering urban and rural differences. Intervention strategies can be developed by policymakers and social care professionals to increase the provision of the most suitable kinds of social support based on children's and families' needs (Fierloos et al., 2022). In this way, these findings can influence the policies regarding strengthening social connections within communities and neighbourhoods to better support families.

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## **Appendix A. Caregiver Questionnaire**

Hello parents of 8–12-year-olds, this survey is for you!

You are invited to participate in our study by completing the following survey. The aim of this research is to look at the relationship between the social support that parents received from their social networks and child well-being.

The following questionnaire will require approximately 15-20 minutes. If you have more than one child in this age range (8-12), please answer the questions according to your older child. For your participation, you will have a chance to enter a draw for an **iPad**.

Your participation in this study is completely voluntary.

There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point. The collected data will remain confidential and used solely for academic purposes.

Thank you very much for your time and support. Please see the consent form before starting with the survey now by clicking on the **Next** button below.

#### Next >>>

1) What gender do you identify as?	
Female	
Male	
Non-binary	
Trans-gender	
Prefer not to say	
f) Other (Please specify)	
2) What is your age? (years)	
<u> </u>	
3) Where do you live? (city, province)	

4) Which of the following would be more appropriate to describe where you currently live?

Large city
Suburban area
Small city or town
Rural area

#### Other (Please specify)

5) What is your child's age? (years)

6) How would you describe your child's gender?

Female

Male

Non-binary

Trans-gender

Prefer not to say

Other (Please specify)

\_\_\_\_\_\_

Start of Block: Personality Questionnaire

#### I see myself as someone who...

1) ... is reserved
Disagree strongly
Disagree a little
Neither agree or disagree
Agree a little
Agree strongly

2) ... is generally trusting Disagree strongly Disagree a little Neither agree or disagree Agree a little Agree strongly

3) ... tends to be lazy
Disagree strongly
Disagree a little
Neither agree or disagree
Agree a little
Agree strongly

4) ... is relaxed, handles stress well Disagree strongly Disagree a little Neither agree or disagree Agree a little Agree strongly

5) ... has little artistic interests Disagree strongly Disagree a little Neither agree or disagree Agree a little Agree strongly

6) ... is outgoing, sociable
Disagree strongly
Disagree a little
Neither agree or disagree
Agree a little
Agree strongly

7) ... tends to find fault with others Disagree strongly Disagree a little Neither agree or disagree Agree a little Agree strongly

8) ... does a thorough job Disagree strongly Disagree a little Neither agree or disagree Agree a little Agree strongly

9) ... gets nervous easily Disagree strongly Disagree a little Neither agree or disagree Agree a little Agree strongly

10) ... has an active imagination
Disagree strongly
Disagree a little
Neither agree or disagree
Agree a little
Agree strongly

Start of Block: Happiness Questionnaire

A number of statements that people have made to describe how they feel are given below. Please read each one and tick the box which best describes how frequently you felt that way in the past 7 DAYS, including today. Some statements describe positive feelings and some describe negative feelings. You may have experienced both positive and negative feelings at different.

 I felt dissatisfied with my life Never Rarely Sometimes
Often 2) I felt happy

Never

Rarely

Sometimes

Often

3) I felt cheerless

Never

Rarely

Sometimes

Often

4) I felt pleased with the way I am

Never

Rarely

Sometimes

Often

5) I felt that life was enjoyable

Never

Rarely

Sometimes

Often

6) I felt that life was meaningless

Never

Rarely

Sometimes

Often

Start of Block: Religiosity Questionnaire

## In this part of the study, you will be asked some questions about your religiosity.

1) How often do you attend church or other religious meetings?

Never

Once a year or less

A few times a year

A few times a month

Once a week

More than once/week

2) How often do you spend time in private religious activities, such as prayer, meditation or Bible study?

Rarely or never

A few times a month

Once a week

Two or more times/week

Once a week

Daily

More than once a day

# The following section contains 3 statements about religious belief or experience. Please mark the extent to which each statement is true or not true for you.

3) In my life, I experience the presence of the Divine (i.e., God)

Definitely not true

Tends not to be true

Unsure

Tends to be true

Definitely true of me

4) My religious beliefs are what really lie behind my whole approach to life

Definitely not true

Tends not to be true

Unsure

Tends to be true

Definitely true of me

5) I try hard to carry my religion over into all other dealings in life

Definitely not true

Tends not to be true

Unsure

Tends to be true

Definitely true of me

Start of Block: Social Network and Social Support Questionnaire

In this section, we will ask you some questions about your friends, family, and neighbours

Thinking about your FRIENDS (e.g., childhood friends, new friends, long-term friends, but not family) ...

