

DAL-MSS  
NURSING  
C541  
2010

Environmental Health Inequities: Low-Income Mothers'  
Negotiation of Health in a Low-Income Urban Neighborhood

by

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Submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy

at

Dalhousie University  
Halifax, Nova Scotia  
January 2010

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Dedication Page

For Antonia, Maximilian and Aldo

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## ABSTRACT

The purpose of this study was to explore the relationship between health and the urban environment as it is experienced and negotiated by low-income mothers within the context of everyday family life. The research questions were: 1) How are low-income mothers' everyday health decisions for their families influenced by their urban environments? and 2) how do low-income mothers understand and negotiate their experiences of poverty, their low-income urban neighbourhood and health?

An ecofeminist framework guided the critical analysis of gendered environmental health inequities, capturing the complexity with which gender, class, the social and physical environments interact to mediate health or health inequities. The methodology combined urban- and institutional ethnography to allow data collection and analysis consistent with an ecofeminist framework. The policy document analysis of the *Day Care Act* of Nova Scotia explicated patriarchal and neoliberal gender and class assumptions that have implications for mothers' health decisions. A photovoice approach invited participants to take photographs of their neighborhood. Over the course of 19 months I interviewed 11 women living in the low-income, urban neighborhood of Spryfield, a suburb of Halifax Regional Municipality, the capital of the Atlantic Canadian province of Nova Scotia.

Findings included four themes: the absence of regulated childcare, negotiating urban infrastructure, negotiating nutrition, and mothers' invisible balancing act for negotiating health. Results of this study added insights into physical and social urban environments through the lived experience of low-income mothers living in low-income urban neighborhoods. This study sheds light on how issues of childcare, housing, nutrition, and urban infrastructures in the context of poverty are fundamental to the larger issues of environmental health. This study's methodology supported the creation of experience-based evidence to inform public policy that is relevant to low-income mothers living in low-income urban neighborhoods.

The evidence generated by this study adds to the scientific and moral evidence that calls for universal childcare in Nova Scotia. Implications for further research and policy development include the use of innovative methodologies to capture the complex nature of urban governance, by mapping multiple, layered conceptual frameworks of actors and institutions that influence the public policy-making processes.

## ACKNOWLEDGEMENTS

I would like to express my heart-felt thank you and deep gratitude to my co-supervisors Dr. Barbara Downe-Wamboldt, and Dr. Angela Gillis for their unwavering support, mentoring, and intellectual guidance of my scholarly development over the past few years. I would also like to thank my readers Dr. Trish Glazebrook and Dr. Brenda Beagan for their much appreciated, sage advice and insights from their respective academic disciplines of philosophy and sociology. I am grateful for the generous financial support of my doctoral work from the Killam Foundation, the Faculty of Health Professions, and the Nursing Research Fund, Dalhousie University.

I am thankful to the women who participated in this study, for taking time to share their stories and perspectives with me. There were also many women in the neighborhood of Spryfield, including Marjorie Willison, who have been very helpful, particularly with recruiting participants.

Throughout these past years I was fortunate to have the support of many friends and colleagues including Adele Vukic, Debbie Sheppard-LeMoine, Lucille Wittstock, Marlene Mercer, and Jackie Gilby.

Finally, a huge thank you goes to my family who lived with me through the experience of doing a PhD.

## CHAPTER I

### Introduction

“Imagine the improvement in people’s quality of life if, by addressing the social and economic factors that influence health, physical and social environments were created in which Canadians could easily make good choices to achieve and maintain good health” (David Butler-Jones, Chief Public Health Officer of Canada, 2009, p. 3)

The purpose of this study was to explore the relationship between health and the urban environment as it is experienced and negotiated by low-income mothers within the context of everyday family life. To this end, I have attempted to illustrate an approach that emerged from a focus on large scale population health data and policy directions from the international, national and local arena. This integration of research based evidence with policy directions or recommendations crystallized the need to investigate environmental health inequities at the neighborhood level, focusing on a vulnerable population (Butler-Jones, 2008; CIHI, 2008; Raphael, 2007). The research questions were: 1) How are low-income mothers’ everyday health decisions for their families influenced by their urban neighborhood? And 2) how do low-income mothers understand and negotiate their experiences of poverty, their low-income urban neighborhood and health?

My primary interest from a community health nursing perspective is the link between health and the environment, which are two dimensions of the nursing metaparadigm that includes person, health, environment, and nursing. Initially, my focus was on environmental health and how mothers with young children would make environmental health decisions. It quickly turned out, however, that the study

participants, who were low-income mothers, had other concerns such as childcare, housing and how to feed their children. This difference in priorities is significant and sheds light on how issues of childcare, housing, nutrition, and urban infrastructures in the context of poverty are fundamental to the larger issues of environmental health. As such, the low-income mothers in this study had a broader understanding of the environment.

An ecofeminist framework was developed to guide this study (Chircop, 2008). The requirements of an appropriate framework to critically investigate gendered environmental health inequities included a capacity to capture the complexity with which gender, class and the social as well as the physical environments interact to mediate health or health inequities.

Evolving from the ecofeminist framework, I developed a research methodology that combined urban and institutional ethnography to allow data collection and analysis consistent with the framework's dimensions. The urban ethnography approach enabled engagement with low-income mothers' narratives of their daily lives within a low-income urban neighborhood. The institutional ethnography provided direction for the identification and analysis of a relevant public policy document, in this case the *Day Care Act* of the province of Nova Scotia. The photovoice method employed in this study, which invited participants to take photographs of their neighborhood, illustrated positive and negative features of the mothers' immediate neighborhood environment and contributed to the formulation of themes. Over the course of 19 months I had the privilege of interviewing 11 women living in a low-income, urban neighborhood of Spryfield, a suburb of Halifax Regional Municipality, the capital of the Atlantic Canadian province of Nova Scotia.

From a population health perspective, 80% of Canadians live in urban areas within five major municipalities along Canada's southern border with the United States of America, including, from west to east, Vancouver, Calgary, Toronto, Montreal, and Halifax Regional Municipality (Canadian Institute of Health Information [CIHI], 2006). According to Hancock (2002), a leading scholar in environmental health, the fact that the majority of Canadians live in urban areas makes the urban environment their natural environment.

The focus of this research was gendered, urban environmental health inequities. I explored how living in an urban environment such as Spryfield, a suburb of Halifax, Nova Scotia, in Eastern Canada, affects health related decisions of low-income mothers for themselves and their families. Health inequities in Canada exist between cities and within cities, and furthermore, neighborhood or place has been recognized as an important determinant of health (CIHI, 2008, 2006; Kjellstrom & Mercado, 2008). The effects of neighborhood on health are not the same for all groups in society (Ellen & Turner, 1997; CIHI, 2008, 2006). Environmental health inequities affect women more than men, due to women's biological and social roles in society and are compounded by socioeconomic status, race/ethnicity, and geographic location (Health Disparities Task Group, 2005; Raphael, 2004; Spitzer, 2005).

The link between the environment and health has long been established by prominent thinkers such as Hippocrates (Adams, 1939), Florence Nightingale (1859), Rachel Carson (1962), and David Suzuki (2003), the scientific community (Canadian Nurses Association/Canadian Medical Association, 2009; Di-ethyl-stillbestrol (DES) Action Canada, 2000; Health Canada, 1997; Kleiner, 2004; McMartin & Koren, 1999; Sallinenfait & Robert, 2000), and policy makers at all government levels (Health Canada,

2005; Nova Scotia (NS) Department of Health, 2006; Stockholm Declaration, 1972; World Health Organization (WHO), 1986). According to the World Health Organization, the environment is “one of the most critical contributors” to the global disease burden and ¼ of the global disease burden is related to environmental factors (WHO, 2006, 2005).

Poverty is the leading determinant of health inequity in Canada (Bryant, 2009; Raphael, 2009, 2007), and poverty can be a pathway to environmental health inequities. Income is of overriding importance in shaping health outcomes within Canadian neighborhoods (Wilson, Eyles, Elliott, & Keller-Olaman, 2009). The majority of people living in poverty are women, particularly single mothers and their children. Within Nova Scotia, the suburb of Spryfield, in the Halifax Regional Municipality (HRM) was identified as the neighbourhood with the highest number of low-income families headed by single mothers (Community Counts, 2006). The importance of recognizing the additional burden of health disparities carried by African Nova Scotian and Mi'kmaq mothers, due to their racial/ethnic backgrounds, is acknowledged. Each group requires their own inquiry into environmental health disparities. However, for the purpose of this study, the focus was on low-income mothers living in Spryfield regardless of ancestry.

Study findings included four major themes: 1) the absence of regulated childcare, 2) negotiating urban infrastructures, 3) negotiating nutrition, and 4) mothers' invisible balancing act for negotiating health. These themes have fluid boundaries and often overlap the social and the physical dimensions of the urban environment. My interpretation of the study findings was based on the research questions and aligned with the ecofeminist framework's diagnostic dimensions to explicate oppressive conceptual frameworks that underlie public policy resulting in gendered environmental health inequities. The framework's future oriented dimension of care-sensitive ethics was



integrated into the public policy recommendations and recommendations for nursing research education and practice. This study is an example of the possibility to contextualize large-scale population data to provide public policy makers with the necessary experience-based evidence required to alleviate gendered environmental health inequities, one policy at a time.

The following chapter includes the literature review with a focus on urban environments and environmental health inequities, low-income mothers in Nova Scotia, and the environment as a women's health issue. The literature review provides the context for the significance of the proposed research, followed by the problem statement, goals, objectives and research questions. Chapter 3 describes an ecofeminist framework for understanding urban environmental health of low-income mothers in Nova Scotia. The research methodology will be presented in chapter 4, followed by details of the research design and protocol in chapter 5. Research findings are described and illustrated in chapter 6, followed by the interpretation and discussion in chapter 7. The dissertation concludes with recommendations and reflections in chapter 8.

## CHAPTER II

### Literature Review

#### *Urban Environments and Health*

Definitions of environmental health have broadened over the past few years from a focus on chemical toxicants to physical and social environments, including urban and rural health, appropriate land use, public transportation systems, and industrial development (Srinivasan, O'Fallon & Dearry, 2003). Approximately 80% of North Americans live in urban environments and spend 90% of their time indoors, with as little as 1% spent outdoors in the "natural" environment (Hancock, 2002). This is consistent with Canadian data, which indicates that 24 million people, or 80% of all Canadians, live in urban areas (CIHI, 2006). According to Hancock, that makes the urban environment the "natural" environment for the majority of North American populations. Hancock views urban settlements as human ecosystems, but cautions that it is important to recognize that human ecosystems are situated within larger bio-regional and planetary natural ecosystems. Human health ultimately depends on ecosystem health.

The term 'urban health' tends to be associated with inner-city poverty, health inequality and disadvantages of urban populations (Vlahov, Galea & Freudenberg, 2005). It is important to differentiate the terms urban health advantage and urban health disadvantage. Factors potentially contributing to urban health advantage include neighborhood affluence which may help sustain social organizations and community-based activities and more civic services. The availability of social support and greater social cohesion has been associated with better health, and denser social networks can offer diverse opportunities (ethnic, cultural, professional) (Vlahov et al, 2005). According to Kemp (2001), urban neighborhoods can provide anonymity and diverse opportunities

not available to women elsewhere. She acknowledges women as active players in their environments, and not just objects under restrictions and obligations. Neighborhood infrastructures such as the availability of parks, playgrounds, and accessibility to modestly priced fresh produce are related to less childhood obesity (Veugelers, Sithole, Zhang & Muhajarine, 2008).

Conversely, poor urban planning and inadequate housing can lead to a variety of health disadvantages including depression, aggressive behavior, asthma, obesity, heart disease, and stressors on the immune system (Srinivasan, 2003; Welch & Kneipp, 2005). Housing disrepair, which is disproportionately higher in poor neighborhoods, can lead to exposure to lead, pests, and air pollution as well as an increase in injuries. Lack of affordable public transport, sidewalks, bike lanes, playgrounds and parks can lead to an increased sedentary lifestyle. Studies have shown an association between deteriorated physical environments and higher crime rates, making communities less safe, which can lead to an increase in social isolation and a sense of disconnect in communities (Srinivasan, 2003; Welch & Kneipp, 2005).

According to the Canadian Institute for Health Information “urban areas are built for people, by people” (CIHI, 2006, p. 4), and health differences exist between urban neighborhoods in Canada, but they are not straight forward. There is evidence that collectively people in some urban neighborhoods are healthier than others. Gaps in health are consistently related to the socioeconomic status of urban areas (CIHI, 2008). Generally, self reported obesity tends to be lower in, or near, downtown neighborhoods, and in higher income neighborhoods. Canadians in neighborhoods with higher rates of post-secondary education, are more likely to rate their health as very good or excellent, and residents from these neighborhoods are more likely to be physically active and to

smoke less (CIHI, 2006). This evidence supports earlier evidence that higher income and education contribute to better health (Raphael, 2004). However, the CIHI (2006) research did not employ a gender or time analysis, and the report clearly states that the mechanism linking socioeconomic characteristics of neighborhoods with the health of its residents is unclear.

### *Environmental Health Inequities*

Studies show that particular geographic areas or neighborhoods can expose residents to environmental pollution, hazardous substances and fewer civic benefits (Kjellstrom & Mercado, 2008; NIEHS, 2004). In addition to different environmental experiences, health disparities exist between people for reasons related to socioeconomic status (SES), ethnicity/race and gender among other determinants of health (Evans, Barer & Marmor, 1994; Health Disparities Task Group, 2005; Public Health Agency of Canada, 2004; Wilson et. al., 2009). Gender is, however, a strong mediator in addition to other determinants of health (CIHR Institute of Gender and Health, 2004; Colman, 2003; Spitzer, 2005). There is growing evidence that environmental burdens are disproportionately carried by women and children, low-income communities, indigenous peoples, and racial and ethnic minorities in North America (Bullard, 1993; Colman 2003; Di Chiro, 1997; Evans & Marcynyszyn, 2004; Gay, 2000; NIEHS, 2004; Northridge, Stover, Rosenthal & Sherard, 2003). More chemical plants with higher risk for accidents, and more landfills containing hazardous waste, tend to be located in predominantly African-American and Native American communities (Elliot, Wang, Lowe & Kleindorfer, 2004; Jackson, 2005). In Nova Scotia, Black communities are more likely to be located near landfill sites, but research on health effects in Black neighborhoods has not been carried out (Enang, 2001).

Urban neighborhoods of low-cost or public housing are associated with negative health outcomes including higher rates of asthma, allergies, greater exposure to toxic materials such as lead and pesticides, increased stress, fear for personal safety, unintentional injuries, feelings of anger, hopelessness and frustration, and feelings of shame, lack of control and stigmatization (Bent, 2003; Butterfield, 2002; CIHI, 2008, 2006; Gee & Payne-Sturges, 2004; Howell, Harris & Popkin, 2005; Kaplan & Kaplan 2003; Wasylyshyn and Johnson, 1998; Welch and Kneipp, 2005). The urban environment and its resources for low-income families have implications for health and social interactions (Shostak, 2000). According to Ellen and Turner (1997), the neighborhood environment may affect people with less socioeconomic resources more than affluent residents, who can afford to obtain services and gain access to facilities outside their residential neighborhood. In particular, single female headed households may be more vulnerable to the neighborhood environment due to a lack of resources and a greater dependency on neighborhood services and institutions. Neighborhood effects need to be differentiated and explored to identify mechanisms that link environmental conditions with health. According to Kemp (2001, p. 9), “it is not appropriate to assume that some experiences are common to all”; on the contrary, the environment is experienced differently along axes including identity, class, race, and gender.

Urban infrastructure, for example public transportation, is often disadvantageous for low-income women (Khosla, 2005). Women’s daily activities, particularly mothers with small children, often require access to transportation schedules and transit routes which in many cities are designed around the needs of full-time, down-town, 9am-5pm, Monday-Friday, office employees. School and daycare services for children often require parents to organize transportation to multiple locations, and at times outside of 9am-5pm.

Another area of concern is safe and convenient access to amenities such as community centres, day care, clinics, shopping malls, safe public parks and spaces, as well as well-paying employment opportunities (Fanos, 1998; Khosla, 2005; Teplitzky, LeClair & Willison, 2006). In Spryfield, for example, the Riverview Daycare Centre with 85 subsidized spaces has been closed since 2004 without any alternative replacement for the lost subsidized childcare spaces (Teplitzky, LeClair & Willison, 2006). Situations like this make it difficult for low-income, single mothers to find suitable employment opportunities. The Captain Spry Community Centre houses a public library; however, the use of the public pool requires user fees, which are too high for many low-income residents in the area (Personal communication, 2006). The lack of affordable recreational services in low-income neighborhoods can also contribute to health inequities.

Negative effects of poverty are compounded by sub-standard housing (Welch & Kneipp, 2005). Since the majority of Canadians living in poverty are women, more women tend to be affected by sub-standard housing arrangements (Colman, 2003; Khosla, 2005). There is little information about the relationship between urban housing conditions and health status of vulnerable populations. The likelihood of increased domestic violence has been related to the density in public housing complexes of low-income households (Raphael, 2001). Residents in rooming houses in Toronto, who reported their health as the worst, were concentrated in rooming houses with the poorest physical conditions (Hwang, Martin, Tolomiczenko & Hulchanski, 2003).

According to Shapcott (2004) the availability of affordable and suitable housing for single, female headed families in Canada has not improved in recent years. The effects of poor housing conditions on health are associated with many factors, including exposure to lead, asbestos, poor heating and ventilation, dampness, and overcrowding

(Bryant, 2004). In addition, the effects of excessive spending on shelter will impact other determinants of health, particularly nutrition.

A rise in the use of food banks has been associated with a continuous housing crisis impacting on available monetary resources for the working and non-working poor (Bryant, 2004). For example, McIntyre, Officer, and Robinson (2003) studied the experience of low-income mothers, and found that mothers compromise their own food intake to feed their children. Since more women than men assume child care responsibilities, more mothers than fathers jeopardize their own health to respond to their children's needs.

Women in Nova Scotia who depend on income assistance live well below the poverty line. They are struggling daily to survive, to pay rent, to provide nutritious meals for their children and to pay for utilities to keep warm (McIntyre et al., 2003; Ross, 2006). Women who live on income assistance in Nova Scotia are often subjected to discrimination by landlords who know the income status of tenants. Women report that they are always last on the list for critical repairs and that their dwellings are not properly maintained (Ross, 2006). This means that low-income women are often exposed to greater health risks due to their residential exposure, compared to residents with financial resources for adequate housing. Thus, the effects of inadequate social infrastructure and housing for low-income, female headed families support the idea that the urban environment has a greater effect on these residents compared to more affluent residents who can afford supports and services outside their neighborhood (Ellen & Turner, 1997).

#### *Low-income Mothers in Nova Scotia*

Canada does not have an official definition of poverty. Poverty, in terms of material deprivation, is most commonly measured by what Statistics Canada identifies as

the “Low-Income Cut Offs” (LICO), a measure of relative poverty taking into account household and neighborhood size. A low-income household spends a disproportionate amount of its income on food, shelter, and clothing (National Council on Welfare, 2003). Welfare is Canada’s income assistance program of last resort, and eligibility and income levels vary among provinces and territories. For example, the National Council of Welfare estimated the annual welfare income in 2004 for a single parent, one child family in Nova Scotia, to be \$12,684. In Halifax, the LICO in 2004, for a single-parent, one-child family was \$21,077 (Ross, 2006). This means that the welfare income of a single-parent, one child family in NS is drastically below the poverty line. According to an initiative on social assistance reform, a single mother with one 4 year old child, on employment support and income assistance in Nova Scotia, has a monthly income of \$1090.99 and expenses in the amount of \$1353.00, which leaves her with a monthly deficit of \$262.01 (Ross, 2006). This example illustrates not only the dire straits of a working single mother and child poverty in Canada but also the results of unethical social policy that inevitably produces unacceptable results (National Council on Welfare, 2005).

Generally, in Canada women still earn only 81% of men’s hourly wages for doing the same job with the same education and skills background (Colman, 2003). During the 1990s every province in Canada saw a widening in the gap between the income of the richest and the income of the poorest (Colman, 2003), with almost half of lone-parent, mother-led families below the low-income cut-off.

In 2001, 16.8% of all Nova Scotian families were lone-parent families: 14% were female headed while 2.8% were male headed. This was an increase from 1991 when 11.3% of families were headed by lone-parent women (Community Counts, 2006). However, over 22% of Nova Scotia’s children live in lone parent families (Nova Scotia



Advisory Council on the Status of Women, 2003). Female lone-parents with young children are less likely to be employed full-time. In 2001, women in Nova Scotia earned on average 71.6% of male earnings for full-time employment, or on average \$28,822 annually for women, as compared to \$40,155 for men (Statistics Canada as cited in Nova Scotia Advisory Council on the Status of Women, 2003). This means that women more often have more financial responsibilities for children, and also have to manage with far less material resources than their male counterparts.

Poverty is a significant determinant of ill health, affecting shelter, nutrition, education, and early childhood development among other things (Public Health Agency of Canada, 2006). Income is generally used as a marker of social and economic conditions and poverty is the most reliable predictor of poor health (Colman, 2003). Canadians with the lowest income are four times more likely to report poor health than high income earners (Colman, 2003). Since women earn less than men, women are more likely to suffer adverse health effects.

The current hegemonic discourse on poverty is based on a model of the “rational man” and implies that people have a choice between welfare and employment, while welfare dependency is moralized as an individual character flaw that leads to irresponsible decision making (Reid, 2004). The notion of a “free will” in combination with increased individuation in the prevailing health discourse leads to victim-blaming, and diverts attention away from systemic social and structural conditions that create the conditions for poor health in the first place (Reid, 2004; Sherwin, 1998). “Poor women are culturally excluded as a consequence of being stigmatized, stereotyped and invisible” (Reid, 2004, p. 27). Exclusion has been identified as a major determinant of health, and women are under-represented in research and governance, and have reduced access to

resources (Colman, 2003). While the concept of 'social exclusion' goes beyond measures of poverty and economic and social indicators, the concept of 'vulnerability' refers to particular groups in society who are vulnerable to social exclusion, including single mothers, children, aboriginal people, and racial and cultural minorities, among others. Thus vulnerability is broader than social exclusion and refers to issues of low income, food insecurity, lack of social support systems, inadequate housing, working and living in dangerous places, and a general lack of control over one's life (Colman, 2003).

### *Environment as a Women's Health Issue*

Women activists, such as Rachel Carson, Gro Harlem Brundtland, Lois Gibbs and Elisabeth May, have long been at the forefront of environmental health. Environmental health is a women's health issue. My previous research with women living with Environmental Illness identified that women, as primary care givers, are among the first to observe ill-health effects on children and other family members (Chircop, 2003). As homemakers, women largely take responsibility for the family's diet including intake of fresh produce, dairy and meat products, and for the purchase of potentially hazardous household cleaning products. Mothers' decisions as consumers have an impact on the environment and on their family's health. Women's decisions for their children can expose unborn children to potentially harmful chemicals, as follicular fluid of ovaries and breast milk can contain environmental contaminants (Chance & Harmsen, 1998; Schreiber, 2001). Females are socialized to adhere to certain standards of beauty, which, in most cases, cannot be achieved without the use of cosmetics and other consumer products, which may also contain toxins. Globally, an increasing number of women work under hazardous conditions (Doyal, 1995).

Everyday family life involves making choices among competing demands and interests that are influenced by interactions with the social and physical environment. Contradictory reports of peoples' perceptions about health and the environment raise questions such as, how is the link between health and the environment negotiated at the family level? How does the link translate into people's everyday life practices? How is this relationship articulated by low-income mothers and how is it translated into everyday routines?

A Canadian survey found that 71% of all health care decisions are made by women (O'Connor, Jacobsen & Stacey, 2002). Mothers, as main care givers, make daily consumer decisions on behalf of their children with regard to health and the environment. Mothers largely control a child's environment during the first crucial months and years of development. The areas of control range from nutrition and everyday consumer products, to place of residence and outdoor activities. Mothers are instrumental in the development of an environmentally-conscious lifestyle. Regard for a clean environment and health is a socially transmitted and learned behaviour influenced by many contexts (Orr, 2004).

Health-relevant decision-making and actions taken on behalf of others within the family, including diet, physical activity, hygiene, health check-ups, and socialization are mostly made by mothers in their roles as primary care givers (Stokols, 1992). A recent study about mothers' health decision-making suggested that most decisions they made in everyday life related to their family were health related decisions (Kushner, 2005). Gender influences decision-making about the environment and natural resources. Contextual factors that influence the multiple relationships women generate, as agents of environmental health, need to be considered.

### *Significance of this Research*

National and international policy makers have long been advocating for changes in the way we treat the environment, recognizing its impact on human health. The 1972 United Nations (UN) Conference on the Human Environment adopted the Stockholm Declaration, a landmark document which states that “planning must be applied to human settlements and urbanization with a view to avoiding adverse effects on the environment and obtaining maximum social, economic and environmental benefits for all” (Stockholm Declaration, 1972). The Ottawa Charter (WHO, 1986) outlines the creation of supportive environments as health promoting action and acknowledges the inextricable link between people and their environment. The UN Conference on Environment and Development in Rio de Janeiro brought a renewed commitment to move the environment to the top of the policy-making agenda for the new millennium (Agenda 21, 1992), which was reaffirmed ten years later in Johannesburg (World Summit, 2002). In 2002, the World Health Organisation pledged to promote the protection of children’s environmental health (Bangkok Statement, 2002). During the same year, and for the first time in history, health and environmental ministers of the Americas met to discuss the development of environmental health indicators (Gray & Schornack, 2002). This meeting resulted in a call for capacity building for environmental and public health and the need to engage civil society in these efforts. The broad goals and objectives of international policies are reflected in Canadian federal programs and policy directions such as the Public Health Agency of Canada (2004) which states:

The physical environment is an important determinant of health. At certain levels of exposure, contaminants in our air, water, food and soil can cause a variety of

adverse health effects, including cancer, birth defects, respiratory illness and gastrointestinal ailments. In the built environment, factors related to housing, indoor air quality, and the design of communities and transportation systems can significantly influence our physical and psychological well-being.

Canada's recently formulated first health goal addressing basic needs such as the social and physical environment states:

Our children reach their full potential, growing up happy, healthy, confident and secure. The air we breathe, the water we drink, the food we eat, and the places we live, work and play are safe and healthy – now and for generations to come (Healthy Canadians, 2005).

The statement continues: “We participate in and influence the decisions that affect our personal and collective health and well-being” and “A strong system for health and social well-being responds to disparities in health status and offers timely, appropriate care.” Hence, research about urban environmental health and low-income mothers will contribute to a better understanding of why some people are healthy and others are not (Evans et al.,1994), and contribute to a reduction in health inequities.

Mothers' experiential, tacit knowledge of urban environmental health, and how they experience and negotiate it in their daily routines, can contribute to the formulation of health promotion policies and programs that are truly integrated with other relevant public health policies, thus making them more responsive to the realities of disadvantaged communities. This knowledge will contribute to the fields of health promotion, social justice and environmental justice and give low-income mothers a voice to be heard by decision-makers. Increasingly, Canadian policy makers are seeking participatory

approaches to policy development and design with input from people at the grassroots level (Department of Justice, Canada, 2005; Status of Women, Canada, 1998).

This study's focus is on the necessary structural or health related policy changes required to create an environment that is conducive to health, rather than on individual behaviour change, as is often pursued in studies that are based on theories such as the Health Belief Model (Rosenstock, Strecher & Becker, 1988; Ulin et al, 2005) and models of rational decision-making (Edwards, 1954; Betsch, Haberstroh & Höhle, 2002). These latter approaches to health promotion tend to blame "the victim," by drawing attention away from policy implications that are detrimental to the health of low-income women, whose health beliefs may not have any relationship to their material and social circumstances (Brown, 2003; National Coordinating Group, 2002; Wasylshyn & Johnson, 1998).

Ample evidence indicates that social determinants of health, including income, housing, and social policy have a far stronger influence on health than individual life-style choices, and are rooted in factors beyond the control of most individuals (Hayward & Colman, 2003; Raphael, 2004). Trends in an increased burden of chronic diseases are reflected in geographic distributions of economic and social disparities and a rural-urban divide. Statistical analysis of urban areas also points to an intra-urban divide between high-income and low-income urban neighborhoods (Community Counts, 2006; CIHI, 2006). Physical and social characteristics of "place" impact a community's health despite individual income variables. Physical characteristics of neighborhoods, such as walkability, availability of green spaces, and playground safety affect people's choices (CIHI, 2006). Social characteristics of neighborhoods, including perceptions of safety and attractiveness, also influence individuals' choices. A study found that residents who

have negative perceptions about their neighborhood are more likely to report their health as poor, and are more likely to report one or more chronic health conditions, as compared to residents who have positive perceptions about their neighborhood (Wilson, Elliott, Law, Eyles, Jerrett & Keller-Olaman, 2004).

What then, are the aspects of an urban neighborhood that influence peoples' health? Effective policy planning to improve the health of Atlantic Canadians requires a better understanding of these complex relationships (Hayward & Colman, 2003). Policies may not have been designed to disadvantage certain populations; however, the effect of some policies may create unintended health inequities. There is an increasing awareness among some policy makers of the impact of health promotion programs and policies on social and economic inclusion. To "put the population back into population health," necessitates strategies that include lay knowledge, as well as empirical evidence, and the importance of integrating upstream policies with community participation (Hayward & Colman, 2003).

This research illuminates individual voices from the grassroots that are intended to inform necessary policy changes (Bent, 2003; Brown, 2003; Butterfield, 2002; Lock & Kaufert, 1998; Reutter, Neufeld, & Harrison, 2000; Warren, 1996, 1997, 2000). It responds to the Ottawa Charter's (1986) principles of primary health care, calling for individuals to gain control over their lives, and for healthy public policy. For example, the *National Network on Environments and Women's Health* (2005) advocates for the "inclusion of the excluded" in decision-making about built environments and urban poverty to create healthy cities for all. In Nova Scotia, *Social Assistance Reform: Moving Forward a Woman Positive Public Policy Agenda* (Ross, 2006) makes policy recommendations that were identified by women who live in poverty. Nurses have a

professional and moral obligation to participate in sociopolitical activities. Leadership in policy development is a hallmark of disciplinary influence and professional practice (Ballou, 2000; Reutter & Duncan, 2002).

### *Problem Statement*

Research has shown that women's health inequities are related to low-income, poverty and environmental conditions including residential exposures in low-income neighbourhoods and substandard housing (Welch & Kneipp, 2005; Wasylshyn & Johnson, 1998). Due to women's responsibilities in society, and in particular low-income mothers, they are in "positions of unique exposure as well as unique consciousness" (Clay, 2003, p. A34). Gaps in the literature highlight a lack of knowledge about urban environmental health from the grassroots, particularly low-income mothers. There is a dearth of published research that gives low-income mothers living in urban, low-income environments a voice that provides public health policy makers and urban planners with vital insight into their urban living conditions (Welch & Kneipp, 2005). According to Perry (2005) legislators may not even be aware that issues of housing can affect health. Community health nurses can play a key role in this area and draw attention to one of the most basic social and public health needs by highlighting negative consequences and collaboratively exploring strategies with voices from the grassroots to alleviate unacceptable living conditions.

### *Purpose and Objectives*

The overall purpose of this study was to explore the relationship between health and the urban environment as it is experienced and negotiated by low-income mothers within the context of everyday family life. The objectives of the study were: a) to provide



a forum for low-income mothers to articulate how they experience and negotiate their own and their families' health in an urban environment; and b) to influence public policy relevant to low-income mothers living in urban environments.

### *Research Questions*

The specific research questions were:

1) How are low-income mothers' everyday health decisions for their families influenced by their urban environments?

2) How do low-income mothers understand and negotiate their experiences of poverty, their low-income urban neighbourhood and health?

## CHAPTER III

### Ecofeminist Framework

To address my research questions and to conceptualize urban environmental health of low-income mothers, an ecofeminist framework (Chircop, 2008) is presented. The core element for this study is the overlap between low-income mothers' systemic oppression, their urban neighborhood, and their local knowledge. The framework is designed to reveal oppressive social structures, and institutional relations of low-income, urban environments, as they are experienced by low-income mothers. The framework is future oriented toward influencing healthy public policy by focusing on the determinants of health. The dimensions that inform this framework are discussed, and include Warren's (1996) logic of domination, socioeconomic, epistemological, empirical, ethical, and historical connections between women and the environment. To strengthen my argument for this ecofeminist framework, limitations in the form of essentializing are addressed in the discussion.

According to ecofeminism there are important connections between the domination of women and the domination of nature within patriarchal societies. In order to overcome domination, one of its forms cannot be addressed without simultaneously addressing others (Warren, 1996, 1997, 2000). Ecofeminism is an action-oriented philosophy, a theory in progress as well as a practice (Lahar, 1996). Its goals are to deconstruct oppressive and exploitative social practices, and to re-construct more viable social and political communities (Lahar, 1996). The liberation of nature requires the liberation of women, and vice versa (Gardner, 2006). Human societies have the capacity to change exploitative and oppressive practices.

moral consideration. The conceptual analysis that makes ecofeminism a philosophy holds that all forms of domination in the West are based on the same Western, patriarchal logic of domination. According to Warren (1996), this logic holds that the female is associated with nature, whereas the male is associated with culture. Nature is regarded as the opposite of culture (including reason).

### *Origins of Ecofeminism*

Ecofeminist philosophy recognizes the connection between the environment and women as one of shared oppression. In 1974, French feminist Françoise d'Eaubonne (as cited in Glazebrook, 2002, p.12) coined the term “ecofeminism” by establishing a connection between overpopulation through the exploitation of women’s reproductive capacity, and resource scarcity through the destruction and exploitation of natural resources for material production. This dual exploitation is threatening human survival. Ecofeminism, as a philosophical and political movement, aims to reveal oppressive ideologies, practices and structures within patriarchal social systems that support these interconnected exploitations, and seeks their elimination; as such it is diagnostic and future oriented (Glazebrook, 2002).

Contemporary ecofeminists have expanded the notion of oppression beyond early feminist analyses of gender to be more inclusive. According to Warren (1997), ecofeminism is concerned with the connection among women, people of color, children, the poor and nature. Thus issues of oppression within patriarchal social structures and societies cannot be dealt with in isolation, but must be addressed simultaneously. The oppression of women, children, the poor and ethnic/racial minorities within patriarchy is interrelated by a common logic of domination.

### *Warren's Logic of Domination*

The logic of domination is the central feature of an oppressive conceptual framework, and some of the most important connections between women and nature are conceptual (Warren, 1996). Warren illustrates the nature of conceptual frameworks, which are socially constructed sets of basic values and beliefs that influence how we see ourselves and the world around us. Conceptual frameworks are influenced by many factors including age, race, gender, nationality and religion. According to Warren, conceptual frameworks are oppressive if they explain, justify and maintain relationships of domination and subordination. For example, a patriarchal framework explains, justifies and maintains the subordination of women by men. Patriarchy is defined as a system of male domination (Gardner, 2006), recognizing that individual women can enact patriarchal values, and that individual men can suffer under patriarchal domination; for example if there is an ethnic/race, and/or class difference between the oppressor and the oppressed. Patriarchal domination is a system of male power to maintain their privilege and control over natural, economic, and social resources in society. For Warren (2000), patriarchy is an unhealthy social system.

The claim that patriarchy is a social system locates patriarchy within historical, socioeconomic, cultural, and political contexts thoroughly structured by such factors as gender, race/ethnicity, class, age, ability, religion, national and geographic location. The claim that patriarchy is an unhealthy social system describes and evaluates patriarchy as a system of Up-Down relationships of domination and subordination in which Downs, and, in many respects, Ups, have difficulty getting their basic needs met. The Downs in an unhealthy patriarchal

system include women, other human Others, and nonhuman animals and nature (p. 206).

The faulty belief system underlying patriarchal domination is evident in oppressive conceptual frameworks. According to Warren (1996), the most significant features of oppressive frameworks are: 1) value dualism which uses a disjunctive pair to establish exclusiveness and opposition rather than complementarities and inclusiveness, for example, when historically “mind,” “reason” and “male” are portrayed as opposites of “body,” “emotion” and “female”; 2) value-hierarchical thinking which places a higher value on what is “up” as opposed to “down”; and 3) justification of the domination of the group subordinated in value hierarchical thinking. That is, a logic of domination is established when the structure of an argument leads to justification of subordination (Warren, 1996, p.20). The most significant feature of an oppressive framework is the logic of domination because an ethical premise is needed to establish the argument to sanction a “legitimate” subordination. What is problematic then is not value-hierarchical thinking in itself, but the way and to what end an oppressive conceptual framework is constructed and used to justify subordination. This is established by a combination of the logic of domination with value-hierarchical thinking and value dualism as illustrated in Warren’s following example:

Humans do, and plants and rocks do not, have the capacity to consciously and radically change the community in which they live.

Whatever has the capacity to consciously and radically change the community in which it lives is morally superior to whatever lacks this capacity.

Thus, humans are morally superior to plants and rocks.

For any X and Y, if X is morally superior to Y, then X is morally justified in subordinating Y.

Thus, humans are morally justified in subordinating plants and rocks (Warren, 1996, p 22).

This argument, which uses the assumption of moral superiority and the assumption that superiority justifies domination, is expanded in Western patriarchal societies to justify the dual oppression of women and nature:

Women are identified with nature and the realm of the physical; men are identified with the “human” and the realm of the mental.

Whatever is identified with nature and the realm of the physical is inferior to (“below”) whatever is identified with the “human” and the realm of the mental: or conversely, the latter is superior to (“above”) the former.

Thus, women are inferior to (“below”) men; or, conversely, men are superior to (“above”) women.

For any X and Y, if X is superior to Y, the X is justified in subordinating Y.

Thus, men are justified in subordinating women (Warren, 1996, p, 22).

The notion that women are identified with nature, and that whatever is identified with nature is inferior to the “man” has historically been asserted in dominant Western philosophical and intellectual traditions (Merchant, 1993; Ortner, 1986; Twine, 2001; Warren, 1996). As Warren (1996) explains, these assertions are then regarded as matters of historical fact, and accepted as the truth. This truth is perpetuated by ideologies that are kept alive by metaphors that describe women as chickens, cows, hare-brains and snakes, while nature (or whoever is considered weak) is described as barren, and needing

to be penetrated (Merchant, 1993; Warren, 1997). The female is naturalized, and nature is feminized.

This is supported by Twine (2001), who states that historically in the West, women are categorized as closer to nature and more embodied than men. He argues that certain bodies are socially constructed as “marked bodies” to confer a lesser status upon a person and to establish Otherness. He explains the hierarchical Up-down logic underlying the animalization of people as vertical matching of Western dualisms. Building on Descartes’ contribution to Western dualism, in particular his understanding of animals as mere bodies, Twine argues that associating certain bodies with animals constitutes a process of agency-stripping.

Ecofeminist sociologist Ariel Salleh (2003) theorizes the domination of women and nature, through the industrial division of labor which leads to fragmentation of knowledge. Tacit, lay knowledge was marginalized, which alienated people from their own organic nature, resulting in environmental abuse. According to Salleh, current social movements to overcome the global ecological crisis, seek strategies across the human-nature divide “with little help from sociological theory” (p. 61). She argues that “the nexus where reproductive labor and its knowledges mediate humanity and nature is the most promising vantage point for an ecologically literate sociology” (p. 74). Sociology’s historic separation of human and nature, which can be found in the split between productive and reproductive labor, reflects a masculine social construction of gender identity, and consequently its conceptualization of human and nature as dichotomous. Through this analysis, ecofeminism becomes sociology of knowledge (Salleh, 2003). It does so by critiquing gender-biased construction of the sociological concepts used to explain how society works. The relevance of ecofeminism as sociology of knowledge for

this research, is that the starting point for inquiry is women's experiences of their urban environments, and a critical analysis and sensitivity towards gender biased conceptualizations that underlie hegemonic discourses concerning women living in poverty and low-income urban neighborhoods.

