Through Gendered Lenses: Exploring Rural Seniors' Use of Photovoice to Document Health Barriers and Supports in Northwestern Ontario

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Abstract

This thesis is an exploration of the ways in which gender influenced seniors' use of photovoice method in a study of barriers and resources for health in two rural Northwestern Ontario communities. Building upon an earlier SSHRC-funded project examining the utility of photovoice to explore rural seniors' perspectives on resources and barriers to health, this study explores the ways gender shaped the photovoice process and findings in both communities, as well as the way participants defined health.

Eight men and 13 women from the towns of Atikokan and Ignace, in Northwestern Ontario participated in the study. Gender differences were observed with respect to the types of barriers and resources for health identified by male and female participants, as well as the ways in which the women and men responded to the use of photovoice. The health barriers and resources the men identified were primarily physical in nature. They tended to define health primarily in physical terms, emphasizing the impact of phenomena such as mobility on health. By contrast, the women identified health barriers and resources that were physical, mental and emotional in nature, reflecting a broader definition of health.

Gender differences were also observed with respect to participants' engagement with the photovoice method itself. Initially, the senior women were less comfortable with the use of cameras and were more concerned during the orientation session to ensure that the ideas they had for illustrative photographs would meet the expectations of the project. The women's focus groups were more cohesive than the men's and they displayed a stronger group dynamic. The findings contribute to our understanding of how gender affects elderly individuals' perception of health barriers and resources as well as the way they participate in photovoice research.

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Chapter 1 – Introduction

In recent years the popularity of visual research methods such as photovoice has steadily increased (Dennis et al., 2009). The knowledge that "images evoke deeper elements of human consciousness than do words" (Harper, 2002, p. 13) allows researchers to form a deeper connection to participants than when relying on words alone. Keller et al. argue that this deeper connection between participants and researchers leads to a greater bond of trust, providing results with greater meaning and greater insight into cultural and social factors (2008). Photovoice, a methodology first pioneered by Caroline C. Wang and Maryann Burris, has been utilized to allow researchers to gain an insider's perspective into communities and to investigate difficult to study topics such as homelessness, AIDS and the experiential aspects of illness (Wang et al., 2000; Mitchell et al., 2005; Baker & Wang, 2006). The use of photovoice has become particularly popular in qualitative health research where it is used to present health concerns and issues through the eyes of participants and communities that experience them (Dennis et al., 2009; Baker & Wang, 2006).

A substantive body of photovoice research on health has been conducted in recent years; however, few studies have examined whether women and men use this technologically-based research technique to explore health issues in a similar fashion. This is particularly surprising given the well established body of literature demonstrating a significant gendered relationship to technology as well as numerous studies documenting differences in the ways in which women and men both envision and talk about their health (Bimber, 2000; Mundorf et al., 2006; Oliffe & Bottorff, 2007).

Researchers have identified a digital divide present among American adults that has been partially attributed to gender (Bimber, 2000). Limited research has been conducted on

specific technological usage among elderly individuals; however according to Mundorf et al. (2006), the number of individuals utilizing technology is inversely proportional to age. Health researchers must be mindful of potential gender and age differences associated with these methodologies if accurate and meaningful insights are to be obtained through their usage.

While research has been conducted which demonstrates gender differences in perceptions of health and in men's and women's use of technology such as computers, an extensive literature review did not turn up any studies which examined the impact of gender on the use of photovoice method, particularly for older groups of women. A few studies completed with single sex groups have noted potential gender differences in its usage and efficacy (Oliffe & Bottorff, 2007). In particular, Oliffe & Bottorff (2007) found that men responded well to the methodology and a vast amount of usable data was obtained; however, the researchers suggested potential gender differences, in particular the difficulty the men encountered when discussing personal health issues. While successful photovoice projects undertaken by both men and women have been documented and potential gender differences suggested, a comparative study between men and women has not been conducted to date.

Research Goals

Following from this, the purpose of this small scale case study is to compare the ways in which senior women and men use photovoice and examine whether gender differences are evident in the themes and issues they identified as barriers to and resources for their health. The intention is not to focus on the shortcomings of health care in these northern, rural environments per se, but rather to examine how men and women utilizing the photovoice

methodology understand and portray these shortcomings through the analysis of photographic images taken by participants, as well as the data from individual interviews and focus group discussions conducted as part of the photovoice method. I also explore similarities and differences in the way senior women and men portray health barriers and supports in their communities.

The goals of this research were:

- To determine whether gender differences are evident and to what extent they may occur in photovoice studies occurring in two Northern Ontario rural communities through the analysis of photographs, orientations sessions, focus group discussions, and individual interviews.
- To determine if these gender differences are community specific or if there are commonalities along gender lines in both communities.
- To determine to what extent gender affects the utilization of technology by the senior women and men in these communities.

This study contributes to the limited methodological research on the ways in which gender might impact the use of qualitative research methods such as photovoice particularly by senior or elderly women. It also enhances our understanding of rural northern women's and men's perceptions of the barriers and resources to health in their communities and what these tell us about how they define health and healthy communities.

Thesis Plan

Chapter Two provides a contextual literature review from the social sciences, women's studies and gerontology on aging and health in rural and northern communities, as

well as gender and the use of technology, and photovoice methodology. First, the demographic trend of population aging in Canada is explored in order to contextualize its importance for health research with elderly residents. Rural and northern life as experienced by elderly residents is examined; presenting the unique challenges these individuals face. Gender differences associated with health status and technology use is explored, as well as the limited literature on gendered use of photovoice.

Chapter Three outlines the methodology of the case study. The technique of photovoice method is briefly described followed by a discussion of the use of photovoice with seniors. The research framework of this case study is described along with an explanation of analysis protocols. Demographic and contextual information on the two research sites chosen for the study are presented along with a description of the sample.

The main findings of this study are presented in Chapter Four. The health barriers and resources identified by men and women from each research site, including such areas as infrastructure, travel concerns, community supports, and recreational activities are discussed. Gender similarities and differences in findings within and across the communities are explored. For example, male participants in both communities discussed physical infrastructure concerns at great length, while only male participants in one community discussed recreational activities. Gender differences in the methodological aspects of this study, such as whether men or women were more comfortable and confident with the use of the camera, and gender dynamics of the focus groups were also explored. While both groups were comfortable with the use of the camera and took photos competently, the women were more concerned with expectations associated with the photovoice study and the instructions regarding the operation of the provided disposable camera.

In Chapter Five the study findings are discussed in relation to current literature on photovoice, gender and health. I suggest that the gender differences evident in this study can be attributed to the ways in which men and women are socialized. The men consistently identified barriers and resources that were physical in nature and that they felt they could pragmatically address. The women discussed barriers and resources as being physical, emotional and mental in nature. They were more accepting of their declining mobility and sought to maintain and nurture relationships with others. The men had fewer apprehensions surrounding the project's technological aspects but were less comfortable sharing in focus groups, demonstrating their overall comfort with technology, but less comfort with emotional connections with one another.

Chapter 2 – Background Literature

As the purpose of this study was to explore the gendered use of photovoice among elderly residents of two Northwestern Ontario communities, the following literature review focuses on four key thematic areas; the elderly population, life in rural areas, gender differences associated with health, and gender differences associated with the use of technology. The elderly rural population forms the participant pool for this research and an understanding of challenges faced by this sector of the population provides a foundation for interpreting the findings of this study.

The population of Canadians aged 65 and older is steadily increasing. In 2006 there were 4.3 million seniors in Canada, comprising 13% of the population as compared to 11% in 1981. Statistics Canada predicts that by 2056, seniors will comprise 27% of the population (Statistics Canada, 2007). The number of seniors will almost double in size as the baby boomers reach 65 years of age, and then the increase is predicted to occur at a slower pace (Turcotte & Schellenberg, 2006).

With medical and health advancements, seniors are living longer than ever before. While seniors make up only 13% of the overall population, they account for 44% of the healthcare expenditure in Canada (Turcotte & Schellenberg, 2006). An increase in overall health has lead to an increase in younger seniors able to remain in a private household, 93% in 2001, as well as an increase in those seniors aged 85 years and older living alone, up to 34% in 2001 from 22% in 1981 (Statistics Canada, 2007).

Among the senior population, women comprise the majority of those 65 years or older (56%) and 64% of those 84 years or older. They are twice as likely as men to live alone (Statistics Canada, 2007). As life expectancy for men increases, projections show that the gap

between the number of older men and older women is decreasing. The population of men aged 80 to 84 years will increase to 43% by 2021 and similar projections exist for other older age groups (Statistics Canada, 2007). This increase in the senior population, necessitates research that will better understand the health needs of Canadian seniors and determine how best to meet them in the future.

Senior Life in Rural Areas

While most Canadian seniors live in urban areas, 22.6% live in areas defined as rural (Turcotte & Schellenberg, 2007). The definition of rural varies throughout the literature. A commonly used Statistics Canada definition considers a rural area to have a population of less than 10,000, and to be located outside the commuting zone of urban centres having a population of more than 10,000 (duPlessis et al., 2001). I have followed the Statistics Canada definition of rural for this study as it applies well to areas such as Northwestern Ontario. Rural areas may lack health infrastructure resources, such as full service hospitals and clinics, when compared to urban communities (Turcotte & Schellenberg, 2006). Many rural areas also have a shortage of health care professionals (Ministerial Advisory Council on Rural Health, 2002). Opportunities and resources to enhance health, such as social and recreational activities, may also be more limited in rural than urban areas (Sherman et al., 2007).

Most senior rural dwellers have lived a majority of their lives in rural areas and they may be resistant to the change associated with relocating to live with other family members, or to an urban centre where health services and care may be more accessible (Koehler, 1998). Research has shown that when rural residents require health care, they would prefer to

receive care at home rather than having to travel to an urban centre (Kelley & MacLean, 1997). While they may be resistant to change, rural seniors are more likely to have contact with family members than urban seniors, a factor which could positively influence their health as assistance is more likely to be available if required (Turcotte & Schellenberg, 2006). Access to a support system can make independent living a possibility for rural seniors. Living independently may be an indication of high quality of life for seniors living in rural areas (Arbuthnot et al., 2007).

Northern areas in Canada are of particular interest to researchers studying seniors because these areas have additional challenges, such as increased living costs, harsher climates, and isolation (Leipert & Reutter, 2006). Rural areas located in southern regions may have better access to larger urban centres, which are able to provide resources for seniors. Seniors living in southern areas may be able to embrace a rural lifestyle while still having accessibility to urban amenities. However, residents living in the northern regions of Canada may lack the opportunity to readily access such amenities. In order to overcome the health risks associated with northern rural location, Leipert and Reutter argue that resiliency must be achieved by residents through knowledge of the health concerns at hand and through taking steps to resolve those issues (Leipert & Reutter, 2006).

A 2000 report, entitled *A Regional Outlook for Northern Boards: A Northern Approach to Regional Labour Force Development*, noted that Northern Ontario was aging faster than the national or the provincial average (Southcott, 2000). According to Southcott (2007) while Ontario residents over the age of 65 increased from 8.4% of the province's population in 1971 to 12.9% in 2001, for an overall increase of 54.2%, the percentage of residents over the age 65 in Northern Ontario increased by 110.7%. This above normal increase can be

attributed to decreased immigration and increased migration of younger workers seeking employment in urban centres – a phenomenon which is reshaping the demographic profile of Northern communities (Southcott, 2000).

In isolated areas the dependence of residents on community is heightened. Typically, residents of a community have two types of supports available to them: formal and informal supports (Lyons & Zarit, 1999). Formal supports involve areas overseen by specific agencies or governments, such as home care services, adult day programs and occupational therapy assessments, whereas neighbours or family members provide informal supports. In areas where formal supports may be lacking, or not readily available, individuals may turn to other community members for support (Lyons & Zarit, 1999). In a rural area, community plays an increasingly important role, especially for older seniors, whose family members may have moved away. The availability of these supports may influence a senior's decision to remain in a rural community as well as their perceived quality of life.

Seniors Health in Rural Areas

A recent report on the health of rural Canadians has determined that rural Canadians have lower incomes, poorer health status and higher mortality rates than their urban counterparts (Canadian Population Health Initiative, 2006). Approximately 45-50% of individuals residing in rural areas reported low to low/middle income status, compared to 33% of urban residents (Canadian Population Health Initiative, 2006). Rural Canadians also experience increased cases of circulatory disease, injuries and suicides (Canadian Population Health Initiative, 2006).

Although rural Canadians experience poorer health, health promotion and disease prevention may help reduce the gap between rural and urban individuals (Runciman et al., 2005). Health promotion is the process of providing education and resources to individuals to allow them to make informed choices and decisions regarding their health and the health of their community (Ministry of Health Promotion, 2007). Health promotion strategies have been found to be successful with an aging population; helping with chronic conditions and for those individuals at higher risk for certain diseases or conditions (Federal/Provincial/Territorial Ministers Responsible for Seniors, 2007). Health promotion can prove challenging in rural areas as access to education, prevention and care may be limited. Small rural communities may rely on community health clinics with limited resources for their services in contrast to larger urban hospitals, which may offer a wider variety of services (Kelley, 2007). Additionally, health promotion itself may prove difficult if someone not originally from the community, or without strong ties to the community, attempts to direct residents in ways to live healthier. Health promotion can often be an area of tension, as some individuals prefer to believe they know best when their health is being considered (Crossley, 2002). In rural areas, the participation or endorsement of influential community members may increase rates of participation in health promotion programs (Runciman et al., 2005). Thus, gaining a first hand perspective on the needs or strengths of a rural/northern community from the perspective of its residents through use of a methodology such as photovoice, may be a more beneficial way to connect with the community.

Gendered Dimension of Health

When examining the available resources and existing barriers in rural communities, it is also important to analyze gender as a social determinant of health as past research has demonstrated significant gender disparities with regard to health care and access to resources (Bierman, 2007). A study conducted by Leipert and Reutter (2006) showed that northern women are more vulnerable to health risks in three arenas; physical health and safety risks, psychosocial health risks, and risks of inadequate health care. Physical health and safety risks stem from climate, geography and isolation challenges, while psychosocial health risks stem from isolation combined with northern attitudes, such as lack of options or power. Risks of inadequate healthcare also stem from isolation, which may prevent women from having knowledge about health issues or receiving adequate treatment for their health problems (Leipert & Reutter, 2006).