1) How many of your friends live in this local area?

None

Some

Most of them

All of them

2) How many would that be?

C

1

2-3

2-0

4-9

10-19

20+

3) How often do you contact your local friend/friends?

Weekly or more often

Once or twice a month Less than monthly

regularly, that you can call in a case of need/help (stress or crisis etc.)? Yes No
5) How many local friends do you have like that? 0 1 2-3 4-9 10-19 20+
6) How often do you contact those local friend/friends? Weekly or more often Once or twice a month Less than monthly
7) How often do you help each other in the case of sickness or childcare? Regularly Sometimes Would if I asked Never
8) Thinking of all of your friends, do you have local friends that you can count on to listen to you when you need to talk? Yes No
9) How many local friends do you have like that? 0 1 2-3 4-9 10-19 20+
<ul><li>10) Do these local friend/friends help you in the case of dealing with personal problems by understanding and providing suggestions?</li><li>Regularly</li><li>Sometimes</li><li>Would if I asked</li><li>Never</li></ul>
11) How often do you contact those friend/friends? Weekly or more often Once or twice a month

4) Thinking of all of your friends, do you have any local friends that you contact

#### Less than monthly

Yes

### Thinking about your FAMILY/RELATIVES...

1) How many of your family/relatives live in this local area?  None  Some  Most of them  All of them
2) How many would that be? 0 1 2-3 4-9 10-19 20+
3) How often do you contact your family/relatives? Weekly or more often Once or twice a month Less than monthly
4) Thinking of all of your family/relatives, do you have any dependable family/relatives that you contact regularly, that you can call in a case of need/help (stress or crisis etc.)? Yes No
5) How many family/relatives do you have like that? 0 1 2-3 4-9 10-19 20+
6) How often do you contact those family/relatives? Weekly or more often Once or twice a month Less than monthly
7) How often do you help each other in the case of sickness or childcare? Regularly Sometimes Would if I asked Never
8) Thinking of all of your family/relatives, do you have family/friends that you can count on to listen to you when you need to talk?

No 9) How many family/relatives do you have like that? 1 2-3 4-9 10-19 20+ 10) Do these family/relatives help you in the case of dealing with personal problems by understanding and providing suggestions? Regularly Sometimes Would if I asked Never 11) How often do you contact those family/relatives? Weekly or more often Once or twice a month Less than monthly Thinking about your NEIGHBOURS... 1) Do you have much to do with neighbours? Yes No 2) How often do you contact or communicate with your neighbours? Weekly or more often Once or twice a month Less than monthly 3) Thinking of all of your neighbours, do you have any dependable neighbours that you contact regularly, that you can call in a case of need/help (stress or crisis etc.)? Yes No 4) How many neighbours do you have like that? 1 2-3 4-9 10-19 20+ 5) How often do you contact those neighbours?

Weekly or more often Once or twice a month Less than monthly 6) How often do you help each other in the case of sickness or childcare? Regularly Sometimes Would if I asked Never

7) Thinking of all of your neighbours, do you have neighbours that you can count on to listen to you when you need to talk?

Yes

No

8) How many neighbours do you have like that?

0

1

2-3

4-9

10-19

20+

9) Do these neighbours help you in the case of dealing with personal problems by understanding and providing suggestions?

Regularly

Sometimes

Would if I asked

Never

10) How often do you contact those neighbours? Weekly or more often Once or twice a month Less than monthly

Start of Block: Child Well-Being Questionnaire

Dear Parents,

#### Thinking about YOUR CHILD...

How does she/he/they feel? This is what we would like to know from you.

Please answer the following questions based on **YOUR PERSPECTIVE** of your child. Please try to remember your child's experiences **over the last week...** 

Questions from 1-5 are about your child's *physical activities and health* 

1) In general, how would your child rate her/his health?

Excellent

Very Good

Good

Fair

Poor

#### Thinking about the last week ...

2) Has your child felt fit and well?

Not at all

Slightly

Moderately

Very

Extremely

3) Has your child been physically active (e.g., running, climbing, biking)?

Not at all

Slightly

Moderately

Very

Extremely

4) Has your child been able to run well?

Not at all

Slightly

Moderately

Very

Extremely

#### Thinking about the last week ...

5) Has your child felt full of energy?

Never

Seldom

Quite often

Very often

Always

Questions from 6-12 are about your child's *feelings and general mood* 

#### Thinking about the last week...

6) Has your child felt that life was enjoyable?

Not at all

Slightly

Moderately

Very

Extremely

#### Thinking about the last week...

7) Has your child been in a good mood?

