

Caregivers' Perceptions of Social Capital within their Neighbourhood

by

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ABSTRACT

Children do not grow up in a vacuum. For this reason, the examination of children's environments and relationships within those environments is important to understanding human development. Social capital – a sense of connection, trust, and solidarity with others – has been identified as an important variable in neighbourhoods. Researchers are actively seeking to understand how neighbourhood interactions influence families, but there are important methodological considerations to be made. Given that parents play a key role in children's lives, it is important to discover how much their perception of social capital may differ from other members of the community. The purpose of the present study was to examine social capital from the perspective of caregivers of young children. Structured phone interviews were used to explore neighbourhood attachment, social cohesion, informal social control, and other aspects of social capital within a British Columbia community. Responses for caregivers of children ages zero to five were compared to two groups: a sample of caregivers of children older than five years old; and a non-caregiver sample. The presence of significant differences in the experiences of these variables between these groups was examined. Results indicated no statistically significant differences in perceptions of social capital between caregivers and non-caregivers for social cohesion, informal social control, or intergenerational closure. However, some small differences did exist in reported neighbourhood attachment and neighbour exchanges. The present study did not provide evidence that it would be necessary to survey parent populations separately for estimations of social capital within a community.

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CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

Introduction

Children do not grow up in a vacuum. For this reason the examination of children's environments and the key people and relationships that exist within those environments is important to our understanding of human development. As Bronfenbrenner asserted: "Children need people in order to become human.... It is primarily through observing, playing, and working with others older and younger than himself that a child discovers both what he can do and who he can become." (Bronfenbrenner, 1970, preface). In depth examination of the key people in children's lives is an important part of understanding children's environments.

There are vulnerable children growing up in Canada yet many of these children do well in terms of cognitive, behavioural, social, and health outcomes (Willms, 2002). Bronfenbrenner's bioecological theory of human development highlights the importance of the interaction between child-level, family-level, and community level variables (Bronfenbrenner, 1979; 2005a; 2005b; Bronfenbrenner & Morris, 1998). These embedded levels of context in the bioecological theory are conceptualized as interacting to influence the developing child and his or her context. Of particular interest is the role that parents can play in this context. In the current study, caregiver perceptions of social capital are examined. An aim of this exploration is to contribute to methodological considerations when surveying the public at large about issues relating to children and also to the literature on social capital.

Parents experience different life trajectories from non-parents in many important ways (Palkovitz, 1996). Research has also outlined several differences in personality

traits of parents compared to non-parents (Rauthrauff & Cooney, 2008; Somers, 1993). When researchers choose to survey a sample of people about variables that may impact child development, there may be a need to survey parents separately as their responses may differ significantly.

Despite the importance of neighbourhood factors and their influence on children's development (Bronfenbrenner, 2005a; 2005b; Duncan & Raudenbush, 1999), the ways in which this influence occurs is not fully understood. Jenks and Mayer (1990) have proposed two models to help understand the ways neighbourhoods may impact development, the collective socialization model and the contagion model. The collective socialization model proposes that all adults in a community will serve as role models and will engage in some form of supervision. This is not likely the case in city dwellers, Therefore, if there are more positive role models in the community, all of the children will have better outcomes. In the contagion model, children are influenced by the power of neighbourhood peer relations. The assumption is that more children with healthy developmental outcomes in a given neighbourhood promote better health in other neighbourhood children (Jencks & Mayer, 1990).

The importance of family functioning on children's development has been well documented in the literature (Oliver, Dunn, Kohen, & Hertzman, 2009). In particular, home academic culture, family support, family integration (Woolley & Grogan-Kaylor, 2006), English as a second language status, and family income (Oliver et al., 2009) have been found to be associated with school outcomes. However, there is less information about how family interactions outside of the home impact families and children.

Research examining measures of neighbourhood dynamics such as social capital spans several decades and several different fields of study including psychology (Boisjoly, Duncan & Hofferth, 1995), sociology (Coleman, 1988), health (O'Campo, Salmon & Burke, 2009), and public policy (Beauvais & Jensen, 2002). The social capital construct embraces the notion that membership in different social networks can provide advancement, certain prestige, profitable exchanges, and usable relations.

Understanding and conceptualization of social capital has evolved over the past few decades through different researchers. While many researchers and theorists generally state that through membership in a group, persons can obtain benefits (Putnam, 1995), others acknowledge that social capital can contribute to some negative outcomes such as holding members back economically and helping gang membership thrive (Bourdieu, 1986). In community and neighbourhood literature, social capital research has focussed on trust and norms within a social network (Adler & Kwon, 2002).

In the present study, differences between Caregivers of children and Non-Caregiver perceptions of social capital within their neighbourhoods were examined. With a particular focus on children in their early years, the present study aims to contribute to the social capital literature by contributing information about how these social connections are experienced by a group of people with an investment in early childhood. Further examination of neighbourhood factors such as social capital from the perspectives of families can help to inform research examining the interactions between family and community and how they influence child development.

Review of the Literature

Theoretical Context

Bronfenbrenner's bioecological theory of human development highlights the importance of interactions between child-level, family-level, and community level variables (Bronfenbrenner, 1979; 2005a; 2005b; Bronfenbrenner & Morris, 1998). In this theory, embedded levels of context which interact to influence the developing child are conceptualized. The microsystem includes factors with which the child has direct contact, such as family, caregivers, friends, and teachers. The mesosystem includes factors which have direct influence on aspects of the microsystem including parents' friends or colleagues. In the exosystem, larger organizations and institutions that influence the child, both formal and informal in nature, are considered. Child care settings, schools, and neighbourhoods are all included in the exosystem. Finally, the macrosystem includes broader cultural and value systems of a nation, community, or ethnic group (Bronfenbrenner, 1979; 2005a; 2005b). The most recent evolution of Bronfenbrenner's theory incorporates the interaction of processes, persons, context, and time, known as the chronosystem (Bronfenbrenner & Morris, 1998). This aspect of the theory postulates that human development is dynamic and changing and that research needs to account for these dynamics (Bronfenbrenner & Morris, 1998).

Neighbourhoods do matter to children's development, according to theory (Bronfenbrenner, 2005a; 2005b; Jencks & Mayer, 1990; Wandersman & Nation, 1998) and research (Leventhal & Brooks-Gunn, 2004; Oliver et al., 2009). However, researchers are still seeking to understand how the neighbourhood interacts with the other systems of influence to promote healthy child development. Given the hypotheses

presented by Jencks and Mayer (1990), researchers at the Human Early Learning Partnership (HELP) have developed a program of research that aims to shed light on the missing pieces by creating a research network that collaboratively investigates child development in the same environment with different viewpoints (Kershaw et al., 2007). The Collaborative Sampling Framework (CSF) is a research initiative that aims to focus research in an environment that has many constant variables – such as school board, health care region, and municipal government – but varying levels of child developmental vulnerability (Kershaw et al., 2009). The interactions between the contextual layers identified by Bronfenbrenner and colleagues (1979) are what researchers within the CSF aim to investigate in order to understand the impact on child development. The present research study is most interested in examining the family's perception of their neighbourhood context. The results of this study will then inform other research interested in relating these neighbourhood variables directly to child development.

Neighbourhood Impact on Families

Neighbourhood variables that are important in the construction of healthy environments have been under investigation for many years (Brooks-Gunn, Duncan, Klebanov, & Sealand, 1993; Curtis et al., 2004; Duncan & Raudenbush, 1999). While there are several variables that consistently relate to positive health, family, and social outcomes, there is no consensus as to how these variables interact to create the most enriching environments for families and their children (Curtis et al., 2004; Duncan & Raudenbush, 1999). The literature outlining the impact of neighbourhood variables is vast and crosses several fields of study using many different research methods.

Previous research has outlined many different neighbourhood variables and factors that influence children, families, and communities. Researchers have examined aspects of social control (Carver, Timperio, & Crawford, 2008) socio-economic status (Webster-Stratton & Reid, 2008), public resources (Bryant, 1985), social cohesion (Morenoff, Sampson, & Raudenbush, 2001), neighbourhood attachment (DeLisi & Regoli, 2000), physical characteristics (Wei, Hipwell, Pardini, Beyers, & Loeber, 2005), cultural processes (Caughy, Nettles, O'Campo, & Lohrfink, 2006) mobility (Prezza, Pilloni, Morabito, Sesante, Alparone, & Giuliani, 2001), and social organization (Ohmer, 2007). For the purposes of the present study, this literature review will discuss some of these key findings as it relates to families and will primarily outline research on socio-economic status and the presence or absence of public resources, as these are areas that have been demonstrated to play an important role in neighbourhoods (Caspi et al., 2000; Farley et al., 2007). While SES and public resources are not primary research variables in the present study, they are important contextual factors that need to be considered when interpreting the overall results. The review will then move into the examination of key aspects of social capital including social control, organization, and cohesion. These factors have been identified in the literature as playing an important role in neighbourhoods and are integral to the proposed study.

Socio-economic status. Socio-economic status (SES) is commonly associated with having an effect on families and children. In a nationwide U.K study of over 3500 families with twins, unmeasured family-wide variables accounted for 20% of the variance in children's behaviour and neighbourhood economic conditions accounted for 5% of the variance among family-wide variables measured (Caspi et al., 2000). In other

words, neighbourhood socioeconomic conditions were found to have a significant impact on the family environment. In another large scale randomized study of 794 significantly disadvantaged families involved in housing relocation in the U.S., students in low-poverty neighbourhoods performed better on academic outcome measures than students from high-poverty neighbourhoods. Likewise, this study found that neighbourhood safety as described by parents impacts children's academic aptitude (Leventhal & Brooks-Gunn, 2004). Additionally, in a research study examining family and neighbourhood factors relating to early child development, family-level factors contributed to the largest amount of variance for children's development, as measured by a rating of developmental health (Oliver et al., 2009). However, neighbourhood factors such as median income and percentage of single parent families also uniquely contributed to outcomes of physical health and well-being, communications, and general knowledge (Oliver et al., 2009).

The research outlined above highlights the important role being played by socio-economic status for both the family and the neighbourhood context. Socioeconomic conditions can play a role in children's school readiness (Oliver et al., 2009), academic performance (Leventhal & Brooks-Gunn, 2004), and children's behaviour (Caspi et al., 2000). While socioeconomic status is an important factor for many positive outcomes, it does not explain the whole story.

Resources. Another area of influence within neighbourhood research is investigation of resources such as physical play spaces or community gathering centers. In an experimental research study across two inner city neighbourhoods, it was found that the children provided a safe play space were significantly more physically

active and spent significantly less time watching television and using computers (Farley et al., 2007). Another study, in which 91 children from an urban high density neighbourhood were interviewed, showed that children valued designated play spaces and developed parks. Observational analyses in this study also demonstrated that these spaces tended to be the place that children spent more time (Min & Lee, 2006). While there is not a large body of research in this area, Min and Lee (2006) have demonstrated that resources such as parks and play spaces are important to children.

The literature discussed thus far points to the importance of a variety of neighbourhood factors on children and families. Tangible variables such as socio-economic status (Caspi et al., 2000; Leventhal & Brooks-Gunn, 2004; Oliver et al., 2009) and public resources (Farley et al., 2007; Min & Lee, 2006) play an important role in creating healthy environments. There are also a number of intangible factors that have been found to impact children and families, including social relationships, connections, and networks.

Social capital. Pierre Bourdieu advanced the notion that there are different forms of capital that are available for persons to use in their lives, which can help to advance them in different ways (Bourdieu, 1985). Bourdieu discussed the differences and advantages of economic, cultural and social capital. Social capital is described as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition—or in other words, to membership in a group—which provides each of its members with the backing of the collectively-owned capital, a ‘credential’ which entitles them to credit, in the various senses of the word.” (Bourdieu, 1985, pp. 248-

249). Another important theorist in the field of social capital is Robert Putnam, who describes social capital as social networks with norms of reciprocity and trust (1995). Putnam places emphasis on civic engagement and face-to-face relational ties between people of various backgrounds (Putnam, 1995). While strong ties between members of a community can sometimes be seen as a negative factor in a community, the current research study is generally interested in highlighting the positive aspects of social capital described above by Putnam.

In the community and neighbourhood literature, research on social capital has focused on trust and norms within a social network (Adler & Kwon, 2002). That is to say, there is social hierarchy or organization made up of people that can trust in each other and have expected norms for behaviour. Variables impacting trust and norms in social networks include social organization as well as social cohesion or collective efficacy. Social capital has also been found to function as a source of social control (Portes, 1998).

Social organization. The ability and tendency for members of a community to mobilize in ways that benefit everyone can be conceptualized as social organization. Social organization includes recreational clubs such as sports leagues, book clubs, or bridge clubs. It also includes groups of people with a common goal, such as environmental groups, neighbourhood watch, or a community beautification group. Research in low income communities has demonstrated that voluntary involvement in neighbourhood organization helped to improve individual self-efficacy, neighbourhood collective efficacy, and a sense of community (Ohmer, 2007).

Initiatives that focus on social organization to improve outcomes for children and families are an important area to examine. Melton, Holaday & Kimbrough-Melton (2008) outlined the formative evaluations of a community organization intervention program known as Strong Communities for Children in Chicago. This large-scale intervention is meant to keep children safe through universal and comprehensive services, which actively engages the community and its members. One of the methods for achieving these goals is to reduce social isolation of families, as that has been shown to contribute to risk. Results of their evaluations have shown significant improvements in social organization and reductions in child maltreatment related injuries (Melton et al., 2008).