Rural senior women experience numerous health concerns that do not typically affect senior men. Due to the fact that women live longer than men, they are at an increased risk of suffering from social isolation. Social isolation remains a cause of depression among elderly populations (Blazer, 2003). Women are more likely to act as caregivers to their husbands, but when they become ill themselves, there is less likely to be a spouse to care for them (Dennerstein et al., 1997). Women typically have lower incomes than men, which may pose a problem when obtaining unfunded or partially-funded services, such as home support or transportation. Additionally, services in rural areas may cost more than in urban centres, adding a further economic burden to health for elderly women (Ministry of Industry, 2006).

Gendered Dimension of Health Care

Studies have also documented differences in the ways women and men encounter and navigate the health care system and the responses of health care professionals to them. Studies suggest that women seek health care often more than their male counterparts (Suominen-Taipale et al., 2006). Researchers have been unable to successfully determine the reason women seek medical help more frequently than men (Galdas et al., 2005). There are two explanations for the increased use of health care by women; a greater incidence of illness leading to health care usage, or a similar incidence rate, but more attentiveness to health and willingness to seek help on the part of women (Orfila, et al., 2006). Some researchers have speculated that women seek help more often than men as it is more socially acceptable to take control and take preemptive measures, while men seek help only once in dire need (Galdas et al., 2005). Men have a shorter life expectancy and suffer from increased rates of preventable disease (Suominen-Taipale et al., 2006; Orfila et al., 2006). Men may experience difficulty asking for help, as they prefer to act independently and solve their own problems (Richardson & Raibee, 2001). Men are socialized to ignore the pain an illness must bring, therefore delaying treatment, as they opt to seek medical attention when physical symptoms become overwhelming instead at early onset of symptoms (Spiers, Jagger, Clarke, & Arthur, 2003; Moller-Leimkuhler, 2002). In general, women tend to take a direct approach to health care, seeking help when needed, whereas men tend to avoid asking for help (Galdas et al., 2005).

Elderly men and women also face different health challenges from one another. Grant (2002) identifies an increased incidence rate in women with respect to the following illnesses: stress, suicide rates among Aboriginal women, depression, violence and poverty.

Furthermore, studies have shown that even for common diseases such as coronary heart disease, which affects relatively equal numbers of men and women, the treatment outcome for women is less favourable than for men (Hsia, 2007). While women live longer than their male counterparts, their quality of life is not necessarily better (Armstrong & Deadman, 2008). As elderly women are more likely to be widowed, than their male counterparts, they are more likely to face health challenges alone. Due to existing biases in health care, women may experience health care that treats them the same as men when inappropriate or treats them differently than men when inappropriate (Health Canada, 2004). Generally women receive less high-tech services and less aggressive care than their male counterparts (Clancy, 2000).

In 2003, The Centres of Excellence for Women's Health released a summary report on rural, remote, and northern women's health, based on an extensive review of published research. This study highlighted several ways in which rurality affects women's health, such as limited availability of health care services, limited information on the health status of rural women, and invisibility of rural women in Canadian research and policy. While the literature demonstrates a relationship between rurality and women's health, contradictions are present particularly with regard to the literature debating when, and to what extent, rurality matters. The report identifies gaps in current research including: a lack of focus on specific health concerns; inconsistent definitions of rural, remote and northern; and lack of consideration relating to cultural aspects of health for rural and northern women. The necessity of including northern women in health research is called for, as well as adopting a rural and gender lens in research on women's health (Sutherns et al., 2003). This report recommends the use of multidisciplinary approaches to "large and small scale studies…to ensure that the body of

Canadian research on rural women reflects the diversity and richness of Canadian rural women themselves" and that women's own perspectives are included in discussions of research and policy recommendations (Sutherns et al., 2003, p. E50).

As discussed above, healthcare experiences vary between men and women. The potential differences in their experiences provide a rationale for this study as does the literature demonstrating gender differences in attitudes and perceptions of health between women and men. While the extent of these differences may be influenced by situation and circumstance, for example age, location and education level, research demonstrates that gender is an important social determinant of health and thus important to explore. An additional gendered dimension requiring exploration is the gendered use of photovoice methodology as current research suggests that there is a strong relationship between gender and the use of technology.

Gender and Technology

According to Bray (2007), "one fundamental way in which gender is expressed in any society is through technology" (p. 38). As a tool utilized by people, technology has the ability to influence and be influenced by society and social values (Lohan & Faulkner, 2004). Gender and technology may be mutually influential. Gender may impact technology through design, use and consumption. For example a technology for use with household chores, such as a dishwasher or sewing machine, is manufactured with a feminine use in mind (Lohan & Faulkner, 2004). Thus the overarching importance of examining the relationship between technology is to understand the ways in which access to and the use of technology intrinsically affects men's and women's lives.

Many analysts see particular technologies as possessing masculine qualities and present them as tools feared by women, for example automobiles or electronics (Bray, 2007; Kennedy, Wellman & Klement, 2003). If women are to fear technology designed with masculine qualities in mind, they are encouraged to utilize technology made specifically for them, with feminine qualities in mind. Technology is often used as a means to highlight gendered hierarchies, with men ruling over women (Rankin, 2001). Women are viewed as utilizing technology to complete tasks, such as making or repairing clothing with sewing machines or doing household laundry using washing machines, but they are rarely presented as enjoying the technology itself. By contrast men are viewed as enjoying the use of technology not only to complete tasks, but also as a form of leisure, such as tinkering with cars or machines, or playing computer games (Bray, 2007).

The values and symbols associated with technology also possess masculine bias (Wajcman, 2007). For example, weapons of war are seen as masculine as are the powerful motors in automobiles. The masculine values of technology are thought to be "patriarchal, mechanistic, rationalistic", compared to a feminine technology concerned with social relationships (Brown, 2007, p. 333; Wajcman, 1991). This division between masculine and feminine technologies has implications for women choosing to utilize technology. When women choose to utilize masculine-based technology and enter this masculine dominated culture, they must "forsake their femininity" (Wajcman, 1991, p. 19). This loss of femininity will deter some women from utilizing technology (Wajcman, 1991).

The gap between individuals who are well versed in, and comfortable with, the use of technology and those who are not is referred to as the "digital divide". This divide is most commonly seen in individuals of varying socioeconomic statuses and genders. In particular,

individuals who are economically disadvantaged, elderly, female and living in rural areas are at greater risk of finding themselves on the wrong side of the divide (Cullen, 2001). A study by Bimber (2000) reported a digital divide between American adults. This observation was accounted for with differences in socioeconomic status, as well as three gender specific factors including stereotypes, cultural aspects relating to gender and technology, and cognitive and communication preferences. Technology is stereotypically seen as a masculine tool, and men are viewed as having a relationship with technology for pleasure, for example the use of computers. In cultures where men compose the majority of the workforce, they will frequently have greater access and higher usage rates of technology than their female counterparts (Bimber, 2000). There are also specific aspects of technology that may appeal more to men than women. For example, men have been found to enjoy searching for information on the internet more than their female counterparts (Ford & Miller, 1996). In general, individuals who have lower incomes, are older, or are female are less likely to have access to technology. Hubbard (1983) states, "technology is part of our culture; and, of course, our culture, which is male dominated, has developed technologies that reinforce male supremacy" (p. vii). As a result men are more interested in technology, are more likely to try new things, and are more confident when working with technology (Fallows, 2005).

While both young men and women today may both be exposed to new technologies, encountering them through educational opportunities, social activities and in the workplace, the same cannot be said for previous generations (Bimber, 2000). Individuals of earlier eras did not have an equal opportunity to access technology and gender differences may be evident in their comfort with, and use of, technology. According to Mundorf et al. (2006), the number of individuals utilizing technology is inversely proportional to age. When

considering the internet, for example, the percentage of seniors, who are 65 years of age and older utilizing the internet has risen 7% between 2000 and 2004, with 22% of American seniors accessing it, compared to 77% of 30 to 49 year olds (Fox, 2004). While the percentage of seniors utilizing the internet has risen over the past decade, the number of younger seniors, those 70 years and younger, is the quickest growing subset (Fox, 2006). The number of seniors utilizing technology is expected to grow as the baby boom generation ages (Mundorf et al., 2006). Older women are less likely to utilize technology, as they were less likely to be exposed to it in the workplace than their male peers. According to surveys, seniors who actively utilize the internet are college-educated men, who first were exposed to the internet and other such technologies at their places of work (Fox, 2001). As photovoice relies on the use of camera technology, gender differences associated with technology may influence the obtained data.

Photovoice Methodology

Photovoice is a research method that has proven particularly useful to elicit community perspectives and generate social action. Photovoice is a qualitative research method in which participants are provided with disposable cameras and asked to take photographs which they feel reflect their perspective on the particular topic of study. After the photos have been processed, individuals are brought together to participate in focus group discussions, to elaborate on the pictures taken and collectively select those images which they feel best represent the group's perspective on the issue. The group may then choose to take social action using the photovoice images and focus group narrative as evidence for the concerns they have identified (Wang, 2005; Wang & Burris, 1997).

The use of photography allows for the creation of "socially produced visual information" (Purcell, 2007, p. 117). Participants use cameras to document specific issues and to shed light on these issues in communities where professionals, researchers, or policy makers may be unaware (Wang, 2005). Photovoice has three simple objectives: 1) to provide participants with the opportunity to voice their opinion, through photographs and reflection; 2) to provide participants with the opportunity to discuss their photographs with other community members; and 3) to allow this knowledge to be transmitted to policy makers (Wang & Burris, 1997). Some researchers have slightly modified the original methodology to allow participants to express their perspective and provide insights to their communities by allowing participants more time to take their photographs or providing more opportunity for dialogue to occur (Leipert, in press; Castleden et al., 2008).

Photovoice was first used with women in rural Yunnan China, giving them the opportunity to discuss the challenges they were facing as rural women, as well as challenges faced by their families and neighbours (Wang & Burris, 1997). In part influenced by the success of this project, photovoice has been employed in a variety of countries and contexts to explore health and social concerns, such as homelessness and poverty whose effects are often hard to document (Wang, 2005). Photovoice methodology is particularly useful to researchers because the only skill required to participate is the ability to take a photograph. This allows photovoice to be employed with diverse populations (Wang, 2005).

Photovoice is also an important methodology for researchers because it allows for the opinion and perspective of the community to be heard, rather than relying on 'outsiders' to evaluate situations. Community members may have a better understanding of their community and its needs, making photovoice an excellent way to gain an insider's

perspective (Wang & Burris, 1997). In a study using photovoice to explore chronic pain in elderly seniors, researchers determined the value of photovoice as allowing researchers and healthcare providers to supplement analytical methods with a patient's perspective (Baker & Wang, 2006). Photovoice is considered a participatory action research method as it is often used to "catalyze personal and community change" (Wang et al., 1998, p. 75). Photovoice has also been used as a participatory health promotion strategy, allowing individuals to take an active role in determining and dealing with preventive health measures (Wang et al., 1998).

Photovoice methodology may be employed to visually express the needs of vulnerable populations, such as homeless individuals or rural seniors, who may experience difficulty with conventional research methods (Jurkowski & Paul-Ward, 2007). Photovoice is an ideal qualitative methodology to explore community health barriers and resources from the perspective of community members themselves. Studies have documented the assets of photovoice, as participants are able to express their experiences through photography and remain in control of the situation leading to greater exploration and information sharing (Purcell, 2007).

Use of Photovoice with Seniors

While limited research has been done on the use of photovoice with seniors, preliminary studies suggest that it can be a particularly useful method to use. Klein and Parks (2007) found that using photovoice along with focus groups and interviews provided seniors with the opportunity to freely explain themselves to their peers in a situation that was comfortable for them. They argue that researchers are granted the opportunity to hear stories

narrated by participants in manner that may shed more light on the participants than a conventional survey method would provide (Klein & Parks, 2007). Klein and Parks (2007) also found that by listening to local residents a researcher can learn the "local language" which may be helpful in communicating with participants and validating answers.

The Gendered Use of Photovoice

While there is a growing body of data on the use of photovoice attesting to its value as a qualitative research method, my literature review did not turn up any studies which examined whether gender had any impact on the conduct of photovoice. This is particularly surprising given the large body of data which identifies gender differences in women's and men's use of technology. A few studies completed with single sex groups have noted potential gender differences in the usage and efficacy of photovoice. Oliffe and Bottorff (2007) found that photo elicitation and photovoice with men may prove complicated as it may be seen as less socially acceptable for men to discuss their feelings openly, whereas emotional discussion for women is often considered acceptable. This fact is especially true when dealing with matters of health, as emotional discussion is a common component (Oliffe & Bottorff, 2007). The use of photographs was thought to facilitate emotional discussion, allowing the male participants to express their opinions without verbal expression (Oliffe & Bottorff, 2007).

The lack of research concerning potential gender differences in the use of photovoice, a methodology which relies on the use of technology (a camera), highlights a gap in our current understanding of the methodological utility of photovoice for different social groups. As discussed above, both health and technology possess gendered dimensions. Women are at

greater risk for numerous illnesses and access healthcare more often than men, but are often treated differently in the healthcare system (Grant, 2002; Hsia, 2007). In particular, elderly women are at greater risk than their urban counterparts (Leipert & Reutter, 2006). Men seek help rarely and have a shorter life expectancy (Galdas et al., 2005; Suominen-Taipale et al., 2006). Studies have indicated that men are generally more comfortable with the presence and use of technology, as technology and tools are frequently designed with them in mind (Bray, 2007; Wajcman, 2007). Women, particularly elderly women, are at a two-fold disadvantage for utilizing technology: their gender and their age. (Wajcman, 2007; Cullen, 2001). These findings in the literature suggested that attending to gender differences associated with experiences of health and uses of technology are both relevant and necessary when employing research methods such as photovoice.

Chapter 3 – Methodology

Photovoice combines elements of photography, internal reflection, and group discussion. As will be discussed below, in this particular project an individual interview process has been added to the methodology in order to gain as much insight as possible into the perceived needs of the community. While the initial project as begun by Drs. Mary Lou Kelley and Pamela Wakewich was to determine barriers and resources to health encountered by elderly residents of two Northwestern Ontario rural communities, this case study examines the gendered dimensions of using photovoice with seniors in two communities, which were part of the larger project. The data described here were collected in the Northwestern Ontario communities of Atikokan and Ignace over a two-month period, and then analysed using a systematic qualitative procedure of analytic induction.