Never

Seldom

Quite often

Very often

Always

8) Has your child had fun? Never Seldom Quite often Very often Always Thinking about the last week.. 9) Has your child felt sad? Never Seldom Quite often Very often Always 10) Has your child felt so bad that he/she/they didn't want to do anything? Never Seldom Quite often Very often Always 11) Has your child felt lonely? Never

Seldom

Quite often

Very often

Always

12) Has your child been happy with the way he/she/they is?

Never

Seldom

Quite often

Very often

Always

Questions from 13-18 are about your child's free time and family

#### Thinking about the last week...

13) Has your child had enough time for him/herself/themselves?

Never

Seldom

Quite often

Very often

Always

14) Has your child been able to do the things that he/she wants to do in his/her free time?

Never

Seldom Quite often Very often Always
15) Has your child felt that his/her/their parent(s) had enough time for him/her/them? Never Seldom Quite often Very often Always
16) Has your child felt that his/her/their parent(s) treated him/her/them fairly? Never Seldom Quite often Very often Always
17) Has your child been able to talk to his/her/their parent(s) when he/she/they wanted to?  Never Seldom Quite often Very often Always
18) Has your child had enough money to do the same things as his/her/their friends? Never Seldom Quite often Very often Always
19) Has your child felt that he/she/they had enough money for his/her/their expenses?  Never Seldom Quite often Very often Always
Questions from 20-23 are about your child's <i>friends</i>
Thinking about the last week
20) Has your child spent time with his/her/their friends? Never Seldom Quite often Very often

#### Always

21) Has your child had fun with his/her/their friends?

Never

Seldom

Quite often

Very often

Always

22) Have your child and his/her/their friends helped each other?

Never

Seldom

Quite often

Very often

Always

23) Has your child been able to rely on his/her/their friends?

Never

Seldom

Quite often

Very often

Always

Questions from 24-27 are about your child's *learning and school life*.

#### Thinking about the last week...

24) Has your child been happy at school?

Never

Seldom

Quite often

Very often

Always

25) Has your child done well at school?

Never

Seldom

Quite often

Very often

Always

#### Thinking about the last week...

26) Has your child been able to pay attention?

Never

Seldom

Quite often

Very often

Always

27) Has your child got along well with his/her/their teachers?

Never

Seldom Quite often Very often Always

Start of Block: Ending questionnaire + Follow-ups

Did you answer the questions above alone or did you consult your child?

- I answered the questions alone.
- I consulted my child while answering questions.

Thank you for participating in our study! You will now be entered into the draw to win the iPad. The results will be announced on February 27th, 2023, at 11:00 AM via e-mail. We will announce the winner by email!

Please add your e-mail address here!

The first stage of this study has been done successfully! In the optional second stage of this study, we would like to interview your child on Zoom!

If you would like to continue our study with your child, you will have a chance to enter a **SECOND** draw for **Beats headphones!** 

- 1. Would you like to continue to the second stage of the study with your child and participate in the second prize draw for **Beats headphones**?
  - Yes
  - No

If your answer is yes, we will contact you via e-mail to arrange the time for the interview!

2. Do you have more than one child in this age group and want to participate in the survey with them?

Please add	your e-mail address;	: we will contact yo	ou later!
Thank you!		-	-

## Appendix B. Child Well-Being Interview Questionnaire

Hello there, My name is Gülce Özker and I am doing my Masters at SFU under the supervision of Dr. Tanya Broesch. Thank you both for joining me today! How are you? ... Could you tell me your names, please? Thank you, I am very pleased to meet you [parent name] and [child name]

Today I am asking [child name] to take part in a study on family, friends and well-being. I would like to ask you some questions about your physical activities, general mood, family, friends and school. We would like to hear **[child name]**'s answers to our questions without getting any encouragement or discouragement from parents during this interview. This interview will take about 25 minutes. **[Parent name]**, you are welcome to stay or leave during the session. If you do stay, you may want to sit next to your child but please remember not to influence their answers in anyway. Is that ok? Yes, no

I also want to let you know that your participation is completely optional, and you may stop the study at any time if you wish. There are no right or wrong answers to any of the questions you will be asked in this study. All the information will be kept private and confidential from everyone who is not in this interview session right now.

Now, I will share my screen with you and I will be asking you some questions about how you felt in the last week.

#### [SCREEN IS NOW SHARED]

Do you see my screen?
Do you see the rating scale on my screen? It is a scale that says "never, once in a while,
quite often, very often, always". We also have numbers there too. Do you see that? Ok,
so, this is an example – if I was going to ask you how often you ate brussel sprouts last
week – what would you say? Ok, great. And what number would never be?
Ok Great.