This, however, is a different approach from ecofeminist philosophy's analysis of patriarchal logic of domination put forward by Warren (1996, 1997, 2000). Using Warren's logic of domination would facilitate an understanding that the economy of patriarchal society does not value women's reproductive capacity equally to the material production of goods and services that, in contrast to childbearing and childrearing, are accounted for in national gross domestic productivity. At the same time, dimensions of the environment that cannot easily be converted into monetary value, are also not valued and accounted for equally (Colman, 2005). The link between Salleh, Warren and Twine is that the valuing, or rather devaluing, is at the ideological level. This hegemonic ideology offers a seemingly rational explanation of the superiority of men over nature and women, to justify ongoing oppression and exploitation.

The power of ecofeminism can be seen in its analysis of oppressive conceptual frameworks as they relate to the treatment of women and nature, and the acknowledgement of meaningful difference that does not sanction domination. As such ecofeminism is relevant beyond a nature-gender connection to include race, class, sexual identity, religion and many more factors. Domination is complex and can take many different forms including authoritarian subjection or exploited labor. At its core domination is about de-valuing which can take the form of marginalizing, ignoring, failing to see, and making invisible. Within the context of Canadian public policy, this analysis contributes to a better understanding of the social and political determinants of



health by explicating neo-liberal agendas of policy-making that have weakened the Canadian welfare state and at the same time promoted the notion of individual responsibility for health and welfare (Raphael, 2004).

### *Socioeconomic Connection*

Connections among women, people of color, children, the poor and nature, lies at the intersection of common experience of oppressive socioeconomic structures within patriarchal societies. The majority of the poor are women and children. Women of color tend to be worse off in terms of, for example, income, education, health and living standards (Colman, 2003). Economic inequity based on evidence of income, employment and unpaid domestic work is the broadest underlying factor in gendered health disparities (Spitzer, 2005). It leads to compromised access for women to education, housing, health care, child care and nutrition.

The socioeconomic connection between women and nature is evident in the exploitation of women's labor and reproduction, and the exploitation and destruction of natural resources. Although Warren (2000) illustrates the socioeconomic connection based mainly on examples of mal-development policies in countries such as India, the socioeconomic connection is also relevant to Canada. Environmental destruction and resource depletion directly affect women's lives in the form of exposure to hazardous toxic materials at work or at home, and living conditions in dilapidated, unsafe neighbourhoods with negative health impacts, based on the available empirical data (Health disparities Task Group, 2005; Raphael, 2004; Spitzer, 2005; Srinivasan, 2003; Welch & Kneipp, 2005). Healthy environments are required for all. What makes women as a group more vulnerable is their systemic exclusion from political and economic institutions of power and privilege (Warren, 2000).

Systemic practices that allow for unequal pay for the same work based on gender need to be eliminated with the support of relevant public policy changes. In addition, other systemic practices and policies that discriminate against women due to their biological role of childbearing and childrearing in terms of loss of pensionable years of employment, lack of affordable and accessible childcare, and many other barriers, need to be rectified. The significance in the connection between women and socioeconomic status is the acknowledgement that there is something fundamentally wrong in a society where the majority of the poor are women and children. This systemic perspective and analysis does not blame the victim, but points to the structural shortcomings of a system that not only allows this situation to develop, but exacerbates it.

At the same time as women are exploited socioeconomically, society sanctions environmental destruction and resource depletion for socioeconomic gains. This is evident by past and present industrial practices including those of the mining industry, oil and gas industry, large scale agribusiness, the lumber industry, fisheries and many more. What these industries have in common is their exploitation of non-renewable resources for economic gain. At the same time these industries' by-products pollute the environment at no cost to the industry; rather communities suffer the consequences of pollution and/or resource depletion (Suzuki, 2003).

Damaging the physical environment to the point that it negatively affects human and non-human lives is particularly relevant to women, due to their biology and social roles in society. Environmental exposure to pollutants, for example, has negative health consequences to mothers and their children. Toxic chemicals have been found in follicular fluid, breast milk and women's breast tissue (Chance & Harmsen, 1998; Schreiber, 2001). Ironically, Inuit women who have least benefited from modern

industrial growth in the North American Great Lakes region are paying the highest price in terms of the amount of persistent organic pollutants, originating from the Great Lakes area, found in their breast milk (Arctic Monitoring and Assessment Program, 2000).

The connection between women's social roles and low-income urban environments is established through socioeconomic inequities based on gender, race and class, and economic and political neglect of urban infrastructure, particularly those of low-income neighborhoods (Bullard, 2005). Socioeconomic necessity forces some women to live in environments that are less conducive to health. Women earn less than men for equal work, and more women than men live in poverty (Colman, 2003), more single parent households are female headed, and more of these households, out of economic necessity, are located in low-income neighborhoods (Community Counts, 2006). The infrastructure of these neighborhoods is often neglected in the form of missing sidewalks, unsafe playgrounds, insufficient public transport (Khosla, 2005), and the lack of accessible parks and health enhancing green spaces (Maller, Townsend, Pryor, Brown & St. Leger, 2005). Thus, women, as a group, are significantly more affected by the connection between poverty and the environment (Khosla, 2005; Welch & Kneipp, 2005). Neo-liberal governments save money by keeping welfare payments to single mothers and their children to a minimum, and by keeping investments in urban infrastructures to a minimum (Ross, 2006; Shapcott, 2004). The connection between low-income women and low-income urban neighborhoods lies in their shared history of oppression, on the basis of poverty.

The socioeconomic connection between low-income women and their urban environment can be understood as a pathway, whereby economic disadvantage dictates the location of affordable housing. Low-income-families may be more affected by low-

income neighborhoods due to the lack of accessible supports and services in their neighborhood, and the lack of financial resources to obtain needed support and services outside their own neighborhood. Women are more likely to be poor, the poor are more likely to live in unhealthy environments, and our economic system is based on environmental degradation, which most seriously harms women, thus women and the environment are linked through economic logic. According to ecofeminism then, both issues of oppression need to be addressed simultaneously, that is women's poverty and unhealthy urban environments.

### *Epistemological Connection*

According to Warren (1997, 2000), a distinct ecofeminist analysis arises where three spheres overlap: a) feminism, b) science/technology/development, and c) native/indigenous/local knowledge. Warren (2000) refers to Haraway's (1988) notion of knowledge as "situated" in explaining how ecofeminism challenges Western notions of knowledge. Ecofeminism examines the context within which ethical and epistemological claims are made (Warren, 2000). Lived experience provides knowledge derived through being part of, and participating and living within a community or social context and environment. For example, indigenous knowledge about natural surroundings and ecosystem is experiential. Ecofeminist epistemology claims that the object of knowledge is an actor and co-creator of knowledge along with the agent. We come to know about the environment by experiencing and forming a relationship with the natural environment, not just by observing it. We come to know the environment through our bodies, by experiencing it as members of the ecosystem, not merely through intellectual reflection. The knower is then not an objective, detached observer, independent of the context, and neither a purely rational knower (Warren, 2000). Contrary to the dichotomous conception

of the human person as a separate entity from the environment, according to ecofeminist theory, humans are part of and experience the surrounding environment with the whole body, mind and spirit. Thus, by being part of nature, humans come to know nature through lived experience over a particular spatiotemporal moment. According to Besthorn and McMillen (2002), ecofeminist philosophy provides a new ontology of person and nature and their interrelationship. This ontology provides an opportunity for a fundamental change in the way the relationship between human and non-human nature is understood. Nursing as an art and a science is given an opportunity to develop a new understanding of its metaparadigm of person, environment, health and nursing, leading to a better understanding of environmental health inequities. This new conceptualization can provide the basis for changing current, oppressive social, political, economic, and environmental conditions to alleviate health inequities.

The prevailing dualistic thinking in Western society that splits male-female, human-nature, black-white and so forth perpetuates and reinforces categories and conceptualizations of exclusion and Otherness, and prevents a conceptualizing that allows for fluidity, degrees, shades, and less concrete categories that could be more inclusive, yet respectful and inviting of differences. Dualistic thinking then excuses us from an imagination of wholeness (not sameness, because sameness denies difference) with the environment. Conversely, if we imagine ourselves as part of the environment, theoretically we shouldn't treat anyone or the environment in a way that is unhealthy, or oppressive and exploitative, because to do so would eventually lead to self-destruction.

An imagination of wholeness with the environment would allow nurses to advocate on behalf of the environment or nature. This imagination would provide me, as the researcher, as well as the participants, with a voice for nature. According to

ecofeminism, non-human nature is an active agent, actor and co-creator, and we can gain access to this knowledge (even if ever so limited) through the notion of embodiment (Twine, 2001), as being one with nature, and acting as conduit to know nature.

According to Twine (2001), all our understanding of nature is cultural, since it has accumulated within a cultural and political context. The concepts of body and nature have been socially constructed with opposing meanings attached. For Twine, 'embodiment' is the way out of this dualistic conceptualization and "ecofeminism can make all aware of their closeness to nature and embodiment" (p. 35), by reflexively granting some agency to bodies and nature.

For this study, ecofeminist epistemology recognizes low-income mothers as subjective knowers of their urban environment or ecosystem. We can gain knowledge about the low-income urban environment through low-income mothers' experiences. According to ecofeminist theory, the data obtained from low-income mothers will be analyzed by explicating oppressive conceptual frameworks, which will then provide evidence for policy change that can turn oppressive urban neighborhoods into more viable communities, where women, other human Others and non-human nature are not oppressed. This means that for this research the focus of inquiry is on the relationships between a) the systematic oppression of mothers living in poverty, b) the urban environment including its institutions, and c) mothers' knowledge from their lived experiences of these relations.

### *Empirical Connection*

Empirical connections are those that link data concerning environmental degradation to the experiences of women, children, people of color, and the poor (Warren, 2000). For example, evidence exists that hazardous waste sites are predominantly, if not

exclusively located in or near neighborhoods of color (Bullard, 1993; Elliot, Wang Lowe & Kleindorfer, 2004; Jackson 2005). A wide range of health consequences results from poor urban planning and inadequate housing. Pesticides and other toxic chemicals have a significant effect on women's reproductive systems and children's development.

Individual compounds, such as hormone-disrupting chemicals and organic solvents, have been associated with miscarriages and cancer (DES Action Canada, 2000; Health Canada, 1997; Kleiner, 2004; McMartin & Koren, 1999; Saillenfait & Robert, 2000).

Estimates of the World Health Organisation (WHO) state that almost one-third of the global disease burden can be attributed to environmental factors, many of which are anthropogenic. "Over 40% of this burden falls on children under 5 years of age" (WHO, 2002). It has been recognized that a growing number of chronic diseases can be attributed to environmental exposure, and children, due to their developmental vulnerability, are at increased risk (WHO, 2002; Landrigan, 2001; Powell & Stewart, 2001). Children are not little adults: they have disproportionately greater exposure to environmental toxins, their metabolic pathways are immature, and "windows of vulnerability" during phases of development increase the risk of permanent disruption of developmental processes by environmental agents (Landrigan, 2001). In the Maritimes, children in chronic poverty show 30% higher rates of asthma than the Canadian average (Lethbridge & Phipps, 2005). Children's health has a greater impact on women than men, as women are largely held responsible for home health care.

Empirical connections therefore are important to reveal existing evidence about environmental effects on the health of populations, particularly the most vulnerable, as well as evidence of inadequate urban environmental planning. Empirical connections also identify gaps in the scientific literature that need to be addressed by further research.

## *Ethical Connection*

Warren (2000) offers an ecofeminist ethic that is a “care-sensitive” ethic. For Warren, any ethics needs to be care-sensitive, that is, ethical decision-making requires emotional intelligence in addition to rational intelligence, and the underlying ability to care about oneself and others. Building on Goleman’s (1995) work, Warren states that care is a moral emotion, and the ability to have empathy is one of the characteristics of emotional intelligence. Warren distinguishes between an ethics of justice and an ethics of care, though neither is sufficient to capture a “care-sensitive” ethics which incorporates both emotional and rational intelligence, neither one to the exclusion of the other. Key features of this care-sensitive ethics include an understanding of ethical theory as theory in process, the condition that ecofeminist ethics must be anti-sexist, anti-racist, anti-classist, anti-naturist and opposed to all “isms” that advance a logic of domination. An ecofeminist ethics is moreover contextualist in that ethical discourse and practice emerge differently from voices in varying historical, social, and cultural circumstances.

Narrative voice, therefore, is at the heart of moral thinking: “For ecofeminist ethicists, *how* a moral agent is in relationship to another – and not simply the nature of the agent or “other,” or the rights, duties and rules that apply to the agent or “other” – is of central significance” (Warren, 2000, p. 99). An ecofeminist ethics is thus inclusive of difference and diversity of perspectives: “It emerges from the voices of those who experience disproportionately the harmful destruction of nonhuman nature” (Warren, 2000, p. 99). This inclusiveness extends to nonhuman nature and rejects the notion that humans are totally separate from nature; rather humans are members of the ecological community. The notion of inclusiveness is significant for researchers because it ensures that voices from the margins are given legitimacy, and at the same time minimizes



reductionist bias. Research studies must therefore be representative of women, but represent diversity and not stereotype. Ecofeminist ethics rejects objectivity in the sense of a bias toward exclusion, in favor of a “better” bias which is more inclusive of diversity and context. Ecofeminist, care-sensitive ethics provides researchers with specific guidelines for the design of research about the relationship between human health and the environment. It does so by taking empirical data seriously, and by a method that includes diversity of narrative voice as well as objective scientific methods.

For my study, this suggests that policy makers should use evidence for ethical decision-making concerning healthy public policy that is informed by marginalized voices of low-income mothers. For example, Canada’s first health goal (which was developed under the leadership of the Federal Minister of Public Health) addressing basic needs such as the social and physical environment is well intended and commendable, but requires the support of research evidence that is contextualized and directly relevant to low-income mothers living in low-income neighborhoods if it is to reverse health disparities. Gender-based analysis of public policy appears to have slowed down over the past few years and “the persistence of health disparities among diverse populations of women and men suggests a postponement of the vision of a just society with health for all” (Spitzer, 2005, p. S90).

Research based on such an ecofeminist ethics can provide policy-makers with evidence that may enable them to empathize with vulnerable populations, and design programs and policies that are based on caring as part of rational intelligence. To address health disparities of socially excluded and vulnerable populations adequately, Nova Scotia needs care-sensitive public policy.

### *Historical connection*

According to Warren (2000), ecofeminists disagree about the beginning of patriarchy, and with it the domination of women and nature, much as they disagree about the bases for the alleged historical-causal connection between women and nature. Some accounts, based on archeological findings, locate the connection as far back as the invasion of Indo-European societies by nomads from Eurasia, while other writers start much later with classic Greek philosophy of Athens, and the rationalist tradition (Plumwood, 1996). Rationalism elevates humans over non-humans on the grounds of the “superior” human ability to use reason. The logic underlying the human/nature dualism also underlies gender dualism, i.e. masculine = rational; feminine = emotional, bodily and natural, hence “humanity is defined oppositionally to both nature and the feminine” (Plumwood, 1996, p. 163). Merchant (1993) starts her discussion about the historical connection between women and nature with the scientific revolution during the 16<sup>th</sup> century. Her analysis illustrates how the rise of modern science contributes to the legitimization of the destruction and exploitation of nature and natural resources, while at the same time powerful metaphors link women with nature, thus sanctioning the oppression of women within Western patriarchal societies. According to Merchant, “new interpretations of the past provide perspectives on the present and hence the power to change it” (p. 269).

An understanding that nothing and nobody starts with a sum zero, and that everyone’s circumstances are rooted in past events, makes it unethical to ignore history or personal biography. Since much depends on who is telling that history, however, it is essential to recognize that there is not only one history but many diverse histories and her-stories that need to be told with sensitivity to a plurality of perspectives of gender,

class, race/ethnicity, religion and other standpoints. Systemic injustices and oppression that have existed for generations can easily be regarded as “naturally given” and therefore interpreted as inevitable. Only a critical, historic analysis will reveal the social construction of systemic injustices and lay the groundwork for restructuring viable communities. The historical perspective for this study was provided by inviting research participants to share their biography through stories of their past as they relate to living in an urban environment, and to investigate possible evolutions of oppressive conceptual frameworks in public policy.

### *Limitations of an Ecofeminist Framework*

One of the major critiques of ecofeminism has been the charge that it is essentialist (Gardner, 2006; Harding, 2004; Hekman, 2004; Sargisson, 2001; Sturgeon, 2003; Weeks, 2004). Sturgeon (2003) defines essentialism as “the practice of making generalized claims about a group based on notions of an essential, inherent similarity” (p. 114). Essentialism, as it has been used by some ecofeminists, is a way of making generalizations about women and nature (Gardner, 2006). For example, a problematic essentializing in ecofeminism is when women are portrayed as having a special relationship to nature that men cannot have. The critique of essentialism has also been levied against those standpoint theorists who claim that there is only one women’s standpoint, regardless of other identities (Hirschmann, 2004). The problem of essentializing is that it easily precludes difference and critical analysis of differences brought about by social construction (Field, 2000; Seager, 2003; Sturgeon, 2003).

As an example of essentializing in some North-American ecofeminist writings, Sturgeon (2003) discusses the portrayal of indigenous, Third World women as the ultimate ecofeminists, characterized by an idealized, romantic notion of women integrated

with nature by virtue of their daily food gathering, subsistence farming and child-rearing practices. The East-Indian Chipko movement of women hugging trees to prevent logging, is often used as prime example in Western ecofeminist writings (Warren, 1997, 2000; Curtin 1997).

I concur with Sturgeon (2003) that this form of essentializing is counterproductive to the goal of ecofeminism, and particularly to my research questions. If the indigenous form of ecofeminism is to be aspired to, where does any solution for non-indigenous people come from? It conceptually prevents an imagination of urban problems that are addressed by my research questions. North American ecofeminism has not embraced a conceptualization of the urban environment as the “natural” environment for the majority of its populations. My question then is: What makes an urban ecofeminist, and what are urban ecofeminist practices that can be explored without essentializing women or nature? For example, some urban practices that could be considered ecofeminist practices include lobbying for the design of dense communities with schools, childcare facilities, shops and services within walkable distances; lobbying for affordable, alternative modes of transportation for low-income mothers, such as using a bike, or public transport, instead of a single family vehicle; lobbying for affordable organic food from a local cooperative or a local farmers market, and the availability of affordable, non-toxic cleaning, and personal care products. Approaches like this could then lead to critical questions about difference, such as: Who is in a position to do all these things? Why do some people use public transport, but never buy any organic food or non-toxic cleaning and personal care products? What prevents some, more than others, from adopting an urban ecofeminist “lifestyle,” and why? Is ecofeminism in the urban environment defined by material “choices”? What determines urban ecofeminism? A good starting point for any of these

questions is women's everyday and everynight (Smith, 2005) experiences of living in an urban neighborhood. In my particular study, empirical data has led my research questions to focus on low-income mothers living in low-income, urban neighborhoods.

The charges of essentialism in ecofeminism have come mainly from postmodern feminists who claim that the use of women as a category does not account for the many different identities and locations of women (Godfrey, 2005; Sandilands, 1997). However, reducing the complexity of ecofeminism to one simplistic woman-nature connection is a mischaracterization of ecofeminism (Field, 2000). Contemporary feminist analyses start with gender and include sexual orientation, class, race/ethnicity, religion, age, ability and many more categories. In its appreciation for inclusiveness, ecofeminism acknowledges variations in an individual's identity over time.

In contrast to finding new ways of non-essentializing, such as the notion of embodiment (Twine, 2001), ecofeminism has defended essentializing as strategically useful, if not politically necessary (Field, 2000; Glazebrook, 2002; Godfrey, 2005; McCormick, et al., 1998; Sturgeon, 2003; Warren, 2000). Strategic essentializing can be used to establish differences of oppressed groups in society vis-à-vis dominant groups. These differences can be based on gender, race/ethnicity, class etc. that influence peoples' social experiences and access to resources including health care and a clean environment. If people can "identify" with a certain characteristic for political reasons, essentializing can be a strategy to further the cause of a particular group in society. The more people identify with a group, the stronger their voice becomes. In this sense, strategic essentializing can be empowering.

According to nursing scholar McCormick (1998), the concepts of women and women's health have been semantically created to differentiate women's from men's

health, which has historically served as the default. Furthermore, these concepts have implications for research funding, and financial allocation of health care spending, and access to health care. McCormick advocates for a strategic essentialism that provides a theoretical ground for a political agenda of women's health activism. However, caution is advised about the danger of foreclosing the definitions of women, gender, and sex, and researchers are encouraged to "think outside the box" of current limited and limiting perspectives (p. 501).

For ecofeminism, health hazards are also environmental hazards, and illness is linked to the domination of nature (Field, 2000). According to Warren (2000), ecofeminist philosophy makes use of empirical data that provide evidence of the link between women's health and the environment due to patriarchal domination. Negative health outcomes of environmental exposures are experienced as a consequence of biology and sometimes as a consequence of social location (Seager, 2003). The human cost of environmental destruction manifests itself differently, depending on sex, gender, class, race/ethnicity and geography and it appears to cascade down the socioeconomic gradient, with marginalized and vulnerable populations feeling the effects most severely (Seager, 2003). Building on Warren's (2000) notion that there are certain material commonalities among women, Glazebrook (2002) adds that these commonalities among women are political, since women share a historical, cultural and social space.

Twine (2001) concludes that the essentialist/constructivist, or nature/nurture debate is counterproductive to the cause of ecofeminism, because it falls into the trap of dualism, instead of recognizing the interdependence of human and non-human nature. According to Twine, a postmodern understanding of nature and biology is based on a cultural/social conceptualization, that is, because knowledge is created within a

sociopolitical context, our understanding of nature is social, without acknowledging a possibility of nature having knowledge and agency itself. Twine suggests that ecofeminism might re-think embodiment as a new strategy of resistance with a new notion of essence. This notion requires the inclusion of temporality, an understanding of self not simply in dualistic terms, such as mind/body, and a definition of human essence or identity that clarifies the “embodied and ecologically embedded aspects of humanity” (p. 49). Twine supports a process theory of essence that conceptualizes essence in terms of fluidity, and in terms of the interdependency of human and non-human. This can be illustrated through the interconnections of environment and health, whereby social injustice together with unhealthy environments (which are often the result of social injustice) result in embodied health inequities (Hofrichter, 2006). Twine does not attempt though, to answer his own question, whether political movements require essentialist claims. He contends that certain strategic essentialism has a role to play, which “would be to assert that the human body is inherently fragile or vulnerable” (p. 51).

If essentializing is used strategically, it can support advocacy for public policies that are more responsive to the link between women’s health and geographies. At the theoretical level, the conceptual analysis and argumentative justification of the women-nature connection by the patriarchal logic of domination is ecofeminism’s fundamental insight underlying all forms of oppression. This insight will contribute to a better understanding of the mechanisms underlying gendered environmental health inequities. Nursing as a practice profession with responsibilities toward society, relies on both, rational evidence and moral values. Ecofeminism, in addition to its diagnostic component, offers a future oriented care-sensitive ethics that will build on the rational argumentative justification and add moral value.

### *Design of an Ecofeminist Framework*

An ecofeminist theory that can be applied to lived experiences in a way that is meaningful to the subjects of that experience must place the research participants and their experiences at the center. In this study, the center or core element in an ecofeminist epistemology represents the overlap between a) low-income mothers' systematic oppression, b) their urban neighborhood, and c) their local knowledge. In order to understand and to generate solutions to gender and environmental issues from an ecofeminist philosophical perspective, one needs to aim for the overlap of the three spheres. Because my research questions addressed issues of gender as in feminism, issues of nature as in urban environments, and issues of local perspectives as in low-income mothers' knowledge of their environment, they fall within the sphere of overlap, thus they are issues of ecofeminist philosophy.

Ecofeminism acknowledges that there is no one "woman's voice," no women simpliciter, but rather that every woman has her own distinct background and experience. As such, ecofeminism is a "solidarity movement" of shared social and political experiences (Warren, 1996). The research questions sought to explore the experience of low-income mothers living in an urban environment. Only by listening to marginalized voices "can one begin to see alternative ways of viewing an environmental problem" (Warren, 2000, p. 33). The research design was informed by the interpretive tradition and was an ecofeminist urban ethnography (to be discussed in the methods chapter) with participatory components. Thus, "objectivity" was balanced with strong narrative voices from the grassroots. Mothers were regarded as agents of knowledge, and also as experts of their own unique lived experience (actors) within their social and biophysical context. Mothers have embodied knowledge about their urban environment through everyday



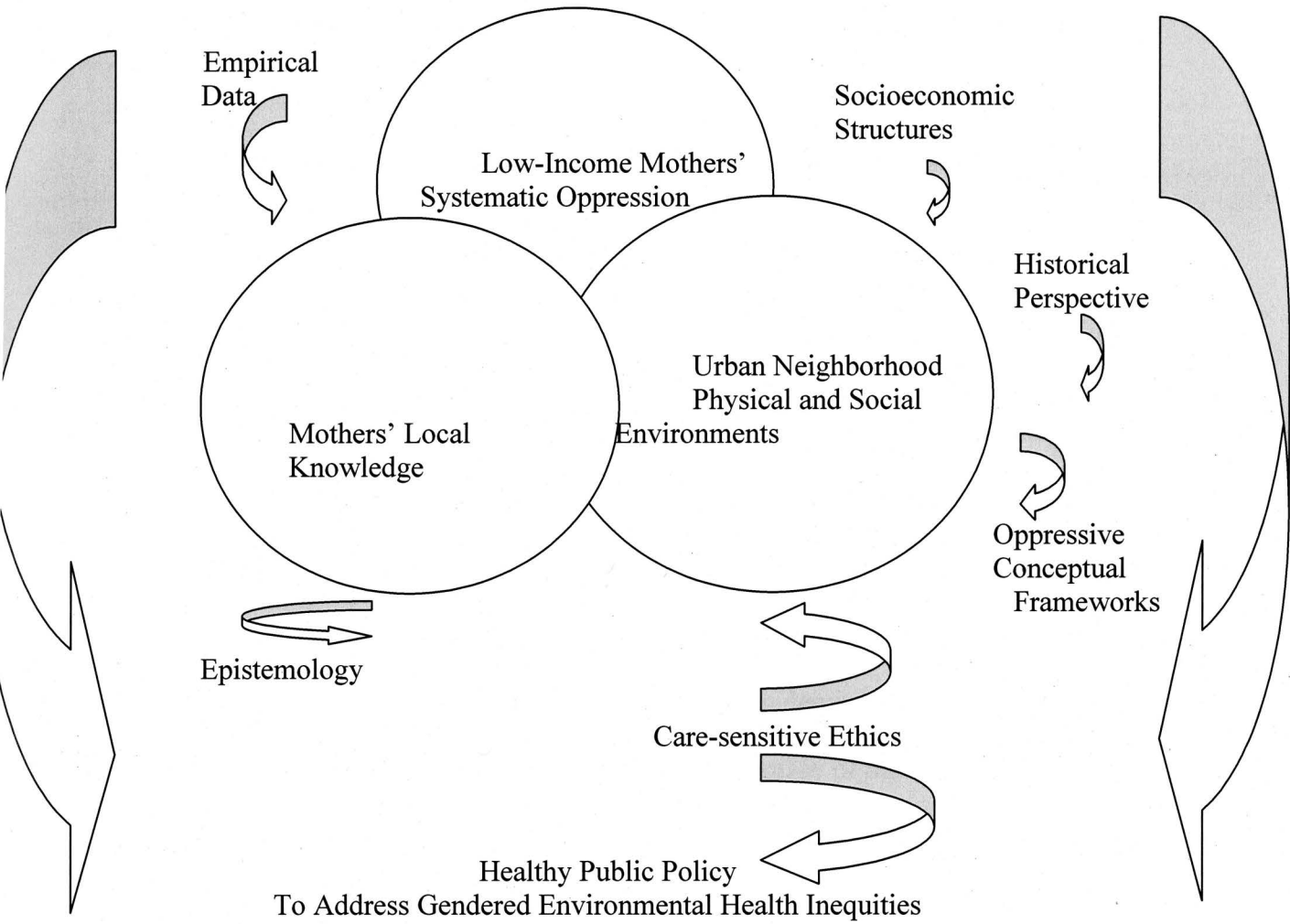
interactions in their relationship with the environment. Mothers are active players within their urban social, cultural, economic and political context. As researcher, I entered in to a relationship with low-income mothers who took part in the co-creation of knowledge about urban environmental health.

In this framework (Figure 1), ecofeminist analysis informed, and was simultaneously informed by: 1) empirical data that link environmental degradation to the experience of women, children, the poor and people of color; 2) socioeconomic connections revealing shared experiences of oppressive socioeconomic structures within patriarchal societies; 3) a historical perspective that is empowering and enlightening through critical interpretations of social programs and welfare policies; 4) a care-sensitive ethics to guide policy design with emotional and rational intelligence, and 5) an ecofeminist analysis of oppressive conceptual frameworks.

This design of an ecofeminist framework for analysis of low-income mothers' urban environmental health explains the research problem of health and environmental inequities faced by low-income mothers. It does so by addressing the dimensions of gender, particularly women's perspectives, the environment, conceptual frameworks, socioeconomics, epistemology, empirical data, ethics and history. It establishes important connections among these dimensions as they affect women and nature in conjunction. This framework supports and guides research, in its diagnostic attempts to reveal oppressive social structures, and institutional relations of low-income, urban environments, as they are experienced by low-income mothers. The framework is future oriented toward influencing healthy public policy, seeking to change the status quo, particularly by focusing on those determinants of health that are beyond the control of individuals.

Figure 1.

Ecofeminist Framework



## CHAPTER IV

### Methodology

The methodology for this study was an ecofeminist ethnography, which is a combined approach of institutional- and urban ethnography to study the relationship between health and the urban environment as it is experienced and negotiated by low-income mothers, living in a low-income neighborhood. While ethnography is the writing about culture as a methodology, and a result (Creswell, 1998; Van Maanen, 1995), institutional ethnography is a sociology for people (Smith, 2005). Ethnography as research methodology has been used by anthropologists and sociologists, but institutional ethnography has a distinct focus and has been developed later by feminist, standpoint sociologist Dorothy Smith (2005). I chose to harvest the strengths of both research approaches to address my research questions. Both methodologies aim at a better understanding of peoples' lives within everyday and every night contexts (Smith, 2005). Research is informed by philosophical and theoretical underpinnings that include epistemological orientations about the source and legitimacy of the knowledge to be produced (Denzin & Lincoln, 2005). The ecofeminist framework of my study informed the methodology.

To provide clarification about the methodology, I discuss ethnography and institutional ethnography by analyzing the strengths and tensions within and between the two approaches. Possible resolutions to these tensions are explored, specifically with regard to my research questions. I argue that an eclectic methodology informed by ethnography and institutional ethnography is most suitable to address my research questions, from a community health nursing perspective.

## *Ethnography*

Classic ethnography is rooted in naturalism and social realism to describe a culture as it occurs naturally, and to produce realistic account (Denzin & Lincoln, 2005; Gubrium & Holstein, 1997; Hammersley, 1989; Van Maanen, 1995). Examples of early ethnographies include works of anthropologists Malinowski (1922) and Mead (1928) to describe exotic, strange cultures from the location of an objective observer. These classic ethnographies were committed to objectivity, imperialism, and a belief in timelessness of cultures (Denzin & Lincoln, 2005). Since then, ethnography has undergone many changes in response to its critics (Van Maanen, 1995), and has been adopted by other disciplines, including nursing (Allen, 2004; Leininger 1985; Morse, 1994; Roper & Shapira, 2000). It is difficult, if not impossible, to find consensus about what exactly ethnography is, unlike the consensus that it is a contentious field (Holmes & Marcus, 2005; Kelly & Long, 2001; Lofland, 2002; Van Maanen, 1995). If ethnography is a way of seeing (Wolcott, 1999), a way of hearing, and describing what occurs naturally (Gubrium & Holstein, 1997), then, epistemologically, this means that we can know simply by looking, listening, and observing, as in social realism (Hammersley, 1989). But “research procedure constructs reality as much as it produces a description of it” (Gubrium & Holstein, 1997, p. 9). The result is a picture of ethnography akin to an “epistemological trial by fire” (Van Maanen, 1995, p. 2). Concerns about the role of the researcher, the participants, and representational practices abound. The way data are collected, analyzed and interpreted have become problematized. Before I discuss the tensions within ethnography however, it is useful to establish some common definitions.

According to Van Maanen (1995) ethnography is a “story telling institution” (p. 3) that continues to look for a close study of culture of a particular people, in particular

places, at particular times (Gillis & Jackson, 2002; Kelly & Long, 2001; Roper & Shapira, 2000). A working skepticism or “debunking” what is taken for granted, a commitment to close scrutiny, concern for detail, and social life as it unfolds in all its complexities and subjectivities are common threads of ethnography (Gubrium & Holstein, 1997). As art and science, ethnography describes a group or culture over time within its own context; the ethnographer documents conflicting insider perspectives, and recognizes multiple realities, or perceptions of realities, based on people’s roles in society (Fetterman, 2004). The main characteristics of ethnography are fieldwork and participant observation (Allen, 2004; Fetterman, 2004; Gillis & Jackson, 2002; Kelly & Long, 2001). Methods of ethnography include interviews, participant observation, and document analysis (Fetterman, 2004; Roper & Shapira, 2000).

For nursing scholars, ethnography is learning about people from people (Gillis & Jackson, 2002; Roper & Shapira, 2000). Its purpose is to produce local knowledge and to make explicit what is implicit within a culture to improve health and health care (Gillis & Jackson, 2002; Muecke, 1994). Culture is an abstract concept and has many varied definitions, including perceptions and ways in which people view the world (Morse & Richards, 2002). Based on assumptions of shared behaviors, values and beliefs within a group or community, ethnography can be used to explore smaller sub-cultural units (Morse & Richards, 2002). The range of ethnographies within nursing includes ethno-nursing (Leininger, 1985), maxi-, mini-, focused or particularistic ethnographies (Boyle, 1994; Gillis & Jackson, 2002; Morse & Richards, 2002), and urban, rural, and photographic ethnographies (Boyle, 1994). Despite this wide range, there are common hallmarks of ethnography including fieldwork, participant observation, reflexivity, and an emic-, or insider perspective (Boyle, 1994; Kelly & Long, 2001; Manias & Street, 2001).

The value of nursing ethnography lies in its pragmatic outcome for both theory and practice (Boyle, 1994, Wolcott, 1999). Different types of ethnographies depend on the ethnographer's epistemological stance (Boyle, 1994), such as critical (Burawoy, 1991; Thomas, 1993), or feminist (Bell, 1993; Williams, 1996), or critical feminist ethnographies (Kushner, 2005).

Since my epistemological stance is ecofeminism, the question is: What would an ecofeminist ethnography look like? The ecofeminist epistemology that I have proposed is based on an understanding that there is a connection between women and the environment. With regard to my research questions, the connection is between low-income mothers and their urban environment, a low-income, urban neighborhood. This ecofeminist epistemology holds that low-income mothers have local, tacit knowledge about their urban environment. This relates to the point where the three spheres of women, local knowledge, and environment overlap (Warren, 2000).

### *Urban Ethnography*

My research questions, from the perspective of a community health nurse, sought to understand mothers' local environmental health knowledge and how they negotiate their own and their families' health in an urban environment. To explore the everyday and everynight (Smith, 2005) experiences of low-income mothers in their urban environment, urban ethnography starts with 'what' that experience is like. An urban ethnography attempts to describe and interpret an urban social or cultural group within its context, and all its complexities from an insider perspective. Knowledge production starts with women's experiences and involves the researcher, as he or she becomes involved in participants' lives (Williams, 1996). As such, the resulting knowledge is co-created (Kaufman, 1994). This ecofeminist urban ethnography sought to produce

knowledge about the complexities of women's lives related to their urban environment, and how these complexities affect their health decisions.

My own background as a community health nurse, mother, and European immigrant influenced this knowledge production, as I took part in participants' lives during fieldwork. According to Boyle (1994) this combination of insider/outsider perspective creates deeper insight, and application of this knowledge can improve nursing care (Robertson & Boyle, 1984). This acknowledgement speaks to the reflexive character of feminist ethnography as opposed to naturalistic inquiry of early ethnographies. The reflexivity I am referring to is not so much the practice of positioning as "a sterile form of identity politics, reducing it to a formulaic incantation at the beginning of ethnographic papers in which one boldly 'comes clean'" (Marcus, 1998, p. 199). The reflexivity I am supporting and aiming for is the one put forth by Haraway (1988) in her manifesto-like writing about situated knowledge where she states: "Feminist objectivity is about limited location and situated knowledge, not about transcendence and splitting of subject and object. It allows us to become answerable for what we learn how to see" (p. 583). This then is an acknowledgement on the part of the researcher about the partiality of the produced knowledge as much as it is a responsibility for dialogue about that knowledge production. What then, are the strengths and limitations of urban ethnography that lead to an eclectic approach to combine it with, or be informed by institutional ethnography?

#### *Strengths of urban ethnography.*

Useful to my research questions were the holistic and contextual aspects of ethnography, reflexivity and its etic/emic perspectives. The holistic, contextual aspect is achieved through fieldwork and participant observation. Fieldwork has different phases and tasks (Fetterman, 2004; Gillis & Jackson, 2002; Gubrium & Holstein, 1996). Pre-

fieldwork consists of the entry phase which is an “ongoing reciprocal relationship” that has to be negotiated between the researcher and each participant (Gillis & Jackson, 2002, p. 227). During pre-fieldwork, contact with gatekeepers is made to gain entry and to establish rapport with potential participants. Informed consent is obtained from interested participants, and is negotiated throughout the entire study (Pels, 1999).

Fieldwork takes place over an extended period of time, much of it in the urban environment, in order to observe, ask questions, and collect documents and artifacts. It gives the ethnographer an opportunity to get an insider perspective on the culture or community, and spend as much time as possible with participants in their environment going about their usual lives. The researcher is the main tool for data collection (Allen, 2004; Fetterman, 2004) which requires considerable interpersonal communication skills, interviewing skills, observational skills, flexibility and respectful curiosity. Community health nurses are ideally situated, skilled and trusted through the nature of their work with people in all walks of life in public places and in people’s homes (Roper & Shapira, 2000). As such, ethnography entails much of the immersion practices that community health nurses do on a daily basis.

Participant observation is an active involvement in participant’s everyday social lives on their turf (Roper & Shapira, 2000). The purpose is to establish a relationship of trust with participants, and to write down what has been discretely observed and experienced (Emerson, Fretz & Shaw, 1995). Because of the personal nature of participant observation, rapport and trust are of utmost importance and require discussion of expectations, empathy, confidentiality and reciprocity (Kaufman, 1994). An awareness of bias is important during participant observation. As much as the researcher’s own worldview and location influences the process, participants may have their own agenda



and choose how to present themselves (Kaufman, 1994; Roper & Shapira, 2000; Van Maanen, 2002/1979, 1995). The researcher's bias is addressed through bracketing, which is the setting aside of the researcher's perspectives, experiences and judgments about the research topic (Creswell, 1998; Ely, 1991; Gillis & Jackson, 2002; Janesick, 2000). Practically, this means that the study is open and transparent about my own background, values and beliefs, by integration of reflexive practices during data collection and analysis, such as the writing of fieldnotes including my reactions to observations or conversations. As much as every participant has his or her own standpoint, so does every researcher, which is a good thing, because it adds another perspective to the development of our collective knowledge (Harding, 2004).

Interviews take place during participant observation, and may be spontaneous and informal, or they can be planned ahead of time, and take on a more formal character (Roper & Shapira, 2000). Rubin and Rubin (2005) suggest a conversational partnership for interviewing, which is characterized by an obligation to show concern for the emotional impact the interview may have on participants. Rather than just asking questions and listening, interviewers also respond with appropriate self-disclosure and empathy. Ethnographic interview questions are evolving throughout the study, but are focused on the urban environment and health. Information gained from initial interviews and subsequent analysis lead to semi-structured follow-up interviews (Rubin & Rubin, 2005).