Methodology and Frame of the Research

A Social Sciences and Humanities Research Council (SSHRC) funded study exploring barriers and resources for senior women's health in six rural communities in Northwestern and Southwestern Ontario utilizing the method of photovoice research was begun in the winter of 2007[1]. The study also examined senior women's reflections on using the photovoice method. While the original frame of the research included only female participants, the northern component of the project (conducted by Drs. M.L. Kelley and P. Wakewich) was expanded to include senior men as the men in these communities indicated a strong interest in participating in the research (Kelley & Wakewich, 2007). This thesis draws

[1] Study being conducted by Dr. B. Leipert (P.I), Dr. C. McWilliams, and Dr. D. Forbes, University of Western Ontario and Dr. M.L. Kelley and Dr. P. Wakewich, Lakehead University.

from the data collected in the expanded project in which I participated as a research assistant. Additionally, it adds to the northern component of the study by adding a comparative gender lens to the analysis of the photovoice images, focus groups and individual interviews conducted in the two communities to assess gendered similarities and differences in the process and findings. Before turning to a detailed discussion of the study protocol, a brief sketch of the two study communities will be drawn to provide a context for the findings.

The Research Sites

The northern component of the larger SSHRC project was conducted in three communities in Northwestern Ontario. Two were primarily non-Aboriginal communities, Atikokan and Ignace, and the other was a remote First Nations community. Because of substantive differences in the living conditions, demographic features and cultural environment of the First Nations community, my data analysis is limited to a comparative discussion of the non-First Nations communities. Data from the Atikokan and Ignace research sites were analysed to examine whether there were gender differences in the use of photovoice and to identify health resources and barriers in rural communities from the perspectives of male and female elderly participants.

Northwestern Ontario covers an area of 458, 000 square kilometers or 47% of Ontario's landmass, but is home to only 2% of Ontario's population. According to the Northwest Local Health Integration Network (2008), people living in Northwestern Ontario, and to a further extent the elderly residents, face many challenges that other Ontarians do not. These include a lower life expectancy and higher rates of unemployment. Residents also experience higher rates of chronic diseases, such as diabetes, high blood pressure, arthritis

and heart disease, which are prevalent in elderly populations (North West Local Health Integration Network, 2008).

Atikokan

Atikokan is known as the canoe capital of Canada and is located immediately outside of the boundaries of Quetico Provincial Park, approximately 200 kilometers west of Thunder Bay, with a land area of 316.75 square kilometers (see Appendix A for a map). Atikokan has a population of 3,293 as noted in the 2006 census with a population density per square kilometer of 10.4 (Statistics Canada, 2006). The population has decreased at a rate of 9.3% from 2001 when the town had 3,632 residents. In Atikokan there are 960 people over the age of 55 or approximately 29% of the total population. This figure is more than double the national average of 13% of the population being over the age of 55. Of those 960 individuals, 445 are senior males while 520 are senior females. Atikokan has 45 widowers, and 200 widowed women (Statistics Canada, 2006).

Atikokan was at one time a bustling mining town, with a very small senior population. In recent years, the mines and forestry industries have left Atikokan, causing younger residents to move away for employment opportunities, while seniors have remained. Atikokan has many amenities compared to its regional neighbours. Atikokan has a 41-bed hospital offering acute care along with 24-hour on-call care, an extended care facility, a helicopter pad for patient transport, as well as supportive housing for the elderly (Atikokan General Hospital, 2008). There are numerous recreational opportunities in Atikokan, including outdoor activities such as canoeing, hiking, swimming, camping and fishing.

Atikokan has an arena, swimming pool, golf course, curling club, public library and bowling alley (Township of Atikokan, 2008).

Ignace

Ignace is located approximately 240 kilometers northwest of Thunder Bay, Ontario on Agimak Lake with a land area of 72.66 square kilometers (see Appendix A for a map). Also once a bustling mining town, Ignace has a population 1,431 as noted in the 2006 census with a population density of 19.7 persons per square kilometer (Statistics Canada, 2006). The population has decreased at a rate of 16.3% from 2001 when the town had 1,709 residents. In Ignace there are 380 people over the age of 55 or approximately 27% of the total population, compared to the national average of 13%. There are 195 senior males and 170 senior females. Of the residents in Ignace, 15 are widowers and 35 are widowed women (Statistics Canada, 2006b).

Ignace has a smaller population than Atikokan and also possesses fewer amenities. Ignace does not have a hospital, but it does have a community health centre open during weekdays, with access to a physician, pharmacy and dental clinic. There are also numerous recreational opportunities in Ignace such as camping, hiking, swimming and fishing. Ignace also has an arena, swimming pool, golf course, curling club, library and bowling alley (Township of Ignace, 2008).

Method

Participants from Atikokan and Ignace, Ontario, aged 55 and over, were recruited for this study. While it was hoped that eight to ten women and eight to ten men would participate

from each community (see Appendix B for a copy of recruitment letters) due to time constraints and winter weather limitations fewer participants were recruited.

In Atikokan, four men and eight women began the study. One woman did not complete the study due to poor health. The male participants were all of similar socio-demographic background. They ranged in age from 55 to 82, were all in committed relationships with either a married spouse or common law partner, considered themselves in fair to very good health, and had not experienced any changes to their health in the last year (See Table 1 for a complete summary of socio-demographic characteristics). The women ranged in age from 57 to 81, approximately half were married and half widowed. They considered themselves in fair to very good health, and had not experienced any significant changes to their health in the last year (Table 2).

In Ignace, five men and seven women were initially recruited to the study. One man did not complete the study due to prior commitments and one woman did not take any photographs herself. Her husband took the photographs for her. The socio-demographic characteristics of the male participants in Ignace were similar to those in Atikokan. The men ranged in age from 65 to 75, all participants were married, considered themselves in fair to very good health, and had not experienced any changes to their health in the last year (Table 1). The women in Ignace ranged in age from 62 to 81 and were of similar marital status to the women of Atikokan; four participants were married and two were widowed. They considered themselves in fair to very good health, and had either not experienced any changes to their health or were in poorer health than the previous year, unlike their female counterparts in Atikokan (Table 2).

Table 1: Demographic Characteristics of Male Participants

	Frequency	
	Atikokan	Ignace
Age		
Under 64	1	0
65-69	0	2
70-74	1	1
75-79	1	1
80-84	1	0
85-89	0	0
Marital Status		
Single	0	0
Married	3	4
Common Law	1	0
Divorced	0	0
Widowed	0	0
Education Attainment		
< Grade 9	0	0
Grade 9-13	2	0
Trade Certificate	0	2
University Undergraduate	1	1
University Graduate	1	0
Income		
<10K	0	0
10,000-19,999	0	1
20,000-29,999	0	1
30,000-39,999	1	1
40,000-49,999	1	0
50,000-59,999	1	0
60,000-69,999	0	1
70,000-79,999	0	0
80,000-89,999	0	0
90,000-99,000	1	0
Rating of Health		
Excellent –Very Good	1	1
Good	2	1
Fair	1	2
Poor	0	0
Rating of Health Over Past Year		
Much Better Now	0	0
Somewhat Better	0	0
About the Same	4	4
Somewhat Worse	0	0
Much Worse Now	0	0

*Not all of the participants completed all of the questions in the socio-demographic survey, and some participants provided more than one answer to a question.

Table 2: Demographic Characteristics of Female Participants

	Frequency	
	Atikokan	Ignace
Age		
Under 64	1	1
65-69	0	2
70-74	3	0
75-79	2	2
80-84	1	1
85-89	0	0
Marital Status		
Single	0	0
Married	3	4
Common Law	0	0
Divorced	0	0
Widowed	4	2
Education Attainment		
< Grade 9	0	1
Grade 9-13	3	4
Trade Certificate	3	0
Income		
<10K	0	1
10,000-19,999	2	1
20,000-29,999	0	1
30,000-39,999	2	0
40,000-49,999	0	1
50,000-59,999	1	0
60,000-69,999	0	1
70,000-79,999	0	0
80,000-89,999	1	0
Rating of Health		
Excellent –Very Good	3	1
Good	1	1
Fair	3	4
Poor	0	0
Rating of Health Over Past Year		
Much Better Now	0	0
Somewhat Better	0	0
About the Same	6	3
Somewhat Worse	0	2
Much Worse Now	0	1

*Not all of the participants completed all of the questions in the socio-demographic survey, and some participants provided more than one answer to a question.

Participants in Atikokan attended an orientation meeting in their home community on May 7, 2008, having been recruited through the local seniors' organization, the Atikokan Pioneer Club, and through flyers and word of mouth at various club events. After an introduction to the project and review and completion of consent forms as per the Lakehead University and Tri-Council Ethics guidelines, participants were given disposable cameras, a demonstration on the use of the camera, and instructions on ethics protocols for photographing other people[2]. Participants were asked to spend the next few weeks photographing health resources and barriers in their town. As well, each participant was provided with a journal and asked to record a title for each photograph as well as any relevant explanatory notes. During this orientation session participants were also provided with a letter outlining details of the study and a consent form explaining the ethical implications of the project (Appendix I). During the orientation session group dynamics were observed; types of questions asked and the concerns raised by the participants were noted. In the interim between the orientation session and the focus groups, participants received phone calls from the researcher to remind them to take their photos by the set date and to provide assistance for any questions or concerns they had.

At a mutually agreed upon date (approximately two weeks after the orientation), the cameras and journals were collected and returned to the researcher. The camera films were developed and focus groups were held in the community. Separate women's and men's focus groups each lasting approximately two hours in length were conducted on June 4, 2008. At the focus groups, as per the photovoice protocol, participants were given time to review their

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[2] Ethics approval was obtained for the initial pilot project in Ignace, and an ethics extension was granted in March 2008 (see Appendices C thru E for a copy of the ethics application, Tri-Council Tutorial Certificate and ethics approval from Lakehead University Ethics Committee).

photos and asked to select one image representing a key health barrier and one image representing a key health resource to discuss with the group. Discussion was facilitated through a semi-structured interview format using core theme prompts (see Appendix F for a list of the questions). The discussion had two parts. The first was centered around the choice and meaning of participants' selected images; the second focused on the participants' perceptions of the benefits and limitations of using photovoice. Participants were also given an opportunity to suggest changes for future study design. Dynamics of the focus groups were observed to determine whether the process and nature of discussion differed among the women and the men. At the time of the focus group, a questionnaire was also completed by each participant to gather basic socio-demographic information (see Appendix G for a copy of the questionnaire). After the focus group sessions, each participant was individually interviewed by telephone to discuss the additional photographs they had taken as well as the explanatory notes in their journals.

All interviews were audio taped with participants' consent, and transcribed. Focus group participants were advised of the importance of maintaining confidentiality with regard to the focus group discussion to maximize everyone's comfort in participating. Upon completion of data collection, a summary report was created and provided to participants to review. Revisions were made where required and the final summary document was sent to all participants so that they could use it to advocate for change in the community if they wished to do so[3]. We were also asked by participants to send additional copies of the report, which they could share with local decision makers and health care authorities.

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[3] The participants in Atikokan took the final report to their municipal council and some roadwork changes have occurred.

Participant recruitment and data collection for the Ignace case study was carried out by Drs. Kelley and Wakewich in the winter of 2007, following the same recruitment format and research protocols as discussed above for Atikokan. The methodology evolved slightly throughout the course of the project. The researchers decided to conduct individual telephone interviews with respondents after several participants voiced discontent that the focus group format would only allow them to profile and discuss one of the pictures that they had taken. They felt that all of the images they had taken conveyed something important about community health resources and barriers. The follow up individual interviews provided an opportunity for additional picture themes to be discussed and included in the analysis of key themes identified. Having done this successfully in Ignace, the same option was offered to the participants from Atikokan and they were keen to do it. While I did not participate in the data collection for Ignace, I had complete access to the photographs and the orientation, focus group and individual interview transcripts in order to carry out my analysis. The data from Ignace were analysed in a manner consistent with the data from Atikokan. I was present and participated in all aspects of data collection in Atikokan.

Analysis

In order to utilize the data to the fullest extent, photographs, journals, and transcripts from both the orientation and focus group sessions were analyzed. To synthesize data on health barriers and resources present in the communities, as well as explore potential gender differences and group dynamics, data analysis was done in two parts. The first part involved the analysis of all textual data, including journals and transcripts of focus groups and individual phone interviews. The second part involved the analysis of visual data, including

the actual photographs, as well as observations about group dynamics made by the researcher during the focus groups.

Analysis of Textual Data

A systematic procedure of analytic induction was used to analyse the textual data. Thematic networks were identified in order to clearly visualize the barriers and resources identified by each group. Thematic networks as described by Attride-Stirling (2001) are "web-like illustrations (networks) that summarize the main themes constituting a piece of text" (p. 385). The networks are composed of three parts; a basic theme, organizing theme and global theme. In the context of this study, the global code would be either "health resource" or "health barrier", an organizing theme would be "community supports" and a basic theme would be "Pioneer Club". Data were reviewed to generate an exhaustive list of codes for the findings. Text was reviewed line by line to generate codes containing key words and phrases pertaining to health barriers and health supports, such as "cracked pavement" and "seniors luncheon" (See appendix H for a list of codes as well as visual thematic maps for each community). The codes were reduced using analytic induction and grouped into sub-themes or basic themes, such as "unsafe road conditions" and "Native Friendship Centre". The sub-themes were then further reduced and grouped into encompassing themes or organizing themes, based upon similarities, such as "safety issues" and "community supports". Utilizing the identified themes and sub-themes, health barriers and resources for men and women of each community were explored. In the second stage of analysis, the textual data was further reviewed to analyze advantages and disadvantages of

using photovoice as discussed by male and female participants to determine any overarching themes.

Analysis of Visual Data

After the focus group discussions were held, analysis of the visual data occurred. The images were examined in two ways. In order to determine the conveyed message, the perceived health barrier or resource, as determined by the titles the participants gave to the photos during the focus group sessions or in log book entries, was identified. On a secondary level the photos were analysed to identify the gendered themes they expressed. The images were examined for content as well as theme. Each participant's pictures were examined and coded for similarity to textual data. Each picture was identified by a few key words or phrases in order to assess the intended meaning of the photograph. For example an image of an icy landscape would be coded as "ice", "snow", "winter", "winter in Northern Ontario", and so on. In cases where intention was unclear, journals and interview transcripts were consulted to determine the participant's intention. Photos were further grouped into sub-themes based on common meaning. For example, photos of various recreational activities such as "swimming", "canoeing" and "hiking" would all be grouped under a single theme, "recreational activities".