Social cohesion and collective efficacy. Social cohesion is a term used in the social policy literature to describe a social unit, or a group of people with shared values (Beauvais & Jenson, 2002). This term can also be used to describe groups of people with commonalities in some type of social network (e.g. a neighbourhood) that demonstrate solidarity (Beauvais & Jenson, 2002). Social cohesion has not often been examined as a singular predictive variable in the literature. A term more often examined in sociological and psychological research is collective efficacy (Browning, Feinberg, & Dietz, 2004; Chow & Feltz, 2008; Pecukonis & Wenocur, 1994).

Sampson, Raudenbush and Earls (1997, p. 918) describe collective efficacy as “social cohesion among neighbours combined with their willingness to intervene on behalf of the common good”. They argue that informal mechanisms of intervention can be integral to decreasing violence in communities. When a group of people have a shared perception that they would be able to achieve something together when faced

with adversity, they are said to have collective efficacy (Pecukonis & Wenocur, 1994). This construct has evolved from the concept of self-efficacy in which individuals report a belief that they have the capability to act in ways that will achieve a given goal (Bandura, 1977). Researchers have investigated the relationship of collective efficacy to understanding team success (Chow & Feltz, 2008), leadership (Chen & Bliese, 2002), and the regulation of neighbourhood crime (Browning et al., 2004). In the neighbourhood literature, collective efficacy has been proposed to be an important factor that can impact health, social, and child developmental factors within a community (Browning et al, 2004; Duncan, Duncan, Okut, Strycker, & Hix-Small, 2003).

Collective efficacy appears as a main theme in the examination of a variety of neighbourhood and community variables on children, families, and neighbourhoods (Pecukonis & Wenocur, 1994). Collective efficacy in the neighbourhood literature is often related to reports of cohesiveness and attachment to the community and social control (Beauvais & Jenson, 2003; Dolan, 2007; Duncan et al., 2003). High levels of collective efficacy indicate that people in the neighbourhood perceive that they are capable of promoting successful outcomes for the people that reside in their neighbourhood (Morenoff et al., 2001). Indicators of collective efficacy include residents' perceived levels of comfort with addressing misbehaviour of young people, ensuring the safety of young children and other related behaviours (Morenoff et al., 2001).

In a multi-level examination of factors impacting the development of collective efficacy, Duncan and colleagues (2003) examined factors at the individual, family, and neighbourhood level. In that study, 392 families from 55 different neighbourhoods in the Northwest of the United States were surveyed. Age was found to be the best predictor

at the individual level of collective efficacy. At the family level, marital status was the most influential (Duncan et al., 2003). Poverty and perceived gang activity were the most significant predictors of collective efficacy in the sample at the neighbourhood level (Duncan et al., 2003). This research demonstrates that perceived safety and stability plays a role in the development of collective efficacy for communities. Additionally, evidence of crime is more present in neighbourhoods that are lacking in collective efficacy (Duncan et al., 2003).

Collective efficacy is an intangible social construct that is based on social resources and is therefore not always easy to examine. However, Cohen, Inigami, and Finch (2008) hypothesized that physical spaces, or characteristics of physical spaces, could be a determining factor in creating collective efficacy within neighbourhoods. Cohen and colleagues (2008) examined physical characteristics of neighbourhoods such as land use, presence of parks, liquor outlets, and other physical aspects and their relation to collective efficacy as measured by the Los Angeles Family and Neighborhood Survey (LAFANS) with 2431 Los Angeles County residents. The presence of parks was significantly and positively related to collective efficacy, while the presence of liquor outlets was negatively associated (Cohen et al., 2008). These findings have important implications for our understanding of what kind of communities we need to build in order to have healthy children and families.

Research has also demonstrated the importance of social cohesion in nonmetropolitan areas (Cancino, 2005). In a survey of 1,125 nonmetropolitan Michigan residents throughout 31 areas, social trust, and solidarity was related to perceptions of incivility and burglary (Cancino, 2005). This provides further evidence that social

cohesion can play an important role in the promotion of quality of life in various environmental contexts.

The literature outlined above discusses the importance of feelings of cohesion, trust, and collective efficacy for groups of people. Places with increased levels of social cohesion tend to have reduced rates of incivility and burglary (Cancino, 2005; Duncan et al., 2003; Sampson, Raudenbush & Earls, 1997). Additionally, perceptions of collective efficacy and social cohesion can be impacted by the physical structures in neighbourhoods (Cohen et al., 2008) as well as individual variables such as age and marital status (Duncan et al., 2003). Overall, social cohesion appears to be playing an important role in the suppression of crime and incivility and creation of stability and safety within neighbourhoods.

Social control. Social control is when there is a certain expectation of rule enforcement within a community (Portes, 1998). This is evident through trust and solidarity and when a tight community is able to maintain discipline and promote compliance. The absence of trust and control will often result in crime and misbehaviour. As a result, studies of crime and safety are often used to examine neighbourhood social control. Across many studies, unsafe neighbourhoods are generally found to have a significant relationship with crime. Factors related to social control are also often found to have an impact on children health and well-being.

Caughy and colleagues (2007) investigated physical characteristics of neighbourhoods and their relation to child development. Systematic structured observations were used to measure physical incivilities, territoriality, and availability of play resources. Findings indicate that the increased presence of physical incivilities is

related to lower parenting eliciting behaviours and higher levels of child behaviour problems as measured with parent questionnaires and videotaped observations of parent-child interaction (Caughy, Nettles, & O'Campo 2007). Additionally, in a cross-sectional study throughout 20 large U.S. cities, over 3000 mothers were interviewed about their perceptions of neighbourhood safety and its impact on children's television time and outdoor activity (Burdette & Whitaker, 2005). That study indicated that children in the least safe neighbourhoods, as perceived by mothers, tended to spend less time outside and more time watching television.

Other research examines the relationship between neighbourhood physical disorder and residents' physical health (Miles, 2008). In this study of seven European cities, informants from 2782 households were surveyed. Parents were found to be twice as likely to encourage their children to play outside in neighbourhoods characterized as having 'low' or 'moderate' physical disorder as rated by trained observers. This disorder accounted for 15 to 20% of the variance of perceived safety and was related to women's occasional involvement in sport or recreational activity (Miles, 2008).

The literature described above demonstrates the role that social control can play in children's behaviour (Caughy et al., 2007) and outdoor activity (Burdette & Whitaker, 2005). This aspect of social capital has also been shown to impact parental perceptions of safety (Burdette & Whitaker, 2005). The ability of a community to maintain social control can have an important impact on children's behaviour and family functioning that is critical to healthy child development.

Social networks, connections, and organizations can play an important role in children's development (Caughy et al., 2007), family functioning (Burdette & Whitaker,

2005) and neighbourhood development (Cancino, 2005; Duncan et al., 2003; Melton et al., 2008; Ohmer, 2007). Taken together, these studies demonstrate that social capital can be a valuable human resource for children and families. Overall, social capital appears to play an important role in the suppression of crime and incivility, the creation of stability and safety within neighbourhoods, and improvement of positive child and family outcomes.

Adult Development and Parenthood

Adult development theory. Different people have different life trajectories, based on circumstance, personality, resiliency, and many other factors. The adult development literature outlines that transitions such as parenthood, career changes, marriage, or loss can create significant change in life trajectories (Cowan, 1991). Further, there are certain aspects of adult development that have been found to be associated with parenthood (Palkovitz, 1996). Based on a meta-analysis of studies examining differences between parents and others, Palkovitz theorized that increased parental investment is related to certain changes in personality characteristics, such as empathy, egocentrism, and anxiety levels.

It stands to reason that being a parent will create changes in priorities and values for the average person. In Palkovitz's analysis of previous research (1993), he advances the notion that increased parental investment is related to higher levels of empathy and lower levels of egocentrism. Additionally, he discusses there are relationships that exist between parental investment and career advancement. He indicates that increases in parental investment first result in increases in career advancement but at the highest levels lead to decreases, resulting in an inverted 'U'

shaped relationship (Palkovitz, 1996). The opposite is true for anxiety. Increases in parental investment first result in decreases in anxiety levels, but parents with the highest levels of investment have higher levels of anxiety demonstrating a 'U' shaped relationship. Changes in adult development due to parenthood are not all linear and straightforward, but there are important differences in trajectories due to parental investment (Palkovitz, 1996). Given that parents are important respondents in research, an examination of the differences and similarities that exist is worthwhile.

Comparisons between characteristics of parents and non-parents.

Researchers have demonstrated particular differences and similarities between parents and non-parents through various investigations. In a German study of over 2000 participants, researchers found that parenthood was positively associated with mental health having the greatest impact being on substance abuse and depression (Helbig, Lampert, Klose, & Jacobi, 2006). Additionally, in a comparison between parents and childless adults, differences were found between the groups for stereotype perception, decision making and certain aspects of marital satisfaction (Somers, 1993). In particular, voluntarily child-free adults found they were stereotyped by others more than were parents, but expressed more dyadic satisfaction in their marriage. This same study also found that there were not differences between these groups for emotional expression and dyadic consensus. This finding addresses the notion that there are also areas that have not been found to differ between these groups.

Other research has compared parents and childless adults and found no differences across certain variables. Taylor and Hill-Davies (2004) investigated parents and non-parents awareness of deception in children, discovering few differences

between groups. This did not demonstrate that parents and non-parents have a different understanding of situational variations and children's responses to those variations across these groups. An additional study investigated the variation in generativity between these groups in a sample of over 2000 participants (Rauthrauff & Cooney, 2008). Generativity is defined as the desire to give back to the next generation and these researchers found no differences in generativity between parents and childless adults (Rauthrauff & Cooney, 2008). In other words, having children was not found to impact a person's desire to provide for and give back to the next generation.

When compared to non-parents, parents have been found to demonstrate greater empathy (Palkovitz, 1996), decision making abilities, stereotype perception, marital satisfaction (Somers, 1993), and better mental health (Helbig et al., 2006). On the other hand, parents and non-parents have not been found to differ in emotional expression (Somers, 1993), dyadic consensus, and generativity (Rauthrauff & Cooney, 2008). Given these differences and lack of differences it is clear that using parents and non-parents as respondents in research can yield different perspectives.

Parents in Research

Parents are very common respondents in literature when questions related to child development are asked. Such research often relies on personal perceptions of factors that impact participants' lives. This may involve asking people about their neighbourhoods, relationships, the people around them, how their community functions, and what role they play in their community. The population that researchers choose to draw from can have a significant impact on the results as different groups of people can have very different life experiences. As outlined above, parents and non-parents are two

groups that have been found to have some significant differences as well as some similarities. A thorough understanding of how these two groups may differ is important to any research question which will use these groups, particularly when research is related to child development. Research examining perceptions of parents specifically, as well as other residents in neighbourhood studies is outlined below.

Residents' perceptions. Safety is often an important factor in studies of neighbourhoods. DeLisi and Regoli (2000) used a random digit dialling telephone survey and asked 1803 residents to identify their attachment to their neighbourhood and their perception of neighbourhood safety. It was found that people who were not attached to the neighbourhood had the tendency to see the neighbourhood as less safe (DeLisi & Regoli, 2000). These results point to the necessity of identifying participants' attachment to their neighbourhood in order to understand the context of their feelings about the neighbourhood.

In a qualitative research study of how social capital is perceived to impact community and health, a group of 22 working class men living in both affluent and non-affluent neighbourhoods (half from each) were interviewed (Dolan, 2007). In these discussions, all of the men reported that perceived social hierarchies play a role in the trust and connections experienced by people in the community. Additionally, the men living in the non-affluent community described a perceived lack of trust borne out of their constant fear of lurking violence (Dolan, 2007).

Researchers in Australia examined how perceptions of academic ability and social capital for children and parents impact children's aspirations and academic outcomes (Marjoribanks, 1998). School social capital (i.e. teacher supportiveness) as

well as out-of-school social capital (i.e. family networks of support) were found to play an important role in the children's ability to be successful in school (Marjoribanks, 1998). One of the factors implicated in this interaction is that children's friends' aspirations impact their own, thus social networks start to create an impact early on in young persons' lives (Marjoribanks, 1998). Implications of this research are that social networks that children have both in and out of school (e.g. neighbourhood) play an important role in their development. The above research outlines the valuable information that can be gained from questioning the public at large for perceptions about the researchers' variable of interest.

Parents' perceptions. An examination of the neighbourhood perception literature at the family level is important in keeping with the bioecological model outlined previously (Bronfenbrenner, 2001). Studies investigating parents' perceptions of their children's neighbourhoods have produced somewhat different results depending on exactly what was asked of parents and which parents were asked. In an interview study of 260 parents of children 6 to 12 years of age, having supportive neighbours, child-friendly environments, and certain amenities were regarded as important neighbourhood factors contributing to their child's psychological well-being (Jutras & Lepage, 2006). However, there were significant differences between what parents from disadvantaged backgrounds and those from more affluent backgrounds considered important. For example, parents from disadvantaged backgrounds were more likely to talk about social disorder and less likely to mention environmental amenities than parents from more affluent backgrounds (Jutras & Lepage, 2006).

Another study with 117 parents and 126 children ages nine to thirteen demonstrated that direct observations of neighbourhood characteristics and perceptions of both parents and children were not highly correlated (Schaefer-McDaniel, 2007). In other words, subjective and objective ratings of neighbourhoods differ. Children's ratings of neighbourhood safety and observations of physical conditions of the neighbourhood also predicted children's physical health (Schaefer-McDaniel, 2007). This study points to the importance of personal perspectives in order to gain a thorough understanding of the interaction of variables in that individual experiences impact individual perspectives.