The integrated photovoice method was intended to add another source of data and to provide a participatory component. Participants were invited to take pictures of their urban environment which was intended to give them a sense of ownership as participants in the study (Wang & Burris, 1994). The goals of photovoice are to enable participants to

record and reflect their community's strengths and concerns, to promote critical dialogue by discussing the pictures, and to reach policy makers (Wang and Burris, 1997). The physical context is an important component of an urban ethnography, and photographs taken by participants add value and richness to the study. Taking pictures may be a preferred method for women who are less verbal or articulate in their communication. These photographs offer another dimension of participants' perspectives that may otherwise be lost, and they can be an ideal way to attract policy makers' attention.

Document analysis adds to the holistic picture of a culture and can be used as an additional source of data for triangulation with interviews and participant observation to establish validity and reliability (Roper & Shapira, 2000). Of particular interest for this study were institutional policies related to public housing, transport, infrastructure and land-use planning, as they relate to urban neighborhoods. According to Smith (2005) people's everyday lives are coordinated by institutions and their policies. Therefore, the specific document for analysis was identified based on the information obtained through interviews and participant observation. The public document chosen was the *Day Care Act* of Nova Scotia because the absence of regulated childcare was a major issue identified by participating mothers.

Fieldnotes were written throughout the entire fieldwork period and consist of observations, impressions, experiences, hunches and ideas. They also contain information about places and times of interviews, meetings, physical locations, and maps (Emerson, et al., 1995; Gillis & Jackson, 2002; Roper & Shapira, 2000). Fieldnotes are invaluable for data analysis (Emerson et al., 1995).

In summary, the strengths of urban ethnography to address my research questions include the nature of the relationship between researcher and participant as negotiated

over an extended period of time that allows for an insider perspective of the culture in its natural environment. Ethnography is an ideal methodology for community health nursing research because it captures the complexity of cultural groups and provides a variety and range of knowledge necessary for the holistic work of community health nurses (Schulte, 2000). Ethnography provides insight from individual accounts, and social, structural aspects of a culture (Porter & Ryan, 1996). Reflexivity through transparency concerning the researcher's own values and beliefs, together with an appreciation of reflexivity, contributes a different perspective to knowledge development. Ethnography is an evolving process, largely driven by the information participants provide from the beginning. It is a holistic, flexible, and interactive research process that allows for a variety of data, including participant observation, interviews, photovoice, and documents. Triangulation of information collected from a variety of sources, with a variety of methods, lends credibility to the study findings (Gillis & Jackson, 2002; Ulin et al., 2005). Ethnographies are methodologically pluralistic (Allen, 2004), and can be tailored to the epistemological stance of the researcher, as its evolution has shown. However, the limitations of ethnography need to be addressed as well, which relate more to the underlying epistemology rather than to technical aspects of data collection (Lowenberg, 1993).

#### *Limitations of urban ethnography.*

Essentializing in feminist ethnographies is of concern to Visweswaran (1997), who suggests allowing other constructs beyond gender, such as race and class, to enter the portrait of culture, and to explore difference within privileging gender at the centre of analysis. She advances the idea to move from "women like us" to "women unlike us vis-à-vis racial, sexual, or class positioning" (p. 596). From an ecofeminist perspective,

ethnography's essentializing is a political strategy to end the dual oppression of women and nature within patriarchal social systems.

Key tensions within the ethnographic project, however, are related to the triple crisis of representation, legitimation, and praxis (Denzin, 1997). According to Denzin, the underlying assumptions of this crisis are that qualitative research cannot capture lived experience, because experience is created in the social text (research reports) by the author. The gaps between reality, experience, and expression amount to the crisis of representation. The post-structural notion that language and speech do not mirror experience or reality, leads to the legitimation crisis, questioning the authority of the text itself.

Responses to this crisis include critical post-structuralism's call for a new set of criteria stressing subjectivity, and emotionality, whereby the question is not validity, but authority and legitimation (Denzin, 1997). Thus, politics and values will govern future science instead of objective epistemology. This post-structural science "seeks to understand how power and ideology operate through systems of discourse" (Denzin, 1997, p. 10). Politics and values are central notions in feminist ethnography (Williams, 1996). Knowledge production is a political endeavor to further one cause or another, and is based on the values of those who participate in the co-production of knowledge (Harding, 2004; Smith, 2005; Williams, 1996). The project of ecofeminism is to expose how the logic of domination perpetuates "legitimate" domination of women and nature through value-hierarchical thinking and value dualism (Warren, 2000). Values that need to govern new science include those of an ecofeminist care-sensitive ethics (Warren, 2000), as described previously. The implications for this research included the establishment of a collaborative relationship between researcher and participants over an extended period of

time in the field to gain an insider perspective (Creswell, 1998). Ecofeminist epistemology established the mothers (in my study) as the experts of their own experiences. The resulting co-production of knowledge between the researcher and participant has limited generalizability, but more depth and greater authority by making the voices of mothers heard.

In addition to issues of politics, values and praxis in this ethnography are the questions of depth, and how to guide the inquiry into ‘how’ women ‘negotiate’ their experiences. In order to explore why and under what circumstances these experiences are created, the inquiry needed to move beyond observation or ‘what’ questions. In search of a way to gain more depth, I will briefly examine ethnomethodology as one approach to move beyond ethnographic description (Garfinkel, 1984/1967). Ethnomethodology asks both ‘what’ and ‘how’ questions to explore what is going on, and how social order is constructed (Garfinkel, 1984/1967, 2002, 2006; Gubrium & Holstein, 1997; Have, 2004). This is accomplished primarily by listening and analyzing how language produces reality and more broadly, by exploring social rules by violating them. Here, ethnography is concerned with communicative activity; it is “talk about talk” (Gubrium & Holstein, 1997, p. 8) and interest in how theorizing is done (Sharrock & Anderson, 1986). A prime example is the convict code described by Wieder (1974) in a study of conduct of members in a halfway house. In addition to describing the code, Wieder explores how the code “promotes motivations and sanctions that lead to deviance” (Gubrium & Holstein, p. 47). For example, the way convicts would construct their discourse encouraged deviant behavior while residing in the halfway house.

Moving between ‘what’ and ‘how’ is an important analytical task and is accomplished by an ongoing reflexive process during analysis to capture *what* the reality

for participants is like, at the same time recognizing *how* that reality is constructed by participants within the present context. Gubrium and Holstein (1997) refer to this process as “analytic bracketing” to allow for different questions about social reality. It is similar to looking for the strange in the familiar. In other words “analytic bracketing” demands a critical questioning of familiar social processes and rules that are taken for granted. This term can be misleading however, and is not to be confused with the term ‘bracketing’ as it is used in the qualitative methods literature to describe the setting aside of the researcher’s own biases, perspectives, experiences and judgments about the research topic, so that all the forms of data can be treated equally for inspection (Creswell, 1998; Ely, 1991; Gillis & Jackson, 2002; Janesick, 2000). In my search for a suitable methodology to explore how low-income mothers negotiate their everyday experiences, I was intrigued by ethnomethodology for its focus on the taken for granted and rather mundane aspects of daily lives (Lynch, 2004; Have, 2004), and its ‘analytic bracketing’ strategy.

My succinct analysis of ethnomethodology merely portrayed however, a stop along the way of finding a suitable methodology. It is an example of how ethnography can move from description to interpretivism and expand its questions. Ethnomethodology is a subfield of sociology that studies both methodology and methods themselves (Lynch, 2004; Have, 2004). To address my research questions adequately, ethnomethodology would have been too narrow in the sense that its main concern is with communicative activity and the methods people use to produce social order (Lynch, 2004; Have, 2004). In order to answer my research questions and to include the environment as a constituting element in women’s urban experiences, my search for a suitable methodology brought me to Institutional Ethnography (Smith, 2005).

## *Institutional Ethnography*

According to Dorothy Smith (2005, 1999) institutional ethnography is a social theory and at the same time a method of inquiry that explores relationships between social institutions and people, from the people's perspectives. Ethnographers learn from people by assembling different perspectives, and investigating how people's activities are coordinated by institutions. The investigation moves beyond what people know, to how their doings are connected to others' doings and the relations of rulings. As such, the inquiry moves from the individual, to others, and to institutions. Institutional ethnography is a "radical" departure from mainstream sociology, building on Marx, ethnomethodology, and feminism (Smith, 2005, p. 2). Institutional ethnography holds that people's actions are coordinated and concerted by something beyond their own motivation and intentions; it opens up aspects of power operating in social life that are otherwise hidden (Campbell & Gregor, 2002).

Whereas ethnomethodology studies how people in their talk constitute social order, Smith (2005) explores how people's relations with institutions are textually mediated across time and space; hence, its suitability for document analysis. Knowledge is co-created between the researcher and participant, because the ethnographer's inquiry moves beyond what people know about their own experiences, to discover how their doings are connected to others' doings. Institutional ethnography is a different sociology that does not start with social theory that transforms people into objects, but is a method of inquiry that starts with people's experiences. According to Smith, the standpoint of this "sociology for people":

does not identify a position or a category of position, gender, class, or race within the society, but it does establish a subject position for institutional ethnography as

a method of inquiry, a site for the knower that is open to anyone (Smith, 2005, p. 10).

This standpoint creates a point of entry from which the inquiry proceeds, and is located in a concern people have in their relationship with an institution. It seeks to explicate what is implicit in the relationship between people and institutions, whereby the strangeness is made possible by problematizing the everyday world of participants (Gubrium & Holstein, 1997; Smith, 1987). To illustrate the everyday/everynight world as problematic, Smith (2005) provides an example of a mother in an urban environment: When it comes to knowing her way around, where the bus stops, where to buy vegetables and milk, how to get things done, she is an expert. It is another matter, however, when it comes to the form of organizations that “constitute the responsibility of the municipal government for the state of the streets, the sidewalks, the standards of waste disposal and so on” (p. 24). These are the largely unseen social relations that coordinate people’s lives. This is the point where the researcher’s expertise in critical policy document analysis and the mother’s expertise of the local environment interact to co-create new knowledge.

Smith (2005) explains institutional ethnography by contrasting it to a conventional sociological inquiry, and to ethnomethodology. The sociological inquiry in this example is organized along theoretical concepts of race and class, to investigate ghetto schooling. Institutional ethnography however, would start with the experiences of people who are black or live in poverty and how they are affected by ghetto schooling. Ethnomethodology, similarly, starts with people’s experiences at the micro level and proceeds to the macro level of society. It is at the macro level where ethnomethodology differs from institutional ethnography, in that ethnomethodology uses theory for its analysis of the system, whereas institutional ethnography does not use theory for analysis.



According to Smith, institutional ethnography does not have prior commitments to concepts such as domination or resistance to be used in analysis (although Smith acknowledges herself that the development and approach of institutional ethnography is informed by notions of domination related to class, race, and gender). In Institutional ethnography, the system is explored ethnographically rather than theoretically. This is achieved by investigating the texts of institutions, asking how social experiences came to be as they are.

At this point, institutional ethnography makes use of a theory of language as a medium for people's thoughts, ideas, and ideologies. Language in the form of text, therefore, is central to institutional ethnography "because the distinctive forms of coordination that constitute institutions are *in* language" (Smith, 2005, p. 94). By analyzing an institution's texts, institutional ethnography can describe how they facilitate the interest of the institution, rather than the interests of people. The disjuncture between people's experiences and the way these experiences are portrayed in texts of institutions is explored. It can reveal that people's experiences are made to fit into texts of institutions. For example, a children's hospital admissions form may list the category of "father's name" and "mother's name." This then, assumes heterosexual relationships of parents, and automatically excludes different realities and experiences, such as homosexual parent families, or one-parent families; or the assumption that next of kin has to be an opposite sex partner. Within the context of community health nursing, the omission of the physical environment in any health assessment would be questionable, as much as any act of assessment that follows the "text" (institutional assessment form), instead of listening to the person's story. Standardized texts of institutions then, by naming or silencing, include and exclude, and regulate people's lives from the perspective

of the institution, which translates into an exercise of power over people's lives (Wright, 2003; Rankin 2003). This operation of power over people's lives is mostly invisible. Institutional ethnography's crucial theoretical feature is the way in which it conceptualizes the operation of power in a way that it can be discovered in people's everyday actions, and/or re-actions vis-à-vis institutions (Campbell & Gregor, 2002).

*Strengths of institutional ethnography.*

The strengths that institutional ethnography brings to my methodology include its starting point from women's experiences, and the focus on the relationship between low-income mothers and urban institutions that coordinate their everyday/everynight experiences. Institutional ethnography investigates normative texts of institutions (documents), to uncover how they regulate people's lives from people's perspectives. Through this perspective, the applied norm, which is portrayed as value-free and objective, is uncovered as influenced by the worldview of the dominant group or culture in our society, that is largely based on white, male, able-bodied, heterosexual, Christian, middle-aged, middle-class people. In the absence of social diversity and moral regard for the environment, institutional texts and their coordinating functions are exposed as biased. Institutional ethnography discovers "far reaching measures of social domination," such as how welfare institutions are redesigned to fit neo-liberal politics (Smith 2005, p. 220).

Institutional ethnography relies on people's own knowledge and, in collaboration, produces "descriptions and explications of what people know, by virtue of what they do, that ordinarily remains unspoken" (Smith, 2005, p. 210). The results of institutional ethnography can be used by activists to make visible the invisible that permeates their everyday/everynight lives. From a health promotion perspective, institutional ethnography seeks to uncover that which is controlling people's lives, so that it can be

changed and instead increase people's control over the determinants of their health. This diagnostic and future-oriented approach is also complementary to the ecofeminist framework, in that it seeks "changes to practices that oppress or subordinate" (Campbell & Gregor, 2002, p. 101).

*Limitations of institutional ethnography.*

Smith's eclecticism, in that she refuses her work to be grounded completely in a previous tradition, allows her to avoid criticism of theoretical nuances (Hill Collins, 1992). However, institutional ethnography has been critiqued by Hill Collins for its emphasis on text-based information, neglecting a whole culture of oral tradition, produced by historically marginalized groups. Smith's effort to transform objectified sociological knowledge is biased toward literate knowledge controlled by bureaucratic organizations. According to Hill Collins, alternative traditions of narrated local knowledge exist and can supplement Smith's sociology for people by introducing notions of diversity. In addition to text-based discourse, hegemony is also established through mass media such as TV, advertising, music, art and design which can have extensive power over everyday lives.

The issue of reflexivity does not feature in institutional ethnography. "The research design does not address or control the direct interpersonal relations among those involved" (Campbell & Gregor, 2002, p. 68). The limited attention to values and beliefs of the researcher implies an assumption that the researcher undertaking institutional ethnography will automatically adopt Smith's political position, and that it is possible and intentional to take up a position outside the hegemonic discourse. At the same time there is no discussion about the participant's agenda, and how they choose to present themselves (Van Maanen, 2002/1979). In a way it assumes that participants are apolitical and not aware of the hegemonic discourse, or would automatically oppose it.

Perhaps the absence of discussions about reflexivity is related to the atheoretical stance of institutional ethnography in that it rejects use of a theoretical framework.

The insistence of Smith (2005) against the use of theory for analysis in institutional ethnography is critical, and the main tension for my study, as I have proposed an ecofeminist framework. As such, the following is not a critique of institutional ethnography in general, but in particular, as it relates to my study.

Why is an ecofeminist theoretical framework necessary to address my research questions? In order to communicate my ideas about this ethnography, I cannot start “intellectually empty handed” (Robertson & Boyle, 1984, p. 45). A theoretical framework reveals the researcher’s epistemological stance, and gives direction to the research project. The theoretical framework reveals the standpoint of the researcher, which is important information for the consumer of research to ascertain how conclusions were drawn. And “of course, institutional ethnography does not proceed without theory” (Smith, 2005, p. 50). For Smith however, exploration and discovery are central to institutional ethnography, and even though we cannot avoid being influenced by preconceptions in our analysis, she proposes that the ethnographer shows a “commitment to learning from actualities as they are experienced and spoken or written by those actively involved in them” (p. 50). Institutional ethnography, as a radically different sociology, aims at discovering knowledge of society from the people’s perspectives, and does not proceed from theory.

The purpose of my study, however, was not to produce a theory of society. The purpose of my study was to explore low-income mothers’ environmental health knowledge, and how this affects their own and their families’ health decisions. My intentions were to contribute knowledge to better understand gendered environmental

health disparities. Smith's (2005) main contribution to my study is her idea of ethnographically exploring institutional texts that come into play as shaping everyday experiences within an urban environment. As such I used her idea for my document analysis to explicate the invisible relations between women and institutions that coordinated their urban lives. It was a different way of looking at a text. The part of institutional ethnography informing my study was its method of inquiry. The data collected by this mode of inquiry was analyzed according to the ecofeminist framework. In addition to looking at institutional texts and how they regulated or coordinated people's lives, the text was analyzed for evidence of the logic of domination.

The social ontology of institutional ethnography holds that everyday life is constituted by people whose activities are coordinated in specific ways, which means that the inquiry needs data that captures detailed accounts of daily activities (Campbell & Gregor, 2002). This ontology includes people and their social activities. The context within which people's activities are coordinated does not play a major part. Social activities concerning the physical environment are not specifically addressed by Smith (2005). In one example about expert knowledge, Smith refers to a woman in the urban environment as "embodied knower" when it comes to knowing her way around the neighborhood to get things done (p. 24). Even though this example is meant to illustrate a woman as expert knower of her urban experiences, it opens up the possibility to include inquiry into the relations between women and their urban environment as coordinated by municipal institutions. This inquiry, however, was strengthened by an ecofeminist framework directing the focus toward the physical environment.

### *Concluding Solution: An Ecofeminist Ethnography*

The combination of various methodologies and theoretical approaches is not new to nursing. Rather, it has been supported to capture the complexities of nursing work (Allen, 2004; Henderson, 1995; Maggs-Rapport, 2000; Manias & Street, 2001; Schulte, 2000). In particular, community health nursing research requires theoretical frameworks that are “based on a view of health that acknowledges social political, and economic factors, [...] and to be constantly adaptive to the changing milieu of the clients and communities” (Schulte, 2000, p. 9). Smith (2005, p. 3) writes about her own work as “open to being changed, expanded on, [and] improved as research goes forward.”

To explore low-income mothers’ environmental health knowledge, and how they negotiate their own and their families’ health in an urban environment, I designed a methodology based on ecofeminist epistemology. The result is an urban ethnography, informed by institutional ethnography, purposefully guided by an ecofeminist framework. I call this an ecofeminist ethnography approach. It has been designed with a social justice purpose in mind, which is to address gendered environmental health inequities. According to Lincoln and Denzin (2005) the next generation of qualitative research will reconnect social science to social purpose, whereby it is no longer possible to demand methodological conformity or orthodoxy. Therefore, this approach does not claim to be perfect, rather it is a work in progress.

This ecofeminist ethnography enabled a reflexive research approach between participants and myself, to create a holistic, context sensitive portrait of mothers’ everyday urban experiences from an insider perspective. However, the research questions required more depth, and an inquiry that moves beyond the initial ethnographic portrait. Institutional ethnography’s method of inquiry informed the approach to document

analysis, particularly institutional texts and other relevant discourses, and how they coordinate people's experiences. Institutional ethnography provided the anchor for ecofeminist analysis of conceptual frameworks underlying the text itself. An ecofeminist analysis continued the inquiry into a potential logic of domination inherent in institutional policy that includes gender, race, class, and importantly, the physical environment. Again, an ecofeminist framework was essential to explore the connection between low-income mothers and their physical environment. Neither urban ethnography, nor institutional ethnography on its own, or in combination, would have been able to fully address my research questions. Both approaches combined and framed, however, by ecofeminism to become an ecofeminist ethnography proved to be effective in addressing my research questions.

## CHAPTER V

### Research Design

#### *Research Setting*

The community of Spryfield is a sub urban neighborhood of the Halifax Regional Municipality (HRM). Halifax is the provincial capital of Nova Scotia (population 913, 465) which is one of the Atlantic provinces of Eastern Canada. The population of HRM is approximately 390,000 and the population of Spryfield is approximately 10,500 (Community Counts, 2006). Spryfield has a high population of low-income households (Community Counts, 2006), and the second highest proportion of African Nova Scotians within HRM (Community Counts, 2009). In comparison to HRM and Nova Scotia, Spryfield has more young people and lone-female parent families (Teplitsky et al., 2006). In Spryfield, compared to the rest of HRM or Nova Scotia, the proportion of rented housing is larger, the average monthly rent is lower, and more people rely on public transport and walk to work (Teplitsky et al., 2006). Spryfield has a community centre with a pool, library and meeting rooms, a single parent centre, a shopping mall, a Lions Ice Rink, four schools and six churches. The major thoroughfare, Herring Cove Road, is lined by businesses, single family homes and apartment buildings. One particular section of apartment buildings is referred to by local people as the “500 block” and consists of a row of utterly dilapidated rental units. Within a short walking distance and set back from the main road is Greystone, a public housing community of two storey row-houses situated on a hill. Spryfield is ecologically diverse with hills, lakes, rivers and parkland. Residents describe themselves as a close-knit community, friendly and diverse. “Residents are offended by Spryfield’s image as a violent and crime-ridden place, and the majority feel that Spryfield is safe” (Teplitsky et al., p. 35).



### *Participants, Purposive Sampling and Sample Size*

Purposive sampling evolved and depended upon the richness of data obtained as well as the availability of key informants. Based on the assumption that mothers are very busy and that it would be challenging to get a time commitment from mothers for repeated one-on-one interviews, participant observation and photovoice, I anticipated individual, in depth interviews and photovoice with 10-15 participants of whom 2-3 would participate as key informants for a set of three additional interviews. The upper limit for recruitment of key informants was 5 participants. Over the course of 19 months I recruited 11 participants including 4 key informants who participated in the photovoice part of the study. As it turned out, no women were willing to engage in participant observation, as will be discussed later.

The inclusion criteria were that participants would be 18-35 years of age, low-income mothers including racial/ethnic minorities. The study included mothers of young children, 5 years of age and under. The choice of this participant group was based on the assumption that mothers of young children would have a vested interest in environmental health. Based on the principle of justice and fair distribution of benefits of research (TRI-Council Policy Statement, 2005) this study aimed to include populations disadvantaged due to income/class and race/ethnicity.

Specific inclusion criteria were: English speaking, mother of at least one child 5 years of age and under, living on income assistance or self-identified as low-income, and residing in either public housing or low-cost private housing in the Spryfield area, for at least one year prior to the first interview. Low-income was defined by the low-income cut-off (LICO), or poverty line for a single parent, one child family in Halifax's Regional Municipality in 2004 which was \$21,077 (Ross, 2006). Rather than asking potential

participants about their exact income however, residents and professionals of community agencies in Spryfield recommended asking about a range of income, such as: “Is your income in the range of \$20-25,000 annually, or is it above or below this range?” In order to qualify for inclusion, the income had to be below this range. I asked the questions to ascertain possible inclusion at the time when I explained the study to interested potential participants. One key informant’s youngest daughter was already seven years old; I decided to include her as a participant, as she had lived in the community for several years with her children, and at that point in time I had only managed to recruit 5 mothers.

### *Recruitment*

After ethics approval from the Dalhousie University Research Ethics Board in August 2007, recruitment was facilitated through a recruitment poster/handout (Appendix A/B) that was posted in the community and in agencies including the Single Parent Centre in Spryfield (which serves any parents in Spryfield and beyond), the Captain William Spry Community Centre, Hand in Hand (second hand store) and in the South Centre Mall, Spryfield, Halifax. After being contacted by interested, potential participants, I arranged for a personal meeting, at a time and place of convenience to the participant, to provide detailed information about the research study and to discuss any questions the participant would have. During that initial meeting I gave the participant written information about the research study (Appendix C/D) and the questions I would ask (Appendix E). After this meeting with the potential participant, I offered time to consider whether to participate or not, and contacted the person after 2 days to ascertain informed consent. If the person agreed to participate in the study, I arranged the date and time for our meeting.

Participants' consent was negotiated on an ongoing basis throughout the study, particularly before every new interview or meeting (Kushner, 2005; Pels, 1999). No more than 3 follow up contacts were made to participants to request their participation in repeated interviews, participant observation and/or photovoice method.

In August 2008 a renewal of ethics approval from the Dalhousie University Research Ethics Board was obtained in order to continue recruitment and to increase participant numbers. The remuneration for participation was increased from \$20 to \$40; and the recruitment poster was simplified. At this time, I asked for single personal interviews only (Appendix B).

### *Pre-fieldwork*

Prior to fieldwork there were a number of geographic, social and practical factors to consider (Gubrium & Holstein, 1997). I gained access to the community through gatekeepers and well known residents, by participating in community events and by doing volunteer work at the community centres, to show my face and gradually let people become more comfortable around me. This preparatory entry phase, which began in March 2006, provided the opportunity to listen to what was important to people's lives. Pre-fieldwork networking with trusted community members proved invaluable for the recruitment of participants. Most participants contacted me only after one of the gatekeepers or trusted service providers informed them about my study.

In addition, Ulin, Robinson, and Tolley (2005) recommended talking to policy makers to find out what aspects of the research could be relevant to their work. To this end, a meeting with the senior director, population health, Nova Scotia Department of Health Promotion was held in April 2006. The meeting revealed that there is a current interest in research that focuses on health disparities.

Prior to data collection, “introspection” or an acknowledgment of my own background and perspectives was necessary (Emerson, et al., 1995). My social and cultural position as a white, middle-class, European immigrant is acknowledged, because it creates unequal relations of power. I introduced myself to potential participants as a community health nurse educator and mother, and doctoral candidate at Dalhousie University. I also informed them about my volunteer work in the community, and my familiarity with many services as I was residing in a nearby community. During the research period I entered into a “conversational partnership” with the study participants (Rubin & Rubin, 2005). For example, some of the mothers would ask personal questions about my children.

### *Data Collection*

A combination of qualitative methods of data collection allowed for depth as well as breadth of information and analysis, and an appreciation of the subtleties of the everyday complexities of low-income mothers’ lives. All data were collected by me as the researcher over a period of 19 months. To gather comprehensive data, triangulation was used by collecting data from a variety of sources and in multiple ways, including repeated, individual interviews, casual participant observations, document analysis and the newer photovoice method (Ulin et al., 2005). Following the tradition of visual sociology, the method of photovoice has been developed by Wang and Burris (1997) and builds on notions of critical consciousness, feminist theory, and documentary photography. Based on the principle of sharing decision-making power with research participants and the added value of an “insider’s” privileged perspective, the photovoice method aimed to give a voice to people who ordinarily might not be heard. This voice was intended to reach policy makers (Wang & Burris, 1994).

## *Personal Interviews*

According to Smith (2005) an institutional ethnography starts from women's standpoint in local actualities of everyday/night. In-depth, unstructured, conversational interviews between September 2007 and March 2009 elicited mothers' knowledge and perspectives from their individual points of view (Kaufman, 1994). I had hoped to conduct 4 interviews per participant within a 12 month period, each between 1-2 hours long, depending on the participant's time frame and situation (Ulin et al., 2005). The majority of participants (seven) were interviewed twice for 1-2 hours each time, and four participants agreed to only one interview, bringing the total number of interviews to 18. Personal interviews were held in a location of the participant's choice which included their home, the Single Parent Centre, and the community centre. As suggested by Rubin and Rubin (2005) the information gained from initial interviews and subsequent analysis informed the semi-structured follow-up interviews. All interviews began with informal conversations to make participants as comfortable as possible, including topics mentioned by women with whom I had had previous conversations during my orientation phase to the community. Probes were used to invite participants to expand and give richer descriptions. Strategies included asking for elaboration, attention to detail and issues that appear mundane to the participant, as well as asking for clarification. The initial interview focused on broad, exploratory, non-threatening questions such as:

- Please tell me about your neighborhood
- How long have you been living here? (Why have you moved here?)
- What does a typical day look like for you?
- What are some of the things you like and don't like about your neighborhood?

- How do your children like the neighborhood?

As anticipated, the questions triggered a conversation about the women's experiences in their neighborhood, and women's narratives revealed focus areas for more detailed questions. For further clarification, the following probes were used:

- How does your income status affect how you feed your family?
- When you need to get groceries, how do you get to the store?
- How do you usually go about cleaning your home, or doing the laundry?
- Where do your children usually play?
- What kinds of activities do they do?
- Do they have friends in the neighborhood?
- How do your children get to school/daycare/sitter?

Three participants, recruited toward the end of data collection in the winter of 2009, were asked questions to validate the study findings and were given the opportunity to add to or contradict the findings. All interviews were audio-tape recorded and transcribed verbatim. Additionally, fieldnotes were written immediately after the interviews as well as a diary or log kept throughout the entire study to record context related information, impressions, ideas and hunches that would aid in refining future interview questions and supported data analysis.

During the initial interview, demographic data were collected. In conversation, information including age, years of formal education, occupation, household income, cost of housing, whether the family lived in public or private low-cost housing, number of children 5 years of age and under in the household, number of other dependent persons living in the same household emerged, otherwise, I asked specific questions.

Information about neighborhood infrastructure including bus routes, bus-stops with and without shelter, grocery stores, community centres and resources, libraries, clinics or doctors' offices, pharmacies, playgrounds, sidewalks, parks, etc. were recorded on a map collaboratively between the women and me. To maintain confidentiality, participants' exact location of residence was not recorded, only the general area. The mapping exercise served well as an ice-breaker and validated the geographic boundaries of the mothers' daily activities in their neighborhood.

Follow-up interviews were intended to provide further clarification and insight into the mothers' negotiations of health in Spryfield. The content focused on themes of income assistance, childcare, transportation, nutrition, and everyday family health practices.

### *Participant Observation*

I established relationships based on trust and respect in order to be able to discretely observe mothers' interactions during our interviews. The goal of participant observation was twofold. Firstly, to participate in daily routines and to develop relationships between the researcher and participant, and secondly to write down what had been observed and experienced (Emerson et al., 1995). However, none of the participants was interested in the data collection option, where I would actively participate in their daily routines, such as grocery shopping. This might have been due to a perceived intrusiveness in very difficult and private decisions of how to secure food for their families with limited financial resources under the eyes of a nurse researcher. Mothers might have felt a need to justify their consumer choices to someone from a different social location. Rather, the participant observations were limited and took place during scheduled personal interviews. The outsider or non-reactive (Ulin et. al., 2005)

observations took place during my own grocery shopping in the neighborhood, as well as my volunteer work and participating in community events. Participant observations provided insights into the context of mothers' lives and created an opportunity for me to explore, albeit to a limited extent, the lived experience of mothers, and the meaning they derive through as close to an "insider's" perspective as was possible. Field notes capturing participant observations were taken immediately following the interviews.

### *Photovoice*

In contrast to the researcher taking photographs, the photovoice method places the camera into the hands of participants. The power of deciding what images to photograph clearly rests with participants. According to Wang and Burris (1997), the goals of photovoice are to enable participants to record and reflect their community's strengths and concerns, to promote critical dialogue by discussing the pictures, and to reach policy makers. In this study, participants were invited to take pictures of their urban environment. Participants were asked to portray their neighborhood through their own eyes, so that outsiders, such as policy makers, could get a better understanding of their concerns about the good, the bad and the ugly, and about its effect on family health. I explained to participants that it was important that they decided what and how they would like policy makers to get visual insight into their urban neighborhood.

The 4 participants who agreed to take part in the photovoice method were given a disposable camera for 24 exposures and had 4 to 6 weeks to take pictures. An instruction sheet with information about the kinds of pictures, the timeframe, and the handling of the camera was provided (Appendix F). I met with the participants to pick up the camera for development. This was also an opportunity to maintain contact and build research rapport. All four women shared with me that taking photographs of their neighborhood was an



enjoyable experience for them. None of the participants reported any problems with the photovoice method. Upon reflection, the photovoice method appears to be suitable for mothers with young children as their daily activities take them to playgrounds in the neighborhood making the activity of taking pictures of their neighborhood environment less conspicuous than it might otherwise be perceived by other residents. It is also an activity that allows involvement of children. Participants took between 22 and 27 exposures each with their disposable cameras. The majority of photographs were of very good quality with only a few too dark to recognize images. After the pictures had been developed women were asked to choose some pictures for discussion, to tell stories about the pictures and to discuss their meaning and importance, and if possible to formulate themes (Wang & Burris, 1997). The discussion portion of the photovoice method was audio-tape recorded and transcribed verbatim. Fieldnotes were also taken immediately after the discussion.

During our discussion of the photographs it became clear that the conversation about their neighborhood was more relaxed than during our initial interview. Participants appeared to be more at ease, which may have been related to an established rapport, and also that they had an opportunity to talk about their neighborhood from their perspective. In this sense the conversation was directed by the pictures they took and wanted to discuss. As it turned out, however, most of the pictures fit into the themes we had discussed during our initial interview and revealed little new information about their neighborhood. As a methodological issue, it is worth considering whether the outcome might have been different if I had asked the women to take the pictures first, before our initial interview which might have influenced the participants' choice of illustration. For

this reason I decided to use the photographs as illustration of themes and did not further analyze each picture to explore additional themes.

Before women started to take pictures, they were coached individually about the use of the camera and about issues of privacy, and cautioned to avoid pictures where people could be identified. If people could be identified on a photograph their faces were blacked-out. After our discussion, women chose which pictures could be presented to policy makers and/or used for publication. (Appendix G)

### *Document Analysis*

The goals of this research included reaching policy makers and providing context-sensitive evidence for the design or modification of public policies that are supportive of health decisions and respond to everyday realities of disadvantaged, urban communities, particularly low-income mothers. Document analysis was guided by the ecofeminist framework's dimension of oppressive conceptual frameworks. The methodology to explicate any oppressive conceptual frameworks in public policy was informed by institutional ethnography. According to Smith (2005) institutional policies coordinate people's everyday/night lives. By assembling participants' different perspectives about their neighborhood, the inquiry moved from individuals, to others, and to institutions, to explicate how institutions have power over, and coordinate people's activities. As anticipated, interviews, photovoice interviews, and participant observations provided specific information about the effects of a relevant public policy that was retrieved and analyzed. Consistent with institutional ethnography, the decision as to which public policy needed to be analyzed was informed by participants' experiences. In this study, the identified public policy for analysis was the *Day Care Act* of Nova Scotia. The reason why the *Day Care Act* was selected for analysis was participants' identification of

the lack of regulated child care in the neighborhood of Spryfield at the time of data collection as a major concern shaping their everyday experiences

The scope of the document analysis for this study was limited to the analysis of one main priority area of concern to the participants, which was the lack of regulated childcare. The identified policy was analyzed based on its face value; therefore, policy makers were not interviewed. The identified public document was retrieved through the government of Nova Scotia website. The intention of this document analysis was to look for an underlying logic of domination, and gender and class assumptions of public policies that have implications for participants' health decisions and experiences in their urban environments.

### *Analysis*

Data analysis started at the very beginning of data collection and was an iterative and ongoing process (Ulin, Robinson & Tolley, 2005). Its aim was to identify and describe people's experiences, perceptions, values and ideals. The two main strategies of thematic analysis were to identify repetition or patterns, and to discern the central meaning of people's accounts (Luborsky, 1994). However, Luborsky cautions that the nature of condensing meanings is a way of reducing and simplifying, and as such is in danger of decontextualizing data and stripping away important complexities and richness of people's original expressions. Based on this awareness, the reporting of themes then needed to be carefully presented within context to preserve the meaning of statements intended by participants. As such, the analysis of emergent themes required a systematic approach that blended interpretation with explanation. Themes were further analyzed in light of the research questions and the guiding ecofeminist framework. Direct quotes of participants were used to illustrate concepts and themes (Boyle, 1994; Ulin et al., 2005;

Rubin & Rubin, 2005). The voices of participants were central and low-income mothers' tacit urban environmental health knowledge was heard. Participants were asked for their feedback about the identified themes during ongoing analysis. I had asked participants during our second interviews to validate my emerging analysis as a way of member checking. During the interviews with the last three recruited participants I shared the findings from the previous interviews and asked for their feedback as a form of validation of emerging themes.

Fieldnotes were an invaluable source of context information during the analysis process. Following the strategy proposed by Ulin and colleagues (2005) data analysis was initiated from the beginning of data collection and was ongoing and iterative. Initially, transcripts were read and re-read and text was coded line by line by highlighting such things as events, incidents, facts, feelings, emotions, insights, ideas as well as pauses and such. Codes were organized into units of higher abstraction or concepts. Labels for codes came from words and phrases in the text itself, or from the literature or guiding theoretical framework (Rubin & Rubin, 2005). Constant comparison of concepts within and between interviews and observations lead to the emergence of common themes. Themes were further analyzed in light of the research questions, and the guiding ecofeminist framework, by revealing oppressive social structures, historical connections, institutional relations within the urban environment, and oppressive conceptual frameworks. Findings were related to relevant literature during data interpretation. Throughout the analysis process memos were written to capture such things as hunches about relationships among concepts, feelings, biases, ideas for interpretation, definitions of concepts, and further questions to ask in follow-up interviews (Rubin & Rubin, 2005).

The ongoing analysis of interviews, participant observations and photos lead to the identification of the document entitled *Day Care Act* of Nova Scotia (*Day Care Act* R.S., c. 120, s. 1.) which was retrieved from the publicly available government website <http://www.gov.ns.ca/legislature/legc/statutes/daycare.htm>. The document was analyzed by looking for evidence of potential or actual gender and class bias, and to what extent it reflected an oppressive conceptual framework. Ulin and colleagues (2005) suggest the classic approach to document analysis by asking who wrote what, for whom, how and with what effect. This approach is in line with the gender-based analysis for policy-making outlined by the Status of Women Canada (1998). Triangulation was established by linking various data, such as the interview texts, the photographs women took, locations on neighborhood maps and fieldnotes.

Consistent with the photovoice method, participants were asked to select specific pictures they photographed for discussion to describe the meaning of the pictures, what they intended to portray and why. To initiate the discussion, women were asked to sort their photographs into two groups: one portraying features in their neighborhood that helped them in making healthy choices, the other group contained photographs of features that were perceived by participants as barriers to making healthy choices within their neighborhood. During our conversation, participants formulated themes from their pictures that were consistent with initial themes emerging from the previous interviews. The picture discussion between the participants and myself was audio-tape recorded and field notes were compiled promptly after the meeting. Pictures and their stories were related to other data sources, including interviews and maps.

Toward the end of data collection, member-checking was completed by asking participants to comment on and validate my initial findings. Participants were asked if

they could recognize their voice in the analysis, if emerging themes made sense to them, and if it was a fair representation of their accounts. This took place during scheduled interviews with those participants who agreed to be interviewed two times or during interviews with the last recruited participants. Although some participants could not personally identify with all the findings, they appreciated other participants' experiences. There were no disagreements, or contradictions between the findings I presented for validation, and the participants' views. Table 1 provides a summary of data collection methods and analysis.