Analysis of Gender Differences in Textual and Visual Data

All codes were considered when identifying themes, and gender differences were explored, to the extent that they were evident. Gender differences pertaining to health barriers and resources were explored through examination of content from images and

narrative text as well as from comparing themes addressed in discussion by the men's groups and the women's groups. The focus group discussion concerning the problems and benefits of using photovoice was also analysed to see whether men and women raised similar or different issues. The field notes compiled during orientation sessions and focus group sessions were analysed when determining to what extent group dynamics affected the outcomes. Data for each of the communities were initially examined separately and then data from the two communities were compared to see whether there were broader commonalities based on gender evident between them.

Limitations of Research

The limitations of this study are three-fold; an evolving research design, a limited participant pool and a limited study period. As noted earlier, this research was part of an ongoing study by Drs. Kelley and Wakewich (2007, 2008). The Ignace data were collected a year before the Atikokan project and my involvement began. As the Ignace project was initially designed as a pilot study, the research design was modified (through the addition of individual interviews after the focus group) in response to a request from participants and with an aim to provide more meaningful data. While the modifications benefit the research design, allowing the participants to voice in greater detail their opinions and all participants regardless of site were afforded the same opportunities, the decision to do follow-up individual telephone interviews was not made until after the group focus sessions. Prior knowledge of this might have resulted in different issues being discussed in the focus group sessions in Ignace.

Also, this study drew upon a limited pool of active and involved seniors. All participants were members of organized community clubs; seniors who were unable or unwilling to attend these clubs were excluded from the study. The level of community and social activity and health status of those who participated would have shaped their perspectives of health barriers and resources present in the community. Therefore, the barriers and resources identified for Atikokan and Ignace are by no means representative of the perspectives that may have been obtained had a more diverse and representative group of seniors participated. Rather, this study highlights the health barriers and resources as experienced by a particular group of highly functioning and socially active residents in each of the two communities.

Furthermore, the research was conducted in a particular seasonal time frame; spring in Atikokan and winter in Ignace. The time of year will have undoubtedly impacted the barriers and resources identified by respondents. Some participants thought that the time allowed for participation was insufficient to take all the photographs they wished. In order to compensate for the seasonal bias in data collection and time constraints associated with the project, each participant was also asked to identify photographs they would have taken had weather or time permitted. The themes of these missed photographs are discussed in conjunction with those taken to help address the seasonal limitation of the data collection.

Chapter 4 - Findings

As discussed in Chapter Three, the data were examined to understand the resources and barriers identified by participants, as well as the gendered dimensions of photovoice. This chapter presents the findings from the two research sites and is organized into three parts: the first section describes the gender differences present in each community as the barriers and resources to health are explored, as well as examining gender issues present in each community; the second section explores the similarities and differences across gender in the two communities. The third section examines the overall effects of gender in relation to the use of photovoice as a research method.

To fully gauge the gendered use of photovoice it was important to not only explore how participants used photovoice to convey their perspectives, but how each of the methodological phases, such as taking of pictures, or focus group sessions, might differ between women and men. As will be discussed, the men and women identified different health barriers and resources, with men concentrating on the physical environment and its implications for health, while the women considered these as well as the emotional and mental factors associated with health. As will also be discussed, the findings of this study suggest that women and men utilize photovoice differently, not primarily in the way they relate to the technology, although more women than men were initially uncomfortable using the camera, but in the ways they related to one another in the focus group discussions, as well as in the foci of the photographs that they took to document barriers and resources for health.

While the two communities share roughly similar geographical locations and characteristics, there are substantive differences in the health and social services each has, thus it was anticipated that these differences might be demonstrated in the findings from the

two communities. As the findings illustrate, gender differences with regard to barriers and resources identified were not only evident within each community, but were also found across both communities.

Part I: Examining Gender Differences in Atikokan and Ignace

Male Participants in Atikokan

There were four male participants who completed the project. In total they took 49 photos. The number of photos taken by individuals ranged from 4 to 25. Overall, a greater majority of the photographs taken by the men pertained to health barriers encountered in both the indoor and outdoor physical environment, such as traveling to other towns, cracked walkways, accessing the healthcare centre and pharmacy. A few photos documented helpful individuals in the community and economic issues. Some participants took photographs which identified the same or similar barriers, such as transportation problems and cracked walkways.

The male participants identified four main types of barriers to health in Atikokan (Figure 1). These barriers included; safety hazards associated with roads and walking paths, limited availability of transportation, pharmacy access, and job losses along with the social and economic effects of a declining economy in the town. Safety hazards associated with roads and walking paths were visualized through photos of poorly maintained sidewalks and trails, while the limited availability of transportation was seen through photos of highway signs showing the distance between Atikokan and the closest cities, photos of gas station boards showing the cost of fuel, and photos of a newspaper article detailing the termination of the only out of town bus company. The issue of pharmacy access was represented through

photos displaying cramped aisles and a lack of privacy. Job losses and the accompanying social and economic effects of a declining economy in the town were visualized through photos of various factories, which have closed in recent years.

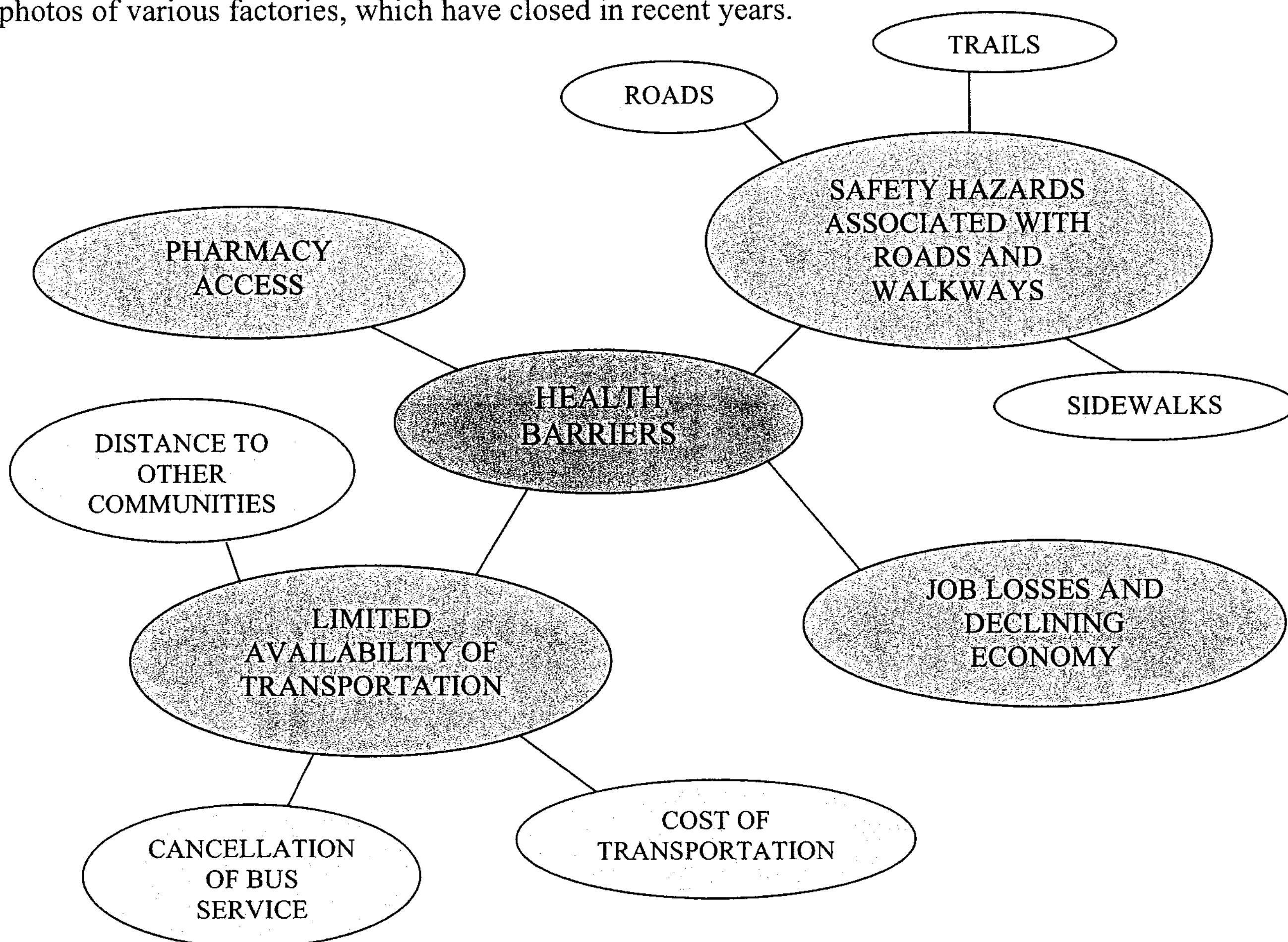


Figure 1: Thematic representation of perceived health barriers in Atikokan as chosen by male participants

The male participants identified two resources for health pertaining to community supports and volunteering (Figure 2). These resources were visualized through photos showing the community health centre, a community luncheon, and a group of extended care residents gathered for a sing-along.

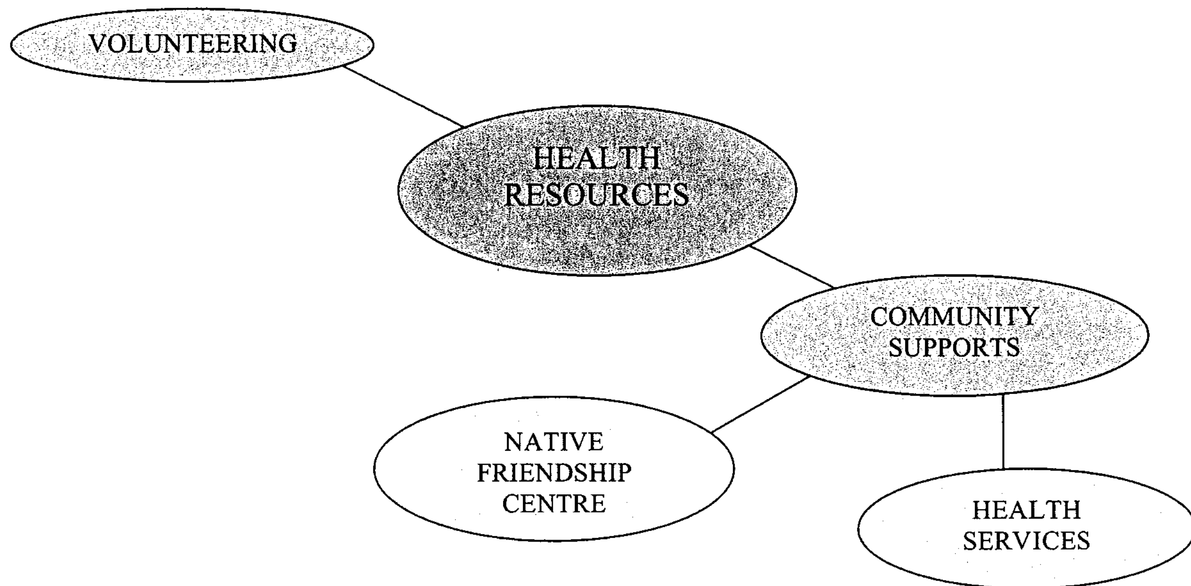


Figure 2: Thematic representation of perceived health resources in Atikokan as chosen by male participants

All individuals could relate to the perils of navigating the roads of Atikokan, whether by road, sidewalk or nature trail using phrases to describe their condition such as 'deplorable' and 'dangerous', as they appeared cracked, uneven, or impassable to the seniors. Gary[4] noted that in the winter the current snow removal on his street blocks the walkway in front of his house, as seen in Figure 3, prevented him from entering or exiting without shoveling,

> "In the wintertime they plow all the snow off on to the side that we live on, onto the sidewalks, so you can't get into your house. We can't park on the street anyways, but if you've got visitors that come. It would be just as simple for them to push it to the centre and then push it to the other side of the road where there's nobody living."

[4] In this text, pseudonyms have been used to ensure anonymity of participants.

Figure 3: View of Gary's street

John discussed the difficulty encountered by various residents when attempting to utilize town sidewalks, "[the sidewalks are] why you see people walking on the road especially students, high school students, who don't take the sidewalk- why? Because the sidewalks aren't properly fixed. They should be fixed." The men thought the sidewalks should be refinished so they were level and usable by everyone. They also noted that the disintegrating sidewalks prevented seniors from accessing services or companionship. Also in disrepair were networks of trails around the town that are intended to provide an outdoor venue for exercise year round, as seen in Figure 4. Trails of various lengths were in need of upkeep, such as clearing brush, rebuilding culverts and repairing damage due to flooding.

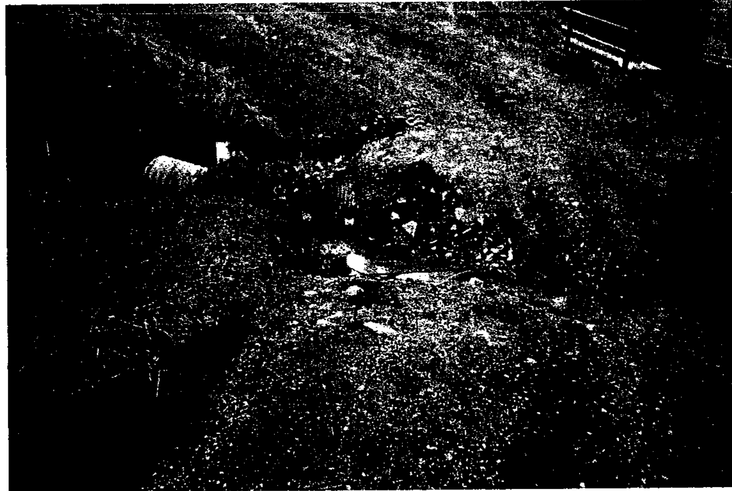


Figure 4: Flooded walking trail in Atikokan

John noted how not all individuals were able to use the trail system in its current state suggesting that, "[the town has] to, to inspect [the trails], either in the mid summer or early spring and get it so that even wheelchairs can go on that trail."

With respect to access and availability of transportation, Bill noted that the physical isolation of Atikokan in relation to other cities acts as a barrier. He took two photographs, one at either end of town, of highway signs showing mileage to the closest cities, 203 kilometers to Thunder Bay and 141 kilometers to Fort Frances (Figures 5 and 6).