Parent's perceptions of their neighbourhood's safety can have an impact on their children's health (Carver et al., 2008; McDonnell, 2007; Weir, Etelson & Brand, 2006). Parents of over 300 children aged 5 to 10 years were surveyed and parents with greater levels of anxiety regarding their child's safety in the neighbourhood were more likely to have children who were less physically active (Weir et al., 2006). In another study, neighbourhood safety accounted for 23% of the variance of parent's perception of their children's safety in a random sample of 229 parents where neighbourhood safety was measured by direct observations of 1800 addresses (McDonnell, 2007). Another study of perceived neighbourhood safety asked mothers about children's television time and Body Mass Index (BMI) (Burdette & Whitaker, 2005). There was a significant relationship between mother's perception of safety and children's television time. According to mothers' reports, children in the least safe neighbourhoods spent the most time watching television. However, children's television time and obesity were not correlated (Burdette & Whitaker, 2005).

Parents as respondents. When conducting research that requires the perceptions of people it is critical to understand how the makeup of that group can impact results. When interested in how certain variables will impact children and families it may be necessary to survey parents directly as there are specific ways that they differ from non-parents that could alter results. The above research notes the differences and similarities between parents and non-parents and also outlines some specific research that calls on the perceptions of parents and the general population. When conducting research requiring perceptions about factors related to child development, there are important considerations for sampling procedures. Given the above research, it may be necessary to first look for differences in perceptions of the researchers' variables of interest before looking at how these variables impact children and families.

Critique of Previous Research

Strengths. A great deal has been learned about neighbourhood influences on families through the many years of research outlined above. The use of census information in large scale research studies has provided the opportunity to learn about the many related factors in families and neighbourhoods. With these methods, researchers have learned the importance of safety (Burdette & Whitaker, 2005; Carver et al., 2008; McDonell, 2007; Weir et al., 2006), socio-economic status (Caspi et al., 2000; Leventhal & Brooks-Gunn, 2004), resources (Farley et al., 2007), and family support systems (Carlton et al., 2006; Springer et al., 1997). Additionally, observational research is beginning to provide answers about what these variables look like in

neighbourhoods. This will allow future work in further operationalizing these positive variables to help create healthy communities.

Previous research has come a long way in documenting the importance of social capital in various neighbourhood contexts. Studies have documented that trust and connectedness can play a role in the perception (Cancino, 2005) and regulation of neighbourhood crime (Browning et al., 2004). Additionally, there has been significant research on how social capital data should be collected and how this data helps account for neighbourhood and individual variation (Araya, Dunstan, Playle, Thomas, Palmer & Lewis, 2006). For instance, age, marital status, and neighbourhood condition can impact perceptions of social capital and, thus, should be taken into consideration when collecting this type of data.

Limitations. Despite a large body of research identifying variables that impact children and families within their neighbourhoods, details on how variables influence one another are lacking. One of the main limitations of previous research is the use of large government collected data sets. While these studies have provided the field with an initial sense of neighbourhood factors that influence children, families and communities and many useful areas for further investigation, they do not provide deeper understanding of perceptions from a unique subset of people with common interests.

Another limitation of previous research is that the focus is very often on detrimental or negative neighbourhood effects. In other words, the studies have been mainly interested in the neighbourhood variables that produce problem behaviour (such as hyperactivity or aggression), reduce cognitive development, and result in obesity or other ill effects (Caspi et al., 2000; Caughy et al., 2006; Caughy et al., 2007; Crane,

1991; Leventhal & Brooks-Gunn, 2002; Morenoff et al., 2001). These studies often examine how high levels of crime or low levels of SES negatively impact children. There has been little research examining resiliency within similar neighbourhoods or generally what seems to work for families in average neighbourhoods. While these studies of the negative impact of neighbourhood factors are useful and important, it would also be useful to know what neighbourhood factors help create healthy, supportive environments for children and their families.

Finally, few studies have focused on children in their early years. The primary focus of research on children and youth has been on high school drop-out rates (Leventhal & Brooks-Gunn, 2004), delinquency (Caughy et al., 2007), or other issues related to children above six years old. Scant research has focused on the impact of neighbourhood variables on children zero to six. Further, while there is some literature that has asked parents of older children about their neighbourhoods, parents have not been asked about how different aspects of social capital are present in their lives.

Key Terms

Neighbourhood

The term *neighbourhood* is used to describe a physical space where people live and in previous literature is generally defined according to census tracts (Caughy et al., 2007). The neighbourhoods used in this research study were determined by the Human Early Learning Partnership (HELP) in collaboration with key stakeholders from the community (Kershaw, Irwin, Trafford, & Hertzman, 2005). These internally defined boundaries reflected lived experiences of social and economic divisions, natural or other physical boundaries, municipal divisions, and/or school catchment areas (Kershaw,

Forer, Irwin, Hertzman, & Lapointe, 2007). The result is 469 unique neighbourhoods in British Columbia that are each identified by their own group of six digit postal codes (Kershaw et al., 2005). In cities these neighbourhoods tend to be smaller geographic areas, while in rural areas neighbourhoods are geographically larger (Kershaw et al., 2005).

Children in the Early Years

For the purposes of this paper, the phrase, '*young children*' or '*children in their early years*' are used interchangeably to describe children from the age of zero to five. Young children are of particular interest for the proposed research study because the majority of past neighbourhood research (Aber, Jones, & Brown, 2003; Caughy et al., 2007; Caughy et al., 2006) has not been focused on this age group.

School Aged Children

For the purposes of this paper, the phrase, '*school aged children*' is used to describe children ages six years zero months to eighteen years eleven months living with their caregiver. This classification is used to distinguish minors that live with caregivers but are not in the target age group described above.

Caregivers

For the purposes of this thesis, the term, '*Caregiver*' is used to describe any person in a care-giving role that lives with either a *child in the early years* or a *school aged child* (as described above) at least part time. This can include a mother, father, grandmother, grandfather, or other guardian. The two Caregiver groups will be referred to as *School Age Caregivers* and *Early Years Caregivers*.

Non-Caregivers

For the purposes of this thesis, the term, '*Non-Caregiver*' is used to describe any person that does not have a child aged zero to eighteen years eleven months living with them at the time of the interview. This term is meant to distinguish persons that could be described as having dependent *school aged children* or *preschool aged children* from those that do not have any dependent children in their care.

The Present Study

Literature that explores neighbourhood factors according to the perceptions of caregivers of young children is limited. Being a parent significantly impacts adult development and can create significant personality and value differences from non-parent peers. Caregivers are directly involved in their children's neighbourhood activity at this age and are therefore an important informant in the quest to understand neighbourhood factors that play a role in their children's development. Activities that children are involved in during the early years and the independence that they experience is largely different from school aged children. Therefore, the experiences of caregivers will be different during this time period as well. Persons who have no current responsibility for children are likely to be less aware of the experiences of children and the things that are important for them and to them.

Personal relationships within neighbourhoods may be just as important as economic variables are in the impact on families. Research is needed to help develop an understanding of the nature of these relationships, specifically how these relationships are perceived by different groups of people with different experiences and the impact these relationships have on families. Neighbourhood social cohesion,

neighbourhood attachment, social control, and other aspects of social capital may be perceived differently by caregivers of young children than by the general population, given their developmental differences. While people rating their neighbourhood about these factors may not be asked specifically about their own social capital, they will need to reflect on their own experiences and perceptions to respond. Thus, personal characteristics and experiences can play a role in a respondents reporting of neighbourhood variables. If there are differences in how these variables are perceived by Caregivers and Non-Caregivers researchers and practitioners can understand more about the dynamics of these constructs. Differences could indicate that different social networks and attachments exist in communities according to family type, which has implications for both research and community practice. In particular, differences in the perception of social capital would call for the need to separately survey these groups in order to understand the impact on neighbourhoods, families, and children.

Purpose

The purpose of the present study was to examine individual differences between Non-Caregivers and Early Years Caregivers in how they perceive social cohesion, social trust, collective efficacy and other aspects of social capital in their neighbourhoods. It was anticipated that examining the profile of perceptions of social capital among Caregiver and Non-Caregiver samples would contribute to a better understanding of how social capital is perceived within communities by outlining similarities and differences that exist. These similarities and differences can help demonstrate how research on social capital should be collected for research projects interested in this area. Learning about the differences and similarities between Non-

Caregivers and Early Years Caregivers is important methodologically for studies of neighbourhood effects because it could help inform those that should be targeted to collect this information.

Research Questions & Hypotheses

The present study asks: do individual Early Years Caregivers' perceptions of social capital differ significantly from that of other Caregiver and Non-Caregiver samples? It was hypothesized that Caregivers' perceptions of social capital would differ from that of Non-Caregivers. Specifically, as Caregivers tend to have greater self awareness, higher perspective taking ability and sense of responsibility (Palkovitz, 1996) it was hypothesized that Caregivers would have a greater sense of attachment to their community and view their neighbourhoods with more cohesion and control than would Non-Caregivers.

Four sub-questions were posed to answer the above question.

- 1a. Do Early Years Caregivers respond differently to questions about neighbourhood attachment than other residents?
- 1b. Do Early Years Caregivers respond differently to questions about social cohesion than other residents?
- 1c. Do Early Years Caregivers respond differently to questions about informal social control than other residents?
- 1d. Do Early Years Caregivers respond differently to questions about public supports than other residents?

Contribution

The present study contributes to the literature on social capital theory by examining concepts of social cohesion, neighbourhood attachment and social control from the perspective of Early Years Caregivers. Given the experiences of this group in dealing with the economics, pressures, care-giving, and preparations for school entry and their tendency to have greater self awareness, higher perspective taking ability and sense of responsibility (Palkovitz, 1996), their perspective is an important one to consider because of the potential differences. An examination of Caregivers' perceptions of these neighbourhood constructs allows researchers to further understand neighbourhood dynamics. When interested in children's development and childhood outcomes, it may be critical to examine specific perceptions from families rather than from the public at large. If Caregivers' perceptions of these constructs differ significantly from that of Non-Caregivers, researchers will need to look at investigating these perceptions when examining the role that social capital plays in their children's lives. Additionally, differences and similarities that exist in the perceptions between these populations will provide researchers with important detail about the constructs. The present study also aims to examine the methodological decisions made by the larger Provincial study on social capital and to explore whether surveying the public at large is an appropriate approach

CHAPTER 2: METHODOLOGY

Overview

In the following chapter the methodology utilized for this study is described. The setting for the present study is described in terms of the research collaborations as well as the physical community where the study took place. The requirements for participant eligibility are described in detail and the procedures and data analyses are outlined.

Setting

Collaborative Sampling Framework (CSF)

The present study was part of a larger investigation of neighbourhood factors impacting child development that is a part of the Collaborative Sampling Framework (CSF) being carried out by the Human Early Learning Partnership (HELP) (Kershaw et al., 2009). The CSF is a research initiative utilizing a geographic cross-section in which many different research opportunities to examine child development exist (Kershaw et al., 2009). The researchers involved in this initiative work cooperatively, in targeted areas and across studies, to provide greater context for the research findings of the respective projects (Kershaw et al., 2009).

The Community

The present research study was conducted in a large urban city in the Lower Mainland of BC. The population of this community is both ethnically and economically diverse, including a large proportion of Caucasian, South Asian, Asian, and Filipino populations (see Table 1 for details). The mother tongue of 44% of residents in this city is a language other than English or French (Statistics Canada, 2006). Various levels of

income are represented across this community with a diverse range included in the study.

Table 1

Community profile: Demographics of city from Statistics Canada

Category	Description	% of Population
Racial/Cultural group	South Asian	27.5
	Asian ¹	8.1
	Filipino	4.2
	Southeast Asian	2.4
	Aboriginal	1.9
	Other ²	4
Age	20-39 years	37.2
	40-59 years	40.6
	60-79 years	18.1
	80+	4.1
Income (median income = \$23,989)	In low income before tax - All persons	18.0
	in low income after tax - All persons	13.6
Education (persons 15yrs+)	< H.S. diploma	22.1
	H.S. diploma or equivalent	30.4
	Apprenticeship or trades cert.	10.0
	College	15.9
	University cert./diploma/ degree	21.6

¹Asian includes Chinese, West Asian, Korean & Japanese

²Other includes Black, Latin American, Arab, Multiple & Other

The diversity of this community provided the opportunity to gain perspectives from Caregivers from different backgrounds and with different values. With a crime rate 70 percent above the national average, the city is reported to be among the top ten

highest crime rate cities in Canada (MacQueen & Treble, 2009). This community is also the setting for an active Early Child Development roundtable with members of the community working together on several initiatives focused on early child development. Studying Caregiver perceptions in this location provided an opportunity to examine the construct of social capital between sub-populations of people living in the same context. For example, persons in this city will all be served by the same Health Authority, School District and Municipal Authority as well as less formal structures such as parks, shopping centres, and streets.

Selection Criteria and Neighbourhoods

The nine neighbourhoods used in the present study were chosen because they met criteria outlined by the Collaborative Sampling Framework. The phrase 'off-diagonal neighbourhoods' is used to describe areas of particular interest to the CSF. These are neighbourhoods where Kindergarten student vulnerability, as measured by the Early Development Instrument (EDI; Janus et al., 2007), was not as would be predicted given the SES of the neighbourhood. For example, if the children in a neighbourhood with a high median SES were also high in vulnerability on the EDI, they would be performing worse than expected and would be considered 'off-diagonal'. Alternatively, off-diagonal is also used to describe neighbourhoods where the children are lower in vulnerability than would be expected given the SES in their neighbourhood. In other words, the children in the neighbourhood are doing better than expected on their EDI results, given the neighbourhood SES (Kershaw et al., 2009). To help control for unexplainable community changes, the CSF neighbourhoods in the present study had been stable or

relatively unchanged across two successive rounds of EDI data collection¹. Overall, the framework aimed to target both on and off diagonal communities that were stable according to the EDI results which is how the nine neighbourhoods in the present study were chosen. In doing so, the neighbourhoods selected represented a diverse range of median income levels. The neighbourhoods selected were also part of a larger study of social capital across the entire Province.