Table 1 *Summary of Data Collection Methods and Analysis*

Method of Data Collection	Purpose	Method of Recording	Methods of Trustworthiness	Method of Data Analysis	Time
Interview	Demographics	Summary	Collected same data from all participants	Grouping according to age, # years of formal education, # of children in the home, etc.	During interview
	Elicit participants' experiences & perspectives	Audio-tape recording	Interviewed a variety of participants, bracketing	I conducted a thematic analysis: Initial coding of text line by line highlighting incidents, facts, meanings which were then described as units of higher abstraction or concepts. Identified units were assigned to common themes Analytic bracketing  Memos were written throughout analysis  ATLAS/ti	Started with the first interview and was ongoing and iterative.  Analysis led to questions for follow-up interviews.
	Tap into tacit knowledge	Verbatim transcripts	Follow-up interviews		
	Give voice to participants	Fieldnotes, Log	Member-checking		
	Establish relationship, trust		Triangulated with other data sources		
	Info for snowball sampling		Corroborated with other data		
Obtain info about infrastructure	Mapping	Compared with other interviews ATLAS/ti			
Participant Observation	To gain insight into 'every-day' and 'taken-for-granted' routine activities of daily living	Fieldnotes	Observed a variety of participants	Thematic analysis	Participant observation started with the first interviews
	To gain deeper understanding of context Tap into tacit knowledge	Log	Triangulation  Corroborated with other data  Compared with other observations		
Document Selection & Analysis	To uncover gender and class bias in relevant public policy as they directly affect the lives of low-income mothers  To explicate oppressive conceptual frameworks	Document reviews,	Triangulation	Reviewed and critiqued selected policy for evidence of potential or actual gender and class bias and oppressive conceptual frameworks	Selection of policy began as it was identified through interviews and observations
		Reports	Corroborated with interviews and observations		
		Fieldnotes			
Photovoice	To give women the opportunity to portray their urban neighborhood through their own eyes	Women decided what pictures to take with disposable camera	Women related pictures to narratives, observations and map	Women were asked to describe the picture, why they took it, what they intended to show.	Concurrently with interviewing and participant observation
	To trigger further information about the urban environment	Women were coached about issues of confidentiality (i.e. taking pictures of other persons)	Triangulation	Women were asked to formulate themes.	
	Visual documentation		Invited a variety of participants to take pictures		
	Participation, empowerment	Pictures were developed on prints and stored on CDs			

### *Trustworthiness*

Issues of trustworthiness include credibility, dependability, confirmability and transferability (Ulin et al., 2005). The credibility of this qualitative research was established by triangulation of information from a variety of sources using different methods including individual interviews, photographs taken by participants, and document analysis. The centrality of narrative voice contributed to this study's credibility.

The goal in qualitative research such as ethnography is not to replicate findings, rather it is to enable replication of the process used to obtain the results. Dependability was established by transparency in the keeping of transcripts, fieldnotes, logs, memos, as well as coding strategies of transcripts and information about computer software to assist in data management and analysis.

#### *Confirmability.*

Confirmability refers to the interpretation process of all the information and data gathered during the study. As recommended by Lincoln and Guba (1985) an audit trail containing information about raw data, lists of codes, memos, fieldnotes, information about theoretical constructs such as diagrams, showing how different themes are related, interview guides, and data collection protocols was created to confirm that my interpretations were well grounded in the data (Ulin et al., 2005).

#### *Transferability.*

Transferability of results from a qualitative study from one context to another is limited because of the uniqueness of specific contexts. The findings of this study, although specific to the context of a small sample of low-income mothers living in Spryfield, contribute to advancing our understanding of the complexity of health decision-making by low-income mothers living in low-income urban environments.



Ulin and colleagues (2005) suggest aiming for middle ground and applying lessons learned from similar contexts. This can be achieved by providing a rich and detailed description of the context, the nature of the interactions, the physical environment, and the study limitations to provide readers with enough information to decide whether the research findings may be applicable to similar situations or not.

The methodology of this study lends itself to be transferred to similar contexts that raise similar research questions. Since the specific methodology of this study evolved from its philosophical framework, it is important to establish congruency between framework and methodology prior to its adoption to other contexts.

#### *Software for Data Analysis*

After consultation with Raewyn Bassett (Personal communication March 30, 2006), an expert on software for qualitative data management and analysis, I decided to use ATLAS/ti. This decision was based on the possibility to integrate not only text based data but also audio and visual data in the analysis.

#### *Confidentiality*

Research participants were assured confidentiality. Participants' names were replaced with pseudonyms on all transcripts and material that may be used for publication (Green & Thorogood, 2004). As suggested by Ulin and colleagues (2005), only I have access to raw data material, which is locked in a secure filing cabinet in my office at the School of Nursing, Dalhousie University. Any raw data relating to this study will be kept for 5 years post publication and will then be shredded and deleted.

All findings were reported in an aggregate form to maintain confidentiality and prevent the possible identification of participants. Quotations were used with pseudonyms and only after permission from participants had been obtained.

When participants were invited to take photographs of their neighborhood, it was explained that they should try to take pictures where people could not be identified. If people could be identified on a photograph, I blacked-out the faces. Participants were asked specifically to decide which of the photographs they took could be used for publications.

Informed consent was negotiated on an ongoing basis (Pels, 1999). Each time I met with participants, I asked if they still wanted to participate in the study. I explained to participants during the recruitment that they could stop or interrupt or withdraw altogether from the study at any point in time, without any negative consequences to them. This explanation was repeated on an ongoing basis. Participants were reminded that they could ask at any time not to be audio-tape recorded. At the beginning of the study, it was explained to participants that, if they chose to withdraw from the study at any time, the previously collected data would still be used for analysis.

When participants agreed to participate in this research, I arranged to meet individually to obtain consent. After I explained issues of confidentiality, the use of pseudonyms, quotes and photographs as well as their right to refuse participation at any time, participants were asked to sign the consent form (Appendix C/D).

#### *Honoraria*

Each participant during the data collection period of 2007/8 received a minimum honorarium of \$20.00 for participating in each 1-2 hour personal interview. In addition, each participant who agreed to take part in the photovoice option received a gift certificate for a local grocery store in the amount of \$20.00 for taking the pictures, and \$20.00 for the photovoice interview. For the data collection period of 2008/9 the

honorarium was increased to \$40.00. Withdrawal from the study prior to the completion of participation did not jeopardize participants' compensation.

#### *Potential Benefits for Participation*

Being aware of the potential of raising false hopes, I did not promise any potential direct benefits to the participants as a result of participating in this study. Rather, I explained that the long term goal of this research is to influence healthy public policy concerning their urban neighborhood and its residents. I explained that some people may find it beneficial to have the opportunity to tell their side of the story and have their stories heard. I also offered to provide any health related information (within the scope of community health nursing), if asked.

#### *Potential Risks for Participants*

Anticipated potential risks included upsetting the "informal social order" within the neighborhood, if my interest as an outsider in some participants was perceived as providing favors to some, to the exclusion of others. This was addressed by early entry into the neighborhood to participate in events, to show my face and by informing people about the research and my role in it. No potential conflicts of interest were identified.

#### *Significance of Results*

The results are intended to facilitate the design of gender and class sensitive healthy public policies addressing urban, environmental and health policies so they will be more relevant to human realities, reflecting care-sensitive ethics. Policy makers are increasingly seeking participatory approaches to policy development and design with input from people at the grassroots level. This approach implies the need to understand the everyday experiences of low-income mothers living in a low-income, urban environment. "The end product of applied qualitative research on public health should be

to give public voice or visibility to private or hidden issues, cast new light on puzzling questions, make invisible problems clear and make health problems more understandable” (Ulin et al., 2005, p. 195).

### *Dissemination of Results*

I published the study’s philosophical framework in *Nursing Inquiry*, a peer reviewed journal, and anticipate further publications of the research method and findings. I have presented the preliminary study findings at national and international conferences, which were favorably received and elicited interest from attending policy makers. In one instance my presentation led to a request by a policy maker for a further personal meeting. The findings, as well as the method of this study, inform my teaching of courses related to social and cultural determinants of health and community health nursing. Of importance to all modes of dissemination has been and will be that the voices of participants are central, and low income mothers’ tacit urban environmental health knowledge will be heard.

## CHAPTER VI

### Presentation of Findings

The purpose of this study was to explore the relationship between health and the urban environment as it is experienced and negotiated by low-income mothers within the context of everyday family life. The research questions were: 1) How are low-income mothers' everyday health decisions for their families influenced by their urban environments? and 2) How do low-income mothers understand and negotiate their experiences of poverty, their low-income urban neighbourhood and health?

Over 19 months I had the privilege of meeting 11 low-income mothers who, at the time of this study, were living in Spryfield, a low-income urban neighborhood of Halifax, Nova Scotia, Canada. Most of the participant encounters took place at the kitchen table of the women's homes, while their young children were playing in the background. In this chapter I present the study findings emphasizing the women's voices through their illustrative quotations. Four women participated in the photovoice aspect of the study and their photographs portray their selected images of the community of Spryfield. The voices belong to Sonja, Liz, Tracey, Pauline, Ping, Maggie, Conny, Nadine, Julia, Olivia, and Bev. Pseudonyms have been chosen in order to protect the identity of participants. Interviews took place at locations chosen by the participants and included the women's homes, the Single Parent Centre, the Captain William Spry Community Centre, and the office of the Chebucto Communities Development Association located at the South Centre Mall. Tracey, Pauline, Julia, and Olivia were interviewed once, all other participants agreed to meet for two interviews. The presentation of the findings begins with a description of the setting, demographic characteristics and vignettes of participants, followed by key findings from 18 interviews with 11 participants, including 4 photovoice

interviews and my personal observations of participants and their surroundings during the interviews which were captured in logs or fieldnotes and memos.

The presentation of findings is intended to provide an account of the women's stories about their everyday lives during a particular time frame, using their own words. Passages from unedited, lengthy interview conversations are presented to give the reader an opportunity to "listen in" and to gain a sense of the tone of the interview. In addition to written text, this first step in the analysis process is supported by participants' photographs that are indicators of how they chose to portray their urban environments. After listening to the audio-taped interviews and repeatedly reading the transcribed interviews, patterns were formed into categories and themes related to the research questions and my own understanding of participants' stories; therefore, the presentation of findings is subjective. My intention in presenting the findings and interpretation in separate chapters is to be as transparent as possible with the "fragile" process of analyzing complex and dynamic live stories of women who live very different lives from my own.

During my analysis of the data from the first 8 recruited participants, I coded the transcribed interviews from the beginning of data collection, using Atlas/ti software for qualitative data management. Initially, codes were identified by reading and re-reading all transcripts, and highlighting events, places, persons, context, process and meanings that appeared relevant to the research questions. This open coding process resulted in the initial identification of 232 codes. As suggested by Coffey and Atkinson (1996) codes ranged from words and sentences to paragraphs. For example the content of an entire paragraph could be coded as "sidewalk" and within the paragraph could also be intersections with other codes such as "safety" or "seasons" or "getting groceries." The process of identifying themes started with a reduction of the initial codes, by firstly

collapsing overlapping and similar codes. Secondly, the density and frequency of codes within and across all participant interviews were used to identify concepts of higher abstraction or categories that would then be grouped to constitute themes. For example, codes such as walking, waiting for the bus, sidewalks and the like were grouped under the concept or category of “transportation.” Next, concepts such as “transportation,” together with “affordable housing,” “services,” and “playgrounds and parks” were used to constitute the complex theme of “negotiating urban infrastructure.” Related codes such as groceries, getting groceries, looking for deals, hunting, food-bank, food insecurity and the like directly formed a theme early on, because of their frequent occurrence within individual interviews and across all participant interviews. Childcare, as an initial code, became a theme in itself, because of its dominance throughout all interviews. In addition to my analysis of the transcribed interviews, 100 photographs taken by four participants were integrated into the analysis to guide the identification of themes.

Each of the four photovoice participants sorted their developed pictures into two groups, one containing photographs of features in their neighborhood that helped them in making healthy choices, the other group contained photographs of features that were perceived by participants as barriers to making healthy choices within their neighborhood. The three most important photographs, chosen by participants, in each group were used to initiate the photovoice interviews. By the end of the photovoice interviews, all of the photographs taken by each participant were discussed. Participants received their own copies of photographs to keep, and I obtained participants’ permission for the use of their photographs in publications. The photographs used for the purpose of illustrating identified themes below were chosen by me. Interviews with, and data from the last three recruited participants were used for validation of identified themes. During these last

three interviews I shared with the participants the themes that had emerged from the eight previous interviews and asked if similar issues would be true for them or if they had any other insights about their health decisions to share with me.

From a holistic perspective of the environment, the findings were not easily compartmentalized into discrete themes, as the lives and experiences of low-income mothers were complex and always exposed at the same time to both the physical and social environments. A presentation of findings into discrete themes might appear to be more “manageable,” but could result in misleading simplicity. According to participants’ stories there was nothing simply good or bad about their neighborhood, or only related to either the social or the physical environments. Simplistic portrayals might lead to simplistic interpretations and answers, thereby neglecting the fragile balancing act of mothers’ daily negotiations of living in a low income neighborhood. As might be expected from a group of low-income mothers, material poverty [for a detailed discussion and analysis of poverty and health in Canada please see Raphael (2007, 2009) and Bryant (2009a)] was paramount in their lives. Therefore, it was within the context of poverty that I identified the following themes: the absence of regulated childcare, negotiating urban infrastructures, negotiating nutrition, and mothers’ invisible balancing act for negotiating health.

### *The Setting*

As described above, Spryfield is a sub-urban neighborhood of the Halifax Regional Municipality. More than half of the research participants were living in the Greystone area, a public housing project, situated off of Herring Cove road, which is the major thoroughfare of Spryfield. The other participants lived close by, renting in privately owned low-cost apartment buildings. Greystone sits on a hill above the southern limits of



Central Spryfield and as such is out of sight to most daily commuters or non-residents of the community. The public housing project was established during the 1970s and consists of 252 three and four bedroom units or row-houses (Murphy, 2006) situated perpendicular and parallel along Greystone drive, a cul-de-sac in and out of this residential neighborhood. The public housing project, managed by the Metropolitan Regional Housing Authority, is subsidized by, and falls under the responsibility of the provincial Department of Community Services (Murphy, 2006).



Greystone Public Housing Area. Photographed by Maggie.

Greystone drive ends on top of a hill at Rockingstone Heights School, a primary to grade 9 public school, built in 1974 and designated as an “Inner-City-School” resulting in the availability of more resources and a lower student-teacher ratio (Rockingstone Heights School, 2008) for approximately 270 students (Halifax Regional School Board, 2008). The Greystone Tenants’ Association (GTA), the Salvation Army, and Healthy Kidz, a non-profit after-school program, each occupy one or two of the townhouses. The

local food-bank is located in a townhouse and its services are delivered by volunteers of the GTA.

There are two playgrounds, a basketball court and a community garden located in this neighborhood. One of the playgrounds, built from metal and old, rough wood is very small and consists of an elevated platform with one slide and three different ladders to climb. The protective rubber base of the original platform, to cushion falls, no longer exists. The second playground has a much larger wood/plastic play structure and is preferred by residents. This playground is surrounded by a green area with one broken bench situated nearby which no longer provides seating for care givers watching their children play. The basketball court is mostly used by older children and is in a reasonable state of repair. The community garden was created in 2006 with the help of The Urban Farm Museum Society of Spryfield (Urban Farm, 2009).

Houses are continuously being renovated, particularly along Greystone drive. The majority of houses are set back from the main road, dilapidated and in a state of disrepair, with doorbells missing or hanging out of sockets, torn window-screens, cracked front steps, flaking paint and littered walkways. Greystone is part of Central Spryfield (Appendix H), a core area identified by its residents (Teplitsky et al., 2006). All participants lived within this boundary where their daily routines took place.



Greystone Public Housing Area. Photographed by Maggie.

Central Spryfield has two major grocery stores; one is located along Herring Cove Road, next to a gas station and video store. The other store is located in the South Centre Mall and within walking distance from Greystone. During the time of data collection, the South Centre Mall also housed a provincially run liquor store, three small tobacco stores, an employment office, the Chebucto Communities Association, a manicure store, a discount “Dollar store,” a hair salon, a money lending store, a video store, and a Canadian Tire store which is a national chain of automobile supplies and services, household and garden centre.



South Centre Mall. Photographed by Liz. Photographed by Liz.

A number of small businesses such as a pizza and donair take-out restaurant, McDonald's drive through restaurant, a Tim Horton's coffee shop, a bank, a Laundromat, and drug stores are located mainly along Herring Cove Road, the major through fare of this community. In central Spryfield, the road widens for approximately 3 kilometers to a four-lane highway with pedestrian walks on either side. This area of Spryfield has a number of charitable organizations such as the Salvation Army Store and several Christian churches, four public schools, including one elementary school, two primary to grade 9 schools and one high school. At present there are no regulated daycare centres in Central Spryfield. The Captain William Spry Centre, a municipal recreation centre is set back from Herring Cove Road, behind the Mall.



Captain William Spry Community Centre. Photographed by Liz.

### *Demographic Characteristics and Participant Vignettes*

The average age of participants was 30 years, with a range from 22 to 37 years. All but two women had achieved, at a minimum, high school education or equivalent, one obtained an undergraduate degree, and one participant was enrolled in a university re-entry program. Most of the women were home-makers for a variety of reasons including the recent birth of a child or parenting of infants. One mother was a private babysitter for her cousin's children. Four mothers were looking for employment, one was a student, one was employed part-time as an office clerk, another woman's foreign educational credentials were not recognized in Nova Scotia, and one mother found work at Walmart a few weeks after our first interview. The number of children 5 years and under ranged from 1 to 2 and their ages ranged from 2 months to 4 years. Due to the inclusion criteria, family income was less than \$25,000 including income assistance and disability pension. Families lived in either public housing or low-cost apartments in Spryfield. The number of people living in the household ranged from 2 to 5. Participants' ethnic backgrounds

were primarily Anglo-Saxon, but also included Chinese, African Nova Scotian, and one mixed Anglo Saxon-African Nova Scotian. Participants had lived in the Spryfield neighborhood between 18 months and 10 years.

Sonja, a friendly and inviting mother of three children was tired when we first met, because she was up all night with her youngest child of eight months, who had teething problems. At that time, Sonja was looking for work to help pay the bills. She said: “We’re struggling right now.” Her husband had health issues and was working odd hours for minimum wage. Sonja liked getting the groceries while her husband looked after the kids, so she could get a break from the children and have some time to herself. A couple of months later, Sonja had found work at Wal-Mart and was excited about it, but still had not found a daycare place for her children, so her husband took some time off work to look after the children.

Liz, a single parent with two young children was enrolled in a University re-integration program. She was receiving provincial income assistance and needed the \$20 grocery gift certificate reimbursement for participating in this study. (The value of the grocery store gift certificate was increased to \$40 after 12 months with permission from the Dalhousie University Research Ethics Board). According to Liz, the people at the Single Parent Centre watch out for these types of research studies that could help low-income residents of the area. Liz had a plan, and knew exactly where she wanted to be in a few years to provide a better life and future for her children. She said she had made some bad choices when she was younger, but knew a better life was possible. She said: “Although I’m in the situation I’m in, I know how to change it, I’ve seen a much better way of life. So in terms [...] of things changing out here, those kids that are out in the schools being bad and being bad influences, it’s cause their parents didn’t know better, in

my opinion, their parents didn't know any better." Liz wanted to get out of Spryfield to prevent her children from accepting the belief that life is limited to the reality of Spryfield.

Tracey, a single parent, had forgotten all about my pre-arranged visit, but still invited me into her home. Her three-year old daughter was in a t-shirt and diapers; her school-age son was sitting in the kitchen at a computer wondering who I was. Tracey was upset with the little food she got from the food bank the other day and really needed the \$20 grocery gift certificate for participating in the study. At first, she appeared very cautious during our interview but by the end felt comfortable enough to agree to participate in the photovoice aspect of the study and to take pictures of her neighborhood. Tracey needed longer than the four weeks I had anticipated was necessary to take pictures. When I went back to pick up the camera to develop the pictures, Tracey had mislaid the camera and couldn't find it until a few days later. Perhaps she was too busy, and taking pictures was not a priority for her, since she was going to move into a larger unit of the housing complex within a few days. After three failed attempts to re-connect with Tracey, her phone was disconnected. We never met again to discuss her photographs.

Pauline, a single parent, was cheerful and energetic. Her youngest child was only a few months old but Pauline was looking already for a job to get off income assistance. She had worked in a book-keeping role previously, and the only thing holding her back from re-entering the work force was the lack of daycare for her youngest child. She loved cooking and liked to share recipes with her neighbor. When I went back to her house, a few weeks after our first interview, to pick up the camera, her school-age son opened the door, followed by a teenage girl who informed me that Pauline was back at work. Pauline's son said to come back on the weekend but not on a Saturday or Sunday. The messages I left on Pauline's phone to re-connect were never returned.

Ping, an immigrant from Asia, was living together with her husband and two-year old son in one of the privately owned, low-cost rental units. Her main concern was to find a neighborhood with a good school for her son. She would have liked to work but her credentials as a high school teacher were not recognized by the province. To teach in Nova Scotia, she would need to upgrade her education, which would not guarantee full-time employment or a sufficient income to cover her childcare expenses.

I knew Maggie from my involvement with the Spryfield Family Support Task Force, a group of professionals working in education, health and community related services in Spryfield to support families through better service integration and delivery. Maggie, a working mom and single parent with two school age children, had been living in Greystone for several years. She upgraded her skills to become an office clerk and found work with a not-for-profit organization in down-town Halifax. According to Maggie, her situation has improved compared to a few years ago, as a single mom on income assistance. She sees Spryfield as her home, a community with many positive features to it, but in need of improvements.

Conny grew up in the area of Spryfield and moved back a few years ago when she was pregnant with her daughter who, at the time of the interview, was 4 years old. As a single mother, receiving income assistance, Conny had family and friends living in the neighborhood and looked after her cousin's two children before and after school. Conny appeared content living in Greystone but didn't like the noise and vandalism. During our first interview Conny was very cautious sharing her experiences of living in this neighborhood. When I returned to collect the camera, she told me how much she enjoyed taking pictures and was very eager to see them developed. At the end of our last meeting



she spontaneously gave me a hug and said how much she enjoyed the experience of participating in the study.

Nadine, a young single mother, lived with her 18 month old baby, her boyfriend, three cats and a puppy dog. She needed the grocery gift certificate as compensation for the interview because she had not received her income assistance cheque. The Single Parent Centre informed her about my study. Half way through the first interview she asked if she could have the grocery gift certificate right away, so her boyfriend could buy some groceries. Nadine wanted to make a new start and become a dog groomer, but needed childcare for her baby before she was able to make any arrangements. She didn't know many people in the area and preferred to keep to herself.

Julia was very shy throughout the interview. She lived with her two baby boys in Greystone, where she grew up. At the time we met, her sons were 18 months and 2 years of age. Our interview was arranged through the Single Parent Centre, because Julia did not have a telephone in her house. Julia would like to go back to school to finish her high-school degree and become an early childhood educator. At the time of our interview she had her name on a waiting list for daycare but wasn't sure if she would qualify for subsidized childcare once a place for her children became available.

My interview with Olivia, a young mother of four children, including a young infant, was dominated by a dispute with her next-door neighbors. She was upset with her neighbors but insisted on my staying and continuing the interview. According to Olivia, her daughter was getting bullied by the neighbor's daughter at school. Olivia stated that she was interested in my study and hoped that her story would "help" me. She seemed genuinely interested in improvements of neighborhoods such as Spryfield, for families with young children.

Bev, who forgot about our first interview, resided sporadically in the area around Greystone for a number of years. She had health issues and lived on a disability pension. Bev was glad that her parents, who lived in the area, supported her with her young daughter. As with most of my visits to participants' homes, here too, I observed that the living space was rather small; there were few spaces in the kitchen to set things down and toys immediately indicated the presence of young children in the homes. During our second interview, Bev told me that she spent the grocery gift certificate from our last meeting on diapers and creams for her daughter. Bev would like to move away from the area before her daughter has to start school. Her preference would be to live somewhere in the countryside.

Over the summer months there were two more women who had contacted me to participate in the study. Both appeared to be very interested and we had met or spoken several times over the phone to find a suitable time for the interview. The planned interviews never materialized due to last minute cancellations by the women for reasons related to illness of children and work demands. Another woman decided not to participate after we had met, and I explained the study and left the consent form with her for a couple of days. She called me to cancel the appointment for our first interview and said that her situation had changed in the meantime.

Recruitment and retention of this population was challenging for several reasons. The issue of trust between researcher and participant was paramount and without the support of trusted service providers and community leaders in Spryfield, particularly from the Single Parent Centre, recruitment of participants for this study would not have been possible. Many participants had been involved with the Department of Community Services to secure income assistance and related services, which required the sharing of

significant personal information with complete strangers. Perhaps this loss of privacy affected participants' perceptions of studies that ask personal questions. Mothers with young children, particularly on a low-income, live very busy lives and frequent, unexpected events happen that make even well intended plans for participation impossible. Life circumstances often change quickly, phones get disconnected, families move to different locations and living arrangements alter, which puts participation in a study at the bottom of their priority lists. To all the women I met during this study, I am very grateful!

### *Theme 1: The Absence of Regulated Childcare*

Throughout all the interviews, mothers shared their insights and experiences of how they managed their daily lives in Spryfield. The narratives revealed mothers' concerns about appropriate residence location, employment opportunities, childcare, transportation, physical and social environments of their neighborhoods, food and groceries. Their daily tasks and related decisions largely centered on their children's needs and how to best meet them. The questions I asked during the interviews focused on how they would accomplish those tasks within their particular neighborhood. The lack of financial resources not only determined participants' negotiations of residential location and housing, but also impacted many daily choices including childcare, transportation, and nutrition. The following section will highlight findings related to the absence of regulated childcare and its impact on mothers' ability to join the paid workforce in order to improve their material circumstances. According to Liz:

Money does make a really big difference. You have money, you can pay babysitters, you can pay child care, you can get daycare, you can pay for golf

clubs and country clubs and going out for dinner [...] <sup>1</sup> [participant trailed off] I have not a dime to my name, I think I have 20 dollars hidden from myself for an emergency.

For some participants, borrowing money was part of their experience of living in poverty: “Like I said, I’m gonna have to, I have to borrow money usually, through this time of month. If I can.” (Tracey). Sonja, who was looking for childcare to be able to go back to work, said: “We’re, like we’re struggling right now ... [participant paused] just to survive.” The lack of available daycare spaces within their neighborhood of central Spryfield was a major concern to most participants. Mothers found that the lack of daycare spaces prevented them from joining the paid workforce and from “getting back to routine” as Sonja pointed out. When I asked Sonja how long she intended to stay home with her children, she replied that she was already planning “on getting back out to get a job” and trying to find a babysitter or daycare in the area. During our interview Sonja mentioned a daycare which she was hoping to get her children enrolled. It turned out that this was the only daycare left in the larger Spryfield area (outside of central Spryfield) and had a waiting list of over 200 children (personal communication with Daycare Director, April 2008). Julia was also on this waiting list for her two young boys and tried to be hopeful about the situation. For Pauline, however, it was hard to be patient:

I: So, you mentioned that you want to go back to work?

Pauline: Oh yes. I’m going soon. I’m not good at not working.

I: No. What were you doing before you stopped working?

Pauline: Accounting and book keeping.

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<sup>1</sup> When I have omitted text from a quote because the speaker trailed off, I have used ellipses in square brackets [...]. An ellipsis without brackets means the speaker paused.

I: Yes, okay. And that's what you want to get back into?

Pauline: Oh yeah.

I: Yeah. And uh, do you have something already lined up, or?

Pauline: Well no, it's just the children. I have to do something with her [baby daughter] before I can do anything.

It was not only the lack of daycare spaces in general that made it difficult for mothers to re-enter the paid workforce but also the lack of spaces for children of a particular age group. Daycare centers are licensed to provide childcare to children of certain ages. For example the Day Care Regulations (2009) differentiate among infants (children who are 17 months old or younger), toddlers, (children between the ages of 18 months and 35 months inclusive) and children or school-age children (children up to and including the age of 12 years and attending school). Licensing requirements are different for different age groups of children, and not all regulated childcare centers offer childcare for all age groups. This situation forces mothers to organize and secure childcare at different locations and from different providers, as is the case with Liz's family where she had to place her son in a licensed daycare and her daughter with a private babysitter.

I: So, your kids, are they both in daycare?

Liz: My daughter is [in] private care, in private care right now because...

I: Oh okay, with a baby sitter, kind of?

Liz: Yeah, until she's 18 months.

I: Okay.

Liz: It's very hard to find daycare.

I: So, how old is your daughter?

Liz: She's 16 months right now.

I: 16 months, okay.

Liz: And the daycare where my son is, is holding a spot for her, as soon, on November 15<sup>th</sup>, she'll be 18 months.

Nadine knew that she qualified for a subsidized daycare spot for her son, once he turned 18 months. At the time of the interview she was on a waiting list for a daycare in Spryfield and shared her experience of yet another challenge for mothers who are looking for childcare. Nadine's predicament lies in the combined challenge of not only finding a subsidized space for her son, but also a childcare facility that takes children at the age of 18 months.

Nadine: Right now, I'm sort of looking into getting into dog grooming. I have to still apprentice and do a couple...do a little bit more training first. And then I can hopefully start. I just have to wait until he's in daycare.

I: Are you looking for daycare?

Nadine: I have a spot hopefully for him. I just have to call. But he's not 18 months yet so I have to wait until the exact day. [...] I put him on the waiting list back in April, I believe. Or something like that. It was in the summertime anyway. So he's been on the list for a little bit. And I called and asked them where he was, and they said to call back after school begins so they can tell who goes to pre-school. And then they'll know how many spots. But it's a subsidy spot so I can't pay a whole spot. Which is hard...I have to wait until a subsidized spot opens, and I also have to wait for him to be 18 months. So a subsidized spot when he's 18 months might

not always match up. So I could be waiting until next say March even until he can get in. Which would hold us back even more, because we are waiting and we are waiting.

There was a lack of information about available daycare spaces and subsidized daycare spaces. Sonja, who moved to Halifax from a rural town, was unfamiliar with policies around subsidized daycare in Halifax, as illustrated in the following conversation.

I: And would you be able, if you find a spot in a daycare, would you be able to get a subsidized space?

Sonja: That would be another thing. I, like, I don't know how the subsidy programs up here work.

I: Right.

Sonja: 'Cause I know in Antigonish, if you're on assistance, you automatically get subsidy. But up here, I don't know if it's the same way...if you're on assistance, do they pay for half of your daycare and then you pay for half? But where we're not on assistance, you know, that's a total different story.

Ping was in a similar situation, and she talked about the difficulty of obtaining correct information about subsidized daycare, in a user-friendly way. Ping, who made use of the internet to search for information, was clearly frustrated with the lack of information and compared the user-friendly site of the city of Vancouver to the unhelpful website of Nova Scotia's childcare services. When I asked her if she knew whether she would be able to get a subsidized daycare space for her son, she replied:

Uh, I'm really confused, I went to two child cares and asked them, they told me that if our family income is more than \$1,600 a month, then we cannot get any subsidy. That's what the people [who] work at the child care centre told me. So if

family income a month [is] over \$1,600, I don't think that's uh, very much [...] I check it out on the internet, some cities, like Vancouver, they have different, they have figures that you can find out from internet, like as a family, so like three people, with one child, your family, it's around forty thousand dollars income a year...you will get, under that, you will get a full subsidy...so I just think wow! I just want to get a general idea like, is it worth for me to apply for a subsidy or I guess, you don't even think about that.

During my conversation with Olivia a few months later, she validated the problematic situation of lack of regulated and subsidized childcare. Olivia's story crystallized the fact that she had to rely on social assistance because she had an infant son to care for at the time her relationship with her former partner broke down and she could not find childcare to be able to go back to work.

I totally agree with that. My daughter was in daycare but she had to be 3. So that was really the only daycare I could find. So when I wanted to go back to work at 18 months, there was just no daycare around here that would do that. I understand it totally, there's just not enough subsidy daycare around here. No, there's not.

In summary, mothers identified the lack of regulated childcare in Spryfield as a primary concern to them. Options of regulated childcare would have enabled mothers to join the paid workforce while knowing that their children would be in a safe place. The complexity of childcare availability, the limited number of subsidized places, age requirements, the long waiting lists, and the lack of user-friendly information were very frustrating for mothers to experience and difficult to negotiate.



## *Theme 2: Negotiating Urban Infrastructures*

The urban infrastructures that needed to be negotiated on a daily basis by participants included housing and finding an affordable and appropriate place of residence to safely bring up their children. Narratives about their location of residence revealed a sense of “ghettoization” as well as images of neighborhood aesthetics.

Urban infrastructure, particularly the built environment, includes many different services that are delivered by various providers such as government (federal, provincial, municipal), not-for-profit organizations, and private enterprise. Participants’ stories of living in Spryfield included positive and negative experiences with service options in their neighborhood. The Single Parent Centre, a not-for-profit organization to support young parents received unanimous and overwhelmingly positive feedback from participants. Furthermore, the narratives about services included the Captain William Spry Community Centre (municipal), the Lions Club (not-for-profit), the employment centre (provincial), shops (private enterprise) at the South Centre Mall, and public schools in Spryfield. Playgrounds and parks, or elements of the natural environment, form part of the urban infrastructure. According to mothers’ narratives, they play a significant role in their negotiations of daily activities with young children. Transportation in the form of bus or public transport services, or the provision of sidewalks and street connectivity, are key elements of modern urban development and infrastructure that impact residents’ daily activities. Very often, transportation determines accessibility to other services or destinations within and outside a neighborhood. The next section will provide detailed findings related to the above described urban infrastructure including housing, services, playgrounds and parks, and transportation.

## *Affordable Housing*

At the beginning of each interview I asked all participants why they had come to live in Spryfield. Sonja's reply, "you gotta live where you can afford to live" reflects the main reason for living in Spryfield, given by the majority of participants. Ping immigrated to Canada and didn't really know the area. She was looking for a low-cost apartment which she found in Spryfield. In addition to low-cost housing, several other concerns such as child-friendliness and safety played a role in negotiating appropriate living spaces for themselves and their families in this neighborhood. For example, Pauline was concerned about finding the right place for her children. When asked: "What made you move here [Greystone area]?" She replied: "Well Housing, this was the spot Housing gave me... It was Uniacke Square or this."

I: Okay so you had to apply for public housing and then they gave you a choice. So why did you choose Greystone over Uniacke Square?

Pauline: Ok, 'cause Uniacke is just too wild and too crazy. And really like, out here's not bad. It's not. Like Spryfield has a bad rep or whatever but it's not that bad out here. I sort of knew a couple [of] people that live out here like... they're friends of friends and stuff ... but not really ... like I didn't know my way from here to the mall when I first moved here.

I: Wow, so where are you, like where did you...

Pauline: From Dartmouth...but then I was in Ontario when I came home... and I applied for the housing when I was having her...and sorta, you only get so many chances with housing and then they put

you back on the bottom of the list, so you have to sort of grab something.

I: Wow, yes. Definitely. So Uniacke, what's so bad about the other place...

Pauline: It's right in town and it's just wild...and it's not like for my kids... like out here, like, the kids run around outside and they play and they play baseball and they have fun and you don't worry so much? You can sit out and watch them. But there, it's busy and it's right in the middle of Gottingen and Brunswick and there's traffic and there's no big field and it's just like (noises)...

As Pauline's story indicates, the decision where to live had to be made within a short period of time in order not to jeopardize a public housing option; and in the case of Pauline, without much prior knowledge about the neighborhood. An additional concern identified by participants about negotiating residence location was related to personal safety, ranging from fear of criminal activities, such as drug use and prostitution, to dangerous driving. The presence of police was reassuring to some residents. Liz explained:

I picked that location, it took me a little while to find exactly what I wanted and where. Picked the location because the building itself seemed safe. I know a few people in the building and they've never had problems. I find that right where we are, right now [area around the Single Parent Centre], this area kind of frightens me. It's uh, with the public housing up there [Greystone], it's not that public housing frightens me, but I find when you drive by this area at night, not late at night, but at night, there's hoodlum teenagers and stuff, so I didn't want to be

quite this far out. There are so many good people here, but I'm afraid of the ones that aren't good because the ones that aren't good here, aren't good. I mean, drugs, gangs, prostitution...and I'm not saying it's any higher here than somewhere else, but when I lived in the South End of Halifax, I knew a few, few spoiled rich kids that smoked marijuana. I didn't know people that dealt drugs. And I, I know, I've seen and known about, didn't get to know, people here deal drugs, do ecstasy and cocaine and you know, sex at really young ages and...

While Liz's concern about her personal safety in relation to criminal gang activities in the neighborhood made her choose the location of her residence very carefully, Conny's concern was related to noise pollution from automobile traffic activities of some neighbors. The presence of a community policing station in Greystone was assuring to Conny:

It's worse in the summertime than it is any other part of the year. Because everybody's out and enjoying the sun, they got their cars revving up and down and, yeah...it'll be better this year, I think so 'cause we're gonna have a police station on the hill this year.

*Ghettoization and residential isolation.*

Up on a hill, close to the southern limits of Spryfield, sits Greystone public housing complex. According to Maggie it is "out of sight, out of mind" to policy makers and the general public commuting in and out of Halifax on a daily basis. Maggie's insights reveal a critical consciousness of this ghettoisation. When I asked Maggie how she feels about living in Greystone her response illustrated the harsh reality of social exclusion:

People are automatically assuming that you're Ghetto. I think that we're just isolated from the rest of the city. It's like we're on top of this hill, there's no, there's only one way in, one way out. Nobody goes up there, or past there, unless they know somebody that lives up there, or they live up there. So it's like, you know, when you look at, let's say, the Pubs [Public Housing Complexes], Uniacke Square, Mulgrave Park. They're all housing, but they're all in the open. You have to pass these, these housing projects every single day to go to work. And what do they do? They fix them ones up. Greystone on the other hand, does not get fixed up in the same aspect because guess what? ...nobody sees it. Nobody sees that, nobody ever has to drive by that eyesore. So, the taxpayers aren't going to complain about it because they don't see it.

Maggie, who had been living in Greystone for the past seven years, was clearly upset about the state of housing disrepair which she attributed to the geographic isolation of Greystone. Pauline, who had been living in Greystone for one year had a similar sense of "ghettoization." Her story was about the residents of Greystone and illustrated powerful analogies at the same time it conveyed a sense of needing to defend the residents from a negative reputation:

People say Spryfield's so bad and okay, so the hill is really ghetto and there is some trashy people here, but not like we're a bunch of animals and we act like animals, you know what I mean? Most of us have our right senses, like, it's public housing, but most of these people either go to school or have a job.

In addition to the isolation and stigma associated with Greystone, the hill is a challenge for mothers who have to push strollers up and down, as well as for smaller children and residents such as Tracey, who had difficulty walking. As indicated by most

participants who lived in Greystone, icy road conditions in the winter season prevent public transport from serving the community.

I know nice people that live up there because I come here and I meet really nice people. But just that, that hill in the winter, is one example...if it's too icy, the bus won't go up it...if a bus can't go up it, how am I gonna go up it with two kids? I mean people do what they have to do, but that's just not an inconvenience that I want to deal with (Liz).

*Neighborhood aesthetics.*

Neighborhood aesthetics was identified by participants as an issue particularly during the photovoice interviews. The issues included litter and graffiti, as well as the general state of the built environment. Maggie described how the houses in Greystone that are least visible from Greystone Drive were always the last ones to get renovated by the public housing authority. According to Community Counts (2009) 43% of dwellings in Spryfield required major or minor repairs in 2006, a 1.3% increase from 1996. As the following quote by Liz indicates, she ascribed the situation to the low socioeconomic status of Spryfield residents as well as a missing sense of ownership.

Liz: Oh this neighborhood is ugly. So ugly, it's just, it's life.

I: And, and why is it? Why do you see it yourself, as ugly?

Liz: Mold on the buildings, and I mean, this [Single Parent Centre] is a non-profit organization but mold on the buildings, graffiti, which is done by people that live here, so you can't have an outside agency come in and help fix that, you have to make people proud to live here and not want to do that. But you know buildings right on top of each other, no yards. And it's just the nature of the, the financial situation up here. There are, you go

five minutes down the road to the Purcell's Cove Rd, wow. Wow. But I don't think that much is really gonna change that for a long, long, long, long time. Because there will always be poor people. And the poor people are always gonna need somewhere to live. And it would take a whole lot of money to tear down all these apartment buildings and suddenly build single residence dwellings on them with yards. Like I don't think that that's ever gonna really, really change.

During the photovoice interview Ping explained the importance of a clean environment and aesthetically pleasing surrounding for her sense of well being. The following quote also illustrates her belief that residents have to take responsibility for their neighborhood environment, whenever possible.