Figure 5: Distance in kilometers from Atikokan to Fort Frances and Rainy River

Figure 6: Distance in kilometers from Atikokan to Thunder Bay

He said, "so you can see that Atikokan is kind of stuck in the middle of nowhere." Bill also noted, "if you want to go someplace, you pretty well have to pay the price" which was accompanied by a picture showing the current high price for diesel fuel, significantly higher than prices in Southern Ontario. Gary and Bill both took pictures of a newspaper article notifying residents that as of August 2008, the Greyhound bus, which is the only form of

public transportation leaving Atikokan for larger regional centres such as Thunder Bay, would cease its service. The Greyhound bus service serves as the only public form of transportation into and out of Atikokan. When the route stops operation, residents will only be able to leave via private vehicle, which may be problematic for elderly seniors who cannot drive, or who are forced to drive in dangerous winter road conditions. Gary was concerned about the effects that the cancelled bus service would have on seniors requiring transportation to medical appointments in Fort Frances or Thunder Bay. In his picture entitled "Transportation Woes" he commented, "being able to actually see a doctor or specialist in person you know with the bus service stopping is going to be a real problem." Atikokan is located approximately 200 kilometers from Thunder Bay, and if unable to drive themselves to medical appointments there, seniors would be forced to rely on others for transportation. This problem is exacerbated by the age structure in Atikokan. There are fewer young people and younger family members able to drive seniors to their appointments.

Atikokan has one local pharmacy, and in previous years the pharmacy was easily accessible and conveniently located in a small shopping plaza. With the recent move of the pharmacy to a basement location in the health clinic and the reduction of the size of the pharmacy problems with mobility and privacy have arisen for customers. People reported challenges getting down the stairs into the pharmacy, difficulty entering, exiting and moving about in the cramped space of the new location and concerns with lack of privacy as anyone in the space can hear discussions between customers and the pharmacists. Gary commented on the general feeling of entering the pharmacy as "claustrophobic" and the crowded layout of the pharmacy may discourage some residents from shopping there as seen in Figure 7.

Figure 7: Interior view of Pharmacy

In recent years Atikokan has experienced a substantive decline in population from 3,632 in 2001 to 3,293 as of the 2006 census (Statistics Canada, 2006). Part of this population decline can be attributed to the migration of younger residents to larger cities in order to find work. Many participants noticed this changing demographic and the declining economy of the community. Bill, the youngest senior participant in this group is presently employed by the town. He noted numerous failed industries in recent years saying, "Breadwinners [are] on unemployment [insurance] right now and unemployment's going to be running out shortly. Stress levels are really high, lots of fear. A lot of the workers are older, like middle aged, so leaving the community is an option, but it's more difficult because they're fairly established in the community." With the lack of employment opportunities, the value of homes has fallen, therefore selling is not an option for those residents wishing to downsize or leave the community.

The male participants in Atikokan identified two main health resources; community supports and volunteering to help others. The photos depicting community supports focus on

various physical features, such as buildings, and people working together to improve the health of all residents. Discussing community supports, some participants noted while physical access to the pharmacy was challenging, the pharmacy staff themselves were "Champions in Healthcare", as seen in Figure 8. As Bill noted,

> "they realize the difficulties like everybody's saying, the size is small and the location is difficult so they've kind of put on their hats and been creative, trying to support the community in anyway they can you know. I think we're fortunate we have a lot of people in the community that have dedicated a lot of their life to making life for seniors in this community as comfortable as possible."

Figure 8: "Champions In Health Care", Pharmacy staff

Other community services mentioned included the Native Friendship Centre, which offered a lunch program as seen in Figure 9.

Figure 9: Native Friendship Centre lunch

Gary described the programs saying, “They have a lunch at the Native Centre that’s every Wednesday and it costs you three dollars for a very good lunch, varied lunch every day- every week it’s different. And anybody that is a member can attend, and it only costs you three dollars to belong to the Native Friendship Centre so it’s a good place for seniors to get their nutrition.” All other participants affirmed that this centre acts as a resource to their health.

Volunteering was seen as a way for participants to connect with their community. All participants were involved in leadership roles in the community, such as leaders in the seniors’ organization, as healthcare employees or as recreational activity teachers. They discussed the importance of staying connected; however only one participant took a photograph demonstrating this. Tom noted the importance of volunteering stems from “The opportunity to be of service in the community, to do something good that you can’t do by yourself, and as a group it works.” Titling one of his photos “Sing the Cares Away” he further discussed how, “Every two weeks volunteer seniors go to sing [at the hospital], and

the entertainment value for the residents of the extended care wing [of the hospital] is so very, very positive. But it's also great medicine for the volunteers that go there to sing. This is the only place in the community where men can go to sing" (Figure 10).

Figure 10: "Sing the Cares Away", residents of extended care facility gather

While the male participants identified very few resources for health in the community, the female participants identified a greater number of resources.

Female Participants in Atikokan

Of the eight women in Atikokan who began the photovoice project, seven were able to finish. One participant did not complete all aspects of the project.[5] She did not attend the focus group session, but she did complete an individual interview. Collectively 128 pictures were taken, with individuals taking between seven and 27 photographs each. The women identified four main barriers and four main resources to health (Figure 11 and Figure 12).

[5] All aspects of the project include taking photographs, attending the focus group session and participating in an individual interview.

The four main barriers to health identified by the women were: access to health services, visualized through photos of the poor layout of the health centre and limited access to home care services; access to and ease of transportation, seen through photos of a poorly designed walkway, the roads filled with pot holes, and a photo of the only type of hirable van service available in town; effects of a declining economy on services available, displayed through the photos of store fronts; and pollution concerns, visualized through photos of railroad tracks with weeds growing along them and dust on the dirt roads.

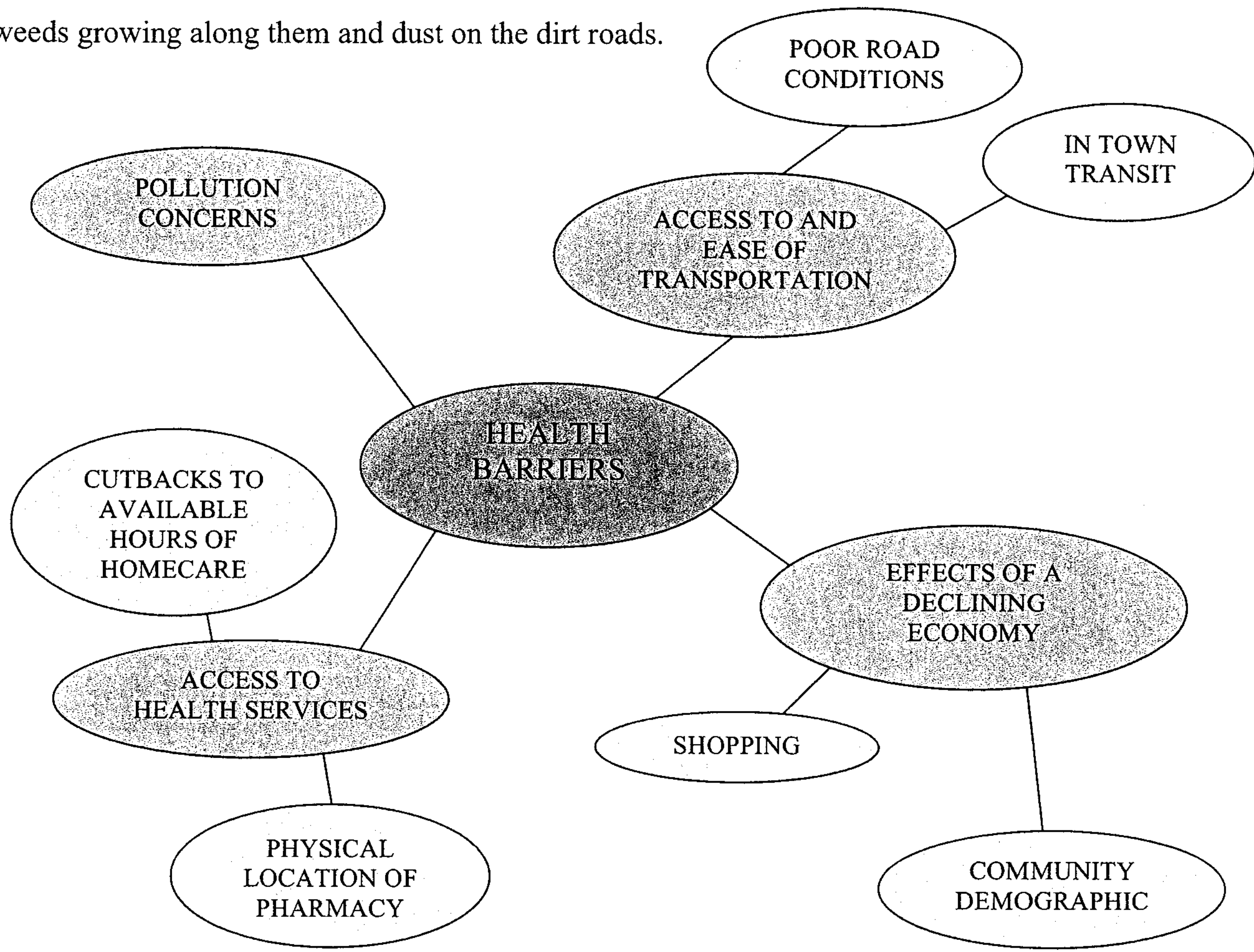


Figure 11: Thematic representation of perceived health barriers in Atikokan as chosen by female participants

The four main resources for health identified by the women were: community services, shown through photos of healthcare amenities and community centres; recreation and leisure, visualized through photos of walking trails, swimming exercises and crafts such as quilting; the ability to socialize, demonstrated through photos of gatherings of friends; and town amenities, seen through photos of the various services around the town available to residents such as the library and the post office.

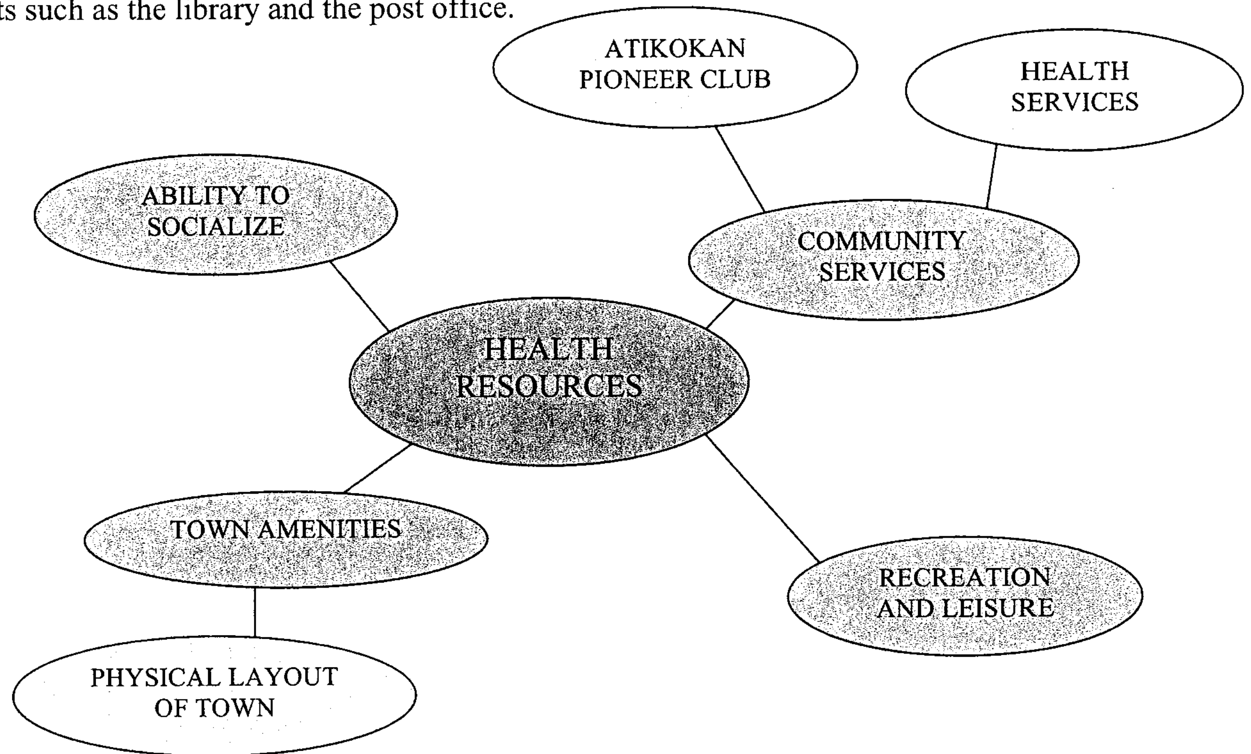


Figure 12: Thematic representation of perceived health resources in Atikokan as chosen by female participants

The women noted the inaccessibility of health services in Atikokan, in particular the poor physical location of the pharmacy and the impact of cutbacks to available home care hours. As mentioned in the previous section, the change in pharmacy location to the downstairs of the clinic allows for seniors to receive two services in one location. However, it is difficult for seniors to access the downstairs pharmacy. Titling a pair of pictures

"Frustration at its best" Margaret noted, "When you get in the door [of the medical building], you have to go upstairs to the clinic and the little entranceway, where you come in here, you can get a wheel chair in it. But if there's somebody sitting in a chair in that entrance way waiting for something, you know waiting for the elevator or something, it's too crowded even for a wheelchair to get in there" (Figure 13).

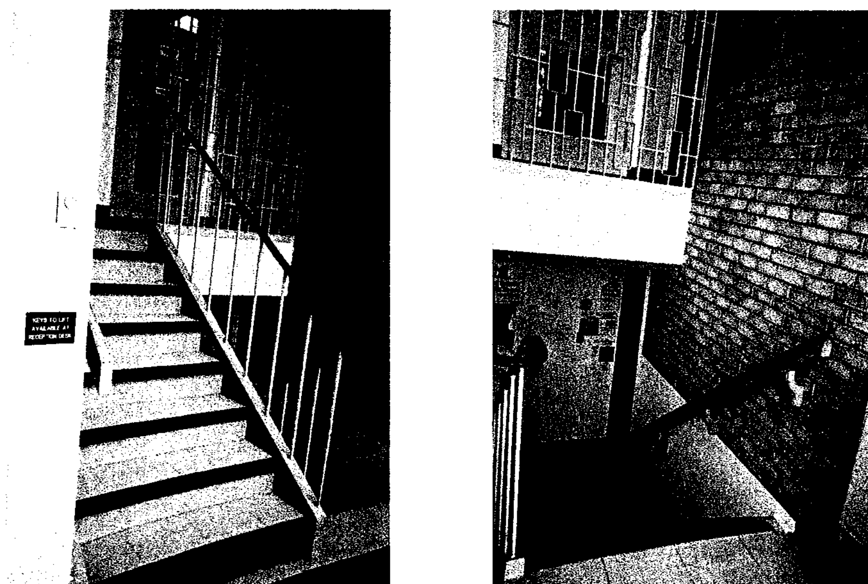


Figure 13: "Frustration at its Best", entrance to the health clinic

Lois added, "Our pharmacy is downstairs…they have an elevator and you have to ring [to go] upstairs, [and say] 'could you come and open and bring us downstairs'… It's very inconvenient." While participants noted there is a delivery option offered, many preferred doing their own shopping or errands and having the option to compare and contrast products and prices. They also discussed the issue of lack of privacy when getting prescriptions at the pharmacy due to its congested size.