Research Ethics

This study upheld confidentiality procedures and policies put forward by the Behavioural Research Ethics Board at the University of British Columbia (see Appendix A for ethics certificate). As this study utilized data from a larger study it is considered a secondary data analysis. Identifying information was not associated with the data files used in this study.

Participants

The present study included a total of 462 participants in three groups: Non-Caregivers, School Age Caregivers, and Early Years Caregivers. The Non-Caregiver group was comprised of 237 participants (60.3% female, 39.7% male) with a mean age of 55 years. The School Age Caregiver group was comprised of 137 participants (61.3% female, 38.7% male) with a mean age of 43 years. The Early Years Caregiver group was comprised of 88 participants (65.9% female, 34.1% male) with a mean age of 37 years. There was a gender bias in respondents with females more often participating than males, which was also true for the Provincial study. The larger Provincial study had a response rate of 12% which is less than is normally expected in this type of research.

¹ The Early Development Instrument (EDI) was collected in a wave across the province between the years 2001 and 2004 and then in a second wave from 2005 – 2007. For more information about the EDI see www.earlylearning.ubc.ca

Given that the three groups were to be examined for differences as part of the research design, it was first important to detect existing differences which might better account for said results. One way analysis of variance and Chi Square tests were used to examine the groups' demographic variables in this way. The one way analysis of variance demonstrated a statistically significant difference between the three groups for age [$F(2,420) = 65.402, p < 0.001$]. Post hoc examination of these differences using Tukey found that all three groups differed significantly from one another on age; results are reported in Table 2. These differences lead the researcher to control for this variable in analyses. Chi Square analyses were used to examine whether differences existed between the three groups for racial/cultural group, income, education, sex, and time lived in location (all categorical variables). Results indicated that the groups differed significantly for identified racial/cultural group and time lived in current location, but not for income, education level or sex. These results are reported in Table 3.

Table 2

Tukey results for significant differences for age (N=462)

	Mean Difference	Significance
Age		
¹ NC – EYC	18.213	0.000
NC – SAC	11.484	0.000
EYC – SAC	-6.729	0.002

¹NC=Non-Caregiver, EYC=Early Years Caregiver, SAC=School Age Caregiver

Table 3

Chi Square results for demographic variables by caregiver group (N=462)

	Pearson Chi Sq. Value	df	Sig.
Time lived in location ¹	51.617	8	0.000
Sex	0.854	2	0.652
Education ¹	21.218	16	0.170
Income ¹	13.386	12	0.342
Racial/cultural group ¹	92.351	24	0.000

¹See Appendix B for individual item category values

The groups distribution in terms of neighbourhood, racial/cultural group, income, and education are displayed in Table 3 (see below). Levene's statistic demonstrated that the homogeneity of variance assumption was met. Normal and independent distribution was also examined using q-q plots and this assumption was also met.

Table 4a

Descriptive characteristics of study participants

	NC ¹		SAC		EYC	
	N	%	N	%	N	%
Neighbourhood (N=462)*						
A	39	16.5	6	4.4	7	8.0
B	26	11.0	22	16.1	16	18.2
C	17	7.2	20	14.6	14	15.9
D	28	11.8	16	11.7	7	8.0
E	28	11.8	12	8.8	4	4.5
F	25	10.5	15	10.9	10	11.4
G	13	5.5	20	14.6	18	20.5
H	30	12.7	11	8.0	7	8.0
I	31	13.1	15	10.9	5	5.7
Total	237	100.1	137	100.0	88	100.2
Gross annual income (N=364)*						
Under \$19,999	26	10.9	7	5.1	9	10.3
\$20K-\$39,999	40	16.9	17	12.4	18	20.5
\$40K-\$59,999	38	16.0	27	19.7	22	25.0
\$60K-\$79,999	35	14.8	19	13.9	11	12.5
\$80K-\$99,999	13	5.5	14	10.2	8	9.1
\$100K +	36	15.2	17	12.4	7	8.0
Total ²	188	79.3	101	73.7	75	85.4

*N reflects number of respondents that provided a response for the item

¹NC=Non-Caregiver, EYC=Early Years Caregiver, SAC=School Age Caregiver

²Percentages are impacted by the # of participants that chose to respond to item, thus not always 100%

Table 4b

Descriptive characteristics of study participants

	NC ¹		SAC		EYC	
	N	%	N	%	N	%
Racial/cultural group Identified by participants (N=448)*						
White	170	71.7	51	37.2	26	29.5
Asian ³	8	3.3	2	1.4	1	1.1
South Asian	36	15.2	59	43.1	48	54.5
Filipino	4	1.7	6	4.4	2	2.3
S.E.Asian	4	1.7	4	2.9	2	2.3
Aboriginal	4	1.7	5	3.6	2	2.3
Other ⁴	4	1.6	7	5.1	3	3.3
Total ²	230	95.2	134	97.7	83	95.3
Education attained(N=462)*						
< H.S. diploma	28	11.8	8	5.8	5	5.7
H.S. diploma or equivalent	69	29.1	43	31.4	27	30.7
Apprenticeship or trades cert.	7	3.0	3	2.2	2	2.3
College	59	24.9	35	25.5	12	13.6
University cert./diploma/ degree	56	23.6	37	27.0	32	36.3
Beyond Bachelor degree	18	7.6	11	8.0	10	11.4
Total ²	237	100	147	99.9	88	100

*N reflects number of respondents that provided a response for the item

¹NC=Non-Caregiver, EYC=Early Years Caregiver, SAC=School Age Caregiver

²Percentages are impacted by the # of participants that chose to respond to item, thus not always 100%

³Asian=Chinese, Korean, West Asian, & Japanese

⁴Other=Arab, Latin American, Black & Other

Procedures

Recruitment and Consent

The data used in the present study was taken from a larger Provincial study examining the role that neighbourhood social capital has for early childhood experiences. Potential participants were contacted by phone using a random digit dialling technique implemented by a market research group hired to collect the data in the larger study. To be included in the study, participants needed to provide their postal code to verify that they lived in one of the neighbourhoods targeted for study.

Phone Interview

The phone interviews were conducted by the market research group. Two components of the larger interview were used for the present study: the Social Capital Survey and Background Information.

Social Capital Survey. The Social Capital Survey (Carpiano, Kershaw, & Ostry, unpublished, see Appendix B) was designed specifically for the larger Provincial Social Capital study, described earlier in this chapter. This survey was designed to examine the stock of social capital and collective efficacy in urban, suburban and rural areas as these area-based characteristics relate to early child development. All of the sections of the Social Capital Survey that address *neighbourhood attachment, exchange of resources, social cohesion, intergenerational closure, public supports for families with children, and informal social control* were used in the present study. The sections on *neighbourhood attachment, exchange of resources, social cohesion, intergenerational closure, and informal social control* are all aspects of social capital and were of

particular interest for this research study. *Public supports for families* was selected to help understand what types of resources are available to participants.

As previous studies addressing the reliability and validity of this Social Capital Survey were not available, analyses were conducted to help understand the characteristics of the survey in the present study. The 23 items making up the Social Capital Survey were analyzed using a principle component factor analysis, and the factors were then rotated using the varimax method. To assess the statistical significance an alpha level of 0.05 was chosen for all analyses ($p < 0.05$). The results indicate that 16 of the 23 items loaded into 5 factors using 0.500 as the criteria for loading value. Table 4 shows the factor loadings for the individual items². The extracted factors included: 1) Intergenerational closure (4 items with a reliability of $\alpha = 0.711$); 2) Neighbour exchanges (renamed as slightly changed due to factor loadings) (5 items with a reliability of $\alpha = 0.711$); 3) Informal social control (3 items with a reliability of $\alpha = 0.637$); 4) Neighbourhood attachment (2 items with a reliability of $\alpha = 0.552$); and 5) Social cohesion (2 items with a reliability $\alpha = 0.609$). The Public Supports for Children with Families scale did not produce a reasonable reliability score ($\alpha = 0.211$) and was therefore eliminated from analyses as a scale, however individual items were analysed as part of understanding this construct.

The original survey sections in the present study included six scales. The results of the principal component analysis yielded 5 factors using Eigenvalues > 1.0 as criteria as well as researcher judgement based on theory. Individual items making up a factor were aggregated using the mean to create factor scores. These scores were used in the analyses and are referred to as factors throughout the remainder of this document.

² The exact wording for items can be referenced in the full survey, see Appendix B

Table 5

Factor structure for principle component analysis with varimax rotation

	Factor 1: IC	Factor 2: NE	Factor 3: ISC	Factor 4: NA	Factor 5: SC
	Intergenerational	Neighbour	Informal social	Neighbourhood	Social
Item ¹	closure	exchanges	control	attachment	cohesion
B4.2	.762	.193	.092	.030	.050
B4.3	.749	.144	.273	.017	.195
B4.4	.688	.170	.116	.226	.106
B4.1	.629	.180	.119	-.118	.069
B2.1	.162	.770	.060	.072	.082
B2.2	.086	.705	.076	-.069	-.013
B2.3	.179	.576	.012	.340	.059
B1.1	.232	.571	.057	.124	.030
B2.4	.055	.545	.174	.044	.226
B6.1	.146	.152	.744	.081	.081
B6.3	.206	.067	.718	.151	-.064
B6.2	.096	.058	.677	-.163	.142
B1.3	-.020	-.055	.048	.820	-.028
B1.2	.111	.275	-.013	.694	.074
B3.2	.134	.103	.157	.016	.809
B3.3	.153	.107	-.005	.046	.807
α =	0.711	0.711	0.637	0.552	0.609
% ²	11.402	10.419	8.908	8.786	7.071

¹Exact wording for corresponding item numbers can be referred to in Appendix B²Percent of variance explained

Background information. Participants were also asked to answer several background questions as part of the interview. This information provided a demographic context to the data and is displayed in the results section. A richer understanding of the participants allowed researchers to ensure that there were no other factors contributing to analyses beyond variables of interest. This background information included: age, education, occupation, ethnicity, first language, other languages spoken, language spoken in household, persons living in household and marital status (Appendix B).

Data Analysis

To answer the question, 'does caregiver perception of social capital differ significantly from that of other residents?' data from the Early Years Caregiver group, School Age Caregiver group, and Non-Caregiver group were compared.

Due to the multifaceted nature of the social capital construct, One Way Analyses of Variance (ANOVA) were used to investigate between-group differences (Early Years Caregivers, School Age Caregivers and Non-Caregivers) for neighbourhood attachment, social cohesion, informal social control, and public supports as sub-dependent variables. This analysis was meant to examine the specific differences for these individual constructs as previous literature identified these constructs as playing an important role for children, families, and neighbourhoods (Browning et al., 2004; Caughy et al., 2007; DeLisi & Regoli, 2000).

While these proposed analyses were the primary objective of this research study, certain demographic details were necessarily considered. The three groups differed significantly in terms of age and racial/cultural group, thus additional analyses were performed to control for these variables. Specifically, multiple linear regression analyses

were used to examine the contribution of Caregiver group when controlling for the amount of time the respondent had lived in their current location, age and racial/cultural group.

CHAPTER 3: RESULTS

Overview

To answer the research question, 'Does caregiver perception of social capital differ significantly from that of other residents?' data from the Early Years Caregiver group, School Age Caregiver group and Non-Caregiver group were compared. Early Years Caregiver, School Age Caregiver, and Non-Caregiver responses were compared using one way analyses of variance (ANOVA) on the social capital factors that were identified according to the principle component analysis outlined in the previous chapter. Levene's homogeneity of variance statistics as well as q-q plots of normal distribution were analysed to ensure that these assumptions were met. Given that the three groups were significantly different in terms of racial/cultural group and age, hierarchical regression analyses were also used to examine the research questions while controlling for this variable. For the regression analyses, distributions were examined for normality with p-p plots and scatter plots were used to look for homoscedasticity. Both of these assumptions for multiple regression models were met.

Research question 1a

Do Early Years Caregivers respond differently to questions about neighbourhood attachment than other residents? The three groups were significantly different [$F(2, 459) = 7.560, p = 0.001$] for responses on the neighbourhood attachment factor (see Table 5 for details). Post hoc analyses with Tukey revealed that Non-Caregivers reported less neighbourhood attachment than both School Age (Mean difference = 0.246, $p = 0.003$) and Early Years (Mean difference = 0.252, $p = 0.010$) Caregiver groups. However, as can be seen in table 6, the effect size for this difference

is 0.03. This demonstrates that the difference, while statistically significant is not really indicative of the groups having different experiences of neighbourhood attachment. In other words, the increased likelihood of caregivers having more neighbourhood attachment is not much more than chance.

Table 6

ANOVA results by social capital factors with means (standard deviations) (N=462)

	Early Years Caregivers	School-Age Caregivers	Non- Caregivers	Total Sample	F	Effect Size ¹
Factor 4: NA	1.91 (0.78)	1.91 (0.72)	1.66 (0.62)	1.78 (0.70)	7.560***	0.032
Factor 5: SC	3.55 (0.75)	3.58 (0.88)	3.55 (0.81)	3.56 (0.82)	0.056	0.000
Factor 3: ISC	3.39 (0.92)	3.41 (0.83)	3.42 (1.01)	3.41 (0.95)	0.026	0.000
Factor 1: IC	3.58 (0.70)	3.74 (0.76)	3.54 (0.72)	3.60 (0.73)	3.314*	0.014
Factor 2: NE	2.75 (0.73)	3.00 (0.69)	2.83 (0.67)	2.86 (0.69)	4.250*	0.018

* $p < 0.05$, *** $p < 0.001$

¹Cohen's *d*

Hierarchical multiple linear regression analyses of these data were also conducted with Neighbourhood Attachment as the dependent variables and predictor variables entered in the following order: Time lived in location, Racial cultural group, Age, and Caregiver group. All categorical variables were dummy coded. These analyses indicated that time lived in location and racial/cultural group explain 11.8% of the variance in neighbourhood attachment. However the total model including age and Caregiver group resulted in a statistically significant 13.4% of variance explained [F (19, 390) = 3.165, $p < 0.001$] (see Table 7 for details). Therefore caregiver group has been found to contribute to respondents' neighbourhood attachment, but only contributes an additional 1.5% of the variance in responses above the other variables in the model.