Ping: First when you are looking for a place to live, you want to look for a beautiful place so you will feel relaxed, you feel you will have a good mood in the whole day. So if the whole place is like full of garbage and disgusting, you will feel bad. I mean you want to leave there, you don't want to stay there. [...] As I say it has good potential to be better, so just needs more effort, with people.

I: Why do you think that happens so much that people throw away garbage just like that?

Ping: There is a garbage can [Ping pointing to it on one of her photographs], a big garbage can there, actually.

I: Is it full?

Ping: No, it's not. Actually, I guess you just walk a few steps and throw your garbage there, so it's not difficult and it's not that inconvenient for you to

do it, so just walk a few steps. I say, probably because this whole neighborhood isn't as clean as, like others, like the Frog Pond [located in a high socioeconomic neighborhood], so people don't have that idea that you should keep clean yourself.

The narratives about the physical environment often included comparison with other neighborhoods, specifically with adjacent neighborhoods of higher socioeconomic status. The missing sense of ownership of one's neighborhood alluded to by participants may be related to the low percentage of actual home ownership in Spryfield vis-à-vis the neighborhoods used for comparison where home ownership is much higher. For example, in 2006, 47.7% of residents in Spryfield rented their dwellings, compared to 27.6% for Nova Scotia (Community Counts, 2009).

### *Services*

Participants' comments identified a number of supports and services that were perceived as helpful in negotiating their daily lives. These included material support from community organizations such as the food-bank or other charitable organizations. Instrumental support was received from the Single Parent Centre in the form of pre-natal classes, parenting classes, and drop-in opportunities to meet other parents. In addition, several attributes of the built and natural environments were identified as helpful to making healthy choices for their families while living in Spryfield. A built environment is defined as buildings, playgrounds, streets, sidewalks, street connectivity, and such. The identified buildings all serve to house social programs that are supportive of healthy living. So it is a combination of social environments that are housed in physical structures, at specific geographic locations within a neighborhood, their size, and accessibility that matter to residents. These included the Single Parent Centre, Captain



William Spry Community Centre, and the South Centre Mall and its stores. In addition, playgrounds and parks or green spaces were identified as central features in everyday lives of these families with young children who live in urban neighborhoods.

*The Single Parent Centre.*



Single Parent Centre. Photographed by Ping.

The Single Parent Centre, a not-for profit organization and service of the Home of the Guardian Angel, supports pregnant women, single and two-parent families through a range of programs and services. According to centre staff, their clients often comment about the centre's name with reference to the "single-parent" and whether the name should change to parent centre. Staff however believe that the current name is important as there are many single-parent families living in the area. Its mission is to enhance and nurture the quality of life of all parents and children in the area and beyond. The programs and services include pre-natal classes, a Doula program, breast-feeding support, literacy programs, community kitchen events, help with income-tax returns, drop-ins, and

many more. ([http://www3.ns.sympatico.ca/single\\_parent/](http://www3.ns.sympatico.ca/single_parent/), retrieved on September 09, 2007)

The majority of participants identified the Single Parent Centre as an outstanding, positive, and helpful service in their neighborhood. All participants knew of the centre and most have used it for various reasons. Liz's praise of the centre was reflective of participants' views:

The Single Parent Centre. Wow, what can I tell you about that? It's absolutely amazing [...] I mean, have you had people tell you all the things that they do? I mean, they have the community programs for the kids, they also have programs for the moms, they have prenatal classes, postnatal classes, they have various different groups of people that will come visit you at your home. They have a clothing, a trading cupboard where you can get clothes... and they have um, sometimes they'll put food away for families in the community in need. I mean, they do everything.

The services offered by the centre were comprehensive for mothers and their children and included informational/educational, social, and instrumental support during the first few years for young families. An important factor was the mode of service delivery and the non-judgmental way in which this was perceived by centre clients.

I: So the people that come visit you in your home are those from the Early Beginning, is that the program?

Liz: Yup. I'm not with them anymore because of school...my worker was Sue [pseudonym], she's really nice. And you know, we were talking, you asked how approachable these people at the employment centre were, well Sue is not condescending, she really goes out of her way to, if she sees you

doing something good, she'll encourage you as the parent. She's a fabulous person. I can't imagine many people being as good at her job as she is.

Home visitors from the centre are often women who are living in the community and have expert knowledge about available, local resources to share with and support mothers with young families in the area. A very popular service of the centre is the Spry Café. This program is intended to create a restaurant-like experience for parents and their young children for a nominal fee. It enables low-income families to feel included and participate in social activities that they might otherwise be excluded from because of their socioeconomic situation and childcare responsibilities. As Liz enthusiastically explains: "I go to the Spry Café once a month, which is like a dollar...has anybody told you about it?"

I: Yes, there was another lady who mentioned that she was gonna go there with her kids, I think.

Liz: So it, I mean it's a dollar for an adult, fifty cents for a child. They give you appetizer, like salad, meal, desert. Um, at Christmastime, did anybody tell you about the Christmastime? Wow. Okay, the Christmas Spry Café is always fun because it's usually a turkey dinner. This year it was not a turkey dinner, but I mean, I went with my two children and a friend of mine. We paid four dollars so...this is great, we paid four dollars. They couldn't get turkeys this year. East Side Mario's catered it, with half a chicken per person. Like, you know, you go get a quarter chicken dinner, it was like half a chicken on each plate, and then, you know their little loaves of bread? There was like two of those for each person, like they cut it up

and put it on the tables, right? I mean, I left with half of my chicken in a bag, half of my kids' chicken in a bag, they wrapped it all up for me. So I mean, I had like three meals for my four dollars for myself and my kids. And then, the Superstore, I think it's called the Turkey Club? I think it was the Superstore that donated twenty five dollar gift certificates to every family there. So I paid four dollars and ended up with three meals, a twenty five dollar gift certificate to Superstore, and then they had a basket raffle. And they had about ten different baskets and almost every single family there left with a basket of toys and clothes and...so I mean, that was pretty good use of my four dollars...but I mean they're, they're great. That's just an example of one of the things that they do.

This was an ingenious and creative way to support the funding and organization of the Spry Café, as many local businesses and organizations donate food and time. The intention is that food should not merely be delivered to the centre but interaction with centre clients by formally serving the food was desired, as the following quote explains.

Liz: It's a multi-step process. Like the Christmas one, East Side Mario's sent us prepared food...so the staff just picked it up and brought it, and served it. The last one that happened just this week on Wednesday, it's once a month on Wednesdays. Armbrae Academy sponsored it...so they didn't pay for it, but sometimes the parent advisory committee will raise money and donate money to it or like the MLA. She gave the money for one Spry Café...so she didn't do the, she gave the money, and then the students from Armbrae Academy went out, got the food, brought the food, prepared

the food, served the food, do the dishes...and the staff usually walk around and take our kids, if our kids are fussy? They'll carry our kids around so the parents can sit down and pretend that we're having a fine dining experience.

The Single Parent Centre is a trusted place in this neighborhood that delivers its services in a dignified manner, enabling low-income mothers to participate in social life events that many higher-income parents take for granted. In addition to the Single Parent Centre, there were other services in the neighborhood perceived as helpful to mothers with young children.

Some of the organization that you can go to get help when you're alone, and actually some program and some organizations you can get help, Single Parent Centre or the Lions, the Rec centre or library. So there are some program, you just have to be creative with this kind of information, then you can get help (Ping).

*The Captain William Spry Community Centre.*

The Captain William Spry Community Centre, owned and operated by the municipality of Halifax (HRM), includes a large indoor wave-pool, a gym, a library, and many rooms for community events and recreation programs. Most participants appreciated the library and the wave-pool, in particular. Ping remarked while talking about a picture she took of the centre: "Just different programs there, by the same, it's in the same building." The convenience of having a variety of services located in the same building was appreciated, although the programming or associated support of some services could be more responsive to mothers with two or more children, whose children are at different stages of development. For example, Liz had two young children at different stages of swimming abilities, which makes a trip to the pool challenging, as

Liz's quote illustrates: "I used to take my son swimming at the wave pool often. See he's terrified, he loves water only with me or his father. But he will not go with somebody else [while Liz would have to hold her younger daughter], so I don't take the two of them swimming [at the same time]."

Participants identified a lack of services such as recreational services or sports opportunities. At times when services existed, they would not be accessible to single parents, again due to a lack of childcare opportunities and financial cost.

Liz: I think they need more, and the library of course, but there's not many places anywhere, not just down here, there's not a lot of places that have instant childcare. And it's the childcare thing that makes...is an issue. [...] If you're poor, you're probably not going to have a gym membership and I know a lot of snotty, snotty rich people, "I have a gym membership and I go play squash twice a week and I go golfing," there's not a lot of free, fun exercise options if you're, you know, if you're poor, you go for a walk, you to the lake, but you're not going to the golf club with your friends. You're not gonna go to your hockey league and play hockey once a week...so in terms of exercise, there's not a lot of fun, free exercise... Well it's an example of something that, you know that's, I know a lot of people that golf. I think golf is too ridiculous to be considered a sport but you do a lot of walking and it's something that a group of people get together and enjoy doing. I don't think there's a lot of free sport opportunities anywhere...you know, rich neighborhood, poor neighborhood. I don't think that that's an option that exists. But if you are low income, then

you're stuck with "where can I go for free?", you're stuck with a walking trail or stuff like that.

A few participants mentioned that they used the walking trail along the MacIntosh Run in Spryfield. One of the problems identified with the walking trail however, was that it could not be used with a stroller due to its narrow path and uneven gravel surface.

Although within walking distance for residents of Central Spryfield, the geographic accessibility of the community centre was an issue. As well, the building was set back from the main road and separated by a small river, the MacIntosh Run. This meant that residents had to walk an additional kilometer around a loop to get to the main entrance of the building. For residents who did not know the community centre it was challenging to find. When I asked Liz about the accessibility of the Centre, her response was ambivalent: "It's very accessible and very easy to get to, but if you haven't gone there, it's gonna take you a little bit to find it" (Liz).

#### *The South Centre Mall.*

The South Centre Mall housed the local grocery store, a liquor commission, a dollar store, the local provincial employment centre, a corner store business, a beauty salon, a bowling ally, a video store and a Canadian Tire store. All participants used the grocery store and the dollar store for their regular food purchases and to look for deals. Sonja said: "God bless the Dollar Store" explaining:

We do a bit of food shopping from there...they sell uh, them Lipton's Sidekick things. They sell those. You go to the grocery store, you're paying a buck twenty nine for something like that, if, if they're not on sale. You can go to the dollar store and get like ten of them for ten bucks... so we buy like those and we buy like the rices from there, um, we buy like cookies for Corinne. We buy like crackers [...] baby cookies for ther baby

and soups and they sell uh, the Nestle quick powder stuff to make chocolate milk.

Most participants had an extensive knowledge about the price differences of a wide range of products between the Super Store and the Dollar Store or Sobey's, which is evidence of their navigation skills in an urban environment. The Superstore (one of two local grocery store chains; the other is Sobey's, further along Herring Cove Road) is where most participants did their weekly or biweekly grocery shopping. In terms of distance from their residences, the Superstore was significantly closer than Sobey's for participants. (The issues of price politics and product quality of the grocery stores will be presented under the theme of negotiating nutrition). The fact that the Dollar Store and the Super Store were located in the same mall made it easier for participants to negotiate between the two locations for the best deals.

The employment centre in the mall operated on a drop-in basis which was important to some of the women because they could use computers and received assistance with resume writing and such. Some found the job offers were not very helpful as they were limited to low-wage jobs:

The important thing about this, I mean you can go there, you can take a lot of small free programs like a free first aid course, they help you with resume writing, they help you do everything you could need to do to get a job. I think we talked about this in previous discussions. The negative with it is, you know, for me personally, I have my grade 12, I have a resume, I can go to them, they're going to help me get the same kind of job that I can get myself. So the negative about it is, you still need X number of skills to get a high enough paying job, but for those that are completely unemployed, it's great. I mean, I have gone there and used



their computers and their printers and printed out my resume and they have job postings all on a board. So I've gone in there, looked at job postings.

I: What kind of jobs do they usually have in there?

Liz: Grade twelve, just uh, basic ten dollars an hour or less jobs...generally, but they do have posters for "come take this truck driving course and get an automatic job" and different, kind of off the beaten track things.

I: Okay, some opportunities that involve training that would then lead to a, maybe little bit better paying job.

Liz: Yes...so, I mean, I think it's a very important thing to have in a community.

The employment centre was perceived by participants as supportive, mainly because of the non-judgmental attitude of the staff and ease of access. However, offers of low-wage employment in combination with the lack of regulated childcare in Spryfield offered no concrete opportunities for positive change of participants' life trajectories.

*Insufficient educational opportunities.*

The stories of mothers clearly revealed that education was highly valued and seen as a way out of poverty, and ultimately out of Spryfield. Their experiences with education in Spryfield were quite varied from each other due to a difference in the ages of their children and differences in their own education levels. For example, Liz who is a student at one of the major universities in Halifax, described her perceptions of the root causes of low literacy in Spryfield in the following quote.

I mean it's great that that employment centre is there, and it's probably because of this type of research project saying "What would make differences in Spryfield?" But I think the problem is more fundamental than that, it needs to go

deeper, it needs to get to the kids. ‘Cause the kids growing up in this situation, need to know why you need to go to school. Why you need an education and you need to know how to achieve a better life. (Liz).

Liz believed that parents are role models for their children and if parents have low literacy levels as is often the case in Spryfield, children will be left behind in school at an early age. One of the root causes of low literacy in Spryfield may be attributable to the lack of early childhood education for all children. This is echoed by a recent study about child readiness for school. The federally funded Understanding the Early Years (UEY) (2009) project found that children in the Chebucto West Community Health Board area, which includes Spryfield, are not ready for school in terms of overall development in the areas of physical health and well-being, social competence, emotional maturity, communication skills and general knowledge, and language and cognitive development. The study identified 46.5% of children surveyed in the Spryfield area as vulnerable.

Ping moved to Halifax from another country, where many parents make sacrifices for their children’s education. A good school with a good reputation is the determining factor for Ping’s choice of neighborhood once her son starts school. She is very determined to find a good school for her son, and was wondering about her options and how the school system works in Halifax. When Ping first moved to Halifax, she chose Spryfield because of the availability of low-cost apartments. With her son starting school within a few years, her priority will be to move to a neighborhood with a good school, because she believes the reputation of schools in Spryfield is not good.

Maggie’s children attended Rockingstone Heights School, which is located just above Greystone. Her experience with this school has been negative. According to Maggie, her younger daughter’s reading level is far behind where it should be, which she

perceives to be the case with many other children at the school. Maggie's perception was that much time is spent by teachers disciplining the kids rather than implementing the curriculum. One of the issues identified by Maggie was the onus on parents to teach their children how to read.

I'm not really happy with any of the school system really. I don't, I think they're, I don't think they're doing such a, a great job educating our, our children and I know that, and I too find that sometimes people put too much onus on the parents? Like, well you should be reading to them, you should be doing that, you should be doing this and then they wouldn't be having a problem at school. But I look at it the other way in a sense where, okay you have my children for six, seven hours a day. [...] You know? The first few years, would, yes, make a difference.

Maggie believed that the school in Greystone was failing the children during the first crucial years of formal education. In her opinion teachers were not fulfilling their teaching responsibility during available school hours. Furthermore, Maggie perceived a negative attitude from the school toward the low-income parents in Greystone who she believed are blamed by the school for their children's low academic performance.

But I mean, at the same time, I just find that our school system just looks at kids, especially in low income areas, as well, they have enough problems or, oh, that's why little Johnny can't read., is because he lives, he lives in the Projects and his mother is on welfare. So let's feel sorry for these people and, and, I don't know, I don't get a good attitude. [...] I don't, yeah, I don't necessarily get a, a good, a good vibe, I don't, people don't want pity.

Maggie argued that the school made assumptions about parents and stigmatized residents of Greystone due to their low-income levels. According to Maggie's account the school associated poverty with residents' having problems with substance abuse.

You know, you can put the help out there and if they want to take it, they'll take it. But people don't want pity. And that's something, I think Greystone, when I was working for Action (muffled) ... for change, and I was meeting with the Salvation Army and stuff up there, but they said they had a problem with, because people were getting an attitude with them in the sense like, how, why are you assuming something's wrong? You're assuming that something's wrong up here. Why? You know, so, I mean, we got a paper one time from Rockingstone Heights School and it was saying, if you want to have, like it was a list of, if you um, need drug counseling or alcohol, or if you would like to learn more about this or that or, and I was thinking, I wonder do they do this at the other schools?

According to research participants, the insufficient educational opportunities in Spryfield are related to a school system that is perceived as patronizing. The system has a negative reputation of having failed its residents for generations and continues to be perceived as prejudiced against residents of Greystone.

### *Playgrounds and Parks*

All participants told stories of their experiences with playgrounds within and outside of the Spryfield community. For mothers of young children the existence and quality of playgrounds were central to their daily lives. Narratives about playgrounds revealed positive and negative aspects. One playground in particular was mentioned by almost all participants as excellent, but was located outside of Spryfield in a middle class

residential neighborhood approximately a 20 minute bus-ride away from central Spryfield.

Liz talked about the importance of the safety features and the superior equipment.

Have you seen the playground at Westmount Elementary School? Check out that playground someday. It is amazing. We need playgrounds like that playground. It's got that rubbery type ground. I mean, my one and two year old children, I don't mind them playing there until the big kids come out at the end of the school day. But all summer long, I take them there, because even though they're only one and two, they can climb, and if they fall, it's squishy ground. And, you know, they had music, they had little drums set up and steering wheels and everything you could, spinning, all the cool things that you see one piece of at this playground and one piece of at that playground, they have it all...we need playgrounds like that. More age appropriate.

Liz's envy of this middle class playground was palpable. She was not the only mother who travelled with her children to use it. Ping's story about this playground was similarly positive.

Yeah, it's so nice there...it's so huge...the floor, I forgot the material, the floor, like it's so soft, some, I forgot the material's name. But you don't have to worry about one of your kids fell would hurt themselves...and it's so large and so many stuff to play with.

Within Spryfield one playground was mentioned as very nice and relatively new, the one located next to the Lions Club. The Lions Club is a not-for-profit community-based organization providing support for the blind and the social needs of community members. It operates an indoor ice-rink and recreation facility. Many participants took their children for recreation and play, particularly to this newer playground.

Playground safety was an issue for most participants. Concerns included old and broken equipment that would cause cuts and splinters on children's hands, concerns with discarded needles for drug use and condoms left behind in the playground. "I've found needles at the playground. I've found razors at the playground. I've found condoms at the playground." (Conny).



Dangerous Playground in Greystone Public Housing Area. Photographed by Tracey.

Elements of the natural environment, in particular the "Dingle" park, Frog Pond area and Kidston Lake were identified by most participants during our interviews and as part of the photovoice activity, as examples of places that support healthy choices for themselves and their families. The "Dingle" park and Frog Pond are adjacent green spaces and are located outside of the central Spryfield area. The immediate, surrounding community consists of high-income households. The area is very well maintained and is a popular recreation destination for all ages. Accessibility from central Spryfield by bus is cumbersome as it involves changing buses at a terminal on route to down-town Halifax, and the bus stop, although next to the Frog Pond, is approximately 2 kilometers from the playground at the "Dingle" park. Ping explained that her reasons for visiting the Dingle

park related to the cleanliness and safety of the setting as compared to sites that were closer to her home.

Ping: The Dingle place, the playground, you don't see that many garbage around, but here, you see it all around. And also I don't want my kids to play there, I think because also I want to go to some trails around here, I do see some bad stuff, like the needles or something so...

I: Oh yes, okay.

Ping: ...and my kids like to see this, he's curious over everything, he also touch[es] things?

I: Okay. Oh yeah, they would pick up everything.

Ping: So I don't want him to do that.

In addition to the Dingle Park, Conny would take her children frequently to a variety of outdoor recreational parks within and outside of Spryfield. To visit parks outside of Spryfield, however, meant long bus rides for Conny and the children.

Conny: We've gone up to Kidston Lake. Last summer we were up there probably four or five times. But we also go to Chocolate Lake. I've been down to Long Lake 'cause I also lived in Herring Cove. We like going down to the Dingle. That's pretty cool, we like it down there.



The “Dingle” Park. Photographed by Ping.

Tracey told me: “We go to Kidston lake...all the time. It’s beautiful up there...yeah, and I even take them fishing up there.” Pauline is enthusiastic about the outdoors: “Well in the summer yeah, I’m like, yeah! I go off the hill every day. These guys, I’m like, lets go to the Dingle, lets go to the Commons, lets take the kids and just, ‘cause we went to the beach up here [Kidston Lake] [...] here’s a beach, every day. Well let’s just, tomorrow, let’s just do anything to be different.”

Participants commented in general about the physical environment, that they used it for recreational purposes: “The neighborhood, yeah. I just think the Spryfield this area had big potential for beauty so if everybody puts their effort inside and works together, this can be a really good place to be”(Ping). Liz took a photograph of a walking trail behind the Captain William Spry Centre and I asked her how accessible the trail was for strollers. She replied: “I think this part is, but I don’t know how, how much is. The area that I go, I usually, when I went, I put my daughter in a front carrier, my son in the backpack and I’d walk. I’d just, I’d hike it.” Quality parks and playgrounds were valued



by participants but were not always located within walking distance which meant that women often took their children on longer bus-rides to get to these places in other neighborhoods, so their children could benefit.

### *Transportation Challenges*

Mothers identified that their daily tasks inclusive of parenting, getting groceries, running errands, socializing, and attending school or work were impacted by transportation options. Liz explained how lack of transportation limited her ability to access community support services.

I was stressed out and things were hard and I was like, I still didn't come up here [Single Parent Centre] right away, because I had both kids and no car at the time. And the 20 [#20 bus] comes right up here, but I have to walk to the 20 and I couldn't have taken a stroller, so I would have had to have her in the carrier and carrying him on a hip...in July, so about four, four-ish months after she was born, three or four months, I got the car. And one of the first things I did when I got the car was come up here, and I wish I had done it a long time ago.

Thus, for Liz, availability of services was meaningless when they were not accessible.

While describing her ways to get around in Spryfield for routine tasks, Tracey explained the impact of not owning a car: "Oh yeah, well I have to go further to pay bills sometimes or like, to get to the bank. My bank's at Mumford." Pauline, whose car got stolen, "hates" the bus because of its inconvenience, and found it hard to adjust:

I never liked the bus. I don't know. I think 'cause I just should have a car. I think when I was younger, like I lived close to my school and I walked to my school and then I bought a car...like I went to work and I bought a car and then ever since I had my kids, I always had a car and I drove myself to university and, and

then when you don't have a car, all of a sudden it's like this shock to your system, like, "Oh my God, what am I gonna do? I'm gonna die."

Pauline had the option of borrowing her mother's car at times and adds: "So then you call, every now and then I'll call my mom like, "I gotta go do errands, can you come over for an hour?"

Sonja's narrative about the interplay of transportation and getting groceries illustrates how many mothers in Spryfield negotiate this task with a combined use of public and private options. Most mothers take the municipal bus to the grocery store and take a taxi to transport the groceries back to their home which has enormous financial implications.

I normally take a bus from here to the Superstore. And I'll just take a cab back...which, cabs normally cost, I would say, from the Superstore, here, seven bucks...which is kinda...well they automatically start out at three dollars...which is kind of crazy...it is, it's like...when, when I first took a cab up here and buddy hit the thing, I'm there, "What are you doing?" You know? He was like, you're not from here. I said, "No, I just moved here." He's there, okay, he stopped the meter, you know, he says, "Well, our meters automatically start at three dollars, and we just exit it and it just totals it all up." I'm there, "Okay, but I'm only going down the road." He's there, "Okay," he says, "Just give me five dollars and, you know, next time," he says, "You'll know...I said, "Gee, well thank you very much." But like, from yeah, normally from the Superstore to here, it's like about six dollars and fifty some odd cents, so I just round up to seven bucks.

The distance from the Superstore to Sonja's house is approximately 2.5 kilometers and the time it would take the taxi to travel this distance would be no more than five

minutes. For the \$7 for the taxi ride Sonja could have purchased at least a 2 litre jug of milk.

Liz explained that even though she lives within walking distance of the grocery store and the daycare, the walk to the university would be rather long: “It’s a long walk to Dal, [...] I think that would take me, maybe about an hour and ten minutes to go from home to the daycare, to Dal.” Though Liz likes to walk, the hour and ten minutes might be too time consuming and onerous, especially on inadequate sidewalks or during inclement weather.

### *Missing sidewalks.*

There are areas of Spryfield that have no sidewalk on either side of the road. Pedestrians have to walk on the shoulder of the road, particularly along stretches of high traffic volume. This is the case for example along a section on Herring Cove Road, and Sonja’s experience illustrates parents’ concerns with safety.

They need sidewalks. They have a sidewalk half way out, just one, two, the third bus stop on this, on my side of the road, is like the sheltered bus stop. That’s where the sidewalk stops, just after that rain thing and there’s nothing else down any further...so like, if I was walking and I had my children in the stroller and I got hit by a car, would I be at fault? Who would be at fault? You know? Guaranteed that they would blame me for walking alongside of the road... they, exactly! Like, that’s what comes, bites me, you know? It’s like my husband and I go for a walk and I’m, “Are they ever gonna put sidewalks in here?” and him and I will talk about it and it’ll, it’ll turn into a full blown argument. You know? Well who can I contact to say look, I need a sidewalk out here, I have two small children and there is other children over in that other building. You know? Yes,

we, we do walk. If I get hit by a car, who's responsible? Me or the person driving that car?

Though Sonja emphasized individual responsibility for safety - her or the driver- it was clear that ultimately she saw the absence of sidewalks as the issue.

*Street connectivity.*

Maggie explains how the Greystone public housing community is geographically isolated and literally cut off by a small wooded area without trails or sidewalks to an adjacent middle-class community. The latter community is serviced by Elisabeth Sutherland School, a French immersion school. French immersion schools are intended for English speaking students to be immersed in the French language, therefore the main language of teaching is French instead of English. In contrast, Rockingstone Heights School is located at the end of Greystone drive. Both schools are Primary to grade 9 and are not more than 2-3 km apart, one serving the children from the Greystone public housing complex, the other serving children from mid-and high income areas of larger Spryfield. This lack of street connectivity contributes to the ghettoization of the public housing complex and its residents (Appendix J).

In summary, the theme of negotiating urban infrastructures reveals limited options of low-cost and public housing for families with young children in Spryfield. Mothers' low income and their safety concerns made the negotiation for appropriate residence location very difficult. Particularly the public housing complex of Greystone was geographically isolated and perceived by participants as a ghetto. Neighborhood aesthetics was identified during the photovoice interviews and revealed participants displeasure with the state of housing disrepair, litter, and graffiti. Generally, mothers found many local services, such as the Single Parent Centre, helpful and offered

suggestions for other services including the employment office. The education delivered by the local elementary school was perceived as less than adequate and the attitude of the school toward parents in Greystone was disrespectful, prejudiced, and stigmatizing.

Playground safety concerns often took mothers and their young children on long bus rides to middle-class neighborhoods that would enable them access to safe and age appropriate playgrounds. Transportation issues, in the form of suspended bus services due to icy road conditions, access to services, and the lack of sidewalks, jeopardized residents' safety on a regular basis and their ability to make otherwise healthy choices.

### *Theme 3: Negotiating Nutrition*

Most mothers want to be able to fulfill the nutritional needs of their family.

Participants' income levels clearly impacted nutritional choices. Tracey, whose income on assistance was very low, had no options other than the local food bank to supplement the nutritional needs of her family. In comparison to living in poverty in rural areas where many residents may have access to a kitchen garden to supplement the family's food supplies, the situation in urban areas is often different without access to a plot of land to garden. In the case of Julia and Tracey, even the option of a food bank is hardly sufficient. The food supplies Tracey had received the previous week lasted only for one day.

Well the food bank...they don't hardly give you anything... anything, like, I went this month and all I got like, three or four cans of canned food. I don't know how long it's supposed to last for, it didn't even last a day, here.

I:                   How often can you go?

Tracey: Oh uh, once a month? I think it's once a month...and uh, yeah, like I said, there's, they barely give anything out lately... Yeah, it is real hard.

The Greystone Tenants Association operates the food bank on behalf of Feed Nova Scotia in this neighborhood once every month on a Tuesday. Residents can register their food request on Monday, to be able to pick up their food items the following day between 9 am and 12 am. Other food banks in Spryfield are also open once every month (Personal Communication with Feed Nova Scotia staff, October 2009). The hours of operation were challenging for Julia who has two young children. She explained:

You have to be there at a specific time. And the other ones [food banks], they are like open until like a certain... You know you don't have to rush, type of thing. But up here, you have to be there before 11:00. And if you are not there, then they are calling you, saying why aren't you there yet, and stuff like that. Like knowing that you have the two kids and you might not be able to get out?

Tracey and Julia compared the quantity of food supplies they received from two different local food banks and wondered why there was such a difference. According to Julia she could choose how much bread she needed for her family at one of the other food bank locations. When I asked Tracey how she manages this situation she explained that she had to borrow money from friends for a week to get enough groceries for her family until she receives the child tax benefits.

Tracey: Like I had to go to the food bank last week...they barely gave me anything at all and then I had to borrow money, you know, to get some more groceries...I've gone to other food banks and big differences in between what you get...incredibly, yeah.

Um, I'm, normally, like this is the hardest time of month. Um, until the 20<sup>th</sup>, like, this last week here, up till the 20<sup>th</sup>, because then we get child tax and um, I'm fine after that. You know, we're fine. So, but I guess, this is the roughest time for us.

Tracey received a child tax benefit for her four children. In Nova Scotia the Canada Child Tax Benefit is paid on the 20<sup>th</sup> of every month. Currently, the basic benefit for one child under the age of 18 amounts to \$111.66/month and a supplement of \$7.75/month is paid for every third and each additional child (Canada Revenue Agency, 2009). The National Child Benefit Supplement is intended for low-income families and for a family of three or more children whose net income is less than \$21,816 the maximum amount paid is \$145.58/month (Canada Revenue Agency, 2009). Once Tracey receives the child tax benefit, which in her case amounts to approximately \$500, she is able to purchase groceries for her family. Tracey budgets this amount to buy fresh products such as bread and milk when needed:

I usually buy like um, a fair amount. Usually buy about three hundred dollars worth, the first day...and then I'll put aside some money, um, to, like if normally for like milk and bread...little things like that...so then usually I just do little bits.

Regardless of income levels, the neighborhood grocery store policies impact nutritional options through pricing, variety, availability, quality of certain brands, and freshness of food products provided. For example, the price of milk varies by as much as \$2.00 for a 4 litre jug between grocery stores in Halifax, with the lowest price offered at stores located in outlying business parks that are not easily accessible without a car (CBC, 2008). My observations, including a comparison between the Superstore on Barrington Street, located in Halifax's mainly high, middle- to upper-class South end, and the

Superstore at the South Centre Mall in central Spryfield, revealed a marked difference between the variety and quality of products offered to residents. For example, in Spryfield produce is often wilted, dairy products are on the shelves past their due dates, and the variety of what many would call “ethnic” foods is very limited. My own personal experience is similar to that of Tracey who remarked: “There’s been a few times I’ve gotten bread up there, mice holes in it.” Maggie clearly related the difference in freshness and variety of food products to the store’s clients and their associated income status as she compared the two local grocery stores, one of which (Sobey’s) is adjacent to a neighborhood of high socioeconomic status:

I find the grocery store in Spryfield is not as good as any other Superstore I’ve even been to in the city. I think they, their produce is like, it’s nasty a lot of the times. I mean, I’ve seen me go down to Sobey’s just because it’s, down Sobey’s, its not like that down Sobey’s. They have fresh produce, they have fresh meat, their stuff is stocked. [...] They have a different, let’s say, clientele maybe. That’s what I think. In the sense where, when you’re going down Sobey’s, you’re around Williamswood [high-income neighborhood] and, you know, other places. And, and Superstore, we’re smack-dab in the middle of Spryfield in the core centre, where there is, that’s all it is, it’s not that all that’s here, but there’ a lot of low income apartment buildings and housing and stuff like that. We do have nice sub-divisions, also, around. It’s not on the outside, it’s around it and I don’t, I don’t know. Do they shop there? Maybe they do, I’m sure they do, I just don’t, but they’re not, they’re not catering to, to those people.

Maggie’s analysis speaks to her class consciousness and awareness that people of different income status receive different treatment, in this case superior quality of food.



Her account also reveals the lack of options for low-income residents, implying that people with higher income can afford to go outside the Spryfield area to get groceries.

Conny clearly prefers to shop outside of Spryfield. She values the superior quality of goods available in grocery stores elsewhere, but she does not always have this option due to lack of transportation.

Produce is fresher, um, I can't say that their staff is friendlier because I know the staff at this store and they are very friendly, if you know them. I grew up with a lot of them. Or I know their parents. Um, their [outside of Spryfield] stores are bigger, they have more produce. I do like our Sobey's but if I have the chance to shop at one of the bigger stores, I do it.

Also, in the Spryfield stores, the advertising of sales through flyers does not always deliver what it promises, according to Maggie:

I have a problem with that, with the grocery store, is that it's never stocked enough. Like so, they advertise these things and you go and it's not there. Or you go and it's rotten. And it's like, and I don't like that. That really, that can make me cranky. If I go to get a green pepper and they're all rotten, I'm...

In Sonja's case, her husband's skills in hunting and fishing, as well as the availability of accessible wildlife, determine what the family eats. According to Sonja her husband hunts deer and rabbit in the area, and fishes salmon. Sonja's planning of meals depends not only on her immediate family's needs but also on whether she expects extended family visitors. When I asked Sonja how often she would get groceries, she replied: "Every two weeks...yeah. Well, depending on if we have family up, if family's up, it's every week...but it's, it's normally every two weeks that I, I go up and get groceries." Sonja had a large freezer, which they filled with game and fish. Trout fishing

in Kidston Lake during the summer months was an additional source of nutrition for a few families who lived in Greystone. For these families it was a recreational activity for the children at the same time as supplementing their food supplies.

The availability of appropriate transportation has an impact on the routine task of getting groceries. For Liz, the amount of groceries she could buy when she had to walk to the grocery store with the stroller was very limited, which had an impact on how often she would have to go to the grocery store:

Before I had a car, every day... 'cause there's not very much room in the bottom of the stroller. 'Cause there was just, you know, the bottom of the stroller, you buy a pack of diapers, a container of milk and a couple microwave dinners, for example. The bottom of the stroller's full. So then it's how many bags can you hang off the handles?

Liz made an important logistical observation impacting her choice of grocery store - that of the size of the child seat of the shopping cart. The superstore "shopping carts have seats for two children ... I don't know if you've ever noticed that or not ... but the Sobey's ones don't." While doing the grocery shopping in the store with two young children Julia had a hard time concentrating because she had to supervise her children at the same time: "I've got one on each side taking stuff off the shelves. They love to take stuff off the shelves." These examples of everyday practicalities related to grocery shopping are taken for granted by many people, and illustrate how laborious this task is for Liz and Julia and their young children.

When I asked participants how their income level affected their choice of groceries many replied by giving an account of their financial situation. The income

available to Liz and her two children amounted to \$1,726 a month as she shared information about the various sources of her financial support:

\$650 because I'm in school...if I wasn't in school, the extra, I was getting \$590.

But the extra \$60 is for a bus pass...it's for transportation...So I have \$650 a month from that. \$600 a month from Child Tax. The Universal, the extra \$100 per child, so it's \$200. And Child Support which is \$260...\$276...I'm doing okay...

I'm lucky enough to have a deep freezer. And I don't have a dime to my name right now, not a dime. And my credit card's maxed but that's, that's how I live.

Similarly, Julia had to rely on the child tax benefit payments, which still was not sufficient to cover all her bills. She found it particularly challenging to be able to afford diapers for both of her children.

It's not very easy because they don't give you enough money. They really don't give you enough money to survive for a whole month. I mean even though you get the child tax, that is still not enough because you've got to pay bills that they don't pay for you. Because they only pay for certain things. So you've got to use child tax to pay for other things. And then you ain't left with very much for groceries for the month. And then plus, both of my kids are in diapers still, and stuff. So it's pretty difficult.

With the financial resources available to most participants, every dime counted because they had to pay rent and utilities, childcare, transportation, and groceries, not to mention the fees and books some required for studies. These women, living in poverty knew an extraordinary amount about prices and the timing and location of sales. It is an example of how low-income mothers negotiate nutrition by careful budgeting and constantly juggling money, as Liz elaborates:

Diapers were on sale for \$10.99 last week, did you hear about that or see them or anything? Okay, basically it worked out to, I usually buy the big boxes...big boxes have two jumbo packs in them. Jumbo packs were on sale for \$10.99. I bought three jumbo packs for the same price that a box with two jumbo packs would have been. So I basically got eighty diapers free...but I'm lucky to have, you know, I do that with meat. When meat's on sale, I buy an obsessive amount. I'm lucky to have a deep freeze to put it in. [...] And I'm lucky to have a credit card because that's basically, I live on my credit card for the month, and then when all my money comes in the end of the month, I pay it off. And I always pay it all off, 'cause I don't want to pay, I can't afford to pay interest.

The few participants that could afford a deep freezer and thus be in a position to better negotiate certain sales were appreciative of this advantage vis-à-vis many other low-income mothers for whom it would be impossible to ever acquire a deep freezer.

Despite all the skillful negotiations of providing sufficient food for the family, Liz knows that the cheaper food often is the less healthy food, yet she has little choice.

A lot of that is a financial, a financial thing. If you're poor, you're buying the least expensive food you can. Which means a lot of you know, processed food or less of the vegetables or cooking with the cheaper fats and just different, I mean that's gonna affect your physical weight (Liz).

'Looking for deals' was a constant theme that occurred in all food narratives and was related to disposable income together with transportation and available products.

Deals or special offers were not an option for everyone, however, as the presence of food stores within the neighborhood did not necessarily translate into availability to all its

residents. The timing of income assistance cheques was not always favorably aligned with sales in grocery stores, as Conny's story illustrates:

When the family allowance cheques come out or the social assistance cheques come out, I'd rather go to one of the bigger stores...because our store, all the people that got their cheques, they don't, a lot of them don't have cars, they just go to our store and by the time I get there on payday, everything's gone.

This situation was echoed by Maggie who explained to me that she usually tries to time her grocery shopping with her payday every two weeks, which limits her options to take advantage of sales:

That's when all the good sales happen, usually is the next week. (laughs). I don't know if they time it. I don't know if they time it or not. I know like, when cheque day is, like Canadian Pension, Social Assistance and stuff like that. They usually do have good specials during that week. But then you go there and it's not there.

According to Conny the kind of food that is on sale during cheque week is of lesser nutritional quality and often cheaper than nutritious food items. "There's more junk stuff for kids than what there is like fruit and vegetables. [...] But that's what the kids want now because that's what their parents are giving them because it's cheaper.

According to Olivia it is very hard to buy healthy foods because it is the "most expensive stuff, like grapes, strawberries and vegetables." She can afford the healthy food only once a month when she receives her family allowance.

There is also a sense of competition of being able to afford healthier foods for one's children than "other" people in the neighborhood. Conny points out that her husband "makes good money, well, not real, real good, but good enough" that she can afford fresh fruits and other fresh items on a regular basis. Conny explains that: "People

on social assistance don't have the money to be able to go leisurely like I do and get fresh fruit and stuff for the kids.”

In Conny's account about negotiating nutrition, a parental health education theme was evident when she explained that her daughter is socialized to regard fresh fruit instead of cookies as a treat:

We call it treat to her now, 'cause we want her to eat it as a treat, but a lot of these kids up here [Greystone], they just want cookies and stuff like that, that their parents can afford to buy them. 'Cause they don't put the fruit and, and the good snacks.