Recognizing the value and importance of home care to seniors in the community, particularly to elderly women living on their own, concerns were expressed about the impact

of recent government cuts to the number of hours of home care provided, as well as problems with the quality and consistency of care received. Dorothy spoke of two friends; both elderly women who received home care visits each week. The reduction to one hour of paid home care per week necessitated some of the women to make a choice about what elements of basic care they could have, for example whether the time would be used to cook and help with errands or whether they would be assisted to take a bath. Dorothy commented,

> "[Seniors I know] only have one bath a week because they can't bathe themselves, so they have to have somebody [help], and usually they will have a bath and take their time. And the government cut another hour; so they cut half the time to have a bath, so they can't soak their feet, or they have to hurry, hurry. And they all complain about that."

Dorothy shared with the group that home care service was not always bad,

> "I had homecare because about 6 years ago I had cancer…I had home care for maybe a year because I couldn't do anything, because I was so sick, but…it was not as bad, because [home care worker] used to come three times a week and she used to wash my bedding, and change the bed, put everything tidy and she used to cook for me lunch time and she vacuumed so…six or seven years ago, [home care] was not as bad, and now, [the government] cut [it] out."

Some participants noted that while this currently did not directly affect them, the future possibility of having only one bath a week, or having to choose between basic hygiene or assistance with meals or groceries in the future was disturbing and unacceptable. The lack of independence associated with limited home care was also a concern. Other participants in the group acknowledged this as an important issue.

Limited options for transportation were also discussed by the members of the women's focus group. Participants noted the barriers associated with in town transit such as poorly maintained walking paths or sidewalks, and the high cost of securing taxi or van transportation around town. Titling her picture "Not Practical" Connie noted, "This path is meant to be a shortcut between businesses, Main Street and O'Brien. It's a good idea but

unfortunately you can't walk on it, you can't bike on it, you can't push your baby stroller on it, or a wheel chair. The ground won't firm up and it's just one of the many things that you could trip on around here" (Figure 14).

Figure 14: "Not Practical", walkway through town

Transportation out of town was also presented as a barrier by the women of Atikokan. Participants voiced concerns about their ability to travel to medical appointments or to do shopping in a larger centre, "It will become very stressful when the buses cease running in [August], for the seniors who are unable to drive and need to travel to Thunder Bay or Fort Frances." Participants also commented on the poorly kept roads around Atikokan acting as a barrier for seniors who drive and for those seniors attempting to remain active through walking and cycling. Titling a series of two photos "Coming or Going" (Figure 15), Barbara pointed out, "Coming or going you have to drive on the same side of the road. You take your life in your hands every time you go down to my place because there's so much pot holes so many dips and bumps, crevices, that you take your life in your own hands."

Figure 15: "Coming or Going", driving in Atikokan

As Barbara explained to the group, due to the uneven pavement on the roadway, as you turn the corner you must cross over into the lane of oncoming traffic in order to avoid the potholes and the risk of damaging your car or having an accident. Due to the location of the corner, the driver's line of sight is not clear, and the driver cannot be sure another vehicle is not approaching, causing a potential accident.

The female participants also remarked on the declining Atikokan economy. The day the focus group session was held, participants had just been notified of the closure of the Saan store, currently the only clothing store in Atikokan. Participants noted the isolation associated with lack of shopping availability and the fact that the closing of this store would

mean that residents would need to travel to Thunder Bay, approximately 200 kilometers away, to shop for basic everyday items. Other barriers associated with shopping were the inability to choose where to shop, as shopping options are limited, and the financial and transportation challenges posed by needing to shop in larger city centres, "We have only one grocery where we are obliged to buy from…from that grocery. It doesn't matter if you travel to Thunder Bay or Fort Frances, it is cheaper of course, but then you have to pay your gas." Related to the declining economy was the changing community demographic. Participants reflected on the past, when Atikokan was a young town and seniors enjoyed more abundant resources, "Do you know about 30 years ago or something like that, a senior did not have to pay their taxes here, they didn't have to pay for going to the pool, everything they did...I never did enjoy any of that." Yet as Connie described, in its current demographic structure, the present day Atikokan "[is] a senior town."

A few of the women noted concerns regarding environmental issues, such as the use of pesticides on railway tracks. Participants were worried about unexplained or unknown health concerns arising from the use of these pesticides. Barbara lives near the railroad tracks, "They spray for the grass, not to grow in the summer time and my husband, when they do spray, my husband has to stay indoors for a week" (Figure 16).

Figure 16: Set of train tracks that are sprayed with pesticides

Barbara believes her husband's allergies are exacerbated by the pesticides. Another pollution concern was the unknown implications of an outflow pipe located in the town's river near a residential area. The participants noted an odd odor coming from the pipe at various times throughout the year, but were unsure of the contents of the pipe.

Community services in Atikokan were seen in this study to play a positive role toward ensuring the health and well-being of older residents. Participants noted the various community supports and health services available that aid their health such as the hospital and medical centre, the Native Friendship Centre, and the Atikokan Pioneer Club. Participants commented that the Atikokan General Hospital was a facility providing wonderful medical services. The hospital also contains an extended care facility allowing residents to remain in the community for a longer time instead of forcing them to relocate to another community to access services as seen in Figure 17, "Those poor seniors, a lot of them have got like Alzheimer's and they don't know nobody and to put them in an environment where they got no visitors, it would be the death…very, very pitiful."

Figure 17: Extended Care facility at the hospital

The hospital also includes a helicopter pad allowing access to Thunder Bay or Winnipeg in case of a medical emergency. Another community support, which was talked about by several of the women, was the Pioneer Club. Lois noted that belonging to the Pioneer Club was similar to having another family,

> "I came to the Pioneer Club, I'd never belonged to any organization. I always worked and my husband became ill and I was home alone, I nursed him at home and then when he was gone, my friend said 'why don't you come to the Pioneer Club' and then, another friend said 'why don't you come and line dance with us' you know and those were the things that we did here. And I don't mind coming here, even to the evening dances because it's like family. You see there are no strangers here."

Other participants agreed commenting, "[The Pioneer Club] keeps us active...you know and things to look forward to and we can get involved in it by helping to serve on a bunch of these committees and set up and things."

Recreation and Leisure activities were identified as contributing to the health of these participants. The women in the focus group participated in activities such as quilting, crafts, swimming, tai chi, gardening and snowmobiling. Dorothy titled her picture of quilts "Hard

Work" and commented, "All the girls come, we all enjoy to be together, and we [work on] different patterns, and then we design [the quilt] and then we [make the quilt]" (Figure 18).

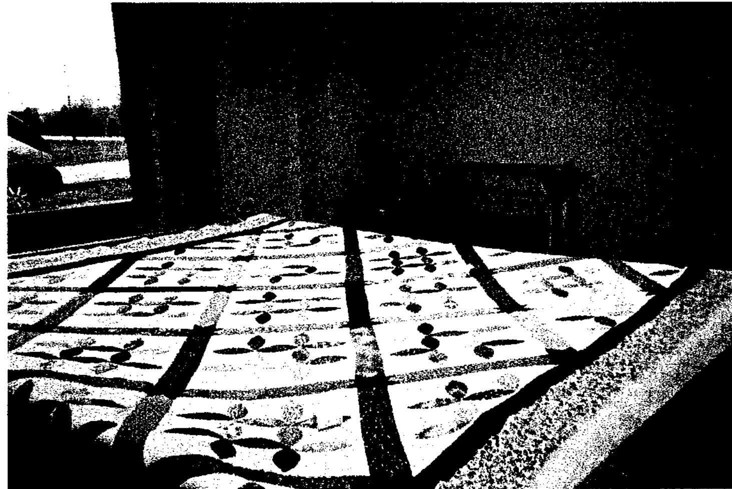


Figure 18: "Hard Work", quilt made by Dorothy and friends

Lois commented on the importance of staying active as she ages, "It is very good for all your joints and your whole body benefits from that, and I think that keeps me fit. It's very good for health." However, while recreation and leisure were seen as positive contributors to health, participants also noted the high costs of certain activities that may prevent individuals from partaking of these health promoting activities, especially those on limited incomes.

The women of Atikokan identified the importance of socializing and informal support networks in maintaining their health and the health of other seniors in the community. Activities that help the women stay connected were described as "opportunities". The women noted that as they age the opportunity to interact with others may be limited due to mobility issues or caring for a spouse, and activities which provide an avenue to interact with others was vital for personal health. The importance of socializing was also noted when dealing

with the death of a spouse and reconnecting with the community as seen in Figure 19, "I don't think we're meant to be by ourselves. I think we're meant to be with other people." Participants discussed the importance of remaining connected to the community for an individual's health as well as their overall feeling of usefulness.

Figure 19: Friends having a picnic

The women also noted how various town amenities; such as the presence of a bowling alley, library, and post office positively contribute to their health. Town services help seniors stay connected to their community, "We have a library, and we have a golf course, and museums, and a bowling alley, community arena, we have a swimming pool. So we [have] a lot of facilities here in this town, which a lot of small towns don't have, and these are all good healthy things to do." In particular, the close proximity of amenities allows many seniors to access them independently. The women identified several health resources which were physical, emotional and mental in nature.

Gender Comparison of Atikokan Data

Overall, male and female participants in Atikokan identified similar barriers and resources to health in their communities; however, some gender differences were observed in

what they highlighted, or how they spoke about issues. Similarities existed with respect to accessibility concerns, transportation issues, the declining economy and the presence of community supports. Both the men and the women highlighted the problems associated with healthcare access, transportation and the declining economy. The male participants of Atikokan perceived many more barriers to health present in the community than resources. The men identified and talked at great length about four barriers, while only two resources were discussed. The majority of barriers they described focused on the physical environment outside of the home; transportation, sidewalks, nature trails, and pharmacy access.

The men's emphasis on physical barriers to health was narrower than the range of barriers identified by the women. While the women also identified physical barriers, they took a broader approach to the definition of barriers and resources than the men. The women discussed the same mobility restrictions created by physical barriers, but additionally they discussed the emotional aspects of health such as isolation associated with aging, and loss of spouses, family members and friends. When Dorothy discussed the concerns surrounding declining time and quality of home care, she was not only referring to the hygienic implications of cutbacks, such as lack of bathing, but also the emotional implications of isolation and dependence faced by the elderly women who require this type of support. The majority of the elderly population in Atikokan are widowed women who rely on supports such as homecare to remain in the community. As resources were discussed the women identified the importance of socializing and friendship to maintaining good health. The men did not comment on the importance of camaraderie or social activities, with the exception of one man who discussed his community volunteer singing. The men were involved in many of the activities discussed by the women; however, they were not highlighted as health

resources in the men's focus group. One of the male participants, for example, was actually a dance instructor and had taught dance to many of the female participants. Over lunch, he spoke fondly of the dance classes as a major form of socializing for himself and other seniors, but he did not document this in his photos of health resources, nor did he mention it in the men's focus group discussion.

In showing their photographs the men frequently presented the issues they were documenting as concerns in general for the community, rather than issues of particular concern for themselves. By contrast, many of the women presented their pictures as documenting issues of particular concern in their own lives or for their individual families. The men of Atikokan were primarily focused on identifying the barriers in the physical environment faced by community members. The women were concerned not only about physical well-being, but also about the emotional and mental health of themselves, as well as others.

As far as the actual content of photographs was concerned, the women and men generally chose to photograph different matter. While the men discussed how their perceived barriers and resources affected residents, very few of their photographs included people in them. Instead, the men chose to photograph signs, buildings, or landscapes. The women's photographs showed individuals participating in the activities being discussed or being affected by the barriers, such as one woman's feet demonstrating the steep slope in the road. Some women even had themselves photographed participating in an activity. The women also chose to photograph buildings and landscapes. Neither men, nor women in Atikokan took any photographs inside their homes.

Male Participants in Ignace

There were four male participants in Ignace who finished the project. Collectively 37 pictures were taken, with individuals taking between one and 17 photographs each. The men identified four main barriers and four main resources (Figure 20 and Figure 21). The four main barriers to health identified were: infrastructure and safety hazards, visualized through photos of low ceilings and poorly lit areas; poor access to health services, seen through photos of the closed health centre; weather hazards, displayed in photos of icy parking lots and those showing snow accumulation; and risks associated with pets, visualized through photos of dogs.