#### [IF PASS, MOVE TO NEXT PART, IF FAIL, REDO]

Now here's another scale. The scale says, "not at all, slightly, moderately, very, and extremely". We have numbers there too. Do you see that? Yes, No
Here's another example: I might ask you how much you like treats? What would you say? And what number would that be? Ok great.
Do you have any questions? Yes, no
Would you like to do this today? Yes, no
Great, now we can start then
PHYSICAL ACTIVITIES AND HEALTH
1) In general, how would you say your health is?
<ul> <li>Poor</li> <li>Fair</li> <li>Good</li> <li>Very Good</li> <li>Excellent</li> </ul>
Thinking about last week
2) Have you felt fit and well?
<ul> <li>Not at all</li> <li>Slightly</li> <li>Moderately</li> <li>Very</li> <li>Extremely</li> </ul>
3) Have you been physically active (e.g., running, climbing, biking)?
<ul> <li>Not at all</li> <li>Slightly</li> <li>Moderately</li> <li>Very</li> <li>Extremely</li> </ul>

### 4) Have you been able to run well?

o Not at all

- Slightly
- Moderately
- Very
- Extremely

#### 5) Have you felt full of energy?

- Never
- o Once in a while
- Quite often
- o Very often
- Always

#### **GENERAL MOOD AND FEELINGS ABOUT YOURSELF**

Thinking about last week...

#### 6) Has your life been enjoyable?

- Not at all
- Slightly
- Moderately
- Very
- Extremely

#### 7) Have you been in a good mood?

- Never
- o Once in a while
- Quite often
- Very often
- Always

#### 8) Have you had fun?

- Never
- o Once in a while
- o Quite often
- o Very often
- o Always

#### 9) Have you felt sad?

- Never
- o Once in a while
- Quite often
- Very often
- Always

#### 10) Have you felt so bad that you didn't want to do anything?

Never

- o Once in a while
- Quite often
- Very often
- Always

#### 11) Have you felt lonely?

- Never
- o Once in a while
- Quite often
- Very often
- Always

#### 12) Have you been happy with the way you are?

- Never
- Once in a while
- Quite often
- Very often
- Always

#### **FAMILY AND FREE TIME**

#### Thinking about last week...

#### 13) Have you had enough time for yourself?

- Never
- o Once in a while
- Quite often
- Very often
- Always

#### 14) Have you been able to do the things that you want to do in your free time?

- Never
- o Once in a while
- Quite often
- Very often
- Always

#### 15) Have your parent(s) had enough time for you?

- Never
- o Once in a while
- o Quite often
- Very often
- Always

#### 16) Have your parent(s) treated you fairly?

- Never
- o Once in a while
- o Quite often
- o Very often

- Always
- 17) Have you been able to talk to your parent(s) when you wanted to?
  - Never
  - o Once in a while
  - Quite often
  - Very often
  - Always
- 18) Have you had enough money to do the same things as your friends?
  - Never
  - o Once in a while
  - Quite often
  - o Very often
  - Always
- 19) Have you had enough money for your expenses?
  - Never
  - Once in a while
  - Quite often
  - Very often
  - Always

#### **FRIENDS**

Thinking about last week...

#### 20) Have you spent time with your friends?

- Never
- o Once in a while
- Quite often
- o Very often
- Always

#### 21) Have you had fun with your friends?

- Never
- o Once in a while
- Quite often
- o Very often
- Always

#### 22) Have you and your friends helped each other?

- o Never
- o Once in a while
- o Quite often
- Very often
- Always

#### 23) Have you been able to rely on your friends?

- Never
- o Once in a while
- Quite often
- o Very often
- Always

#### SCHOOL AND LEARNING

#### Thinking about last week...

#### 24) Have you been happy at school?

- Not at all
- Slightly
- Moderately
- Very
- Extremely

#### 25) Are you doing well at school?

- o Not at all
- Slightly
- Moderately
- Very
- Extremely

#### 26) Have you been able to pay attention?

- o Never
- o Once in a while
- Quite often
- Very often
- Always

#### 27) Have you got along well with your teachers?

- Never
- o Once in a while
- Quite often
- Very often
- Always

This is the end of our interview. Thank you so much, [child name], for joining me today and answering my questions. We hope to finish our interviews in April or May and we will have our study results during summer. We will be doing a draw for Beats headphones when the study ends and you are now entered into the draw. We will send an email to all participants and let you know whether you were the winner or not. If you would you like to know the results, we can send you an email regarding the results or you can always contact us. Ok that's all. Thank-you again for your time! Bye!