Neighbourhood attachment asks about friends that live in and outside of the respondents' local area. These results indicate that both the Early Years Caregivers and School Age Caregivers report to have more friends in their local area than do Non-Caregivers, but the small effect size and small amount of variance accounted for indicates that this statistical difference is not conclusive.

Table 7

Multiple linear regression analyses of caregiver group predicting social capital factor variance (N=462)

Models	Dependent Variables				
	Factor 4: NA	Factor 5: SC	Factor 3: ISC	Factor 1: IC	Factor 2: NE
	R Square (R square change)				
1. Time lived there ¹	.005 (.005)	.016 (.016)	.002 (.002)	.006 (.006)	.031** (.031)
2. +Race/Culture ¹	.118*** (.113)	.047 (.032)	.036 (.033)	.028 (.022)	.064 (.034)
3. +Age	.119 (.001)	.048 (.000)	.049* (.013)	.029 (.001)	.067 (.003)
4. +Caregiver grp ¹	.134* (.015)	.049 (.001)	.053 (.005)	.041 (.012)	.088** (.020)
Observed power	.860	.453	.476	.720	.937

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

¹Categorical - dummy coded into multiple variables as per response options (see Appendix B for details).

Research question 1b

Do Early Years Caregivers respond differently to questions about social cohesion than other residents? The three groups were not significantly different [$F(2, 459) = 0.056, p = 0.946$] for responses about social cohesion (Table 5). Hierarchical multiple linear regression analyses of these data were also used with Social Cohesion as the dependent variable and predictor variables entered in the following order: Time

lived in location, Racial cultural group, Age, and Caregiver group. All categorical variables were dummy coded. Regression analyses demonstrated that this model did not account for a significant amount of variance in social cohesion [$F(19, 390) = 1.060, p = 0.391$] (Table 6). Social cohesion asks respondents about whether people in the local area get along with each other and shares the same values. These findings do not demonstrate that Caregiver groups differ in their perceptions of this construct in their neighbourhoods.

Research question 1c

Do Early Years Caregivers respond differently to questions about informal social control than other residents? The three groups were not significantly different [$F(2, 459) = 0.026, p = 0.974$] for responses about social control (Table 6). Hierarchical multiple linear regression analyses of these data were also used with Informal Social Control as the dependent variable and predictor variables entered in the following order: Time lived in location, Racial/cultural group, Age, and Caregiver group. All categorical variables were dummy coded. Regression analyses demonstrated that Time lived in location, Racial/Cultural group, and Age accounted for a statistically significant 4.9% of the variance, however the total model (including caregiver group) did not account for a significant amount of variance in informal social control [$F(19, 390) = 1.159, p = 0.290$] (Table 7). Informal social control includes questions that ask respondents how likely it is that people in the area would intervene with children acting inappropriately or illegally in the area. Once again, these findings do not demonstrate that Caregiver groups differ in their perception of this construct within their neighbourhoods.

Research question 1d

Do Early Years Caregivers respond differently to questions about public supports than other residents? The reliability analyses for the public supports for families with children scale did not yield acceptable levels (Cronbach's $\alpha = 0.211$). As a result, this research question could not be answered directly. However, there are some approximations that can be made based on some individual items and certain other indexes. First, when the individual items that make up this scale are analyzed using one way ANOVA there are significant differences for two items on this scale (Enough good child care spaces, $F(2, 451) = 6.421, p = 0.002$ and Enough good schools, $F(2, 456) = 3.053, p = 0.048$). Post hoc analyses using Tukey demonstrated that Early Years Caregivers more often reported that there were enough good child care spaces within a 20 minute car ride from their home than did Non-Caregivers (Mean difference = 0.388, $p = 0.001$). In addition, School Age Caregivers more often reported that there were enough good schools within a 20 minute car ride from their home than did Non-Caregivers (Mean difference = 0.179, $p = 0.037$). These differences may be due to the Caregiver groups having more familiarity with schools and child care.

In addition to analysing these individual items some other scales were considered. The intergenerational closure factor and neighbour exchanges factor include questions related to support systems. These two factors were examined to attempt to understand whether Caregivers and Non-Caregivers differed significantly in their perceptions of other types of support.

On the intergenerational closure factor, the ways that children and adults interact with one another in the neighbourhood were examined. Analysis of variance found there to be significant differences between the groups in their responses for this factor [$F(2, 458) = 3.314, p = 0.037$] (Table 6). Post hoc analyses with Tukey revealed that the School Age Caregiver group was significantly different from the Non-Caregiver group (Mean difference = 0.199, $p = 0.030$). However, the effect size is so small that, while a statistical difference is present it is not meaningful and may only be due to chance. Hierarchical multiple linear regression analyses of these data were also used with Intergenerational Closure as the dependent variable and predictor variables entered in the following order: Time lived in location, Racial cultural group, Age, and Caregiver group. All categorical variables were dummy coded. Regression analyses indicated that this model did not account for a statistically significant amount of the variance [$F(19, 389) = 0.884, p = 0.604$] (Table 7). These results demonstrate that differences that exist between School Age Caregivers and Non-Caregivers disappear when important demographic variables are controlled for. Caregiver groups were not found to view differences in relations between children and adults in their neighbourhood.

The neighbour exchanges factor asks about neighbours lending things to each other, helping each other, and talking with one another. The ANOVA found there was a significant difference between the groups [$F(2, 459) = 4.250, p = 0.015$] (Table 6), however, once again the effect size was extremely small. Post hoc analyses with Tukey found there to be a significant difference between the Early Years Caregiver group and the School Age Caregiver group (Mean difference = 0.25, $p = 0.022$), but again, because of the extremely small effect size no conclusions should be drawn about this

difference. Hierarchical multiple linear regression analyses of these data were also used with Neighbour Exchanges as the dependent variable and predictor variables entered in the following order: Time lived in location, Racial cultural group, Age, and Caregiver group. All categorical variables were dummy coded. Regression analyses indicated that time lived in location accounted for 3.1% of the variance in neighbour exchanges on its own. Additionally, in the total model including racial/cultural group, age, and caregiver group did account for a statistically significant 8.8% of the variance [$F(19, 390) = 1.969$, $p = 0.009$] (Table 7). Therefore, it does appear that caregiver group is contributing to the amount of neighbour exchanges people experience with School Age Caregivers experiencing more than Early Years Caregivers. However, with only 8.8% of the variance explained there are apparently much more important variables contributing to the perception of this construct.

Summary of Results

Caregiver groups did not differ significantly on factor scores for informal social control, social cohesion, and intergenerational closure. Differences did occur on factor scores for neighbourhood attachment and neighbour exchanges, although the effect sizes were extremely small, therefore these differences may be only due to chance. When demographic variables such as time lived in location, racial/cultural group and age are controlled for caregiver group still contributes to statistically significant differences in neighbourhood attachment and neighbour exchanges but not providing a meaningful contribution. In the following chapter, reasons for these small differences are explored and implications for these findings are discussed in detail.

CHAPTER 4: DISCUSSION

Overview

In this chapter the findings, interpretation, implications, and limitations of the present research study are examined. A primary purpose of the study was to examine differences in perceptions of social capital between Early Years Caregivers and other residents within the same community. It was hypothesized that caregivers of children in their early years would perceive differences in the social capital available to them in their community. Significant differences were only demonstrated for a small subset of social capital variables and only some important implications are discussed in this chapter.

Summary of Findings

Social capital is comprised of several different variables which together impact a person's well being and success in life. While the present study was interested in social capital as a whole, there were some distinctions between different aspects of social capital and how they were perceived by caregivers and non-caregivers. In this section, the similarities and differences that were found to exist between these groups are examined individually before the construct is interpreted as a whole.

No Differences Between Groups

Social cohesion and informal social control. In all of the analyses conducted, no significant differences between the Caregiver groups on the social cohesion and informal social control variables were found. These scales were meant to capture the likeness and shared values as well as the collective feeling that people within the neighbourhood can take control of undesirable or illegal activities through informal

means. In other words, this was not related to friendships within the neighbourhood but the degree to which the respondents felt their neighbourhood included people that share values and look out for one another. Previous literature has demonstrated that neighbourhood factors such as safety (Duncan et al., 2003), public resources available (Cohen et al., 2008), and neighbourhood levels of violence and other crime (Sampson et al., 1997) contribute to the sense of cohesion, efficacy and control in a neighbourhood. It may be that perceptions of social cohesion and informal social control differ more in terms of these neighbourhood level factors such as levels of safety, crime and poverty and availability of resources than those individual factors of interest measured in the present study.

Intergenerational closure. This scale represented an important form of support available to respondents. These questions were related to the adults in the neighbourhood knowing the local children and being reliable emergency caregivers. The results indicated that the School Age Caregivers demonstrated slightly higher perceptions of intergenerational closure than the other two groups, but the effect size was very small. The model did not account for a statistically significant amount of the variance; therefore the small differences that were found were likely due to the demographic variables measured.

Differences Between Groups

Neighbourhood Attachment. The analysis of variance demonstrated that Non-Caregivers were less attached to their neighbourhood than the two Caregiver groups, and the regression model which controlled for the specified demographic variables accounted for 13.4% of the variance. This scale, which asks about having friends inside

and outside of the neighbourhood, is meant to assess the respondent's attachment to the area through social connections. It was expected that families with children would be more likely to have more social connections in their local area. The results demonstrate that there are some differences that exist for the number of social connections between Caregivers and Non-Caregivers in the local area. It was hypothesized that Caregivers perceptions of neighbourhood attachment would differ from Non-Caregivers because of a heightened awareness and sense of responsibility (Palkovitz, 1996) that could feed into their feeling about their community. The present study found that Caregivers reported to have more friends in their local area than do Non-Caregivers, which confirmed this hypothesis; however, caregiver group only uniquely accounted for 1.5% of the variance and there is still a significant amount of variance unaccounted for in the sample.

Neighbour Exchanges. Results indicated that School Age Caregivers expressed significantly more neighbour exchanges than Early Years Caregivers. Caregiver group, along with time lived in location, ethnicity, and age, accounted for 8.8% of the variance in responses for neighbour exchanges with caregiver group uniquely contributing to only 2%, which still leaves a lot of variance to be explained by other unknown variables. The neighbour exchanges scale includes questions related to doing favours for and talking with neighbours.

School Age Caregivers may report that they interact with their neighbours slightly more because their children go to school close by and they walk to and from the school on a regular basis. Caregivers did acknowledge having more friends in their local area than Non-Caregivers, and there is also a difference in the casual neighbourly

exchanges made. These results indicate that some small differences exist for Caregiver and Non-Caregiver perception of neighbourhood attachment and neighbour exchanges which implies it may be necessary to survey these groups separately when interested in these specific variables. However, given the small effect size and small amount of variance accounted for this finding is not conclusive in that it may only be accounted for by chance.

Overall Social Capital

As discussed above, most areas of social capital were not perceived differently by Caregivers and Non-Caregivers in the present study. Given the random digit dialling technique that was implemented for this study, the sample analyzed in these results is meant to be representative of a British Columbia population and the results should therefore be generalizable to that population. However, the respondents tended to include more often older participants and more often women. Additionally, the response rate for the larger Provincial study was only 12%. This indicates that while an attempt was made to make the data representative, there is some limitation to how the findings are generalizable. Given the diverse sample and the diverse range of participants included in the study the findings are likely a fairly reliable estimation of the province. While differences in perceptions of social capital were hypothesized, close examination of these individual constructs as well as some literature (Bronfenbrenner, 2005c; Clements, 2004; Palkovitz, 1996) provides some explanations for these discrepant results.

Given that Caregivers tend to have greater self awareness, higher perspective taking ability, sense of responsibility (Palkovitz, 1996), as well as many other

differences from childless adults (Helbig et al., 2006; Rauthrauff & Cooney, 2008; Somers, 1993) it is reasonable to expect that their perceptions of social capital may differ from other people. However that was not the case in this sample. These findings may be partially due to changes in society (Bronfenbrenner, 2005c; Wellman, 1979). With increasing technology and globalization, we are living in an increasingly mobile world. People can live further from work, family, and friends and stay connected through phones and the internet. Some commuting families even take their children to childcare nearer to their work than their home. All of this leads to a less geographically structured network (Wellman, 1979).

In an article, originally printed in 1967, Bronfenbrenner (2005c) outlines the changes to the American family. In particular, he notes that children spend less time in their neighbourhoods, that the extended family (including neighbours) is shrinking, and finally that the 'friendly neighbourhood' where children used to spend the majority of time is reduced to a small circle of friends. One can surmise that the rapid advancement in technology and information over the past 40 years has only amplified these changes. In a sociological analysis of community with East Yorkers, Wellman (1979) discusses the fact that urbanites have an increase in social networks through work, friends, and other avenues which could be considered to 'liberate' them from the structure of their urban neighbourhood. However, others may consider this to be a completely 'lost' community given that there is no familiar structure in which interconnections between individual's networks exist. These days, parents tend to keep their children close allowing them less freedom. They schedule play dates with friends' families rather than having children play freely in the neighbourhood. In an American study of children's

outdoor play, it was discovered that because of parents concern for crime and safety and growing dependence on electronic entertainment the children tended to spend less time outside than did their parents generation when they were children (Clements, 2004).