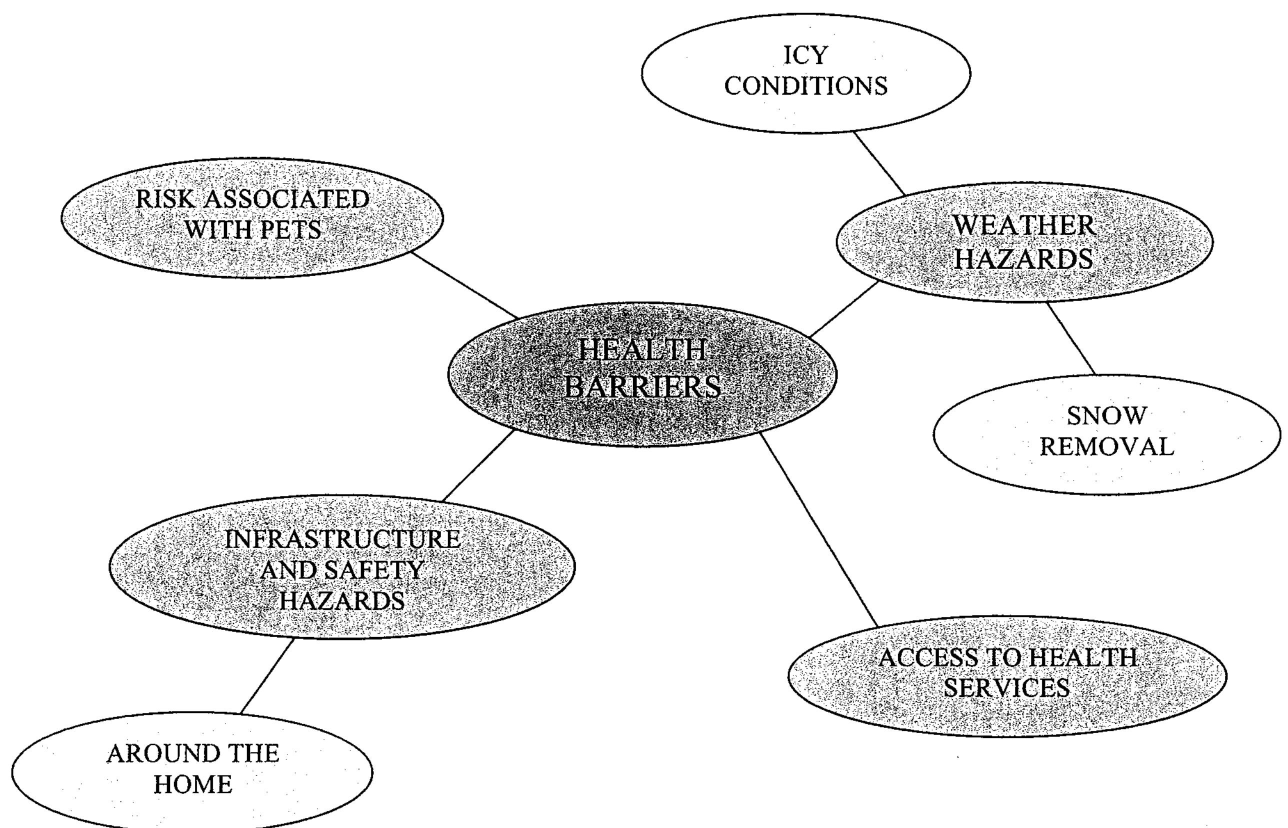


Figure 20: Thematic representation of perceived health barriers in Ignace as chosen by male participants

The four main resources for health were: community supports, visualized through photos of the activities of the local seniors' organization and local service organization; home modifications to alleviate safety hazards, demonstrated through photos of extra outdoor lights and padded sharp corners; the availability of recreation and leisure activities, visualized through photos of badminton and musical instruments; and presence of available health services, displayed in photos of a sign denoting oxygen tanks in the home and various activities provided by the local health centre.

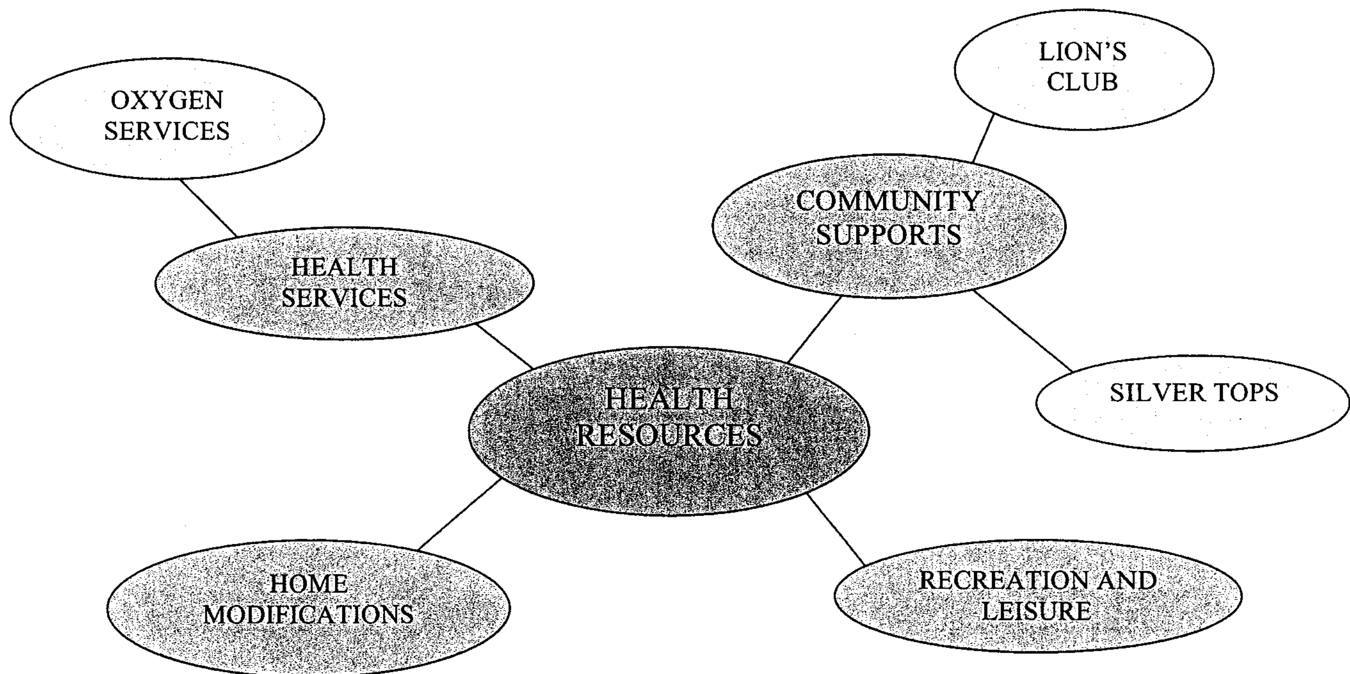


Figure 21: Thematic representation of perceived health resources in Ignace as chosen by male participants

Infrastructure and safety hazards included such things as steep stairwells, low ceilings and dimly lit areas throughout town and in peoples' homes. The men were concerned with

physical injury that could result from any of these hazards. As Herbert commented "[the stairs] going from our dining room into the living room and that of course could be a hazard for seniors because especially in the middle of the night when you go for a glass of milk...you can stumble on the steps...ideally, a house would be totally level" (Figure 22).

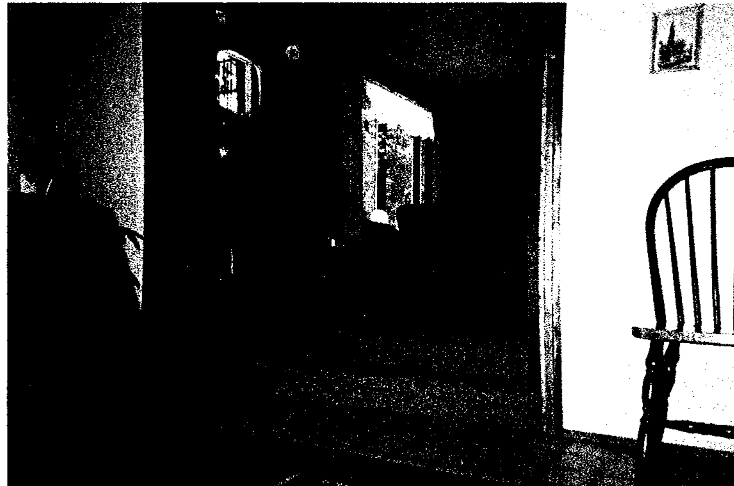


Figure 22: Stairs in Herbert's home

Elsewhere in the home, slippery floors and cupboard doors also posed a problem, "those cupboard doors are spring-loaded and they close themselves. [My wife will] leave them open every time and stand underneath and bang her head." Another safety hazard included the presence of household pets. While participants all agreed they loved their dogs, two participants took photos of their dogs as barriers to health and pointed out that "anyone that has a dog should be careful when going down stairways--not only dogs, but obstructions of any kind" (Figure 23).

Figure 23: Pets can be hazardous

Ignace does not have a hospital but does have a health centre. While the residents are satisfied with services when provided, the clinic's limited hours can be problematic. Frank commented on the alternative when the centre is closed, "[the] Mary Berglund Health Centre [has] no services on Sunday…when it's not open we got to get to Dryden or Thunder Bay." With the great distances being considered, approximately 100 kilometers to Dryden and 250 kilometers to Thunder Bay, the drive is not easy for all residents to make, especially seniors.

During the winter months, residents face many weather related hazards, in particular the high levels of snow and ice. Accumulating snow can cause problems on roofs, as seen in Figure 24, "If you get a bunch of snow on the roof and people are traveling in and out of there and [the snow] came down, it could be hazardous."

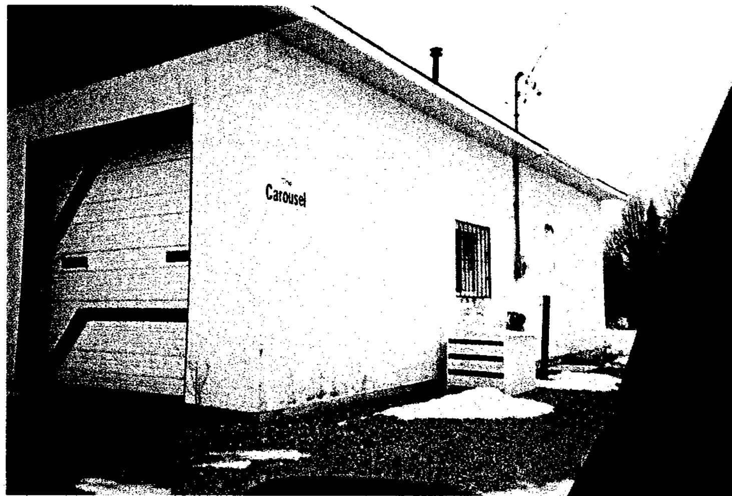


Figure 24: Snow accumulating on the roof

As winter progresses snow also accumulates on the ground and causes problems when parking lots and streets need to be cleared. Frank described how accumulating snow deposits can cause more ice to form in the seniors' centre parking lot, "the ice is unbearable there and the only reason for it is there is a snow bank on the north side that holds the water and it can't get away and all the water backs up when it starts thawing."

The men identified numerous resources, such as community groups that supported their health including the Silver Tops Senior Club, members of the community who help seniors and the Lion's Club. One participant identified a particular community member who "is trying to round up all senior centers and clubs in the province...so we can have one voice. He is also encouraging our region to have an information fair about the topics of interest to seniors." The Lion's club was identified as an important resource in charge of helping seniors remain mobile and maintain their independence.

In order to overcome previously mentioned safety hazards, some of the men have made modifications to their own homes and to those of others in their community. They have

added railings and rubberized tread to stairs, and added padding to sharp corners. Herbert shared one of his home modifications suggestions with the group, "I took some of that foam stuff that you put around water pipes and I fastened it [to the top of the crawl space] so if I hit my head, it wouldn't hurt" (Figure 25).

Figure 25: Home modification for safety

Another participant found a solution to dimly lit outdoor stairs, "I installed these lights [near the stairs]. They are on a timer and when it gets dark, then the light shines on."

The men expressed the importance of recreation and leisure to remaining healthy. A few participants belonged to a musical band that plays in Ignace and also travels to the town of Dryden, approximately 100 kilometers away. George took a picture of his instruments as shown in Figure 26 and commented on the origins of the group, "[Our music group] kind of came together by chance and all of a sudden a couple started and another couple started and they didn't know each other played instruments. We are all Silver Tops [Senior Club]

members" The members meet to practice and perform for the Silver Tops Senior Club frequently.

Figure 26: George's instruments

Another participant enjoyed playing badminton three times a week, "I wanted to take a picture of my badminton group… it's a very healthy exercise."

The health services available in Ignace help residents remain healthy. Titling his picture "NO SMOKING", and shown in Figure 27, George explained how his wife uses an oxygen tank to relieve the pressure on her heart. While some people complain about the expense, he stated "[the oxygen tank] was a good invention for people who have trouble breathing…How do you put a price tag on someone's life?...You do everything you can to keep somebody alive and let them try to live like a half decent normal life you know?"

Figure 27: "No Smoking", a sign denoting the presence of an oxygen tank

Another service male participants enjoyed was the Seniors in Motion program which organizes events for local seniors. One man commented, "[Seniors in Motion at the health centre] got a grant and a couple of weeks ago they supplied tickets to go to the Rita McNeill concert in Dryden…I think that anybody that went really enjoyed it."

Female Participants in Ignace

There were eight women participants in Ignace who began the project; however, only six women completed all aspects of the project. One participant attended the focus group but did not take any photos herself. She allowed her husband, a participant in the male group, to take both sets of photos but did not give a reason as to why. Two other female participants were absent for the focus group but took photographs and participated in individual interviews. Collectively 96 pictures were taken, with individuals taking between four and 27 photographs each. The women identified five main barriers and five main resources respectively (Figure 28 and Figure 29). The five main barriers to health identified were:

accessibility around town, visualized through photos of inaccessible buildings or services around town; weather, shown through photos of snow covered driveways; snowmobile pollution, displayed in photos of the annual snowmobile run; access to health services, demonstrated through photos of the local health centre; and access and availability of transportation, visualized through photos of travels to other communities for care.