In summary, the work of negotiating family nutrition has been illustrated as complex, particularly as it took place within a context of personal and environmental poverty that is, within a low-income urban neighborhood. Insufficient financial resources meant that mothers had to rely on the meager rations of the local food bank to supplement groceries, and some mothers had to borrow money to bridge the time until payment of child tax benefits. Participants were knowledgeable about the timing and location of sales that did not necessarily align with the payment date of income assistance. Hunting and fishing were creative strategies used by mothers to supplement groceries. Left with few or no options, mothers had to contend with lesser quality, quantity and variety of food products as compared to availability in higher income neighborhoods, and the lack of transportation made the work of grocery shopping even more laborious. In this climate of managing against all odds mothers were aware that the cheaper foods are not always the healthier foods, yet still attempted to teach their children healthy eating.

*Theme 4: Mothers' Invisible Balancing Act for Negotiating Health in Spryfield.*

Negotiation, according to the Oxford English Dictionary (2009) is an act of skillful maneuvering to overcome an obstacle. It is important to acknowledge that an obstacle for some might not be considered an obstacle by others, as it depends largely on a person's social location within a give context. Thus, obstacles created by poverty can remain invisible to mainstream society, as can be the tacit knowledge of those who have to overcome them. The themes of absence of regulated childcare, negotiation of urban infrastructure, and negotiating nutrition are examples of obstacles mothers in Spryfield need to overcome to support their children in growing up healthy. Through my personal observations of participants during interviews, I found that their concern for their children was paramount at this point in their lives. "As long as my kids are good, I'm good. Really." (Pauline). This quote illustrates a constant undercurrent of all mothers' narratives of their lives in Spryfield. Providing children with a good start in life and a bright future was a major motivational factor identified by all participants. Participants in this study were motivated to change their current material circumstances. Liz was enrolled as a student at a local university, and both Nadine and Julia wanted to go back to school to be able to find employment. Julia's story is an example of mothers' determination:

I'm just taking my Grade 12. I was there when I got pregnant with him, and I had to leave. So I'm going back to finish up what I started. And then I'm going to do the Early Childhood Education course at St. Joseph's.

Mothers had goals and aspirations, first and foremost for the betterment of their children's present and future life trajectories. For example, mothers' negotiations for appropriate location of residence included weighing safety concerns against affordability,

given their meager financial resources. Spryfield as a location for residence was seen by participants as a best-option trade-off between affordability and safety. Pauline commented earlier about the decision she had to make between two public housing locations: one down-town within a high traffic area, or Greystone where her children could play outside.

Mothering skills were evident through participant observations during the interview process and through their stories. For example, mothers, instead of fathers, put their children's needs before their own by staying at home with their children. The majority of participants had formal education at the high school level, and most had worked outside the home in various capacities, prior to staying home with their children. In fact, the main reason for mothers to stay home was the presence of babies and/or young children, who had not yet entered the public school system. The overwhelming majority of research participants were looking for regulated childcare in the neighborhood, which would enable them to re-join the workforce or the education system in the near future. Most participants had placed their name on waiting lists of regulated childcare services. Not one of the participants felt that a private babysitter was an acceptable and safe solution or alternative to regulated, subsidized childcare. Private babysitters are not regulated in Nova Scotia which means that there are no training requirements for babysitters such as first aid courses or early learning pedagogy courses. Furthermore there are no regulations about the home environment of babysitters to accommodate for infants, toddlers or preschool children. Clearly the participants were not prepared to jeopardize their children's health and safety for a quick and sub-standard solution in their navigation efforts.



Participants showed creativity in their problem solving which was part of their negotiating skills. This became evident in how they managed to keep things together. For example, the way they managed meager financial resources in combination with borrowing money, bartering, or knowing where and when to access support services such as the food bank. During the few times when our conversation allowed for questions related to environmentally friendly choices, it became clear that items such as organic foods were considered an unaffordable luxury. Participants would purchase locally grown produce if the price was the same or less than imported foods. Maggie explained that she would purchase laundry detergent for cold water, because it would help her electricity bill at the same time as it would mean consuming less energy.

Many participants were quite open about the fact that they chose to participate in the interviews because of the grocery gift certificate as reimbursement. The continuous skillful balancing of financial resources among limited options within their neighborhood to secure the best possible nutrition for their families was a central task of their successful household management. Some participants who were fortunate to own a deep freezer had more options to take advantage of sales. Even though participants lived in an urban environment, some were able to supplement their nutrition by hunting and fishing. Being forced to rely on food bank supplies meant that mothers could not always adhere to a meal plan and had to be flexible with food preparation depending on what was available to them at short notice.

Informal social support in the form of emotional, instrumental, and informational was exchanged among family and neighbors or friends, and also provided through the Single Parent Centre. Liz was very creative with the help of technology to ask her fellow students for support.

So I'm like, great. It's, you know, eight o'clock in the morning, my class is at nine thirty and I have a child that has no where to go. I called up, sent out a text message, "Liz has no child care for Alicia today, anybody that can help, please do!" Sent it to a couple of friends and I got a phone call back, right away. "Drop her off at my house" from one of my friends. So I dropped her off and her class started just as my first class ended, so took her back.

The social support that was extended and/or received was typically a process between women. Conny is a stay-home mom who negotiated an arrangement to support her cousin, who works outside the home, to look after her two school-age children. This arrangement was mutually beneficial because Conny's cousin could work outside the home, and in exchange provided groceries and other goods for Conny who was thus able to stay home with her daughter. This illustrated a clever example of barter economy to support her income.

Social support between neighbors in the form of emotional and informational support can go hand in hand as this example of Pauline illustrated. Pauline and her neighbor share recipes:

"Bring me over a plate of that" and when she makes something, 'cause it's like our standing joke, "what are you making?" "well what are you making?" she'll call me, "what are you making?" and I'll be like, "Oh I'm making whatever, what are you making?" ...oh it's funny though, 'cause it's only me and her...but then if people walk by, they'll be like (sniffs) "oh who's cooking fish," and smell that!... "who's that?" I'm like, "no, it's not me, let me know when you find out." cause the lady next door made fried fish one day and her daughter brought it over, it was the best fish ever!

In addition to the bonding between two neighbors over everyday cooking, this is also an example of camaraderie many women seek. The relative spatial closeness of housing can facilitate important social contact if it is desired by residents. An important social aspect of living in the urban environment is how the built form can enable the sharing of caring work.

The contingency of a life on social assistance is another hurdle one of the participants had to negotiate. Bev's financial situation was subject to the whims of a social worker which is degrading and makes it even more difficult to manage scarce financial resources. For example, Bev had to borrow \$40 from her mom the day before our second interview. When I asked her if she had to borrow money often, she replied: "Yes, most of the time. But she [her mother] is good that way [...] I had to buy a special mouthwash for my mouth [for an impending surgery], it was \$18, and I don't know if my worker is going to reimburse me for it or not."

Instead of borrowing money, Sonja felt compelled to send money to her mother who is looking after one of her sons. Sonja's older son lives with her mother in another part of Nova Scotia, she explained:

We send money to my Mom, ... for my son, you know. Even though my Mom says, "Well I don't need no money," you know, 'cause my Mom works, my Dad works and my sister and brother, they both work and my son goes to school and they said, "Well, we don't..." and like, "Don't bother sending us any, like save it. You need it." It's like, "Well no, he's living with you, I have to pay."

Even though Sonja admitted in an earlier quote that her family was struggling, she carefully negotiates the balance between taking advantage of her mother's offer and taking financial responsibility for her older son.

The mothers' awareness and use of parks and their desire to find safe playgrounds for their children reflected their appreciation of the natural and the built environment. The above stories illustrate the efforts of mothers to locate and access these safe places that are often outside their own walk-able neighborhood. The mothers' daily balancing act included a weighing of their physical and their social needs and those of their children against their reality of living in poverty, in a low-income urban neighborhood. The determinants of health, particularly gender, socioeconomic status, and the urban environment acted as barriers and constraints to mothers' successful negotiation efforts for health.

#### *Summary of Themes*

I presented the findings from participant interviews, photovoice interviews, and participant observations, organized according to four major themes: 1) the absence of regulated childcare, 2) negotiation of urban infrastructures, 3) negotiating nutrition, and 4) mothers' balancing act for negotiating health. Consistent with the notion that we are always exposed at the same time to the physical and the social environment, participants identified a number of locations within the neighborhood that represented organizations and social programs perceived as opportunities and as helpful resources in making choices for a healthy living, particularly the Single Parent Centre. Mothers' experiences of living in poverty largely framed the findings of constraints in the urban environment that hindered choices for healthy living; among them the lack of regulated daycare services in Central Spryfield and a physical infrastructure that made efforts for healthy living a daily struggle, including geographic isolation, lack of sidewalks and safe playgrounds. Another significant challenge to healthy living was the work associated with negotiating nutrition within the givens of their neighborhood. Within this context

mothers exhibited a skillful balancing for negotiating health through creative problem solving under often adverse circumstances. The findings illustrate how a critical combination of the determinants of health such as gender, income, housing, employment, social support and the physical environment can dictate how much control low-income mothers have over their own and their families' health decisions.

The commonly identified crucial barrier to an improvement of their material circumstances was a lack of regulated daycare spaces in Central Spryfield, which prevented mothers from joining the paid workforce. In addition, participants in the workforce earned for the most part minimum wage, making childcare options (often outside their neighborhood) less affordable. These realities raise questions about the availability of regulated childcare in this neighborhood, which would benefit both mother and child. Consistent with the approach to document analysis, identified in the methodology chapter, the policy chosen for analysis directly relates to this particular neighborhood and is an example of how social institutions and their social policies control peoples' lives (Smith, 2005). Based on the above findings, participants' choices for healthy living were largely controlled by welfare policy, urban planning policies, including the built environment (street connectivity, location of services, retail, and residential buildings), location of parks and playgrounds, policies related to public transportation (sidewalks, bus services), and food retail policies. In addition, policies of support services in the community such as programs delivered by the Single Parent Centre or local food banks impacted mothers' options and choices. Mothers' lives were also controlled by the absence of supportive environments particularly the availability of regulated childcare; thus, the provincial policy document chosen for the analysis was the *Day Care Act*. R.S., c. 120, s. 1. (1989) (Appendix I), and the related Department of

Community Services website “*Child Care Information for Families*” available on the department’s website <http://www.gov.ns.ca/coms/families/childcare/index.html> .

### *Policy Document Analysis*

The first research question for this study was: How are low-income mothers’ everyday health decisions for their families influenced by their urban environments? This study was guided by an ecofeminist framework that is based on the idea that oppressive conceptual frameworks underlie the mutual oppression of women and the environment. The methodology chosen to identify and reveal oppressive conceptual frameworks of public policies in this urban environment was informed by Institutional Ethnography (Smith, 2005). As discussed in chapter 3, according to Smith, institutional policies coordinate people’s everyday lives. By assembling participants’ different perspectives about their neighborhood, the inquiry moved from individuals to institutions, to explicate how institutions have power over, and coordinate people’s activities. As anticipated, the interviews, photovoice interviews, and participant observations provided specific information about the effects of Nova Scotia’s day care policy. Consistent with institutional ethnography, the decision as to which public policy document needed to be analyzed was informed by participants’ experiences with the lack of regulated childcare in their neighborhood. This is not to negate the importance of policies related to welfare rates, public or low-income housing, transportation or urban planning policies related to the location and maintenance of playgrounds. It was the intensity and dominance of participants’ narratives about the lack of regulated childcare that informed this choice of document. The availability of childcare for mothers with young children has implications for health; indeed Kushner (2005) studied social institutional influences on employed

mothers' health decisions and found that mothers have identified decisions related to securing childcare as health decisions.

### *Description of Documents*

The documents chosen for the analysis included primarily the *Day Care Act*. R.S., c. 120, s. 1. (1989), and the related *Child Care Information for Families* website of the Nova Scotia Department of Community Services. The following is a brief description of the content and purpose of the Act. The *Day Care Act* defines "day care" as the provision of services pertaining "to a child's physical, social, emotional, and intellectual development apart from the child's parents or guardian" (*Day Care Act*. R.S., c. 120, s. 1. 2.). The purpose of the Act is to regulate and license existing daycare facilities in the province of Nova Scotia. It contains interpretations of daycare, director, facility, license, and minister. The Act lists license requirements, renewal, issuance, and expiry regulations. The Act states that the minister may attach conditions or restrictions to a license, and has the authority to cancel, suspend, or refuse a license for which the minister has to provide written reasons. The Act regulates the duty of the facility's owner, inspections by the provincial authority and alterations to the facility. The minister may approve a license for a municipal unit to operate a daycare. Penalties for non-compliance are not more than one hundred dollars or imprisonment of not more than fifty days. The Act lists regulations that may be made by the Governor in Council including the number of children in a facility and child-staff ratios, qualification of facility staff, requirements for standards of programs, services, health, space and fire protection.

This Act is concerned with the licensing of daycare and as such is regulatory only. Regulations include daily programs, building and space requirements, nutrition, medical, hygiene and safety, management and staffing issues. The province of Nova Scotia itself

does not provide the services of regulated childcare. According to the Act, a person or a municipality may apply for a license to operate a day care facility. The Department of Community Services (2009) monitors and licenses day care facilities across the province. Its website contains a child care directory and information on a range of topics, such as the childcare subsidy program and forms, portable subsidized spaces, the early intervention program, income eligibility, assessed daily parent fee changes, and supported childcare for children with special needs (Department of Community Services, 2009).

The childcare subsidy is intended to assist families with childcare expenses to “enable them to work, pursue employment, attend school, and cope with family crisis” (Community Services, 2009). Families with children under the age of 12 years are eligible to apply for a full-day daycare place. “The family's eligibility for child care subsidy will be based on the family's social need, residency status, liquid assets and financial eligibility. An applicant family must establish eligibility in all four areas to qualify for receipt of child care subsidy” (Community Services, 2009). Families are advised to contact the childcare subsidy case worker to determine eligibility and be ready to provide proof of earnings (e.g. income tax notice). It is the family’s responsibility to locate a daycare facility that will accept their child. Eligibility must be re-established every 12 months or earlier if deemed necessary by the case worker. Families are cautioned to advise the case worker of any changes in their financial situation within 7 days or they may risk losing the childcare subsidy or even risk having to pay back fees (Community Services, 2009). For example, families with 2 children whose net income is under \$62,731 would be eligible for a daycare subsidy. In Nova Scotia, all families who receive childcare subsidies are required to contribute a minimum of \$1 per day per family (Community Services, 2009). The province of Nova Scotia offers subsidized portable



spaces, which belong to the child, enabling families to move to other areas while keeping the subsidized space (Community Services, 2009).

### *Critique of Documents*

The act in its current form assumes the existence of childcare facilities. Furthermore, the Act as it is formulated, assumes equal geographic distribution of existing child care facilities, with sufficient spaces, for a variety of age groups, on a full day basis throughout the province to meet the population's needs. The Government of Nova Scotia offers child care subsidies for eligible families (Department of Community Services, 2009). If there are no facilities available however, or too few child care spaces within facilities, as may be needed in a certain geographic region, the offer of subsidies, portable or not, becomes meaningless. This issue was brought to the attention of the legislature on May 21, 2008 by Spryfield's MLA Michele Raymond who challenged the Minister of Community Services on behalf of her constituents to answer to the fact that a community of over 25,000 people with one of the highest proportions of lone-parenting families is served by less than 100 licensed childcare spaces. The response from the Minister illustrates the reliance of the government on the private market to fulfill a social need of families and children: "Again, we know there are challenges in different areas of the province and we make those dollars available and it is entirely up to the sector to come forward and present to us projects that we can support" (Debates and Proceedings, 2008).

In Canada only 10% of children have access to regulated childcare and the provision of a subsidy is inadequate given the demand (Raphael & Bryant, 2004). According to the Minister of Community Services, the provincial government relies on private for profit or not for profit entities, or a municipality to become service providers

of regulated child care. This raises the question of why the provincial government provides health care services and a public education system from grade Primary to 12, but does not create and provide public child care services for children between the ages of 6 months to 5 years? The responsibility for the provision of child care services is relegated to the private sector, or to a lower, municipal government level. Because of this relegation of responsibility for service provision, there is no mechanism in place that ensures equal opportunities of access to child care services for all Nova Scotia residents. The provision of child care services by the government itself is not a financial issue, since the provincial government already offers child care subsidies for eligible families. This means that families who can afford to pay will continue to pay, unlike health care services that are publicly funded for all residents. What would be ensured, if the province would be a service provider for child care, is the availability of spaces for all children in all geographic areas, such as public schools. According to Sancton (2008), the provincial government has in addition to taxation authority, jurisdiction over the areas that cause urban social problems, including health, education, social policy and the built environment. The lack of regulated childcare in Spryfield has the potential to contribute to urban social problems by perpetuating a life in poverty for low-income mothers and their young children. Lack of insufficient material resources, by keeping mothers below the poverty line increases their risk for ill health. Low-income urban environments without services such as regulated childcare that would enable mothers to join paid employment reinforce their risk for ill health.

The lack of regulated child care in Spryfield is an example of how public policy in the form of the *Day Care Act* and its consequences for women has power over individual lives to the extent that it reinforces gender inequities. The majority of

caregivers for young children are women, thus more women than men are disadvantaged by this policy. This is particularly true in the case of Spryfield with a higher than average percentage of low-income single mothers, compared to the rest of Halifax or Nova Scotia (Teplitsky et al., 2006). The assumptions or the logic underlying this childcare policy are an example of oppressive conceptual frameworks that keep low-income mothers living in Spryfield from joining the paid workforce. The logic of false gender neutrality underlying the policy by omitting the fact that the majority of care for young children is provided by women, places women at a disadvantage in accessing the paid labor force due to a lack of provincial childcare facilities that would enable sufficient childcare spaces for all children in Nova Scotia, thus providing a real choice to all parents who wish to access paid employment. Therefore, this public policy, in the form of the *Day Care Act*, together with the reliance of the government on the private sector to provide childcare may not in its intent, but certainly in its effect, be gender biased, because it reinforces inequities in equal opportunity for employment. The social role of women as caregivers of young children restricts their opportunities for employment, a socially created situation that could be alleviated if the province would provide the services of childcare.

Unlike jurisdictions with a social welfare or public responsibility model such as Sweden, which has a universal childcare program, Canada and Nova Scotia follow the neo-liberal market oriented approach, where childcare is regarded as primarily a family responsibility (Navarro, 2007; Raphael & Bryant, 2004). Privatization of services has benefited the top 20% of the population at the expense of the working class that use public services (Navarro, 2007). According to Raphael and Bryant (2004), Canadian women do not participate in the paid workforce to the same extent as men, which makes women economically more vulnerable. The authors examined the role of the welfare

state as a determinant of women's health and concluded that the effect of limited options for regulated childcare reduces women's choices to participate in paid employment, resulting in decreased support for mothers and an increased likelihood of additional stress, and situates women's quality of life in Canada well below that of other Organization for Economic Cooperation and Development (OECD) nations (Raphael & Bryant, 2004). Further discussion and analysis of Nova Scotia's day care policy is integrated in chapter VII.

### *Conclusion of Findings*

In conclusion, the participants' lack of financial resources and childcare responsibilities determined their choice of residence location in a low-income urban neighborhood. In addition to the lack of personal financial resources, central Spryfield lacks the necessary social and physical infrastructures, putting mothers and their families at a disadvantage vis-à-vis residents who either can afford to obtain services outside this neighborhood, or can afford to live in a neighborhood that offers necessary services to support healthy choices. The social and physical structure surrounding the mothers and their families in their daily lives did not always support healthy choices, even with mothers' best intentions and knowledge about healthy living. For example, mothers were discriminated against joining in the paid workforce due to their childcare responsibilities and lack of regulated childcare in the neighborhood. Mothers had to rely on food banks, sales in local grocery stores, or borrow money to feed their families. Mothers perceived their residential environment as a ghetto, disconnected from the larger community, and with a lack of safe playgrounds for their children. And areas in the neighborhood without sidewalks exposed mothers and their children to unsafe traffic conditions. This situation is problematic and can lead to health inequities as outlined in numerous research reports

(Kushner, 2005; Lightman, Herd & Mitchell 2008; Raphael, 2009; WHO, 2008) and government documents (Health Disparities Task Group, 2005; The Senate Subcommittee on Population Health, 2008). The next step in the analysis process is the interpretation and synthesis of the findings presented in chapter VII.

## CHAPTER VII

### Interpretation and Discussion of Findings

In this chapter, I interpret and discuss the study findings within the context of the ecofeminist framework (Chircop, 2008), and use the research questions as analytical categories as suggested by Bloomberg and Volpe (2008). The purpose of this study was to explore the relationship between health and the urban environment as it is experienced by low-income mothers within the context of everyday family life. The research questions were: 1) How are low-income mothers' everyday health decisions for their families influenced by their urban neighborhood? And 2) How do low-income mothers understand and negotiate their experiences of poverty, their low-income urban neighborhood and health? The four themes that emerged from the data were: 1) the absence of regulated childcare, 2) negotiating urban infrastructure, 3) negotiating nutrition, and 4) mother's invisible balancing act for negotiating health. These themes have fluid boundaries and often overlap the social and the physical dimensions of the urban environment. Themes one, two, and three are discussed in relation to the first research question, and the fourth theme is discussed in relation to the second question.

The ecofeminist framework, presented in chapter III, provides insights into possible reasons for gendered environmental health inequities in our society. It also provides a guide for the design of care-sensitive, public policies that can alleviate health inequities. This framework illustrates, in its core, the overlap between mothers' local knowledge, low-income mothers' systematic oppression, and the physical and social environments of their urban neighborhood. Mothers' narratives about their urban neighborhood, as presented in the previous chapter, revealed insights into their systematic oppression through ill conceived public policy within the context of Spryfield's urban

infrastructure. The following analysis is discussed within the framework's dimensions of gender, particularly mothers' perspectives of living in an urban environment, oppressive conceptual frameworks in public policy and socioeconomic structures, epistemology or mothers' local knowledge as experience-based evidence, contribution to empirical data, historical perspectives, and a care-sensitive ethics for healthy public policy.

I will begin by discussing possible answers to this study's first question, addressing the environmental influences on low-income mothers' everyday health decisions, by incorporating the dimensions of oppressive conceptual frameworks of public policies and related socioeconomic structures. This informs the discussion of the findings in relation to the study's second question about how low-income mothers understand and negotiate their experiences of poverty, their low-income urban neighborhood, and health. The dimensions of epistemology, empirical data and historical perspective will be discussed here. Recommendations for healthy public policy will incorporate the care-sensitive ethics in the final chapter. Figure 2 provides an illustration of the integrated ecofeminist analytical approach used for answering the study questions.

Figure 2: Integrated Ecofeminist Analytical Approach

Ecofeminist Framework	Study Questions	Findings	Analysis	Recommendations
Centrality of mothers' voices	Question #1	Theme 1	Oppressive conceptual frameworks	Care-sensitive ethics for public policy
Mothers' local knowledge		Theme 2	Socioeconomic structures	
Urban social and physical environments		Theme 3		
Systematic oppression				
	Question #2			
Dimensions: Oppressive conceptual frameworks		Theme 4	Epistemology	
Socioeconomic Structures			Empirical data	
Epistemology			Historical perspective	
Empirical data				
Historical perspective				
Care-sensitive ethics				



*How are Low-income Mothers' Everyday Health Decisions for their Families Influenced by their Low-income, Urban Neighborhood?*

*Oppressive Conceptual Frameworks in Public Policy and Socioeconomic Structures*

*Basic needs: Shelter and nutrition.*

As discussed in chapter III, the central feature of an oppressive conceptual framework is a logic of domination. According to Warren (2000), a patriarchal conceptual framework operates a logic of domination that justifies the oppression of women (as a group) in society to maintain ethnic-majority-male (as a group) power and privilege over natural, economic, and social resources in society. Patriarchy operates as a system of up-down relationships, where the downs “have difficulty getting their basic needs met” (p. 206). The logic of domination that results in low-income women having inadequate housing and nutrition is based on neoliberal notions that the housing and food retail markets are value free and every citizen has the same choice of housing and food retail. Neoliberal ideology regards the presence of children as a matter of individual choice. This ideology disregards the fact that many low-income mothers a) live below the poverty line, and b) have childcare responsibilities and obligations such as feeding their children, which places them on unequal footing with mid – to high income earners without childcare responsibilities. Thus, the actual accessibility of free market commodities is unequal and the logic of domination denies realities of existing social inequities that are embodied by these low-income mothers. This denial or lack of acknowledgement results in oppression of the downs and perpetuates the position of power and privilege of the ups. Shelter and nutrition are basic needs, and mothers' narratives about the influences of their urban environment on their daily health decisions reveal the magnitude public policies have on their everyday lives, in the form of barriers to meeting basic needs.

The Ottawa Charter (1986) outlines shelter and nutrition, among other basic structures in society, as prerequisites for health. Meeting the needs for shelter and nutrition required careful negotiation of resources available to low-income mothers. The choice of Spryfield as residence location was largely determined by a mother's income status, the presence of dependent children in her care, and the availability of low-cost housing in this neighborhood. As such, the decision where to live was negotiated in a context of scarce material resources and competing demands between shelter and safety, and the families' nutritional and other needs. The study's findings indicated that mothers' decisions for living in Spryfield were determined by the necessity for low-cost housing.

The negotiation between competing basic needs of housing and nutrition are echoed by Bryant (2009a; 2009b) who discusses the association between the increases in the use of food banks with the ongoing housing crisis. The lack of sufficient, affordable housing in Canada (spending less than 50% of one's income) initiates a cascade to situations of inadequate after-rent income for families, to inadequate financial resources to cover food related expenses, to ultimately food insecurity and poor health. Food insecurity includes a lack of appropriate caloric intake as well as a lack of nutritious food quality. According to McIntyre and Rondeau (2009) food security determines "life, health, dignity, civil society, progress, justice, and sustainable development" (p. 188). As such, food security is fundamental to the physical and social environments of a civil society. The challenges of low-income mothers negotiating a nutritious diet for themselves and their children is not a novel finding, but has been reported in Canada for some time (McIntyre et al., 2003; Nova Scotia Participatory Food Costing Project, 2009). Based on the findings of a recent food security study in Ontario, Tarasuk and Vogt (2009) highlight the need for better income support for low-income earners to be able to afford a nutritious

diet. Adequate income support for families to meet all basic needs is a preferred strategy over isolated food security programs. Food security issues need to be addressed within a broader context of the social determinants of health (Chopra & Sanders, 2002; Tarasuk & Davis, 1996; Wheler, Weinreb, Huntington, Scott, Hosmer, & Fletcher et.al., 2004), for example, a home energy assistance program for low-income families (Frank, Neault, Skalicky, Cook, Wilson, & Levenson, 2006).

The most recent report on affordability of a nutritious diet in Nova Scotia indicates that a household of two adults and two children, living on income assistance in 2008, could not afford a nutritious diet. Using conservative estimates, this household would be in a monthly deficit position in the amount of \$421.71 if they in fact purchased a nutritious diet (Nova Scotia Participatory Food Security Project, 2009). This evidence is supported by the findings of this study that mothers had regularly to borrow money to purchase food and other necessities.

Bryant (2009b) suggests that urban planners and policy makers have little appreciation of the impact of the housing crisis on health, and are pre-occupied with the physical aspect of housing design in relation to health, at the expense of an appreciation of the impact of housing availability and its relationship to the social determinants of health. This issue is significant for this study as it calls for the integration of the physical and social environments and their relationship to health. It emphasizes the need, and also the opportunity for interdisciplinary collaboration in addressing complex realities of urban infrastructures and their impact on gender and health.

In Canada, children live in poverty because their mothers live in poverty, or below the LICO (Canadian Research Institute for the Advancement of Women [CRIA], 2005). Macro-level, federal policies that determine federal transfer payments to the provinces,

and provincial policies that determine the level of financial assistance to families who live in poverty, are examples of systematic oppression. Canada is a neo-liberal welfare state, which, according to Bryant (2009a) is the most undeveloped model of a welfare state. Modern welfare states evolved largely after World War II, based on the Keynesian economic model in which the state has responsibilities in regulating aspects of the private market to ensure that social and economic benefits also reach lower-socioeconomic groups in society. This model understands that certain social services should not be commodified in an unregulated free market, but should be accessible to all citizens regardless of income level. The Keynesian model in which the state has regulatory functions over the private market economy was seen as a model that could avoid socialist attempts to rebuild soviet-style societies after the economic crises that preceded World War II (Bryant, 2009a).

According to Bryant (2009a, p. 239 ff.), the degree of commodification of social services underlies the Esping-Andersen typology of liberal, conservative, and social democratic welfare states. A liberal welfare state is based on a “liberal”, hands-off approach to the market economy, with least interference by the state. Therefore, this type serves as a means of last resort for the destitute, with little effort to compensate for previous or future experiences of poverty. Liberal welfare states re-distribute resources through a system of progressive income taxation; however, the extent of redistribution is less, compared to the other types of welfare states. Australia, the UK, and USA are examples of liberal welfare states.

Conservative values of the traditional family, and the maintenance of social status and class are the basis on which conservative welfare states operate. The re-distribution of resources is established through a system of insurances that are shared between

employer and employees. In this state controlled system of social insurance, as opposed to social assistance, higher paid employees receive more generous benefits than lower paid employees. Examples of conservative welfare states include Germany, Netherlands, and Switzerland (Bryant, 2009a).

Social democratic welfare states are represented by Scandinavian countries including Sweden, Denmark and Norway. Values of universalism, decommodification of social services and prevention of social problems form the basis of this system. Economic resources are distributed to achieve equality and the elimination of poverty. Social programs such as childcare are provided by the state (Bryant, 2009a).

In Canada's neo-liberal system, social assistance is usually a means of last resort for the least well off in society. Welfare benefits are kept to a minimum to discourage dependence on the state (Bryant, 2009a). In Canada, social policies that do not support low-income mothers and their families to be able to afford both safe shelter and healthy nutrition, are ill conceived, and their consequences are often unethical. That is, an economically created situation that has consequences beyond discouragement of dependence and forces low-income mothers to choose between adequate housing and food for their family is morally wrong, because it places mothers in a dilemma of having to choose between two basic needs for living and health.

The logic of domination that operates through neoliberal ideology understands that by keeping welfare payments and government investments in urban infrastructures to a minimum, the government is able to facilitate private market growth. The growth of private markets results in the creation of employment opportunities for all citizens to enjoy, resulting in increased tax revenues through income tax and a reduction of the need for welfare payments and provisions of free services. Low-income mothers are the downs

who are not contributing to income tax revenues. They need to be discouraged from dependence on the state, as not to draw valuable resources that could contribute to market expansion and ultimately benefit their own situation as independent consumers. The prevailing value judgment of low-income mothers regards them as not contributing and of using public funds. The care work mothers do is not valued in a monetary exchange economy, rather low-income mothers are judged as deficient, lacking, burdensome, and undeserving.

Canada's first food bank, a non-governmental, not for profit organization, opened in 1981 in Edmonton, Alberta (Weimer, 2009), and today, almost 30 years later, 50% of all food bank users in urban areas are families with children (Food Banks Canada, 2008). The stories of mothers' use of food banks in this study revealed their discontent with the quality and quantity of food received. These findings are not surprising, given that food banks are not in a position to provide for the total nutritional needs, providing a maximum of food for 5 days per month, per household (Food Banks Canada, 2008). In Nova Scotia the situation is such that "it is unsettling but realistic to expect that many folks spread their food supplies as thinly as they could, called on family and friends, or simply did not eat sometimes just to make it through" (Food Banks Canada, 2008, p. 28).

The housing situation of food bank clients revealed that in 2008 the majority of clients resided in rental housing, paying either market rent or subsidized rent (Food Banks Canada, 2008). Canada is one of only a few countries that do not have a national housing strategy (Kothari, 2009). Kothari's report on adequate housing in Canada echoes this study's findings about discrimination in the rental housing market. He found a prevalence of screening-out processes based on sex, age, family status and income level such as social assistance that disproportionately affects women. The lack of sufficient

low-cost or public housing in combination with an increased demand in food banks serves as a message of discouragement to its users and is an attempt to keep people from forming a dependence on public housing and free food. The issue of inadequate and scarce low-cost or public housing and the necessity to use local food bank provisions were particularly challenging in an urban environment, where possibilities of food co-operatives or the opportunity to grow one's own food are limited. The creation of urban environments such as Spryfield is a gendered environmental health issue as it exposes disproportionately more women and their children to unhealthy environments.

The idea of control over one's personal choices, as important for health, as suggested in the Ottawa Charter (1986), was merely an illusion for participants in this study. While the study findings illustrate "personal" experiences and insights, the common themes reveal "structural" determinants of health, in particular public policies that function like strong currents in rapid waters. In addition to the influence of public policy on mothers' health decisions for safe housing and healthy nutrition, the provincial childcare policy in Nova Scotia is another example of policy created impediments to healthy choices.

*Lack of regulated childcare.*

Participating mothers voiced a desire to join the workforce, but were inhibited from doing so by provincial childcare policy. Nova Scotia's childcare policy is built on the assumption that the private market will satisfy the social and economic need for childcare by providing sufficient childcare spaces in locations of need at the right time. Once childcare spaces have been created by the private market economy, the government regulates this service through *The Day Care Act*. In the neighborhood of Spryfield, at the time of this study, the private market did not provide sufficient regulated and affordable

daycare opportunities for mothers with young children, to enable them to join the paid workforce. This situation contradicts a logic of discouraging dependence on the state, where clearly the private market has not fulfilled its promise to create childcare opportunities, leaving these mothers no choice.

Systematic oppression of low-income mothers living in low-income urban neighborhoods is complex. The complexity is related, in part, to administrative and legislative responsibilities of federal, provincial, and municipal levels of government in relation to the health of Canadians. Unlike other countries, Canada has a public health care system where the state plays a very direct role (Bryant, 2009a). Health policy has a broader scope than health care policy, and public policy is even broader than health policy. Public policy influences population health by targeting the determinants of health including income, housing and education. In Canada, however, the consideration of public policy beyond the scope of health policy is rare (Bryant, 2009a). For example, according to an Organization for Economic Cooperation and Development (OECD) report, Canada spends less on unemployment and family benefits than most other OECD countries, which means that inequalities have not been reduced to the same extent as in other OECD countries. In fact, the role public policy could play in reducing inequalities has been declining over time (Coburn, 2006; OECD, 2008; Raphael, 2007).

A neighborhood's physical and social infrastructure is determined by all three levels of jurisdiction with their various supports and services, or lack thereof as has been shown to be the case in Spryfield. In Canada, public policies with a significant health impact on communities are created at the provincial level (Sancton, 2008). Even though municipalities are responsible for by-laws governing urban services, parks, garbage collection and policing, the root cause of many social problems lies with the powers of



policies at the provincial level (Sancton, 2008) such as social assistance, housing, or regulated day care in Nova Scotia. According to Sancton, provinces “have effectively become the strategic policy-makers for our respective urban futures. This is true both for physical infrastructure and for social policy”(p. 4).

One of the “roots of the root causes” of inequities in this study is the structural impediment of the absence of regulated childcare, that would otherwise enable mothers to re-enter the paid work-force or educational institutions, thereby increasing their financial resources to a level that enables health decisions consistent with their knowledge, beliefs and intentions. A recent report about income distribution and poverty in OECD countries succinctly stated “work reduces poverty: child poverty is lower in countries where more mothers work” (OECD, 2008). In Canada, employment rates of mothers are consistently lower as compared to other working women; and mothers experienced a strong decline of up to 33% in earnings during the year following childbirth which continued to decline to 39% during post-childbirth years (Statistics Canada, 2007). These statistical facts are contextualized by Nadine’s lived experience that provided insights into the implications of employment and childcare policies for mothers of young children. Nadine explained that she was trying to become a dog groomer, but had to wait until her son got enrolled in a daycare centre. As stated above, when I asked Nadine how long she had been on the waiting list for the daycare she replied that it had been more than six months. Nadine was getting impatient because she required a subsidized childcare place at the time her son would be 18 months old, which could hold her back even longer.

The province of Nova Scotia does not directly provide childcare services, rather it provides start-up funding for non-profit and corporate, private operators of childcare services, which are regulated by the province through the *Day Care Act*. R.S., c. 120, s. 1.

(1989). The focus of the act is the licensing of day care services in Nova Scotia. Child care licensing and related standards fall under the program of Early Childhood Development Services within the Department of Community Services. The logic behind this policy is that the private market will fill the need for required childcare spaces in Nova Scotia.

Recent statistics indicate that in Nova Scotia only 10.3% of children of employed mothers have regulated child care spaces, and only 21.6% of those 10.3% are subsidized spaces (Nova Scotia Advisory Council on the Status of Women, 2009). The same report indicated that “Nova Scotia’s per child allocation for regulated childcare is one of the lowest in the country” (p.44).

These statistical facts illustrate a social problem yet contemporary approaches to policy analysis are more akin to public issues management that begins with a clear articulation of a social problem (Pal, 2006). According to Pal “policies are responses to problems, and so the character and shape of the problem will deeply affect the nature of the response. At the most extreme, if a problem is not widely recognized at all, there will be little or no policy response” (2006, p. 97). Problems of marginalized populations hardly receive public attention unless they are championed by politicians or advocacy groups. Naming and describing a problem publicly is largely a prerogative of power and privilege. The Act does not articulate a problem to be addressed and does not include a preamble containing information about the role of day care facilities in society, or how it would support working parents. The Act omits any context information about parents, specifically about mothers who are the main care-givers of young children in Nova Scotia. As such, the Act omits a Gender Based Analysis (GBA) approach, or Gender Mainstreaming approach in public policy as proposed by the United Nations (Pal, 2006).

The Act includes a section with interpretation about day care, the director, the facility, the license, and the minister. The interpretation of day care reads “the provision of services pertaining to a child’s physical, social, emotional, and intellectual development apart from the child’s parents or guardian” (*Day Care Act*. R.S., c. 120, s. 1. 2.). The reasons why society ought to provide services to children “apart from the child’s parent” are not clear. It could be implied that the Act serves to protect children if they receive services away from their parents or guardian. The lack of situating the *Day Care Act* in any current social context implies that childcare is basically a matter of private interest or a private “lifestyle” choice independent of any social or economic necessity or consequences. This childcare policy assumes the non-existence of poverty, particularly the feminization of poverty, and that women would be the “natural” caregivers of children within heterosexual family structures. The effects of this “neutral” conceptual framework underlying childcare policy were explicated through the ecofeminist analysis of this research and produced experience-based evidence that Nova Scotia’s day care policy does not respond adequately to the realities of low-income mothers living in a low-income neighborhood.

The question of whether childcare is a private matter or a social responsibility has long been resolved by many European countries, unlike in Canada where the call for universal childcare since the early 1970s still has not been answered. Rooted in the feminist movement, advocates for childcare have joined forces with advocates for early childhood education recognizing the need for a holistic approach that benefits children, mothers, families and all Canadians. Childcare advocates in Canada recommend that the national government take a similar approach to universal childcare as that of the *Canada*

*Health Act* to contribute to poverty reduction, social equity, and social inclusion (Friendly & Prentice, 2009).

Nova Scotia's policy on regulated childcare is problematic as it is based on the assumptions that the private sector will create and operate child care facilities and that there is equal access to these services. This means that a crucial responsibility for social programs is relegated to private market forces. It is an example of "ideals of democratic capitalism [...] that exist normatively, but are always violated in practice" (Trudeau & Cope, 2003, p. 779). In this neoliberal system, realities of unequal access based on race, class, and gender are denied, because the private market theoretically, has "open access". Neoliberal ideology presents itself as value free supporting a value free and neutral market to the benefit of all citizens. This ideology implies personal responsibility for race, ethnicity, class, gender, sexual orientation, etc. in that whoever falls outside of the dominant prototype of the free market citizen is somehow deficient. Clearly, for the study participants this situation constitutes a situational, structural impediment related to their role of mothering young children under dire material circumstances. The experience of financial hardship as a result of motherhood and the absence of childcare have been found to result in social isolation of young mothers in a recent study based in Australia (Baker, 2009). A public policy that constrains mothers' enjoyment of the same rights to employment as others in society, contributes to social exclusion by denying full citizenship as an employee with all the opportunities resulting from improved material conditions. According to Trudeau and Cope (2003), systemic social exclusion is embedded in neoliberal welfare states, perpetuating a "hierarchical social differentiation" (p. 782). Although the phrase "social exclusion" was not used or spoken by study

participants, their stories about daily life in Spryfield provided evidence of social exclusion.