If the above argument is true, then having children would not impact where your friends are located. Changes in neighbourhood dynamics may create a situation whereby all residents have similar viewpoints about the social connections that exist. This could be because people generally communicate with their friends more often with phones and computers rather than on the street. The results of the present study do not demonstrate that there are differences in perceptions for social capital according to whether there are children in the home, with the exception of neighbourhood attachment and neighbour exchanges. The small differences that did exist leave a significant amount of variance unaccounted for, which means that there are other factors much more integral to impacting perception of social capital than those measured in the present study.

Implications

The present study results have implications for both future research initiatives and practice. Implications outlined below discuss the importance of this research for practical considerations in future research. Additionally, some considerations for how policy can be informed are discussed.

Research

There were no significant differences between Caregivers and Non-Caregivers for most aspects of social capital in the present study. Therefore, the present study

does not provide evidence that researchers need to examine these populations separately when surveying the general community about social capital.

The aim of this study was to provide important methodological information about surveying the population about social capital. The larger Provincial study of social capital from which these data was drawn made the decision to examine the perspectives of the general population on neighbourhood social capital. The present study does not provide evidence that this was an inappropriate approach to take. If the findings pointed to the necessity of surveying the populations separately, researchers would be faced with more complicated, costly methodological endeavours for pursuing this research. Recent studies have reflected the importance of social capital in many areas including individual and collective efficacy (Ohmer, 2007), leadership (Chen & Bliese, 2002), and the regulation of crime (Browning et al., 2004; Cancino, 2005; Duncan et al., 2003). This literature points to the need to continue investigations on how social capital can influence child, family, and community development and the present study aimed to help outline how this research can best be conducted.

While School Age Caregivers all have school communities in common, Early Years Caregivers do not have a formal location they all share. In the early years, caregivers may attend libraries, community centres, parks, gyms, pools, and child care facilities but there may be no single place they all have in common. School aged children's Caregivers all have schools in common, which are an easy way to disperse information and contact people. The lack of this common place makes Early Years Caregivers a harder community to access. The above findings do not indicate that

additional efforts made to contact this specific community are necessary for understanding their social capital.

Practice

These findings do not indicate that those with and without children in this community experience different levels of social capital. In other words, having children was not shown to provide a social advantage. Given that caregivers may have a higher sense of responsibility and several other developmental differences (Palkovitz, 1996) it was expected that they might have a higher sense of social capital, which was not found. This could be important information for community development. The changing landscape for communities outlined in Bronfenbrenner (2005c) and Wellman (1979) may indicate that government policy could have an impact on these variables. Policies related to childcare, schools, and commuting (driving and transit services) have an impact on decisions that families make with regards to childcare, schools and where to live. The more community developers can understand how social capital is perceived by community members, the more they can use it to their advantage by creating and maintaining the kinds of social capital that people need and want in their community. More research is needed to fully understand the ways that this type of policy can impact families.

Limitations

While the present study has certain implications, as described above, these conclusions should be interpreted with the limitations of the study in mind. The present study utilized a measure that, while possessing some previously formulated scales, also included some new items. The measure was constructed specifically for the larger

research study. Because the measure included some new scales, there was no psychometric information that could be consulted prior to the start of this study. The present study provided its own psychometric analyses, including factor analysis for validity and internal consistency for reliability and in doing so found the public supports for children with families scale could not be included in analyses due to the psychometric properties of the scale. This is an important limitation as this scale may have demonstrated some patterns of interest for the research questions pertaining to the present study.

Another limitation for the present study was that the data were collected via phone survey. While this provided the opportunity to use random digit dialling procedures to increase randomization, there is still some self-selection that occurs for people that agree to participate. In particular, older respondents and women were more likely to respond to the phone survey than younger respondents. This is consistent with past research on survey research with males refusing more than females (Smith, 1983), adults that live alone more commonly refusing (Groves & Couper, 1998) and households with young children tend to show higher response rates (Lievesley, 1988). Additionally, the response rate for the larger Provincial study was only 12%. This means that there may be something about people that choose to participate in the phone survey that distinguishes them from those that do not. However, recent research on non-response bias has suggested that lower response rates do not necessarily alter survey estimates (Groves, In other words, lower non-response rates do not necessarily reduce non-response bias, which is important because research has found a fairly steady decline in response rates over time. This is because making additional efforts to

get responses from those that would not have initially responded often yields less reliable data. The best approach for future research would likely be to use mixed methods of surveying

One last potential limitation is that the instrument was not designed specifically for the present study and therefore certain questions were not worded in a way fully appropriate for the aims of this study. For example, the wordings of the questions lead to the way that participants were placed in the different caregiver groups. In particular, participants in the Caregiver groups were not exclusively “parents” because the question that was used was about whether or not the participant lived with children. Therefore this group could have included people that were grandparents, aunts, uncles, or roommates that live in the same home but not necessarily parents. Additionally, it may have been useful to distinguish people that spend the majority of their time caring for children. If the study were to ask for people that parent full time, work in day cares, or work as a nanny, there may have been different results. Persons that spend the majority of the time caring for children may have a different perspective from others. Additionally, the group of Non-Caregivers could have included parents with children that do not live with them or that are over the age of 18 due to the way the questions were asked in the survey. It would have been ideal to separate out these parents from people that truly have had and have no caregiving responsibilities.

Strengths

While limitations are always present in research, there are also important strengths that should be highlighted. First, the study utilized randomization procedures with an outside research firm collecting the data that were blind to the research

questions. The community examined in the present study was diverse in terms of socio-economic status, ethnicity, and children's developmental outcomes. Additionally, while the community of interest was largely urban with a high level of crime by Canadian standards, the criminal activity was not to the extreme level of past research. Earlier research on neighbourhood variables is often set in urban centres with extremely high levels of crime and poverty and is often with predominantly African American populations (Caspi et al., 2000; Caughy et al., 2006; Farley et al., 2007). The present study included a diverse range of ethnicity with the most prominent being white and South Asian.

In the present study, an attempt was made to examine the perspectives of caregivers of young children. This population is largely under-examined in past research. In the present study there was an opportunity to capture this perspective and examine the differences against other Caregivers and Non-Caregivers. In doing so, the perspectives from this under-researched group are captured and important details are added to the existing literature. Additionally, the findings of the present study outline important methodological implications for future research concerning social capital.

Another strength of present study was that there was a focus on the presence of positive aspects of social capital. Previous research has largely focussed on the negative impact of detrimental neighbourhood and family variables, such as crime, low-SES, and single parenthood (Caughy et al., 2006; Duncan et al., 2003; Oliver et al., 2009). The present study sought to identify individual perceptions of positive aspects of social capital, which could be seen to benefit their community.

Future Directions

The findings of the present study outline that Caregivers report to have slightly more friends in their local area and School Age Caregivers may have slightly more casual neighbourly exchanges. Investigations into what underlies this small advantage and what other advantages may be present for Caregivers could provide important insight that could inform community policy and practices. Although hypotheses can be made about why the advantage has been found in this sample, future research should examine this question more directly.

The present research does not demonstrate that having children provides one with an overall social advantage. However, variation does exist in the social networks and connections that people have. Therefore, it is worthwhile examining the factors that produce or suppress social capital for people in their community. One way to examine this would be to explore other possible social networks such as work places, religious groups, or volunteer organizations to explore how those groups differ in terms of social capital. Additionally, using interview methods to question people about their social networks and connections could provide important detail about these connections.

Another potential future direction would be to examine social connections more directly and thoroughly. How do relationships develop? Who introduces people to others? What makes these connections sustainable? What makes these connections beneficial? Social capital can be a powerful force in communities and families and thus it is important for us to understand it as best we can.

Conclusions

Bronfenbrenner's bioecological theory of human development highlights the importance of interactions between child, family, and community level variables (Bronfenbrenner, 1979; 2005a; 2005b; Bronfenbrenner & Morris, 1998). Previous research has demonstrated that tangible variables such as socio-economic status (Caspi et al., 2000; Leventhal & Brooks-Gunn, 2004; Oliver et al., 2009) and public resources (Farley et al., 2007; Min & Lee, 2006) play an important role in creating healthy environments for children and families. More intangible factors such as social networks, connections, and organizations can play an important role in children's development (Caughy et al., 2007), family functioning (Burdette & Whitaker, 2005) and neighbourhood development (Cancino, 2005; Duncan et al., 2003; Melton et al., 2008; Ohmer, 2007). While parenthood can have an important developmental impact on many personal variables the findings of the present study do not point to caregivers and non-caregivers having different perspectives of social capital. In a quote by Urie Bronfenbrenner, he addresses the importance of social networks for the betterment of families.

We as a nation need to be reeducated about the necessary and sufficient conditions for making human beings human. We need to be reeducated not as parents—but as workers, neighbors, and friends; and as members of the organizations, committees, boards—and, especially, the informal networks that control our social institutions and thereby determine the conditions of life for our families and their children. (Bronfenbrenner, 1978, p. 678)

In the present study perceptions of social capital were not demonstrated to be different across caregivers of children in their early years, caregivers of children in their school aged years and non-caregivers. The present study aimed to contribute to the neighbourhood literature and social capital literature by investigating this construct within the neighbourhood context. Given changes to our social landscape in recent decades, it becomes increasingly critical for our communities to embrace ways to improve the lives of children and families.

REFERENCES

- Aber, J. L., Brown, J. L., & Jones, S. M. (2003). Developmental trajectories toward violence in middle childhood: Course, demographic differences, and response to school-based intervention. *Developmental Psychology, 39*, 324-348.
- Adler, P., & Kwon, S. (2002). Social capital: Prospects for a new concept. *Academy of Management Review, 27*, 17-40. Retrieved from Business Source Complete database
- Araya, R., Dunstan, F., Playle, R., Thomas, H., Palmer, S., & Lewis, G. (2006). Perceptions of social capital and the built environment and mental health. *Social Science & Medicine, 62*, 3072-3083.
- Bandura, A. (1977). Self-efficacy: Towards a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.
- Beauvais, C. & Jenson, J. (2002). Social cohesion: Updating the state of the research. Discussion Paper, Ottawa: Canadian Policy Research Networks. CPRN Discussion Papers.
- Beauvais, C. & Jenson, J. (2003). The well-being of children: Are there “neighbourhood effects”? Discussion Paper, Ottawa: Canadian Policy Research Networks. CPRN Discussion Papers.
- Boisjoly, J., Duncan, G. J., & Hofferth, S. (1995). Access to social capital. *Journal of Family Issues, 16*, 609-631. doi:10.1177/019251395016005006
- Bourdieu, P. (1985). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). New York, NY: Greenwood.

- Bronfenbrenner, U. (1970). *Two Worlds of Childhood: U.S. and U.S.S.R.* New York, NY: Russell Sage Foundation.
- Bronfenbrenner, U. (1978). Who needs parent education? *Teachers College Record*, 79, 767 – 787.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental process. In R. M. Lerner (Ed.), *Handbook of child psychology: Vol.1. Theoretical models of human development* (5th ed., pp. 993-1028). New York: Wiley.
- Bronfenbrenner, U. (2005a). *Making human beings human: Bioecological perspectives on human development.* Thousand Oaks, CA: Sage.
- Bronfenbrenner, U. (2005b). Article 1: The bioecological theory of human development. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development* (pp. 3-15). Thousand Oaks, CA: Sage Publications. (Reprinted from *International encyclopedia of the social and behavioural sciences*, 10, 6963-6970, N.J. Smelser & P.B. Baltes, Eds, 2001, New York, NY, Elsevier)
- Bronfenbrenner, U. (2005c). Article 13: The split-level American family. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development* (pp. 201-209). Thousand Oaks, CA: Sage Publications. (Reprinted from *The formative years: Principles of early childhood education*, 73-85, S. S. Coopersmith & R. Feldman, Eds., 1974, San Francisco, Albion)

- Brooks-Gunn, J., Duncan, G. J., Klebanov, P. K., & Sealand, N. (1993). Do neighborhoods influence child and adolescent development? *American Journal of Sociology, 99*, 353-395.
- Browning, C. R., Feinberg, S. L., & Dietz, R. D. (2004). The paradox of social organization: Networks, collective efficacy, and violent crime in urban neighborhoods. *Social Forces, 83*, 503-534.
- Bryant, B. K. (1985). The neighborhood walk: Sources of support in middle childhood. *Monographs of the Society for Research in Child Development, 50*, 122-122.
- Burdette, H. L., & Whitaker, R. C. (2005). A national study of neighborhood safety, outdoor play, television viewing, and obesity in preschool children. *Pediatrics, 116*, 657-662.
- Cancino, J. M. (2005). The utility of social capital and collective efficacy: Social control policy in nonmetropolitan settings. *Criminal Justice Policy Review, 16*, 287-318.
doi:10.1177/0887403404271247
- Carpiano, R., Kershaw, P., & Ostry, A. (unpublished) Social Capital Survey.
- Carlton, B. S., Goebert, D. A., Miyamoto, R. H., Andrade, N. N., Hishinuma, E. S., Makini, G. K. J., et al. (2006). Resilience, family adversity and well-being among Hawaiian and non-Hawaiian adolescents. *International Journal of Social Psychiatry, 52*, 291-308.
- Carver, A., Timperio, A., & Crawford, D. (2008). Perceptions of neighborhood safety and physical activity among youth: The CLAN study. *Journal of Physical Activity & Health, 5*, 430-444.