*Urban infrastructures.*

Mothers' daily negotiations of their urban infrastructure reveal their immense strengths and resourcefulness, but also realities of harshness and systemic social exclusion. Ghettoization is perhaps one of the most striking forms of social exclusion that a society can create to keep undesired people spatially confined and away from mainstream society. The spatial separation of unwanted people who are deemed not to fit mainstream society can serve to keep the issues of social inequity out of the public's mind, increasing the possibility that it will not become a "problem" that requires public policy management. Social exclusion has been described as the lived experience of poverty (Raphael, 2007) and includes dimensions such as economic, social, political, neighborhood, spatial, individual, and group (Percey-Smith, as cited in Raphael, 2007, p. 100). Both as a cause of poverty and a result, social exclusion is associated with a lack of resources that prevents participation in everyday social activities (Raphael, 2007). According to Raphael, there is consensus among scholars in the field that the primary cause of social exclusion is structural. Building on the work of Galabuzi (2006), Raphael indicates that recent economic trends impact labour regulations, provision of public services and basic needs such as housing, resulting in urban spatial segregation along gender, class, and race lines.

Participants' characterization of their neighborhood (Greystone) as a ghetto has meanings and implications for their own health and well being, as well as for the larger community. As Maggie said, "Nobody ever has to drive by that eyesore. So, the taxpayers aren't going to complain about it because they don't see it". The fact that this

public housing project is “out of sight” and spatially set apart, conveys, on the one hand, a message to its residents that they do not belong to the rest of Spryfield, or Halifax, and on the other hand, conveys a message to the wider community that “they, up on the hill” do not exist or should be hidden. Because the spatial location of Greystone makes it invisible to non-residents, it does not become an issue for those in the community that might have more political and/or economic power to change the housing situation.

According to participants, the state of its housing disrepair and issues with litter make the neighborhood of Greystone an “eyesore”, or un-aesthetic. Residents are reminded daily by their physical surrounding of their life in poverty, which may add to mental stress, perceived lack of ownership and control, and stigma. Similar experiences of stigma associated with low-income have been reported by Stewart, Reutter, Veenstra, Love and Raphael (2003) who found that people on low-income experience greater social exclusion as compared to people on higher income. In contrast, pleasant surroundings have been found to contribute positively to mental health (Pretty, Peacock, Sellens, & Griffin, 2005). In this study, Pauline’s expression that: “there is some trashy people here”, is an example of the association of physical appearance of the neighborhood with the characteristics of its residents. According to ecofeminist philosophy this association is prevalent in oppressive conceptual frameworks that perpetuate inequities based on a perceived lesser value of a geographic region as well as its residents.

Clark, Myron, Stansfeld and Candy (2007), in a systematic review suggest that there is weak evidence for an effect of poor housing on mental health. The authors concluded that very little research has been carried out in this area yet, Galea, Ahern, Rudenstine, Wallace, and Vlahov (2005) found that the likelihood of depression is related to poor quality built environments. Aesthetic qualities, or the appearance of their

neighborhood was found to be important for the quality of life of residents of Kings County and Glace Bay, two rural low-income communities in Nova Scotia (Colman, 2005). Therapeutic, healing aspects of nature and physical surroundings have been described for centuries dating back to early Greek literature (Schweitzer, Gilpin & Frampton, 2004); and later to Florence Nightingale (1859). Effects have been classified as “non toxic to safe”, “providing a positive context”, to being “actively salutogenic” or health enhancing (Schweitzer, Gilpin & Frampton, 2004, p. S-71). Particularly for a population that is experiencing daily stressors related to life in poverty, a physically pleasing, welcoming and safe environment could provide residents with “salutogenic” benefits. The integration of “green infrastructure” in urban areas as a strategy for public health promotion was proposed by Tzoulas and colleagues (2007) as beneficial for both natural ecosystems and human health.

The public housing community of Greystone has been built on a hill at the outskirts of Spryfield, Halifax. Greystone is home to many families with young children, making it very challenging walking up or down steep gradients with a stroller. During the winter season, public bus transportation ceases if the only road leading up to Greystone is deemed too icy for safe driving. The sidewalk, on one side of Greystone drive, has recently been repaired, but other areas in Spryfield, specifically along Herring Cove Road, a very busy thoroughfare, had no sidewalks in many areas, forcing residents to walk along the shoulder of a road with a heavy volume of motor vehicle traffic. After heavy snowfalls, residents have to walk on the road because the snowplow pushes the snow onto the shoulder, making it impassable for pedestrians. These issues of missing sidewalks and steep terrain in and out of Greystone are structural impediments and the results of urban planning policies that are not in tune with residents’ realities. The logic underlying

this kind of urban planning is based on assumptions that the majority of people who live in public housing are unemployed and have no need to access a fully functioning regular public bus service, in addition to gender blindness that denies the presence of small children in the care of mothers. Adding to the traffic safety risks the residents are subjected to on a daily basis, is the stress of not being able to have timely access to work, necessary health and social services as well as food supplies. This is also an example of how urban planning may not have in its intent, but certainly in its effect, severe health implications for residents whose daily concerns are not taken into account. Clearly, the creation of neglectful urban environments has gendered health implications.

Lack of transportation impacts many aspects of daily activities and contributes to social exclusion (Raphael, 2007). Conversely, the presence of sidewalks, for example, enhances a sense of community and sociability (Lund, 2002; Mehta, 2007). Going to work, school, or daycare, getting groceries, and accessing other services and locations within and outside of one's neighborhood are essential daily routines, mostly of mothers with young children. A physically displeasing (litter, graffiti) environment and high traffic reduces a neighborhood sense of social cohesion, and the presence of sidewalks and less traffic are associated with more walking and biking (Addy, Wilson, Kirtland, Ainsworth, Sharpe, & Kimsey, 2004; Franzini, Elliott, Cuccaro, Schuster, Gilliland, and Grunbaum et. al. ,2009).

Visits to playgrounds and parks were central activities of mothers and their young children. Mothers were looking for certain characteristics of playgrounds including age appropriate equipment, a variety of creative features that would support different activities and sustain children's interest, safety features, cleanliness, and a place for moms to sit and observe while children were playing. Within their immediate neighborhood,



none of the existing playgrounds included all these characteristics. The playgrounds closest to the mothers' homes were often vandalized, had unsafe play structures and flooring, and often no place to sit and watch their children play. Implicit in this arrangement is the message that mothers and children in other, richer neighborhoods deserve access to appropriate playgrounds within their reach, creating and reinforcing inequity in recreational opportunities based on class. Different urban environments are created for different neighborhoods and their residents as a result of failure of urban governance (Kjellstrom & Mercado, 2008), premised on beliefs that middle- and upper class residents have earned (through their income and property taxes) access to appropriate recreational spaces and are deemed to take ownership and good care of public spaces and equipment, as such they have earned trust with urban planners. According to Liz, one of the participants, these different environments may be a result of different tax revenues from different neighborhoods within the city. Children from Greystone and Spryfield learn from early on that playgrounds are often better in other neighborhoods.

Playgrounds have been investigated for their suitability for children with different abilities (Prellwitz & Skär, 2007); for trends in falls injuries (Ball, 2007), as learning environments (Farley, Meriwether, Baker, Rice, & Webber, 2008; Mitchell, Cavanagh, & Eager, 2006); for children's exposure to arsenic and chromium treated wood (Hamula, Wang, Zhang, Kwon, Li, Gabos, & Le, 2006; Shalat, Solo-Gabriele, Fleming, Buckley, Black, Jimenez, et.al, 2006); and for governments' compliance with safety standards of playgrounds (Sherker, Ritchie, Eager, & Dennis, 2009). The physical environment and the perceived safety of the neighborhood have been found to influence parents' encouragement of their children's use of playgrounds (Miles, 2008); and public open spaces in high socioeconomic neighborhoods have been found to have more features that

promote physical activity among children (Crawford, Timperio, Giles-Corti, Ball, Hume, Roberts, et. al., 2008). The least safe and least accessible playgrounds have been found in socioeconomically disadvantaged neighborhoods (CIHI, 2008; Cradock, Kawachi, Colditz, Hannon, Melly, Wiecha, & Gortmaker, 2005; Thomas, 1986), which is supported by Liz's analysis and the findings of this study.

Family oriented services in the community including the Single Parent Centre, the Captain Spry Community Centre, and the Lion's Club were appreciated by participants for their usefulness and support in bringing up young children in Spryfield. Participants were unanimous in their praise for the Single Parent Centre, a not-for-profit, non-governmental organization (NGO). Consistent with the neoliberal approach, numerous public services are delivered by private not-for-profit organizations, which rely on fundraising activities to sustain their services and programs. The provision of services for low-income families is seen as the responsibility of charity. Thus it is a gift, not a right. In Canada these organizations range in size and scope including the well known Diabetes Foundation, YWCA, United Way, and at the local level the Metro Food Bank, Hope Cottage, and Adsum House for homeless women. These services have become a necessity to fill a void of public services that could be provided by the state. A growing number of NGOs in Europe are reported to be concerned with public health in recent years (Gulis, Garrido-Herrero, Katreniakova, Harvey, & McCarthy, 2008). Efforts of NGOs to deliver public services to communities, often through volunteers, many of whom are women, are commendable, because certain services would not be available without such efforts. The necessity of grant applications for funding however, takes up valuable time and many charities have to compete for funding from the same granting agencies, which can lead to fragmentation and disruption of programs for the community

(Personal communication with local NGOs). In Canada, volunteers contributed \$64.9 billion to the national economy in 2007, and in Nova Scotia, volunteers contributed \$1.8 billion in 2005 (GPI Atlantic, 2008, p. i).

The municipal services delivered through the Captain William Spry Community Centre in the form of library, gym, and swimming pool, were appreciated by residents for their recreational value. In contrast to the programs offered by the Single Parent Centre at no cost or at a minimal cost, including childcare, many of the municipal programs are fee based and do not necessarily provide childcare. User fees are a deterrent to participating in desired activities (Stewart, Reutter, Makwarimba, Veenstra, Love & Raphael, 2007). Child care opportunities could provide either respite for parents during recreational activities, or for activities of families with children of different developmental stages, such as the ability to swim.

The accessibility of organized, recreational sports such as hockey or golf was identified as problematic for most participants due to the high costs associated with membership fees and equipment. In Canada, the discourse on healthy lifestyle is largely dominated by a call to increased physical activity and healthy eating (Frank & Engelke, 2001; Sallis & Glanz, 2009; Tomalty & Haider, 2009; Veugelers, et. al., 2008). This discourse is also prevalent in the environmental health arena, where active transportation in the form of walking and biking together with a diet of local, and preferably organic foods have become moral imperatives (Alkon, 2008; Clarke, Cloke, Barnett & Malpass, 2008; Francis, Lieblein, Steinsholt, Breland, Helenius, Sriskandarajah et al., 2005; Tomalty & Haider, 2009z). This focus on individual behavior change to take responsibility for ones' health and the environment is consistent with the neoliberal agenda that puts the onus squarely on individuals, at the same time as new markets for

recreation, sports and food industries are created. The commodities offered by the sports, recreation and food industries, particularly organic foods are out of reach for low-income families and benefit largely the higher socioeconomic classes who can afford to purchase these goods and services. This situation is another example of social exclusion, specifically, the exclusion from participating in a “green” and “healthy” lifestyle. This neoliberal market approach to “healthy living” disenfranchises people living in poverty and sends the message that they are not entitled to healthful activities and nutritious foods.

Other services such as employment and schools were critiqued for their shortcomings that, according to the participants’ stories, appeared to be specifically related to Spryfield as a low-income neighborhood. According to participants, the local employment centre offered little opportunities for employment with higher than minimum wage, or too few opportunities for further skills development that would enhance opportunities for higher paid employment. These findings are consistent with Green’s (2000) who identified a lack of community economic development and limited job opportunities as causes of parenting in poverty. Here, the logic is that the market creates employment opportunities (in reality these are increasingly minimum wage, casual, and part-time) but the acquisition of skills and education to be able to apply for better paying jobs is a personal responsibility of individuals. Low-income mothers who took on the responsibility to care for their children instead of continuing with expensive post-secondary education are punished by this neoliberal approach to the employment market economy.

One of the participants perceived teachers of the neighborhood school to hold prejudicial attitudes toward the parents of Greystone. It was felt that there was an assumption that parents who live in public housing would benefit from a drug and alcohol

prevention program delivered through the school. One of the participants questioned whether this program was planned for parents of all primary schools in Halifax, or just their particular community. The assumption that there was something wrong with the residents of Greystone reinforces the notion that individuals are responsible for poverty instead of shifting the blame to societal structures. Auwarter and Aruguete (2008) found that teachers were more likely to develop negative attitudes toward students of lower socioeconomic backgrounds.

Similar to this study, Green (2000) found that low-income mothers of preschool children, who lived in low-income neighborhoods in Saskatchewan, were confronted daily with challenges in the social and physical environment including inadequate income, lack of daycare, affordable housing, and safe playgrounds as well as the inability to afford a nutritious diet. Green's study originated from a program that provided social and nutritional support to low-income mothers of preschool-aged children and evolved into a participatory action research study to empower low-income mothers to change their neighborhood. Consistent with the study's approach rooted in a philosophy of empowerment, Green's recommendations were aimed at the structural, policy-making level, and recognized the need for realistic expectations of low-income mothers' capacity for social action, due to their limited access to resources and political power to initiate change on their own. These recommendations included the provision of social assistance to levels that enabled families to meet their basic needs, more family support services, the provision of childcare services, and affordable and appropriate housing. Green's study highlights the necessity to critically analyze the structural factors affecting health.

## *The Impact of Neo-liberalism and Patriarchy on Low-income Mothers' Health Decisions*

Neo-liberal ideology espouses that society and its infrastructures will eventually benefit through mechanisms of economic growth of a private market, and not through direct investment in public services by the state (Bryant, 2009; Coburn, 2006; Raphael, 2007; Trudeau & Cope, 2003). Mothers in Spryfield were prevented from joining the paid workforce by ill-conceived public policy that resulted in a lack of infrastructure, specifically regulated childcare. The private market did not provide for a supportive infrastructure for low-income mothers with young children. In addition to the local infrastructure shortcoming in Spryfield, mothers were victimized by a national and consequently provincial welfare system that kept their household incomes below the current LICO's, reinforcing their lives in poverty. This scenario situated mothers with less power and control to join the free market economy than people without childcare responsibilities. According to Navarro (2007) determinants of poor health are rooted in class, race and gender relations of unequal power and their political instruments, such as neo-liberal politics, through which their power is operated and reproduced.

Are neo-liberal politics necessarily patriarchal? Patriarchal values can be enacted by women, and men can suffer under patriarchal societies, depending on their social location. The same is true for neo-liberal politics, where women from the upper class of society may oppress working class men through exploitative working conditions. What both have in common is their establishment and operation of up-down relationships in society to maintain power and privilege for certain groups in society (Trudeau & Cope, 2003). The majority of these privileged groups are male dominated (Nova Scotia Advisory Council on the Status of Women, 2009), and the combined effect of patriarchy and neo-liberal politics on women as a group in society makes them disproportionately

more vulnerable. Evidence suggests that neo-liberal politics are the political instruments of choice for modern patriarchal societies (Brodie, 2008; Coulter, 2009; Fraser, 2009).

Canada has adopted many policies that encourage equal participation of women in society, such as the Royal Commission on the Status of Women, affirmative action policies, and gender based analysis in health research. However, in 2006 Harper's Conservative government terminated funding to equality-seeking groups, including the Court Challenges Program that assisted individuals and groups to challenge public policy under the Charter of Rights and Freedoms, and the Law Commission of Canada that provided independent research on legal questions including equality claims (Brodie, 2008). Canada's endorsement of neo-liberal, patriarchal politics (Bryant, 2009; Raphael, 2007), lead Labonte to pose the question: "How does one "include" people and groups into structured systems that have systematically "excluded" them in the first place?" (Labonte, 2004, as cited in Raphael, 2007, p. 105). Raphael (2007) explained that "poverty is a result of the inherent properties of the social system" (p. 96) and social inequality is built into the economic system that actually benefits from poverty. It does so by keeping wages low to increase profit margins, and pitting employed against unemployed by offering low-wage jobs with little benefits.

At the same time as the number of women, and women with young children participating in the workforce has increased, significant gaps between women's and men's wages remain (Nova Scotia Advisory Council on the Status of Women, 2009). According to Coulter (2003), neoliberalism cannot be seen simply as an economic and political ideology because it has far reaching institutional and cultural consequences; therefore, it needs to be theorized as moral doctrine that squarely puts the individual as the fundamental unit of society. Neo-liberal ideology and patriarchy then reinforce each

other by operating through notions of individual autonomy, maintaining the status quo in society through the establishment and maintenance of hierarchical relationships that privilege upper-class, dominant ethnic, heterosexual men (as a group) in society at the expense of women (as a group), children, racial minorities, and the poor (Markusen, 2005; Sen & Östlin, 2007).

“The feminist critique of bureaucratic paternalism has been recuperated by neoliberalism. A perspective aimed originally at transforming state power into a vehicle of citizen empowerment and social justice is now used to legitimate marketization and state retrenchment” (Fraser, 2009, p. 56). Ironically, liberal feminism may have unintentionally aided neoliberalism through its identity politics to the extreme extent that now we are all neutral consumers, of a two-earner family of an undiscriminating private market that denies social constructions of access (Baker, 2009; Coulter, 2009; Fraser, 2009). That is, a shared (liberal feminist and neoliberalist) focus on individual agency, free from traditional obligations and institutional constraints, has resulted in a discourse of choice and free will that points to personal responsibility for failure or success. The stories of low-income mothers in Spryfield provided evidence to refute the claim of a “neutral consumer” and illustrated how political and economic structures in our society disempower low-income mothers from consumer choices, let alone choices that would be considered environmentally healthy. According to Crabtree, “even in the problematic role of consumer, financially constrained home-makers cannot make “green” choices when we still have in place political, economic, and physical structures that make unsustainable products and practices cheaper” (2006, p. 727).

In summary, this study’s findings support existing evidence of the influence of ill-conceived public policy on the health decisions of low-income mothers living in low-



income urban neighborhoods, such as Spryfield. Oppressive conceptual frameworks in the form of neoliberal ideology are pervasive in public policies that shape the urban social and physical environments of low-income neighborhoods. Mothers' efforts to meet their families' basic needs of shelter and nutrition are framed by their policy-created socioeconomic location, the presence of young children and the lack of regulated childcare in their neighborhood. These conditions that contribute to social exclusion further influence mothers' health decisions through the type of resources available within their low-income neighborhood, including ghetto-like housing arrangements, an inadequate transportation infrastructure, neglected and unsafe playgrounds, insufficient employment and educational opportunities, and insufficient family services. Within this context, the study's second question is explored.

*How do Low-income Mothers Understand and Negotiate their Experiences of Poverty, their Low-income Urban Neighborhood and Health?*

The intricate balancing act of negotiating health in the context of poverty and living in a low-income urban neighborhood are discussed next, by incorporating the ecofeminist framework's dimensions of epistemology, empirical data and historical perspectives. Similar to findings reported by Green (2000), women's experience of poverty determined their location of residence in a low-income neighborhood where they could find a safe and affordable place to live with their children. If the participants in this study had not had the responsibility of being the primary caregiver for young children, most of the women might not have been living in poverty (Canadian Research Institute for the Advancement of Women, 2005). Ironically, women's unpaid housework and childcare contributed a staggering \$10.4 billion to the economy of Nova Scotia alone (GPI Atlantic, 2008). Daily realities of scarce material resources greatly influenced the

opportunities for healthy choices, not only for mothers themselves but also for their children. In addition to living on a low household income, mothers also had to contend with the limited resources available within their low-income neighborhood. Mothers' stories illustrated a skillful balancing of basic needs with limited basic material resources. These skills did not come "naturally" rather they required local knowledge, and were learned "low-income-family-household-management" skills to carry out the work of mothering.

### *Epistemology and Experience-based Evidence*

Respecting that mothers are the experts of their lives within their neighborhood is consistent with the ecofeminist framework and the institutional ethnography approach to knowledge generation. Acknowledging their expertise is the beginning to learning about their daily balancing acts of negotiating health between competing demands and scarce resources. Due to their social and physical location, participating mothers in this study represented an example of the embodiment of environmental health inequities. They have come to know their environment by being, experiencing, participating, living, and observing it on a daily basis, and not merely by rational observation or as a neutral bystander. Mothers' insights were the starting points for this investigation, where local knowledge was co-created between the participants and myself as a researcher, resulting in the articulation of experience-based evidence. Informed by the ecofeminist framework and methodology I have connected the physical environment and oppressive conceptual frameworks in public policy and socioeconomic structures with women's everyday experiences.

Mothers' negotiations for their own and their children's health included prudent, financial and safety decision-making about housing, as previously discussed. To secure

food for their families with the remaining after-rent income, mothers had to make frugal decisions and constantly look for deals and sales in local food stores and discount “Dollar Stores”. According to participants’ stories, many people in Spryfield can afford only the less healthy foods, meaning less fresh fruits and vegetables, oils and more processed foods. The ability to purchase foods in general was largely dependent upon the timing of participants’ welfare payments or child tax benefit payments, making it very difficult to take advantage of special deals offered by neighborhood-based grocery stores. Most participants had to use the food bank where there was very little choice over food quantity and quality. Strategies to secure food included borrowing money, and participating in this study, which was motivated by obtaining grocery gift certificates for most participants. Amount and timing of income assistance were structural barriers to food security, and NGOs such as the Metro Foodbank or the Single Parent Centre, as well as relatives were places of last resort for mothers to secure food for their families. It was low-income mothers’ resourcefulness, knowledge, and creativity in negotiating a variety of strategies that kept their families fed.

Mothers’ concerns for their children and the absence of regulated childcare opportunities in the neighborhood obliged them to stay at home until their children would reach school age. In Canada, the majority of stay-at-home parents are women (GPI Atlantic, 2008). Most participants believed that, under the circumstances, it was their responsibility to be the main care giver for their children. Ironically, this belief which mirrors patriarchal assumptions, might have been influenced by the prevailing discourse about “good mothering practices” in our society. Many mothers change priorities from themselves to their children and suppress self interests in order to accomplish mothering responsibilities (Baker, 2009). Low-income mothers get little recognition for their

parenting accomplishments under less than optimal conditions; instead they are frequently stigmatized and devalued (Green, 2000).

Mothers made use of social support services provided by community organizations, or created their own social support networks among neighbors. Mothers' community participation has been positively related to their children's health status, particularly in poorer neighborhoods (Nobles & Frankenberg, 2009), and social supports for mothers in low-income neighborhoods have been positively related to fewer accidents and injuries of their children (Leininger, Ryan & Kalil, 2009).

Access to parks, particularly Kidston Lake, was appreciated and a welcome opportunity for recreational activities. For some however, fishing in the lake was an additional resource of food. Urban areas that have been designed to provide space for fishing/farming opportunities such as community gardens have positive health impacts for entire communities, including an increase in fruit and vegetable consumption (Alaimo, Packnett, Miles & Kruger, 2008; Armstrong, 2000), increased physical activity and mental health, as well as the promotion of social health and community cohesion (Wakefield, Yeudall, Taron, Reynolds & Skinner, 2007; Twiss, Dickinson, Duma, Kleinman, Paulsen & Rilveria, 2003). The importance of green spaces such as parks and community gardens in urban areas has been recognized by planners and developers as important features of healthy cities. At the time of data collection for this study, the community garden in Greystone existed only for one year and participants believed it was a recreational activity for the children. Promoting ecosystem and human health by implementing a green infrastructure into urban residential areas was suggested by Tzoulas, and colleagues (2007) as complementary to public health promotion. By knowing their ways around their neighborhood and appreciating the importance of seeking out green

spaces for their children's health and development, participants demonstrated another aspect of their tacit knowledge of negotiating health within their neighborhood.

Participants' local knowledge about their neighborhood and how to negotiate health for themselves and their families has contributed experience-based evidence. The findings from this study add to the existing data and knowledge about urban, gendered environmental health inequities (CIHI, 2008; Green 2000; Raphael & Bryant, 2004; Sen & Östlin, 2007; WHO, 2006) and are intended to inform public policy. The contributions of this study to existing knowledge are twofold: First, it adds insights into the physical and social urban environments through the lived experience of low-income mothers in low-income urban neighborhoods, particularly, the structural, policy created impediments to healthy choices through the absence of regulated childcare in this neighborhood which prevented mothers from joining the paid workforce to improve their material circumstances and the life trajectories of their children. Second, this study is an example of the creation of experience-based evidence to inform public policy that is relevant to low-income mothers living in low-income urban neighborhoods.

### *Historical Perspective*

From a historical perspective, over the last few decades, the political economy in Canada has evolved into a neoliberal welfare state (Coburn, 2006). Fraser (2009) maintains that the feminist critique of the "family-wage" policies during the 1950s and 60s has contributed to the evolution of the two-earner family of today. The liberal feminist critique was focused on the privileged role of the male head of the household as the main breadwinner, and the subordinate role of the female as the homemaker and main care-giver with no earning power. Meanwhile, economic security in Nova Scotia has actually declined by 12.9% between 1981 and 2007 and women are still the main unpaid

care-givers in the home (GPI Atlantic, 2008, p. iv). In addition, the neoliberal welfare state has not provided universal childcare to support working parents, as is the case in other jurisdictions such as Sweden (Navarro, 2007). According to Fraser (2009), gender equality has largely been accepted on a cultural basis, meaning the attitudes of the general population, but not by institutions. That is, feminist ideals of gender equality have not been realized in practice, specifically as institutional change. Deep rooted structural connections between women's responsibility for the majority of unpaid childcare work, gender segmentation of wages in the labor market, and ethnic-majority-male domination in political systems have not changed significantly. According to the ecofeminist framework, economies of patriarchal societies do not value women's reproductive capacity and associated social roles equally to the material production of goods and services. The importance of this historical perspective is that it crystallizes the role of the neoliberal welfare state in creating and maintaining gendered inequities in society that have severe health consequences beyond gender, such as the children of parents living in poverty. Within this historical context low-income mothers' negotiations for health within a low-income urban neighborhood are akin to swimming against a current.

To answer research question # 2, mothers' balancing act for negotiating health included their knowledge and skills to negotiate safe and affordable housing, to provide food for the family, to parent creatively within a neo-liberal social and often neglected physical environment, and making personal sacrifices to enable healthier life trajectories for their children. Motherhood is still characterized as something that occurs naturally and instinctively, and is based on ideologies of self-sacrifice. The currently held popular assumption that reproductive control equals "choice" of motherhood has implications for ideologies of mothering (Baker, 2009). For example, the "post-feminist" phenomenon of

the “yummy mummy” (Baker, 2009, p. 277) defines motherhood as liberated and cool, as opposed to traditional and old-fashioned. Contributing to this perspective is an affluent, stylish mothering, reinforced by the media’s portrayal of celebrity mothers. This “post-feminist” representation of motherhood is problematic for its privileged position and punitive consequences for not living up to it in the form of a moral economy that values financially stable and planned parenthood, at the same time condemning mothers who have to rely on welfare benefits as shameful (Baker, 2009).

The real moral issue that is skillfully avoided in public discourse however, is that it is not merely unfortunate and unjust, but simply wrong to perpetuate a system that places low-income mothers and their families in a position of inadequate resources that inhibits “healthy choices” in the first place. The balancing act of mothers is evidence of their contributions to raising children, the next generation of citizens, to the best of their abilities given their situations. The findings of this study provide evidence that the neoliberal welfare state, through its public policies, is not fulfilling its social contract toward all of its citizens, particularly low-income mothers living in low-income urban neighborhoods.

In summary, I have discussed my interpretation of the study findings by incorporating the ecofeminist framework. Drawing from the first three themes of absence of regulated childcare, negotiation of urban infrastructures, and negotiating nutrition, I discussed answers to the study’s first research question. To answer the second question I drew from the fourth theme of mothers’ balancing act. Findings were analyzed according to the framework’s dimensions, specifically the oppressive conceptual frameworks in public policy and socioeconomic structures of Canada’s neoliberal welfare model.

### *Conclusion of Interpretations*

Within the parameters of the ecofeminist framework, the findings support the argument that a neighborhood such as Spryfield, a low-income urban environment with its social and physical infrastructure can contribute to environmental health inequities for low-income mothers and their families. The mechanisms for health inequities revealed through this ethnography are a combination of many ill-conceived social policies at the macro (liberal welfare state) and micro (*Day Care Act* of Nova Scotia) levels. These policies negatively impact personal opportunities and services, and physical features in the urban environment, constraining well intended, informed choices by low-income mothers.

Low-income mothers' health decisions are systematically hindered by their personal socioeconomic situation of living in poverty, compounded by infrastructure shortcomings of a low-income urban neighborhood. In the urban neighborhood of Spryfield, low-income mothers' health decisions are influenced by public policies and infrastructures that are based on patriarchal and neo-liberal ideologies and indiscriminate economic assumptions about the ability of the private market in regulating society to the benefit of all. Materialist assumptions in combination with gender biased assumptions act as oppressive conceptual frameworks that create ill conceived public policy, resulting in oppressive social and physical environments that act to reinforce health inequities for low-income mothers living in a low-income urban environment, such as Spryfield. The ecofeminist framework's dimension of care-sensitive ethics will frame the necessary recommendations for public policy arising out of the interpretations of the findings.



## CHAPTER VIII

### Conclusion

#### *Care-Sensitive Ethics for Public Policy*

A care-sensitive ethics for public policy, based on rational and emotional intelligence, exhibits empathy for health inequities and is against any form of oppression advanced by the logic of domination (Chircop, 2008). According to ecofeminist philosophy, ethical decision-making requires emotional and rational intelligence and the ability to care about oneself and others. The ability to care about others requires empathy, which in turn requires an understanding of a situation from the other's perspective. This understanding can be facilitated by experience-based studies like this one that place the other's perspective in the form of narrative voice at the centre.

The ecofeminist framework places narrative voice at the heart of moral thinking. It follows then, that narrative voice needs to be at the centre of a public policy approach that is informed by a care-sensitive ethics. In this study, the narrative voices belonged to the low-income mothers living in Spryfield. Public policies that shape urban environments and urban social and physical infrastructure need to be examined on an ongoing and timely basis to uncover the effect on vulnerable populations from the perspective of their lived experiences. Of particular importance, arising out of this study was the effect of public policy on low-income mothers living in low-income urban environments/neighborhoods. If the overall goal of Canadian health policy is to reduce health inequities, then public policies need to be examined from the perspective of those who embody health inequities.

The care-sensitive ethics of the ecofeminist framework applied to public policy recommendations relates to the future orientation of the framework. Consistent with the

notion of centrality of narrative voice, the question as to which public policy to analyze and change should emerge from the experiences of the vulnerable group, recognizing that communities are dynamic and change over time, under changing circumstances. This study is an example of experience-based evidence for public policy, explicating policy effects on a vulnerable population. As has been revealed in this study, a specific public policy in the form of the provincial *Day Care Act* of Nova Scotia had the effect of contributing to women's oppression and reinforced health inequities. Public policies require critical analysis to understand their effect on vulnerable populations. This can be accomplished within a very specific context, timeframe, geographic area or neighborhood, and from the perspective of particular populations.

Ideally, experience-based evidence can enable more timely policy adaptation as needed by the community, to alleviate health inequities. It is crucial that the policy analysis and design process arises ethnographically out of holistic every-day lived experiences over a period of time, within a particular neighborhood. Because populations, environments and demographics are continuously changing in a neighborhood, policy evaluation and design processes need to be dynamic and ongoing so they remain responsive to changing demographics and people's realities. Time sensitivity in research and policy-making is required to appreciate fully the exposure or experience of living in a poor neighborhood (Timberlake, 2009).

The goal of health equity requires an integrated approach to policy design recognizing a variety of social policies beyond economic policy for their effect on population health. Intersectoral action for public and health policy is required to address a wide range of complex health problems and has been successful at the community level on a case by case approach, recognizing that one size does not fit all (Public Health

Agency of Canada, 2007). Public policies need to be designed to enable a diverse population the freedom and power to make healthy choices (Prah Ruger, 2004). As recommended by the Senate Subcommittee on Population Health (2008), the health sector could adopt a health impact assessment similar to the well developed and established approach of environmental impact assessments (National Collaborating Centre for Healthy Public Policy, 2008). A similar approach, known as “health in all policies” is advocated by the WHO (2008) recognizing that population health can be improved by sectors mainly outside of health. This approach makes it necessary to ascertain the health impact of policies developed by, for example, departments of education, agriculture, transportation, or housing. Any resulting, negative health outcomes need to be mitigated or minimized, and synergies of positive health outcomes enhanced and reinforced.

Marmot (2007), on behalf of the Commission on Social Determinants of Health, explained that all societies have social hierarchies with an unequal distribution of political and economic resources. The Commission critiques this unequal distribution if they are avoidable and health suffers as a consequence. According to Marmot, the right to health, enshrined in the WHO charter, obliges governments to take action on the social determinants of health to increase individuals’ chances for good health. What is problematic in this statement is that it does not go far enough. Perhaps this is not surprising, given that the WHO has obligations of neutrality and it does not interfere in the political process of sovereign nations. The result is that its call to action remains superficial without the necessary critical, political analysis of the current neoliberal agenda that transcends national and global political economies (Legge, Sanders, McCoy, 2009; Navarro, 2007).

The inclusion of the discussion of human rights may be futile because of its inherent focus on the individual, aligning itself with the neoliberal focus on individual liberties that can be attained by everyone in theory but not in reality. Social problems, such as poverty and unemployment, are framed as individual problems as opposed to societal problems (Raphael, Curry-Stevens & Bryant, 2008). Furthermore, human rights may have been enshrined into a nation's constitution, such as Canada's Charter of Rights and Freedom, but in Canada economic rights, for example, are not justiciable:

“Justiciability refers to those matters which are appropriately resolved by the courts” (Human Rights Commission and Economic and Social Rights, 2009, p. 5). In other words, even after a discussion of Canada's implementation of human rights, which is beyond the scope of this study, the underlying point would still remain. That is, any legal system is based on values and conceptual frameworks. As long as there is no critical analysis of these underlying values that form the basis of many health problems, particularly the root causes of poverty, health inequities will be reproduced (Gagnon, Turgeon & Delleire, 2007; Navarro, 2007).

At times, debates about the social determinants of health and related public policies assume that the social determinants are neutral or value free in themselves, without recognizing the underlying values that determine their inequity-producing effects on society with known health consequences. This de-politicized approach is consistent with observations that the approach of the WHO to the social determinants of health is rooted in epidemiological, scientific objectivity and a demand of evidence that is acceptable to policy makers, rather than a critical focus on the social production of health inequity through unjust social structures (Schofield, 2007). The analysis of the social

determinants of health needs to start at an earlier point; that is, the underlying values or conceptual frameworks, as discussed in the ecofeminist framework.

Neoliberal public policies are based on assumptions that everyone has the same opportunity to access services (municipal, provincial, federal) but not everyone starts from the same social location, due to diversity in gender, class, race, culture, history etc. The underlying assumption of sameness in public policy is wrong and unethical, because otherwise whatever is good for me is good for you without any recognition of differences, historically and at present.

According to Crabtree an “engagement with ecofeminism in an urban context demands that the entirety of the urban fabric respond to the challenges of social, ecological, and economic justice” (2006, p. 731). She explains that care and responsibility apply across the urban fabric, from public institutions to the private spheres. This requires not a blueprint for planning, but a case-by-case interrogation of the social, environmental, and economic justice of proposed systems. A similar approach to environmental justice has been proposed by nursing scholars Butterfield and Postma (2009). The authors emphasize the need for context-based environmental health interventions that are sensitive to vulnerable populations by including politically marginalized groups in the research process.

Building on Crabtree’s exploration of ecofeminist urban design options, public policies need to radically reconsider their underlying conceptual frameworks of patriarchal and neoliberal interpretations of home and work, and adopt an approach of “universal public caring” that understands that caring should be adopted as a “generalized normative stance” (Mac Gregor, 2004, as cited in Crabtree, 2006, p. 728), to expand the ethic of care from the domain of the family to all society. In Crabtree’s words to,

dislocate the ethic of care from “essentialist gender and spatial associations” (p. 729), we need a public discourse that recognizes the centrality of an ethic of public care. This recognition can be a basis for a new conceptual framework viable for economic options in which an ethic of care is not in the exclusive domain of mothers or women. This kind of public discourse could follow a similar argument used to support the ‘green economy’ which has been recognized as a viable economic venture that is based on principles of sustainability for all of human kind rather than on economic principles of growth of private markets alone (David Suzuki Foundation, 2009). That is, if the value of care is recognized as a universal principle, as proposed by feminist economies of care (Crabtree, 2006), it would open new spaces for the design of urban environments and urban living, and achieve health equity based on care-sensitive ethics in public policies.

In summary, an approach to a care-sensitive public policy analysis and design starts with the community’s priority, particularly the priority for vulnerable populations. It is their narrative voice that is central. The process needs to be timely and context sensitive, one neighborhood at a time, and requires an appreciation of intersectoral action on the social determinants of health. The application of emotional and rational intelligence requires experience-based evidence which can be generated ethnographically. To move beyond local, particular approaches and solutions, it is necessary to also engage the public in a discourse about an ethic of public care as a viable option to achieve health equity.

### *Public Policy Implications*

Consistent with an ecofeminist action-oriented philosophy and practice, this study responds to “the particular” (Smith, 2005), or women’s everyday experiences, by formulating implications for specific policy action at the local level. Moving then from

“the particular to the general”, without the intention to generalize this study’s findings, implications with relevance beyond the local arena are formulated. This two-pronged approach is necessary because urban neighborhoods are part of larger urban areas that are affected by the complexity of public policies at the municipal, provincial, and national levels. The particular and the general are always connected in that the particular is part of and affected by the general, and general action, if rooted in the particular has authority and credibility. Integrated, multilevel approaches to healthy public policies address not only the immediate but also the underlying and fundamental causes at the societal level (Baten, Mitlin, Mulholland, Hardoy, & Stern, 2007).

A call for the provincial government of Nova Scotia and the federal government of Canada to become a child care service provider is a public policy recommendation emanating from this study. A national universal childcare policy had been advocated in Canada for a long time by women’s groups and proponents of early childhood education (Friendly & Prentice, 2009). Recognizing that the issue of childcare is a determinant of health requires health care professionals to join forces with universal childcare advocacy groups in lobbying governments at all levels to take immediate action. The evidence generated by this study adds to the scientific and moral evidence that calls for universal childcare in Nova Scotia and Canada. Universal childcare will enable low-income mothers with young children to join the paid workforce to improve their material circumstances, including basic needs such as shelter and nutrition.

Infrastructure improvements for the neighborhood of Spryfield include enhancing and optimizing family support services that mirror such services as those provided by the Single Parent Centre. The findings from this study have implications for social investments to support families with children living in poverty; evidence indicates that

these supports reduce health inequities (The Chief Public Health Officer, 2008).

Improvements to the built environment include, at a minimum, the provision of sidewalks along all streets, the provision of safe, fun and creative playgrounds, and timely renovations of the Greystone public housing project.

Implications beyond the local arena include the development of collaborative strategies and working relationships among vulnerable populations, researchers and policy makers to challenge and deconstruct oppressive and exploitative conceptual frameworks of public policies and socioeconomic structures. Over the past 30 years, Canadian scholars have produced abundant evidence about the importance of action on the social determinants of health that has been disregarded in policy implementations (Low & Thériault, 2008). Consistent with the approach of an ethic of public care, Low and Thériault recommend a collectivist rather than individualist ethos of responsibility through coordinated public policy to address the social determinants of health and health inequities. In light of the increasing urbanization worldwide, Sandström, Angelsatm and Khakee (2006) call for an integration of natural and social sciences in land use planning, particularly between the biophysical, socio-economic, and political perspectives. Healthy urban governance as an emerging strategy for urban health promotion recognizes the complexity of the polycentric character of governance and emphasizes social learning, that is, responding to peoples' environments and demands, and coordination as opposed to top-down management (Burris, Hancock, Lin, & Herzog, 2007).