- Caspi, A., & Taylor, A. Moffitt, T. E., & Plomin, R (2000). Neighborhood deprivation affects children's mental health: Environmental risks identified in a genetic design. *Psychological Science, 11*, 338-342.
- Caughy, M. O., Nettles, S. M., O'Campo, P. J., & Lohrfink, K. F. (2006). Neighborhood matters: Racial socialization of African American children. *Child Development, 77*, 1220-1236.
- Caughy, M. O., Nettles, S. M., & O'Campo, P. J. (2007). Community influences on adjustment in first grade: An examination of an integrated process model. *Journal of Child and Family Studies, 16*, 819-836.
- Chen, G., & Bliese, P. D. (2002). The role of different levels of leadership in predicting self- and collective efficacy: Evidence for discontinuity. *Journal of Applied Psychology, 87*, 549-556.
- Chow, G. M., & Feltz, D. L. (2008). Exploring the relationships between collective efficacy, perceptions of success, and team attributions. *Journal of Sports Sciences, 26*, 1179-1189.
- Clements, R. (2004) An investigation of the status of outdoor play, *Contemporary Issues in Early Childhood, 5*, 68-80. <http://dx.doi.org/10.2304/ciec.2004.5.1.10>
- Cohen, D. A., Inagami, S., & Finch, B. (2008). The built environment and collective efficacy. *Health & Place, 14*, 198-208.
- Coleman, J. S. (1988). Social capital and the creation of social capital. *American Journal of Sociology, 94*, 95-120.
- Crane, J. (1991). The epidemic theory of ghettos and neighborhood effects on dropping out and teenage childbearing. *The American Journal of Sociology, 96*, 1226-1259.

- Curtis, L. J., Dooley, M. D., & Phipps, S. A. (2004). Child well-being and neighbourhood quality: Evidence from the Canadian national longitudinal survey of children and youth. *Social Science & Medicine*, *58*, 1917-1927.
- DeLisi, M., & Regoli, B. (2000). Individual neighborhood attachment and perceptions of neighborhood safety. *American Journal of Criminal Justice*, *24*, 181-188.
- Dolan, A. (2007). 'That's just the cesspool where they dump all the trash': Exploring working class men's perceptions and experiences of social capital and health. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, *11*, 475-495. doi:10.1177/1363459307080869
- Duncan, T. E., Duncan, S. C., Okut, H., Strycker, L. A., & Hix-Small, H. (2003). A multilevel contextual model of neighborhood collective efficacy. *American Journal of Community Psychology*, *32*, 245-252.
- Duncan, G. J., & Raudenbush, S. W. (1999). Assessing the effects of context in studies of child and youth development. *Educational Psychologist*, *34*, 29-41.
- Farley, T. A., Meriwether, R. A., Baker, E. T., Watkins, L. T., Johnson, C. C., & Webber, L. S. (2007). Safe play spaces to promote physical activity in inner-city children: Results from a pilot study of an environmental intervention. *American Journal of Public Health*, *97*, 1625-1631.
- Groves, R. M. (2006). Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly*, *70*, 646-675.
- Groves, R. & Couper, M. (1998). *Nonresponse in Household Interview Surveys*. New York: John Wiley.

- Helbig, S., Lampert, T., Klose, M., & Jacobi, F. (2006). Is parenthood associated with mental health? *Social Psychiatry & Psychiatric Epidemiology*, *41*, 889-896.
doi:10.1007/s00127-006-0113-8
- Janus, M., Brinkman, S. Duku, E., Hertzman, C., Santos, R. Sayers, M., Schroeder, J. & Walsh, C. (2007). *The Early Development Instrument: A population-based measure for communities. A handbook on development, properties, and use. Canada: Offord Centre for Child Studies.*
- Jencks, C., & Mayer, S. E. (1990). The social consequences of growing up in a poor neighborhood. In Lynn, L. E., & McGreary, M. F. H. (Ed.), *Inner-city poverty in the united states* (pp. 111-186). Washington, DC: National Academy Press.
- Jutras, S., & Lepage, G. (2006). Parental perceptions of contributions of school and neighborhood to children's psychological wellness. *Journal of Community Psychology*, *34*, 305-325.
- Kershaw, P., Forer, B., Irwin, L. G., Hertzman, C., & Lapointe, V. (2007). Toward a social care program of research: A population-level study of neighborhood effects on child development. *Early Education and Development*, *18*, 535-560.
- Kershaw P., Irwin L., Trafford K., Hertzman C. (2005). *The British Columbia atlas of child development*. Human Early Learning Partnership. Western Geographical Press.
- Kershaw, P., Forer, B., Lloyd, J., Hertzman, C., Boyce, W., Zumbo, B., Guhn, M., Milbrath, C., Irwin, L., Harvey, J., Hershler, R., & Smith, A. (2009). The use of population-level data to advance interdisciplinary methodology: A cell-through-

- society sampling framework for child development research. *International Journal of Social Research Methodology* 12, 387-403.
- Lievesley, D. (1988). Unit non-response in interview surveys. Unpublished working paper, Social and Community Planning Research, London.
- Leventhal, T., & Brooks-Gunn, J. (2004). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126, 309-337.
- MacQueen, K. & Treble, P. (2009). The most dangerous cities in Canada. *Maclean's*, 122, 2 & 22, Rogers Publishing Limited.
- Marjoribanks, K. (1997). Family background, social and academic capital, and adolescents' aspirations: A mediational analysis. *Social Psychology of Education*, 2, 177-197. doi:10.1023/A:1009602307141
- Miles, R. (2008). Neighborhood disorder, perceived safety, and readiness to encourage use of local playgrounds. *American Journal of Preventive Medicine*, 34, 275-281. doi:10.1016/j.amepre.2008.01.007
- Min, B., & Lee, J. (2006). Children's neighborhood place as a psychological and behavioral domain. *Journal of Environmental Psychology*, 26, 51-71. doi:10.1016/j.jenvp.2006.04.003
- McDonnell, J. R. (2007). Neighborhood characteristics, parenting, and children's safety. *Social Indicators Research*, 83, 77-99.
- Morenoff, J. D., Sampson, R. J., & Raudenbush, S. W. (2001). Neighborhood inequality, collective efficacy, and the spatial dynamics of urban violence. *Criminology*, 39, 517-559.

- O'Campo, P., Salmon, C., & Burke, J. (2009). Neighbourhoods and mental well-being: what are the pathways? *Health & Place, 15*, 56-68.
- Ohmer, M. L. (2007). Citizen participation in neighborhood organizations and its relationship to volunteers' self- and collective efficacy and sense of community. *Social Work Research, 31*, 109-120.
- Oliver, L. N., Dunn, J. R., Kohen, D. E., & Hertzman, C. (2007). Do neighbourhoods influence the readiness to learn of kindergarten children in Vancouver? A multilevel analysis of neighbourhood effects. *Environment and Planning A, 39*, 848-868. doi:10.1068/a37126.
- Palkovitz, R. (1996). Parenting as a generator of adult development: Conceptual issues and implications. *Journal of Social and Personal Relationships, 13*, 571 – 592.
- Pecukonis, E. V. & Wenocur, S. (1994). Perceptions of self and collective efficacy in community organization, theory and practice. *Journal of Community Practice, 1*(2), 5-21.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology, 24*, 1-49.
- Prezza, M., Pilloni, S., Morabito, C., Sersante, C., Alparone, F. R., & Giuliani, M. V. (2001). The influence of psychosocial and environmental factors on children's independent mobility and relationship to peer frequentation. *Journal of Community & Applied Social Psychology, 11*, 435-450. doi:10.1002/casp.643
- Putnam, R. (1995). Bowling alone: America's declining social capital. *Current, (373)*, 3.
Retrieved from Academic Search Complete database
- Rothrauff, T., & Cooney, T. (2008). The role of generativity in psychological

- well being: Does it differ for childless adults and parents. *Journal of Adult Development, 15*(3), 148-159.
- Sampson, R., Raudenbush, S., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 277*, 918-924.
- Schaefer-McDaniel, N. (2007). Subjective and objective ratings of neighborhood conditions: Do neighborhoods matter to children's health? Ph.D. dissertation, City University of New York, United States -- New York. Retrieved October 20, 2009, from Dissertations & Theses: Full Text. (Publication No. AAT 3283150).
- Smith, F. (1983). On the validity of inferences from non-random samples. *Journal of the Royal Statistical Society, Series A, 146*, 394–403.
- Somers, M. D. (1993). A comparison of voluntarily childfree adults and parents. *Journal of Marriage and Family, 55*, 643-650.
- Springer, J. F., Wright, L. S., & McCall, G. J. (1997). Family interventions and adolescent resiliency: The southwest texas state high-risk youth program. *Journal of Community Psychology, 25*, 435-452.
- Statistics Canada. (2006). Census of Canada: Community profiles. Ottawa, Ont.: Statistics Canada, Retrieved from <http://www12.statcan.gc.ca/censusrecensement/2006/dp-pd/prof/92591/details/Page.cfm?Lang=E&Geo1=CSD&Code1=5915004&Geo2=PR&Code2=9&Data=Count&SearchText=surrey&SearchType=Begins&SearchPR=01&B1=AllCustom=>
- Taylor, R., & Hill-Davies, C. (2004). Parents' and non-parents' beliefs about the cues to deception in children. *Psychology, Crime & Law, 10*(4), 455-464.

- Wandersman, A., & Nation, M. (1998). Urban neighborhoods and mental health: Psychological contributions to understanding toxicity, resilience, and interventions. *American Psychologist*, *53*, 647-656. doi:10.1037/0003066X.53.6.647.
- Webster-Stratton, C., & Reid, M. J. (2008). Strengthening social and emotional competence in young children who are socioeconomically disadvantaged: Preschool and kindergarten school-based curricula. In W. H. Brown, S. L. Odom & S. R. McConnell (Eds.), *Social competence of young children: Risk, disability, and intervention*. (pp. 185-203). Baltimore, MD, US: Paul H Brookes Publishing.
- Wei, E., Hipwell, A., Pardini, D., Beyers, J. M., & Loeber, R. (2005). Block observations of neighbourhood physical disorder are associated with neighbourhood crime, firearm injuries and deaths, and teen births. *Journal of Epidemiology and Community Health*, *59*, 904-908. doi:10.1136/jech.2004.027060
- Weir, L. A., Etelson, D., & Brand, D. A. (2006). Parents' perceptions of neighborhood safety and children's physical activity. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, *43*, 212-217.
- Wellman, B. (1979). The community question: The intimate networks of East Yorkers. *The American Journal of Sociology*, *84*, 1201-1231.
- Willms, J. D. (2002). *Vulnerable children: Findings from Canada's national longitudinal study of children and youth*. Edmonton: University of Alberta Press.
- Woolley, M., & Grogan-Kaylor, A. (2006). Protective family factors in the context of neighborhood: Promoting positive school outcomes. *Family Relations*, *55*, 93-104. doi:10.1111/j.1741-3729.2006.00359.x.

APPENDICES

Appendix A: Ethics Certificate



The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
Suite 102, 6190 Agronomy Road,
Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK

PRINCIPAL INVESTIGATOR: Laurie Ford	INSTITUTION / DEPARTMENT: UBC/Education/Educational & Counselling Psychology, and Special Education	UBC BREB NUMBER: H09-02297
INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:		
Institution	Site	
UBC	Vancouver (excludes UBC Hospital)	
<p>Other locations where the research will be conducted: This Project will be conducted in four neighbourhoods in Surrey, BC. Our research team has met with members of the Early Childhood Roundtable (a group of key stakeholders working on issues relevant to young children and families in Surrey). The roundtable is in support of our research and has agreed to help with distribution of recruitment flyers. We have met with members of the local community and they have suggested several spaces where we can work with parents based on their convenience. There are several public family support centres and community centres that have rooms for projects. It is our hope to conduct the majority of our interviews by phone from our lab at UBC. However, if needed we will also do face-to face interviews at some of community centres in our neighbourhoods if that is preferred by the participant. If we need to do face-to-face interviews, our ideal setting will be a quiet location mutually agreed upon by investigators, our community partners, and the parents in the study. However it is anticipated that the majority of the interviews will be conducted by by phone. We are only raising the possibility of centre-based face to face interviews in this initial application to save the time of amendment if we need to go to the face to face option. We would only go to that option if we are having difficulty getting participants to do phone interviews. If we need to to interviews in the community, we have developed a safety protocol that is used for all off campus research conducted by members of the team in our lab. The members of the research team will check in with Dr. Ford at the beginning of each session via cell phone and check out (call) again at the end of the observations of interview sessions via telephone (if she is not attending). If the call has not been placed within 30 minutes of the expected completion time of the session, a call will be made to follow up with the co-investigator or the other researcher who will be in the sessions taking field notes. If they are not reached by phone, a call will be made to the community centre and follow up will occur as needed and site visit made if needed.</p>		
CO-INVESTIGATOR(S): N/A		
SPONSORING AGENCIES: N/A		
PROJECT TITLE: Caregivers' Perceptions of Social Capital within their Neighbourhood		

CERTIFICATE EXPIRY DATE: November 2, 2010

DOCUMENTS INCLUDED IN THIS APPROVAL:	DATE APPROVED: November 2, 2009	
Document Name	Version	Date
Protocol: Thesis Proposal Draft	Version 1	October 26, 2009

Consent Forms:

Caregiver Consent

Version 1 October 26, 2009

Advertisements:

Recruitment Flyer

Version 1 October 26, 2009

Recruitment Letter

Version 1 October 26, 2009

Questionnaire, Questionnaire Cover Letter, Tests:

Background Questions

Version 1 October 26, 2009

Adapted Caregiver Survey

Version 1 October 26, 2009

The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.

**Approval is issued on behalf of the Behavioural Research Ethics Board
and signed electronically by one of the following:**

Dr. M. Judith Lynam, Chair
Dr. Ken Craig, Chair
Dr. Jim Rupert, Associate Chair
Dr. Laurie Ford, Associate Chair
Dr. Anita Ho, Associate Chair

Appendix B: Interview Protocol

AREA A: INTRODUCTORY SECTION

A.1. First, can you tell me the postal code of your home? I only need to know your postal code and not your full address.

Postal Code: _ _ _ _ _ .

[If QA.1b. is refused/doesn't know, then end interview]

A.2. How long have you lived at your current address?

1. Less than 1 year
2. 1-5 years
3. 6-10 years
4. 11-15 years
5. 16 or more years

A.3. Think about the place where you lived before moving to your current address. Please tell me why did you decided to move to your current address?

1. Job-related
2. Schooling/education-related
3. Good schools for my children
4. Retirement
5. Cost of living – more affordable lifestyle
6. Better lifestyle – able to afford better/more
7. Health issues
8. Married, divorced, or separated
9. Other

SECTION TOTAL: 3

AREA B: SOCIAL CAPITAL

1. NEIGHBOURHOOD ATTACHMENT

[Source: LA FANS]

LEAD-IN: Now, I would like to ask about your local area.

"Local area" includes the area within a 15-minute walk from your home. Please keep this in mind when answering these questions.

1.1. In the past 30 days, how many of your neighbors have you talked with for 10 minutes or more?

(PROBE IF ASKED: To the best of your knowledge)

1. None
2. 1 or 2
3. 3 to 5
4. 6 or more
98. Don't know
99. Refused/No Response

1.2. How many of your friends live in your local area?

(PROBE IF ASKED: By "Friend" I mean someone who is more than just an acquaintance)

(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. None
2. A few
3. Many
4. Most/All
98. Don't know
99. Refused/No Response

1.3. How many of your friends live outside of your local area?

(PROBE IF ASKED: By "Friend" I mean someone who is more than just an acquaintance)

(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. None
2. A few
3. Many
4. Most/All
98. Don't know
99. Refused/No Response

1.4. Do you work outside of your local area?

(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Yes
2. No
98. Don't know
99. Refused

SECTION TOTAL: 4

2. RESOURCES EXCHANGED AMONG NEIGHBORS

[Source: LAFANS, PHDCN, Team-developed]

LEAD-IN: Next I am going to ask about some things you might do with people in your local area. For each question, please tell me whether you and others in your local area often do this, sometimes do it, rarely do it or never do it.

(PROBE IF ASKED FOR 2.1-2.3: Just give me your best guess of how often)

2.1. About how often do you and people in your local area do favors for each other? For example, help with shopping, lend gardening or house tools. Would you say:

(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Often
2. Sometimes
3. Rarely
4. Never
98. Don't know
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

2.2. When a neighbor is not at home, how often do you and other neighbors watch over their property? Would you say:

1. Often
2. Sometimes
3. Rarely
4. Never
98. Don't know
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

2.3. How often do you and other people in the local area ask each other advice about personal things such as child rearing or job openings? Would you say:

(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Often
2. Sometimes
3. Rarely
4. Never
98. Don't know
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

2.4. Generally speaking, you can get help when you need it.

(PROBE IF ASKED: Help for anything you might need assistance for)

(PROBE IF ASKED: From anyone)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

SECTION TOTAL: 4

3. SOCIAL COHESION

[Source: LAFANS/PHDCN]

LEAD-IN: Now I am going to read you some statements which may or may not be true of your local area. For each statement, please tell me whether you strongly agree, agree, disagree or strongly disagree.

3.1. People in this local area are close-knit.

(PROBE: This local area is cohesive or unified)
(PROBE IF ASKED: Just give me your best guess based on your knowledge of your local area)
(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

3.2. People in this local area generally don't get along with each other.

(PROBE IF ASKED: Just give me your best guess based on your knowledge of your local area)
(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

3.3. People in this local area do not share the same values.

(PROBE IF ASKED: Just give me your best guess based on your knowledge of your local area)
(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

SECTION TOTAL: 3

4. INTERGENERATIONAL CLOSURE

[Source: LA FANS]

(PROBE FOR 4.1-4.4 IF ASKED: Just give me your best guess based on your knowledge of your local area)

4.1. There are adults in this local area that children can look up to.

(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

4.2. Adults in this local area know who the local children are.

(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

4.3. Adults in this local area can be counted on to watch out that children are safe and don't get in trouble.

(PROBE IF ASKED: "Local area" includes the area within a 15-minute walk from your home)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

4.4. Neighbours could be counted on to look after any preschool children, grandchildren, nieces or nephews in your family?

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

SECTION TOTAL: 4

5. PUBLIC SUPPORTS FOR FAMILIES WITH CHILDREN

[Source: Kershaw et al.]

(PROBE FOR 5.1-5.5 IF ASKED: Just give me your best guess based on your knowledge of where you live)

5.1. There are good places for preschool age children to play in your local area.

(PROBE READ TO ALL: Preschool age=Under age 6)

(PROBE READ TO ALL: "Local area" includes the area within a 15-minute walk from your home)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

5.2. There are enough good child care programs for children to attend within a 20 minute car ride from your home.

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

5.3. There are good schools within a 20 minute car ride from your home.

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

5.4. There is good access to health care within a 20 minute car ride from your home.

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

5.5. Generally speaking, your local area is a good place for families with preschool children to live?

(PROBE READ TO ALL: Preschool age=Under Age 6)

(PROBE READ TO ALL: "Local area" includes the area within a 15-minute walk from your home)

1. Strongly Agree
2. Agree
3. Unsure
4. Disagree
5. Strongly Disagree
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

SECTION TOTAL: 5

6. INFORMAL SOCIAL CONTROL

[Source: PHDCN/LAFANS]

Lead-In: Next, please tell me if it is very likely, likely, unlikely or very unlikely that people in your local area would do the following.

(PROBE FOR IF ASKED FOR 6.1-6.3: Just give me your best guess based on your knowledge of your local area)

(PROBE IF ASKED FOR 6.1-6.3: "Local area" includes the area within a 15-minute walk from your home)

6.1. If children were skipping school and hanging out on a street corner, how likely is it that people in your local area would do something about it? Would you say...

1. Very likely
2. Likely
3. Unsure
4. Unlikely
5. Very unlikely
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

6.2. If some children were spray-painting graffiti on a local building, how likely is it that people in your local area would do something about it? Would you say...

1. Very likely
2. Likely
3. Unsure
4. Unlikely
5. Very unlikely
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

6.3. If a child was showing disrespect to an adult, how likely is it that people in your local area would scold that child? Would you say...

1. Very likely
2. Likely
3. Unsure
4. Unlikely
5. Very unlikely
99. Refused/No Response

NOTE: "Don't Know" will be coded as "Unsure."

SECTION TOTAL: 3

7. PERCEIVED COMMUNITY AND NEIGHBORHOOD BOUNDARIES

7.1a. When you are talking to someone about the **neighborhood** in which you live, what do you mean?
Is it:

1. The block or street you live on?
2. Several blocks or streets in each direction?
3. The area within a 15-minute walk from your home?
4. An area larger than a 15-minute walk from your home?
5. An area within a 20 minute car ride from your home?
6. The town you live in?
98. Don't Know
99. Refused/No Response

SECTION TOTAL: 1

POSITION GENERATOR/NETWORK TIES

[Source: Social Capital Benchmark Survey with a more descriptive lead-in]

LEAD-IN: For the next few questions, please think about everyone whom you would consider a friend no matter where they live. This would include not only your closest friends, but anyone who is more than a casual acquaintance. Do you have a friend who...

8.1. ...is a manual worker (such as a laborer, janitor, or waitress)?

1. Yes
2. No
98. Don't know
99. Refused

8.2. ...is a manager or professional (such as a lawyer, engineer, or accountant)?

1. Yes
2. No
98. Don't know
99. Refused

[NOTE TO PROGRAMMER: Please program 8.3-8.7 to appear in a random order for each respondent]

8.3. ...is of Aboriginal heritage?

1. Yes
2. No
98. Don't know
99. Refused

8.4. ...is of a different race or culture than you?

1. Yes
2. No
98. Don't know
99. Refused

8.5. ...is of a different religion than you?

1. Yes
2. No
98. Don't know
99. Refused

8.6. ...has been on welfare?

1. Yes
2. No
98. Don't know
99. Refused

8.7. ...is Gay or Lesbian?

1. Yes
2. No
98. Don't know
99. Refused

SECTION TOTAL: 7

9. CIVIC ENGAGEMENT/INSTITUTIONAL LINKAGES/INTERACTIONS WITH ORGANIZATIONS

[Source: GSS]

Lead-in: Now I would like to ask you about your interactions with people and organizations.

9.1. Has anyone in your household used the internet in the past month?

(PROBE IF ASKED: By “used the internet” I mean, for example visited websites on the world wide web/internet, sent or received e-mail, purchased any product from a website, posted messages to an internet chat group)

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

In the past 12 months, have you...

9.2. ...written a letter to any government representative about a public interest issue?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.3. ...called a radio talk show about a public interest issue?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.4. ...posted a comment to an E-mail or web-based discussion group about a public interest issue?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.5. ...attended a local community event (e.g., church event, school concert, ceremony, parade)

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.6. ...spoken out at a public meeting?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.7. ...given money to any group?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.8. ...volunteered?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.9. ...participated in a Sports, Cultural, Civic or Recreational organization (such as a hockey league, theatre group, book club or bridge club).

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.10. ...attended a religious service (at a church, mosque, temple, synagogue, etc.) more than once a month?

- 1. Yes
- 2. No
- 98. Don't know
- 99. Refused

9.11. Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people? Would you say...

(PROBE IF ASKED: In general)

- 1. People can be trusted
- 2. You cannot be too careful in dealing with people
- 8. Don't know
- 9. Refusal

SECTION TOTAL: 11

AREA D: BACKGROUND DEMOGRAPHIC QUESTIONS

14. GENERAL DEMOGRAPHICS

14.1. Are you...

1. Male
2. Female
99. Refused/No Response

14.2. What racial/cultural group do you most identify with? [INTERVIEWER PROBE WHEN NECESSARY - would you say you were non-Caucasian in race or non-white in colour?].]

1. White
2. Chinese
3. South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
4. Black
5. Filipino
6. Latin American
7. Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian, etc.)
8. Arab
9. West Asian (e.g., Iranian, Afghan, etc.)
10. Japanese
11. Korean
12. Aboriginal (North American Indian, Metis or Inuit)
13. Another group (specify _____)
98. Don't know / no response
99. Refused/No Response

14.3. Is English the language you speak most commonly at home?

1. Yes

2. No

98. Don't know
99. Refused/No Response

14.4. What is your date of birth?

PROMPT: INTERVIEWER: If Respondent refuses to give full DOB, then ask her/him if you could ask for just their **year** of birth

Month: _____

Day: _____

Year: _____

98. Don't know
99. Refused/No Response

14.5. How long have you lived in Canada?

1. All your life
2. Less than 12 months
3. 1 to 2 years
4. 3 to 5 years
5. 6 to 10 years
6. 11 to 19 years
7. 20 or more years
98. Don't know
99. Refused/No Response

14.6. What is your current relationship status?

1. Single/Never married
2. Married
3. Living with a partner
4. Divorced/Separated
5. Widowed
99. Refused/No Response

14.7. Do you consider yourself to be:

INTERVIEWER: Read categories to respondent.

1. heterosexual (sexual relations with people of the opposite sex)?
2. homosexual, that is lesbian or gay (sexual relations with people of your own sex)?
3. bisexual (sexual relations with people of both sexes)?
98. Don't know
99. Refused/No Response

14.8. What is the highest level of education you have **completed**? [READ LIST ONLY IF PROBING IS REQUIRED. ACCEPT ONE RESPONSE.]

1. Less than high school diploma
2. High school diploma or equivalent
3. Apprenticeship or trades certificate
4. College (CEGEP or other non-university diploma; includes accounting technology, real estate)
5. University certificate, diploma or degree (below bachelor level)
6. Bachelors degree (includes LL.B)
7. University certificate or diploma above bachelor level
8. Degree in Medicine, Dentistry, veterinary medicine or optometry
9. Masters degree
10. Earned Doctorate
98. Don't know
99. Refused/No Response

14.9. During the past 12 months, was your main activity...?

INTERVIEWER: If sickness or short-term illness is reported, ask for usual main activity.

1. Working at a paid job or business (including being self-employed)
2. Looking for paid work
3. Going to school
4. Caring for children
5. Household work
6. Retired
7. Other
98. Don't know
99. Refused/No Response

14.10. Into which of the following ranges does your household's gross annual income from all sources fall?

1. Under \$10,000
2. \$10,000 to \$19,999
3. \$20,000 to \$39,999
4. \$40,000 to \$59,999
5. \$60,000 to \$79,999
6. \$80,000 to \$99,999
7. \$100,000 and over
98. Don't know
99. Refused/No Response

14.11. How many adults (i.e. age 19 or older) live in your household?

Number: _____
99. Refused/No Response

14.12. How many children under the age of 19 live in your household?

Number: _____ [IF 14.14=0 or 99, GO TO 14.14]
99. Refused/No Response

14.13. How many of these children are under age 6?

Number: _____ [INTERVIEWER: Check if number exceeds response to 14.12. If so, then prompt the Respondent]
99. Refused/No Response

14.14. Do you rent or own your own home?

1. Rent/lease
2. Owned
3. Other
98. Don't Know
99. Refused/No Response

SECTION TOTAL: 14