#### *Implications for Research*

I concur with Raphael, Curry-Stevens and Bryant (2008) who identified a role for health professionals in educating the public about the social determinants of health and at the same time broaden the knowledge paradigm in the health sciences. Essential for



nursing research, education, and practice is the acceptance of the political nature of health and the confrontation of the political and economic forces that are opposed to action on the social determinants of health. In short, nurses need to engage in political analysis of public policies related to the social determinants of health to become effective advocates for health equity (Hall-Long, 2009; Navarro, 2007).

Ethnographies combine context specific data with personal narratives, and include documents and survey data. Further research is needed on a local scale to contextualize large-scale population data to illuminate the relationship between the determinants of health and women's experiences (Butterfield & Postma, 2009; Thompson, 2006; Wuest, Merritt-Gray, Berman & Ford-Gilboe, 2002). This approach would include critical document analysis, particularly in the form of political analysis (Hall-Long, 2009; Miller & Alvarado, 2005). Document analysis is supported by numerous policy strategies including NS Department of Health Promotion and Protection (2008). Public policy analysis will add to the evidence on how to reduce health inequities (CIHI, 2008).

Given the polycentric nature of urban governance (Burriss et. al., 2007), further research using innovative methods such as geographic information systems (GIS) are needed to visualize the complexity of public policy making with different jurisdictions, institutions, and public and private actors, by mapping their respective conceptual frameworks that influence the policy-making processes. This information can illuminate intersections of congruence or discrepancies and contradictions of underlying conceptual frameworks as a first step in the advocacy process for change toward a care-sensitive ethics in public policy. A critical feminist re-envisioning of GIS technology for research in urban environments is necessary to provide evidence to policy makers (Bondi & Rose, 2003). As Denzin (1997) predicted, politics and values will govern legitimate research

and future science. Prah Ruger (2007) argues that “unarticulated values and norms have a critical role to play in health-policy making and reform; this role has been inadequately studied and has lacked a theoretical framework” (p. 51).

Nursing research should contribute to the transformation of normative frameworks to address the structural dimensions of environmental health inequities. Philosophical frameworks such as the ecofeminist framework in this study need to allow for a variety of neighborhood-based approaches to produce evidence for gender-sensitive infrastructures (Frye, Putnam, & O’Campo, 2008; Sen & Östlin, 2007; Wilkinson & Morton, 2007). Mothers’ experiences in low-income urban neighborhoods need to be explored with a more diverse population including ethnic/racial diversity, diverse forms of parenting, and recognizing the multiple intersectionalities of people’s identities with environments.

Further research to explore the therapeutic or healing aspects of the physical environment on mental health of residents in urban areas is needed. Conversely, the effects of poor housing on mental health require further research evidence (Clark, et. al., 2007).

### *Implications for Nursing Education and Practice*

Nursing education requires a stronger orientation toward the political nature of health. This is not a suggestion of subversion or political indoctrination, rather it is education for political analysis (Raphael, 2007). By increasing content in nursing curricula that is explicit about critical analysis of political systems, and forms of governance, nursing can expand and strengthen its ethical claim of advocacy for nurses’ clients (Byrd, Costello, Shelton, Thomas & Petrarca, 2004; Milio, 2002). Nursing needs to be liberated from the medical model and to embrace the social construction of health and illness, if nurses desire to play a key role in the health care system of the 21<sup>st</sup>. This

evolution opens up new spaces for nursing to play a strong role in the social determinants of health approach.

An implication for community health nursing, including family nursing, is greater understanding of the structural or policy created hardships low-income mothers with young children have to endure on a daily basis. It is important to understand that public policies related to the social determinants of health are numerous and originate from sectors outside of traditional departments of health. This location does not make them irrelevant for community health nurses. It is important not to disregard the impact of seemingly unrelated public policies to the health of vulnerable populations. For example, the finding of the absence of regulated childcare, which led to the policy document analysis of the *Day Care Act* of Nova Scotia was unexpected. My expectations of findings at the outset of this study included public policies related to the environment; however, the mothers' narratives revealed other priorities.

Nursing practice can and should further expand into the political sphere so that health or ill-health does not remain a by-product of economic theories. Collaboration between policy makers in various government departments and levels (federal, provincial, municipal), and other lobby groups requires diplomacy and communication skills for political advocacy. These communication skills include debating and the writing of policy briefs. Nurses need to continue to lobby for accountability by policy makers within an acceptable time frame, and a justification of the choice of evidence used for policy design.

In addition to recommendations aimed at the policy level, a holistic approach toward environmental health equity requires a parallel engagement of community health nursing with the population. That is, I would recommend a participatory approach to

environmental health based on identified needs of the community to inform about, alleviate and mitigate environmental exposure in the home, or through consumer products. For example, impact of mold, or toxic lead paint, chemical cleaning products as well as drinking water quality, or plastic toys and household products to name a few.

### *Study Limitations*

Recognizing that there are many ways to approach the issue of women's environmental health inequities in urban neighborhoods, the study findings cannot be generalized to the larger population or other neighborhoods. It is recommended that readers consider the specific neighborhood context of this study in determining applicability across locations. According to ecofeminist philosophy the limited generalizability however, does not diminish its moral authority by making mothers' voices central.

The study drew from but did not fully exploit the methods intended: The study spanned a four year time frame within a data collection period of 19 months. The intended repeat interviews did not unfold as anticipated because only seven of the participants agreed to be interviewed twice and four participants were interviewed once, for 1-2 hours each time. Participant observation was limited to an outsider or non – reactive observation during times of volunteer work or personal grocery shopping. My background situates me in a very different social and physical location from that of the study participants, particularly due to my socioeconomic status as an academic researcher. Although I have never been a resident of Central Spryfield, I have a certain familiarity with Spryfield – I commute through Spryfield on a daily basis and use many local services, and volunteer with a local NGO.

The photovoice method was not implemented as originally planned and evolved to become a photo elicitation involving four participants. A reverse sequencing of interviews and picture taking might have enabled additional participatory analysis of the photographs.

Only 11 women participated in this study motivated mainly by economic necessity. Two of the participating mothers were working full-time and one worked part-time. The majority of mothers were not employed at the time of the interviews. This self selected sample, of primarily unemployed women, could have influenced the identification of a lack of childcare as the mothers' main concern for negotiating health within their neighborhood.

The recruitment of participants was more challenging than I had anticipated. Time constraints, and perhaps perceived trust, and privacy issues made recruitment difficult. Although the sample of participants in this study is not representative of Spryfield residents, it was designed to be inclusive of diverse ethnic backgrounds and diverse mothering practices.

Another limitation is that only one policy document was chosen for critical analysis. The social environmental impact, particularly in the form of institutional texts is far more sophisticated and complex than can be captured in one document. Within the scope of this dissertation it was decided, in collaboration with my supervisory committee, that the analysis of one policy document serves as an example of how the institutional ethnography approach to document analysis can be implemented.

## *Concluding Reflections*

### *Usefulness of Ecofeminist Framework and Methodology*

Many approaches and interpretations are possible to answer the research questions posed by this study. The interpretations I presented are aligned with its ecofeminist philosophical framework throughout. In its own localized way, this study contributes to the goal of ecofeminism to deconstruct oppressive and exploitative social practices and to re-construct viable social and political communities. Both issues of poverty and unhealthy environments need to be addressed in concert. This study is an example of how ecofeminist theory can be “operationalized”, or can serve as an instrument to contribute to a better understanding of gendered environmental health inequities. Furthermore, this ecofeminist philosophy is a useful instrument to highlight the centrality of the political determinants of health.

The combination of urban ethnography and institutional ethnography approaches that informed the policy document analysis was a good fit. It achieved the study objectives of enabling the mothers’ voices to be heard, and explicated the effect of an ill conceived public policy on mothers with young children. By including the environment as a constituting element in women’s urban experiences, the investigation opened up spaces of power that operate in people’s lives (Smith, 2005).

### *In closing...*

I would like to reflect on three key points arising from this study. First, from a particular or neighborhood specific level, it was evident that a major constraint for low-income mothers in Spryfield was the absence of regulated child care within their neighborhood. This evidence informed the policy document analysis of the *Day Care Act* of Nova Scotia. The results were that patriarchal and neoliberal oppressive conceptual

frameworks justify structural constraints that keep mothers from joining the paid work force. These oppressive conceptual frameworks operate through patriarchal assumptions, and by using neoliberal ideology as political, economic, and moral instruments of choice for public policy development. This keeps low-income mothers in an economically destitute situation that prevents them from meeting their families' basic needs for shelter, nutrition, and social inclusion, and ultimately from enabling healthy choices for themselves and their families.

Second, from a philosophical and methodological perspective the study has produced evidence highlighting the need to contextualize the effects of public policy on the health of vulnerable populations that embody environmental health inequities. Ongoing ethnographically co-constructed knowledge about policy effects on populations at the neighborhood level is necessary. I assume policy makers do not intentionally design policies that create health inequities. However, neoliberal ideology has become a prevalent discourse that may result in unconscious infiltration of its oppressive conceptual framework into public policy design. Without the knowledge from vulnerable populations, policy makers do not have appropriate evidence for the design of policies that alleviate health inequities. Warren's (2000) insight that just or ecologically perfect decisions are impossible when institutional structures are unjust is supported by the findings of this study. In this sense the toxic environment for low-income mothers in Spryfield is the absence of regulated childcare that has far reaching implications that make it not only difficult but often impossible to live an ecologically perfect lifestyle. On the contrary, low-income mothers get blamed for not doing their part for the environment.

Third, what has become evident throughout the debate and research about the social determinants of health is that it justifies and mandates a clear role for the health

sector and health professions to engage in critical analysis of the politics of public policies that determine health outcomes (Navarro, 2007; Raphael, 2002). This period of post-2008 global economic crisis, that de-legitimized neoliberalism's ethical basis (Alvanoudi, 2009), opens a new space for governance based on alternative models that embrace diversity, justice and the common good. This is an opportunity and a moral imperative, for nursing education to courageously provide the foundations necessary to engage fully in political analysis of the social determinants of health to achieve environmental health equity.



## APPENDIX A

### Recruitment Poster

#### **How does your neighborhood influence your health decisions?**

As mothers we make daily decisions for our own and our families' health. Sometimes our health decisions are influenced by the kind of neighborhood we live in.

#### **RESEARCH PARTICIPANTS NEEDED**

For a Study:

**"Gendered Environmental Health Inequities: Urban Environments and Low-Income Mothers' Health Decisions"**

I am looking for:

- Low-income mothers, who have been living in the neighborhood of Spryfield in low-cost, or public housing for at least one year,
- have at least one child under 5 years of age,
- and speak English.

Mothers who participate will receive a \$20.00 grocery gift certificate for each interview, for each visit, and for taking pictures of Spryfield.

This study will include personal interviews, spending time with participants during everyday activities (participant observation visits), and asking participants to take pictures of areas in their neighborhood that influence their health decisions.

Participants will also be asked to identify important locations within their neighborhood on a map of Spryfield.

For more information about this study, and/or if you are interested in being a study participant, please contact Andrea Chircop 494-2384. This study is being conducted by a PhD student from the School of Nursing at Dalhousie University.

APPENDIX B  
Recruitment Poster  
Revised September 2008

## How does your neighborhood influence your health decisions?

As mothers we make daily decisions for our own and our families' health. Sometimes our health decisions are influenced by the kind of neighborhood we live in.

### RESEARCH PARTICIPANTS NEEDED

For a Study:

#### "Neighborhood and Health"

I am looking for:

- Low-income mothers, who have been living in the neighborhood of Spryfield in low-cost, or public housing for at least one year,
- have at least one child under 5 years of age,
- and speak English.

Mothers who participate will receive a **\$40 grocery gift certificate** for each interview.

During the 1 hour interview I will ask questions about living in Spryfield, what your typical day looks like, where you get groceries, how you get to places, where your children play and things you like and/or don't like about living in Spryfield.

For more information about this study, and/or if you are interested in being a study participant, please contact Andrea Chircop **494-2384**. This study is being conducted by a PhD student from the School of Nursing at Dalhousie University.

## APPENDIX C

### **Letter of Introduction and Consent Form**

#### **Project Title**

Gendered Environmental Health Inequities: Urban Environments and Low-Income Mothers' Health Decisions

#### **Principal Investigator and Contact Person**

Andrea Chircop, RN, MN, PhD(c)  
PhD (Nursing) Student  
Dalhousie University,  
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Halifax, Nova Scotia  
B3H 3J5  
[Andrea.chircop@dal.ca](mailto:Andrea.chircop@dal.ca)  
Phone: (902) 494-2384

PhD Supervisor:  
Dr. Barbara Downe-Wamboldt, PhD, RN  
Dalhousie University  
School of Nursing  
5869 University Avenue  
Halifax, Nova Scotia  
B3H 3J5  
Phone: (902) 494-2535

#### **Introduction**

You are invited to take part in a research study conducted by Andrea Chircop who is a PhD student at the School of Nursing, Dalhousie University. Your participation in this study is voluntary and you may withdraw from the study at any time. The study is described below. Your participation in this study will not likely benefit you, but I might learn things that will benefit others. You should discuss any questions that you have about this study with Andrea Chircop.

#### **What is the purpose of this study?**

The purpose of this research study is to better understand the relationship between health and the urban environment. This study will explore how living in an urban neighborhood,

such as Spryfield, influences mothers' health decisions for themselves and their family. Mothers make health decisions on a daily basis and it is important to find out how these decisions are influenced by their urban environment or neighborhood. This understanding can then be used for the design of health and public policies that are supportive of mothers' everyday realities and efforts for healthy living.

### **Study Design**

This study will include personal interviews, spending time with participants during everyday routine activities or events, and asking participants to take pictures of areas in Spryfield that influence their health decisions. Participants will also be asked to identify important locations on a map of Spryfield.

### **Who can participate?**

You may participate in this study if you are a low-income mother, who has been living in the neighborhood of Spryfield in low-cost, or public housing for at least one year, have at least one child under 5 years of age, and speak English.

### **What you will be asked to do?**

You will be interviewed for one to two hours. The interviews will take place at the Captain William Spry Community Centre, or at a location of your choice. As part of the interview you will be asked to identify important locations for your daily activities on a map of Spryfield.

In addition to the first interview, you can choose to participate in follow-up interviews of no more than 3 over a period of 12 months.

You also have the option to allow me to spend time with you during everyday activities. This will allow me to get an idea of what your everyday life in Spryfield looks like. During these visits I would like to learn from you by observing how you go about

your everyday routine activities as a mother in Spryfield. This can be done over 3-4 visits for not more than 12 hours in total. This will take place at a time most convenient for you. We will meet at a location of your choice, which may include your home, the public library, the grocery store, laundry, playgrounds or other public places.

If you agree to take pictures of Spryfield, you will receive a disposable camera. I will explain to you how the camera works. You will be asked not to take pictures of other persons in a way that will reveal their identity. After the pictures have been developed, you will be asked to take part in an interview to discuss your pictures with me. At this time you can choose which pictures you allow me to use for publication in reports. You will also be asked for your consent if you choose to include pictures that reveal your own or your child(ren's) identity. Your child(ren's) names will not be used.

**Who will be conducting the research?**

Andrea Chircop, a PhD student will be responsible for the overall management of this research, including recruitment of participants, data collection and analysis.

**What questions will be asked?**

I will ask you questions about your everyday life in Spryfield as a mother. I will ask what your typical day looks like. I would like to know how you get around Spryfield, to get groceries, to visit friends, to take children to the babysitter, or school. I would like to know how you manage to feed your family, do the housework, take care of the children etc.

**Possible risks and discomforts**

There are no anticipated risks related to your involvement in this study. I will make every effort to protect your privacy. I will not be able to guarantee your anonymity and confidentiality. There is a possibility that some of your statements or photographs of

Spryfield may be recognized by others. For example, some of your comments and opinions about Spryfield, the residents and agencies may not be shared by others in the community. You could experience negative reactions from others in the community if they are not happy about what you said. If you do not wish the photographs you have taken or any comments that you have made to be used in reports, publications, and presentations they will not be used for these purposes. You will be asked for your permission of specific photographs or things you have said to be used in reports, publications, and presentations.

During the interviews and the time spent with you during everyday activities, you will be asked about your experiences as a low-income mother living in an urban neighborhood and how this affects your everyday health decisions including, nutrition, hygiene, health check-ups, physical activity, socialization. If at any time you feel uncomfortable answering any questions, you may choose not to answer them, and/or you may ask the researcher to leave.

You can end your participation in this study at any time without any negative consequences to you. At this time you can decide whether to permit your data to be used for this study, or whether to request that your data be withdrawn and not be used for this study. You have the option of withdrawing your data from the study by contacting Andrea Chircop up to 4 weeks after your last participation, and every possible effort will be made to delete your data from the study.

### **Possible benefits**

This study will have no direct benefits to you. You may find the interviews, participant observations, and picture taking interesting. I hope you will enjoy the opportunity to share your experiences.

## **Compensation**

You will receive \$20.00 in the form of a gift certificate for a local grocery store for participating in each personal interview (maximum of 4)

If you allow the researcher to spend time with you during everyday activities you will receive a \$20 grocery certificate for each visit.

If you agree to participate in taking pictures of Spryfield, you will receive a \$20 grocery gift certificate for taking the pictures, and a \$20 grocery gift certificate for discussing the pictures with me. Withdrawal from the study prior to the completion of your participation in any of these activities will not jeopardize your compensation.

## **Confidentiality and anonymity**

All data from interviews, maps, observations, and photographs will be labeled with made up names (you can choose your own if you wish) and kept in a locked filing cabinet.

Data used for analysis on a computer software will be password protected and only Andrea Chircop will have access. Your name will appear only on this consent form and on a list linking your name with the pseudonym. This list will be kept separately from the data and locked in a cabinet. Only Andrea Chircop will have access.

The data will be kept for a period of 5 years after publication, when it will be destroyed (shredded and deleted). According to the law in Nova Scotia, I will have to report any evidence of child abuse or neglect to the Child Welfare Agency.

**Who can I contact for information about this study?**

Principal Investigator:  
Andrea Chircop, RN  
School of Nursing  
Dalhousie University  
5869 University Avenue  
Halifax, NS  
B3H 3J5  
Phone: 494-2384  
e-mail: [andrea.chircop@dal.ca](mailto:andrea.chircop@dal.ca)

Or, in the event that you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact:

Patricia Lindley,  
Director of  
Dalhousie University's  
Office of Human Research Ethics Administration  
Patricia Lindley  
Phone: 494-1462  
e-mail: [Patricia.lindley@dal.ca](mailto:Patricia.lindley@dal.ca)



**Project Title**

Gendered Environmental Health Inequities: Urban Environments and Low-Income

Mothers' Health Decisions

**Signature**

I have read the information about this study and have been given the opportunity to discuss any questions about the study with the Andrea Chircop. I have received a copy of this consent form for my own records.

I hereby consent to take part in this study, entitled: Gendered Environmental Health Inequities: Urban Environments and Low-Income Mothers' Health Decisions. I understand that my participation is voluntary, and that I may withdraw from the study at any time without consequences.

- "I" consent to participate in one 1-2 hour long interview.
  - "I" consent to be contacted for a maximum of 3 follow-up interviews within a 12 months period.
  - "I" consent to the audio recording of interviews and understand that I can ask the recording to be stopped at any time.
  - "I" consent to Andrea Chircop spending time with me during everyday activities or events in Spryfield.
- 
- "I" consent to take part in taking pictures of Spryfield and to discuss my pictures during an interview. I will be asked to sign a separate consent form for the use of selected pictures in reports, publications, and conferences.
  - "I" consent to be contacted in the future for the permission to the use of sound-bites from audio-taped interviews in reports, publications, and conferences.
- 
- "I" consent to the use of my words as text in reports, publications and conferences.
- 
- "I" consent to the use of the map used to indicate locations in Spryfield.

Participant Signature

Date

Printed Name of the Participant Signing Above

Researcher's Signature

Date

APPENDIX D  
**Letter of Introduction and Consent Form**

**Revised September 2008**

**Project Title**

Gendered Environmental Health Inequities: Urban Environments and Low-Income  
Mothers' Health Decisions

**Principal Investigator and Contact Person**

Andrea Chircop, RN, MN, PhD(c)  
PhD (Nursing) Student  
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### **Study Design**

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If you agree to take pictures of Spryfield, you will receive a disposable camera. I will explain to you how the camera works. You will be asked not to take pictures of other persons in a way that will reveal their identity. After the pictures have been developed, you will be asked to take part in an interview to discuss your pictures with me. At this time you can choose which pictures you allow me to use for publication in reports. You will also be asked for your consent if you choose to include pictures that reveal your own or your child(ren's) identity. Your child(ren's) names will not be used.

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During the interviews and the time spent with you during everyday activities, you will be asked about your experiences as a low-income mother living in an urban neighborhood and how this affects your everyday health decisions including, nutrition, hygiene, health check-ups, physical activity, socialization. If at any time you feel uncomfortable answering any questions, you may choose not to answer them, and/or you may ask the researcher to leave.

You can end your participation in this study at any time without any negative consequences to you. At this time you can decide whether to permit your data to be used for this study, or whether to request that your data be withdrawn and not be used for this study. You have the option of withdrawing your data from the study by contacting Andrea Chircop up to 4 weeks after your last participation, and every possible effort will be made to delete your data from the study.

### **Possible benefits**

This study will have no direct benefits to you. You may find the interviews, participant observations, and picture taking interesting. I hope you will enjoy the opportunity to share your experiences.

## **Compensation**

You will receive \$40.00 in the form of a gift certificate for a local grocery store for participating in each personal interview (maximum of 4)

If you allow the researcher to spend time with you during everyday activities you will receive a \$40 grocery certificate for each visit.

If you agree to participate in taking pictures of Spryfield, you will receive a \$40 grocery gift certificate for taking the pictures, and a \$40 grocery gift certificate for discussing the pictures with me. Withdrawal from the study prior to the completion of your participation in any of these activities will not jeopardize your compensation.

## **Confidentiality and anonymity**

All data from interviews, maps, observations, and photographs will be labeled with made up names (you can choose your own if you wish) and kept in a locked filing cabinet.

Data used for analysis on a computer software will be password protected and only Andrea Chircop will have access. Your name will appear only on this consent form and on a list linking your name with the pseudonym. This list will be kept separately from the data and locked in a cabinet. Only Andrea Chircop will have access.

The data will be kept for a period of 5 years after publication, when it will be destroyed (shredded and deleted). According to the law in Nova Scotia, I will have to report any evidence of child abuse or neglect to the Child Welfare Agency.

**Who can I contact for information about this study?**

Principal Investigator:  
Andrea Chircop, RN  
School of Nursing  
Dalhousie University  
5869 University Avenue  
Halifax, NS  
B3H 3J5  
Phone: 494-2384  
e-mail: [andrea.chircop@dal.ca](mailto:andrea.chircop@dal.ca)

Or, in the event that you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact:

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Phone: 494-1462  
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**Project Title**

Gendered Environmental Health Inequities: Urban Environments and Low-Income

Mothers' Health Decisions

**Signature**

I have read the information about this study and have been given the opportunity to discuss any questions about the study with the Andrea Chircop. I have received a copy of this consent form for my own records.

I hereby consent to take part in this study, entitled: Gendered Environmental Health Inequities: Urban Environments and Low-Income Mothers' Health Decisions. I understand that my participation is voluntary, and that I may withdraw from the study at any time without consequences.

- "I" consent to participate in one 1-2 hour long interview.
  - "I" consent to be contacted for a maximum of 3 follow-up interviews within a 12 months period.
  - "I" consent to the audio recording of interviews and understand that I can ask the recording to be stopped at any time.
  - "I" consent to Andrea Chircop spending time with me during everyday activities or events in Spryfield.
- 
- "I" consent to take part in taking pictures of Spryfield and to discuss my pictures during an interview. I will be asked to sign a separate consent form for the use of selected pictures in reports, publications, and conferences.
  - "I" consent to be contacted in the future for the permission to the use of sound-bites from audio-taped interviews in reports, publications, and conferences.
- 
- "I" consent to the use of my words as text in reports, publications and conferences.
- 
- "I" consent to the use of the map used to indicate locations in Spryfield.

Participant Signature

Date

Printed Name of the Participant Signing Above

Researcher's Signature

Date



## APPENDIX E

### **Initial Interview Questions**

Based on my experiences as community and family health nurse and educator I will conduct the interview in a conversational style, starting with a general exploration of participants' views, which will provide information for the exploration of more in-depth questions concerning participants' health decision-making process. Questions will include:

- Please tell me about your neighborhood
- How long have you been living here? (Why have you moved here?)
- What does a typical day look like for you?
- What are some of the things you like and don't like about your neighborhood?
- How do your children like the neighborhood?

For further clarification, the following probes will be used:

- How does your income status affect how you feed your family?
- When you need to get groceries, how do you get to the store?
- How do you usually go about cleaning your home, or doing the laundry?
- Where do your children usually play?
- What kinds of activities do they do?
- Do they have friends in the neighborhood?
- How do your children get to school/daycare/sitter?

## APPENDIX F

### **Instructions for Photovoice**

You will be provided with one 24-exposure disposable camera.

Please take pictures of your neighborhood that you would like to share with policy makers. Pictures can be about places in your neighborhood that support healthy living, or that are barriers to healthy living and that you would like to change.

Please do not take pictures of other persons in a way that can reveal their identity, without their prior consent, or in case of children, without the written consent of their parents.

Please take all the pictures within 4 weeks.

I will pick up the camera for development of the pictures at a time convenient for you. We will negotiate a time to meet again, after the pictures have been developed, when you are invited to discuss your pictures with me.

At this point I will ask you to choose which of the pictures you will give consent to for use in publications or use in conferences and reports.

## APPENDIX G

### **Consent Form For The Use Of Photographs**

#### **Project Title**

Gendered Environmental Health Inequities: Urban Environments and Low-Income Mothers' Health Decisions

#### **Principal Investigator and Contact Person**

Andrea Chircop, RN, MN, PhD(c)  
PhD (Nursing) Student  
Dalhousie University,  
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5869 University Avenue  
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PhD Supervisor:  
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Dalhousie University  
School of Nursing  
5869 University Avenue  
Halifax, Nova Scotia  
B3H 3J5  
Phone: (902) 494-2535

#### **Purpose of this study**

The purpose of this research study is to better understand the relationship between health and the urban environment. This study will explore how living in an urban neighborhood, such as Spryfield, influences mothers' health decisions for themselves and their family. Mothers make health decisions on a daily basis and it is important to find out how these decisions are influenced by their urban environment or neighborhood. This understanding can then be used for the design of health and public policies that are supportive of mothers' everyday realities and efforts for healthy living.

## Signature

Your permission to use your photos as research data is entirely voluntary and you may refuse to grant permission without any consequences. You may also withdraw your permission at any time, until research reports have been released, without any consequences.

Your signature below indicates that:

- You have received a copy of this consent form for your own records.
- You have selected the (#) photos that will be used for reports, conferences and publications.

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Print Name of Participant,

Participant Signature

Date

I consent to the use of pictures that reveal my own identity to be used for the purpose of presentations at conferences, publications, and/or reports.

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Participant Signature

Date

I consent to the use of pictures that reveal my child/ren's identity to be used for the purpose of presentations at conferences, publications, and/or reports.

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Participant Signature

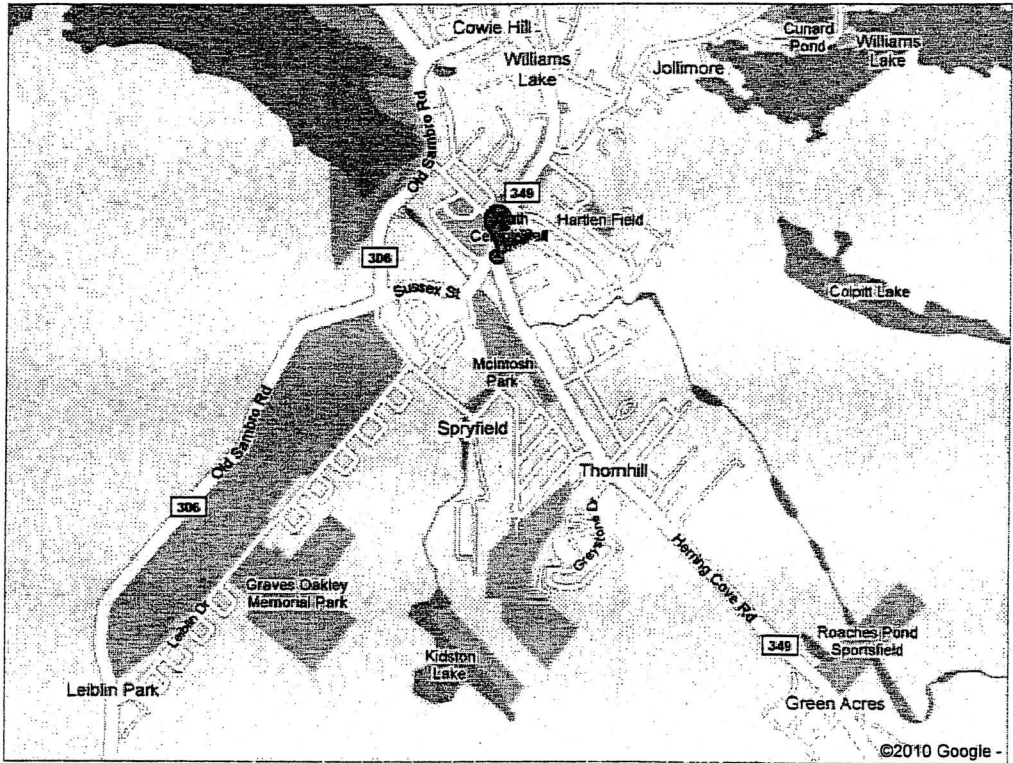
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Researcher's Signature

Date

APPENDIX H  
Map of Central Spryfield



APPENDIX I

*The Day Care Act*



**Day Care Act**

CHAPTER 120

OF THE

REVISED STATUTES, 1989

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**NOTE - This electronic version of this statute is provided by the Office of the Legislative Counsel for your convenience and personal use only and may not be copied for the purpose of resale in this or any other form. Formatting of this electronic version may differ from the official, printed version. Where accuracy is critical, please consult official sources.**

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***An Act to Revise and Consolidate  
the Day Care Services Act and  
the Day Nurseries Act***

**Short title**

1 This Act may be cited as the *Day Care Act*. R.S., c. 120, s. 1.

**Interpretation**

2 In this Act,

(a) "day care" means the providing of services pertinent to a child's physical, social, emotional and intellectual development apart from the child's parents or guardian but does not include

(i) organized recreational or religious activities, or

(ii) services exempted by the regulations;

(b) "Director" means the Director appointed pursuant to this Act;

(c) "facility" means a building or part of a building at or in which day care is or may be provided but does not include a place such as a hospital or school which is subject to other statutory regulation;

(d) "license" means a license issued or renewed pursuant to this Act;

(e) "Minister" means the Minister of Social Services. R.S., c. 120, s. 2.

#### **Director**

3 For the purposes of this Act a Director may be appointed in accordance with the *Civil Service Act*. R.S., c. 120, s. 3.

#### **License required**

4 No person shall conduct, maintain, operate or manage a facility or hold out that a facility is being operated unless there is a valid license to operate the facility. R.S., c. 120, s. 4.

#### **Application for license or renewal**

5 (1) A person may make application in the prescribed form and manner for a license or the renewal of a license to operate a facility.

#### **Issuance of license or renewal**

(2) The Minister may issue or renew a license where he is satisfied that

(a) the applicant and the facility comply with the Act and the regulations; and

(b) the fee prescribed by regulation is paid.

#### **Terms or conditions or restrictions**

(3) The Minister may from time to time attach to any license such terms and conditions or restrictions as he deems advisable.

#### **Form and expiry of license**

(4) A license shall be in the form prescribed by the regulations and shall expire one year from the date on which it was issued or at such other time as the Minister may prescribe in the license. R.S., c. 120, s. 5.

#### **Cancellation or suspension or refusal**

6 (1) The Minister may cancel, suspend, refuse to issue or refuse to renew a license where he is satisfied that the holder of the license or an agent or employee of the holder of the license has violated any provision of this Act or the regulations or has not complied with any term, condition or restriction attached to the license.

#### **Written reasons**

(2) The Minister shall provide written reasons for the cancellation, suspension or refusal.

#### **Review by Minister**

(3) A person affected by the Ministers action taken pursuant to subsection (1) may request the Minister to review the action. R.S., c. 120, s. 6.

### **Deemed cancellation**

7 A license shall be deemed to be cancelled when the person to whom it was issued ceases to operate or own the facility for which the license was issued. R.S., c. 120, s. 7.

### **Right of entry**

8 (1) The Director, or a person acting on his behalf, may, at any reasonable time, enter a facility, or any place that he has reasonable grounds to believe is a facility and may examine the premises, equipment, facilities, books and records thereof.

### **Duty of owner or person in charge**

(2) The owner or person in charge of a facility shall

(a) permit the Director, or a person acting on his behalf, at all reasonable times to enter and inspect the facility and examine the premises, equipment, facilities;

(b) produce to the Director, or person acting on his behalf, for examination, the accounts, books and records of the facility; and

(c) permit the Director, or any person acting on his behalf, to assess the program and services of the facility. R.S., c. 120, s. 8.

### **Records and returns and reports**

9 The person to whom a license is issued shall forward to the Director such records, returns and reports as the Director requests and in the form and manner and within the time requested by the Director. R.S., c. 120, s. 9.

### **Alteration of facility**

10 No person shall permit or cause a facility for which a license is in force to be altered so as to increase or decrease its capacity or to significantly affect the care of children without first submitting to the Minister plans of the alteration or addition and receiving the approval of the Minister. R.S., c. 120, s. 10.

### **Condition for holding out**

11 No person shall advertise or hold out any place to be a facility or assume, use or display in connection with the place, any terms, signs, title or words which imply or lead the public to believe that the place is a facility, unless there is a valid license for that facility. R.S., c. 120, s. 11.

### **Municipal facility**

12 (1) With the approval of the Minister, a municipal unit or two or more municipal units that enter an agreement may, directly or through an agent, erect, acquire, purchase, lease, alter, add to, improve, furnish and equip a building or part of a building as a facility and may purchase, lease or otherwise acquire land therefor and may operate and maintain a facility.

### **By-laws**



(2) A facility provided or operated by a municipal unit shall be regulated by by-laws made by the council of the municipal unit subject to the approval of the Minister.

### **Joint operation**

(3) A facility provided or operated by two or more municipal units or by an agent of one or more municipal units shall be regulated in the manner agreed upon by the Minister and the municipal unit or units.

### **Source of funds**

(4) The sums required by a municipal unit for the establishment or operation of a facility shall be sums required for the ordinary lawful purposes of the municipal unit and shall be raised, levied and collected in the same manner and in all respects as other sums required for the ordinary lawful purposes of the municipal unit are raised, levied and collected.

### **"municipal unit" defined**

(5) In this Section "municipal unit" means a municipality to which the *Municipal Act* applies, a city or a town. R.S., c. 120, s. 12.

### **Penalty**

13 Every person failing to comply with any of the provisions of this Act or the regulations, or with any term, condition or restriction attached to a license, is liable on summary conviction to a penalty of not more than one hundred dollars and in default of payment to imprisonment for not more than fifty days. R.S., c. 120, s. 13.

### **Separate offence**

14 Every day that a person fails to comply with any of the provisions of this Act or the regulations, or fails to comply with any term, condition or restriction attached to a license, constitutes a separate violation and the punishment may be imposed as many times as there are separate offences proved. R.S., c. 120, s. 14.

### **Regulations**

15 (1) The Governor in Council may make regulations

- (a) prescribing the form and contents of an application for a license;
- (b) prescribing the manner of application for a license;
- (c) prescribing the form and contents of a license;
- (d) prescribing the fees to be paid for a license;
- (e) prescribing the manner in which a license is to be displayed;
- (f) respecting a review by the Minister of action taken by him pursuant to this Act;
- (g) respecting records to be maintained by a facility;

- (h) respecting the conditions, including the number of children in a facility and child-staff ratios, under which a facility may be licensed;
- (i) respecting fees, subsidization, capital and operating costs;
- (j) prescribing the qualifications of staff in a facility;
- (k) requiring and prescribing standards of programs, services, health, space, fire protection and safety in or for a facility;
- (l) respecting a day care advisory committee to the Minister;
- (m) respecting the establishment of facilities;
- (n) defining any word or expression used in this Act and not defined in this Act;
- (o) respecting such other matters or things as are necessary to carry out the intent and purpose of this Act.

### **Regulations Act**

(2) The exercise by the Governor in Council of the authority contained in subsection (1) shall be regulations within the meaning of the *Regulations Act*. R.S., c. 120, s. 15.

### **Existing facility**

16 Any day nursery or day care centre licensed or registered under the former *Day Nurseries Act* or the former *Day Care Services Act* immediately before the first day of January, 1980, shall be deemed to be a facility and subject to this Act. R.S., c. 120, s. 16.



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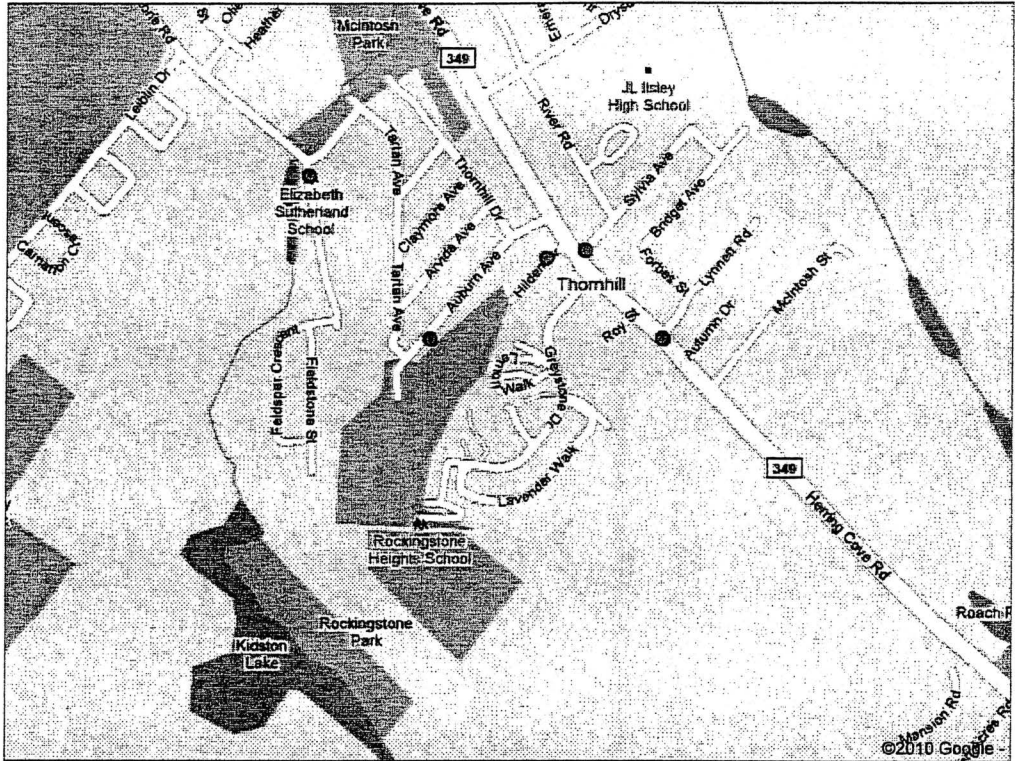
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APPENDIX J

Map to Illustrate Street Connectivity



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