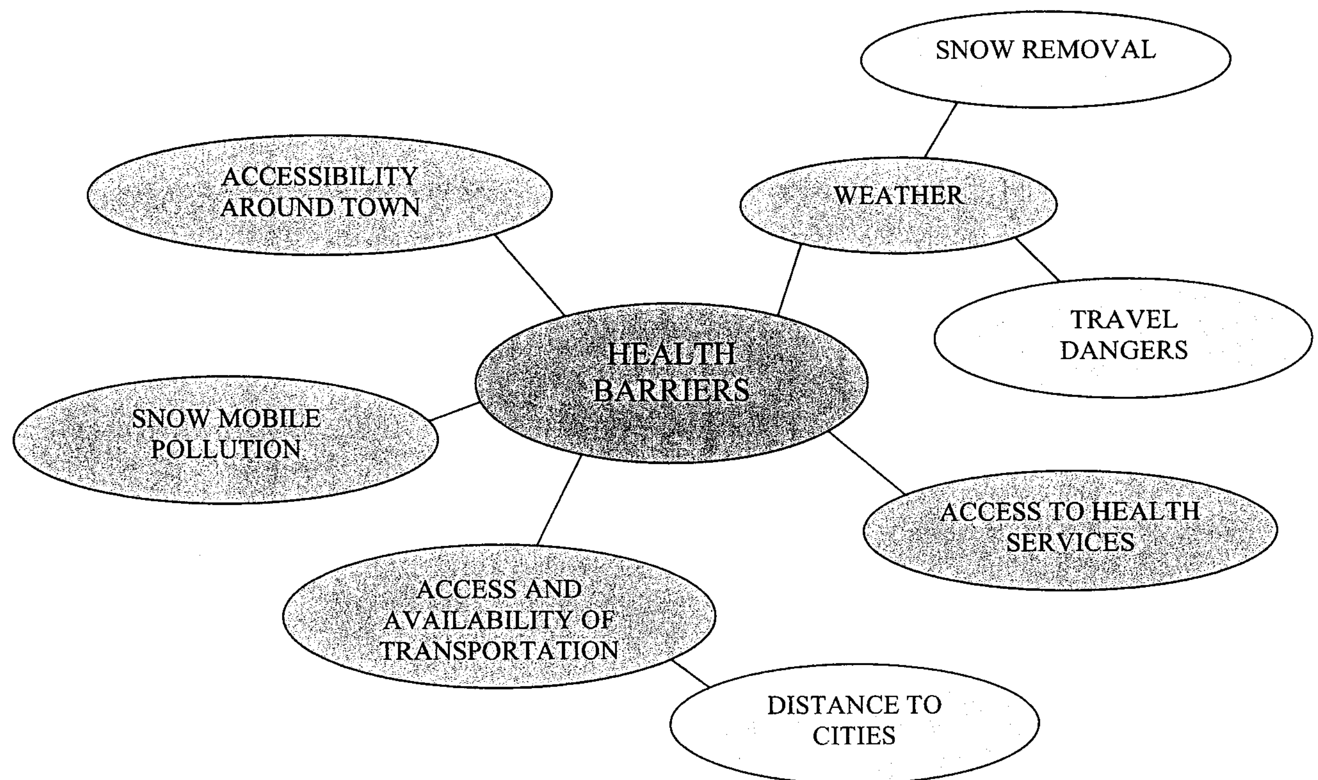


Figure 28: Thematic representation of perceived health barriers in Ignace as chosen by female participants

The five main resources for health were: health supports, visualized through photos of the local health centre; community supports, seen through photos of local service organization such as the seniors' centre or churches; socializing, demonstrated by pictures of friends, pets and family; the outdoors, displayed in photos of hikes and outdoor scenery; and home modifications, visualized through photos of jar openers or Obus form chair inserts.

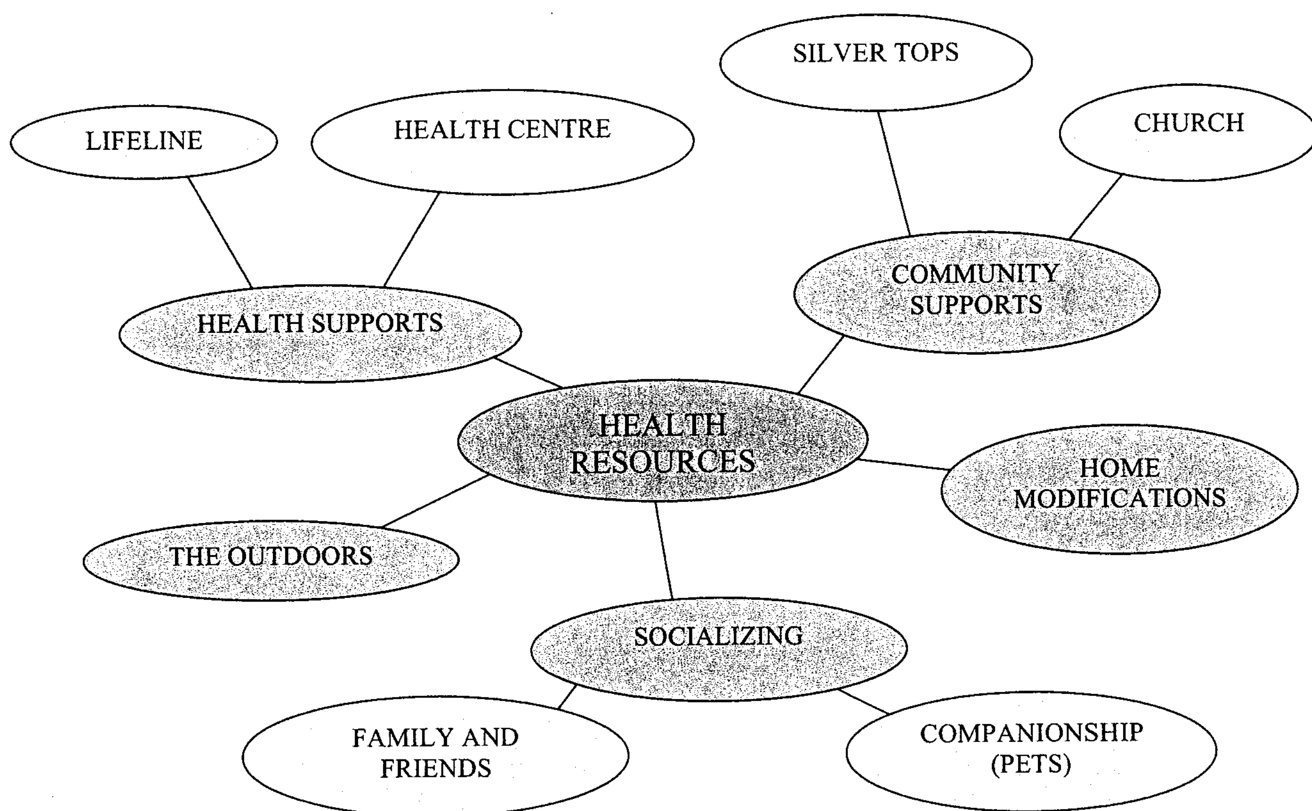


Figure 29: Thematic representation of perceived health resources in Ignace as chosen by female participants

All of the women raised the issue of challenges to accessibility. Accessibility proved to be a challenge around town when dealing with buildings or accessing services, for example, the widespread layout of town proves difficult for residents with mobility issues, or accessing services on the second storey of a building. Accessibility was also a challenge when dealing with utilizing household items. Participants discussed how the health centre was inconveniently located at one end of town. Another participant talked about problems with the bowling program for seniors. The steep and narrow stairs into the bowling alley prevent many seniors from taking advantage of this recreational opportunity. Titling her photo " Bowling Stairs" Joan noted while they offer 'free bowling' the stairs make the location inaccessible for some seniors as seen in Figure 30.

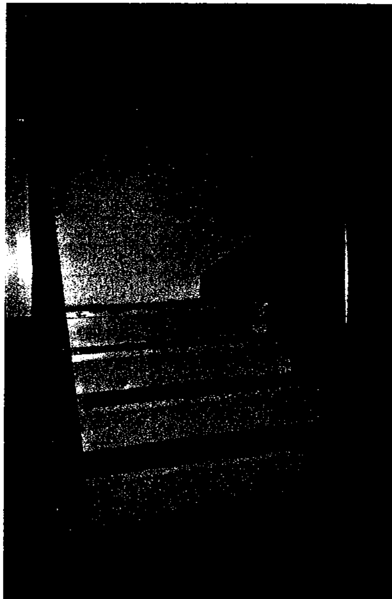


Figure 30: Stairs to the bowling alley

At home, seniors had problems opening packages, such as cans and grasping items off shelves. Even doing up buttons can be a challenge as Ruth pointed out, "I have arthritis in my fingers and it is difficult to button up shirts or blouses."

Winter weather was a barrier that all the female participants documented in their photos. While this was undoubtedly influenced in part by the timing of the study (February), the reality is that all residents of northern communities must deal with inclement weather for a significant portion of the year. Problems with snow removal, getting around safely in wintertime and danger traveling the winter roads to other communities for supplies and medical appointments and often being isolated in their homes in periods of poor weather were examples of how weather negatively impacted the lives of most of these women. Claire remarked, "I think all of January this place was covered in ice and it was almost impossible to go anywhere...it makes it much more difficult to go outside and do things...being inside all the time is not healthy" (Figure 31).

Figure 31: Ignace in winter

With the absence of a hospital in Ignace, residents must drive three hours on an isolated highway to Dryden if they have a medical emergency. The highway to Dryden can be treacherous, as Ruth noted, "There is a lot of accidents on the highway. You are stuck for 12 hours and you can't go anywhere...[what] if you do have an emergency..."

Throughout the winter season many residents choose to take advantage of the snow and travel by snowmobile[6]. Participants pointed out that while this may be an enjoyable hobby, the pollution created when multiple snowmobiles travel together outweighs any benefits. Annually a snowmobile derby is held, where hundreds of snowmobiles converge and ride trails together. Joan described the issues associated with snowmobile use and the picture she took, as seen in Figure 32, showing snowmobiles in a row,

> "I prefer to walk outside. I also have a dog. And the biggest obstacle to my health personally when I walk is quads and snow machines and they spew out, well I don't know what they spew out, but it's garbage and poison for sure...I hate walking when I know there are snow machines around."

[6] Snowmobiles are also referred to as snow machines by some of the residents.

Figure 32: Pollution created from the snowmobile derby

Access to health services remains the largest barrier to health encountered in Ignace, according to the women. The lack of health services, the lengthy travel distance to the nearest hospital (approximately 106 kilometers) on an isolated highway and lack of resident health care professionals challenges all residents of Ignace, but is experienced more acutely by seniors who generally use health services to a greater extent. Taking a photo of the health clinic, as seen in Figure 33, Maureen commented,

> "Most of the time, some of the time, a lot of the time actually [we have no access]. Now with Easter coming, for the next two weeks, three weeks, we have no doctors at all…and they don't work weekends, so even if we have a doctor for the two weeks, we have no access in the evenings."

Figure 33: Mary Berglund Health Centre

With the only hospital located hours away, some seniors are forced to relocate, "We had seniors here...but when they had to start traveling for doctors, they couldn't make the trip in the winter time and moved out."

Ignace is located between larger cities, so travel is inevitable. The distance to travel between cities acts as a barrier, as residents are forced to drive themselves or take the bus,

> "When I go to Winnipeg...if I go by bus, I have to get on [at] 1:00 in the morning, my appointment is only at 10:00 or 11:00 because they only work til noon. Well at that time, that is the only time the bus is coming back. So I have my appointment and I sit in the bus depot for 10.5 hours until 10:30 at night."

Along with the time dedicated to travel, the expense of travel can be a barrier for some seniors. Ruth described the situation encountered by another participant, who must travel for medical treatment, "If somebody doesn't give her a drive [to Dryden]...she has to stay overnight to catch the bus back. So you are spending $100 on a hotel room and taxis."

While health services may be limited in Ignace, participants pointed out that the health services which do exist are important resources for their health. Yvonne commented on the strengths of the health centre, "I must say for the health centre [even though] we have

no medical coverage in the evenings or in the weekends, it is a really good health centre in the sense that they try to set up these programs…and they are bringing in an Elvis impersonator and we went by school bus to Dryden to see Rita MacNeill." Also important in the community was the existence of lifeline, a service connecting seniors at the touch of a button to emergency responders. Lifeline is a paid service used by some residents, as Maureen noted, "I had [my Lifeline] for quite a few years and it paid for itself as far as I am concerned because a lot of other [incidences have] happened."

Various community supports also act as resources for positive health including neighbours, churches, the Lions Club (a service organization) and the Silver Tops Senior Group. One participant told of a recent illness and how her neighbours were there to support her,

> "I'm very lucky, I had a spell with a…heart problem and how many people phoned and said…'don't hesitate, if you need help, we are here to help you.' I didn't have to ask, they came to me."

Taking a photo of her church, Ruth commented, "Our church does a lot of outreach…if you are sick they bring little blankets and they bring food, they bring flowers… and they visit" (Figure 34).

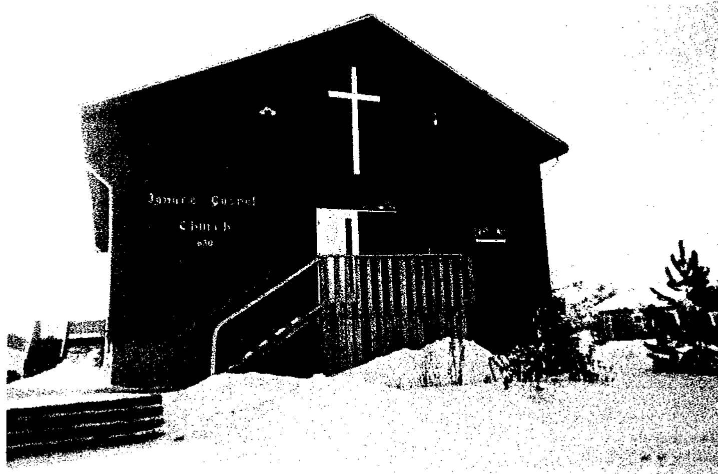


Figure 34: Ruth's Church

The Silver Tops supported participants by providing a place to gather,

> "Well for some of the elderly ladies, [The Silver Tops is] really the only outing that they have and it's only really the once a week that we get together socially."

Figure 35: Silver Tops' gathering

The Lions Club provides ramps for the seniors in need of mobility assistance. These ramps allow the seniors to maintain their independence and remain in their homes.

Socializing was seen as an important way to maintain health and stay connected to the community. The women identified companionship with pets and relationships with family and friends as being important to their health and well-being. Along with a picture of her dog, as seen in Figure 36, Joan stated, "Of course the dog is wonderful for good health. She is a source of entertainment, and joy, and watching a dog is much more fun than watching TV, no commercials for one thing...I probably wouldn't be half as faithful in getting in daily walks if I didn't have her."

Figure 36: Joan's Dog

Family relationships with grandchildren and spouses were also seen as resources, "[my husband and I] have been married 38 years. He makes most of the meals and is a good cook."

The outdoors provides a location to enjoy nature and to exercise. Participants commented on the importance of staying active through walking. Nature was seen as a way to find inner peace and relaxation from hectic lives, "If you lived in the city...unless you lived near a park where there is always people around there are always city noises around and I find the silence is what really attracts me to this place."

In order to increase the physical comfort and safety of their homes, female participants had employed the use of many home modifications. Some modifications helped with getting dressed, opening containers or reaching articles. Others helped make the home more comfortable, Claire described the picture she took, “That’s my chair…It’s got an Obus form high neck and high back on it…and it’s very comfortable and it’s sort of like a rocking chair and it swivels also and it’s really great and I do my crafts there and do my knitting there” (Figure 37). The women identified numerous physical and emotional barriers and resources present in Ignace.

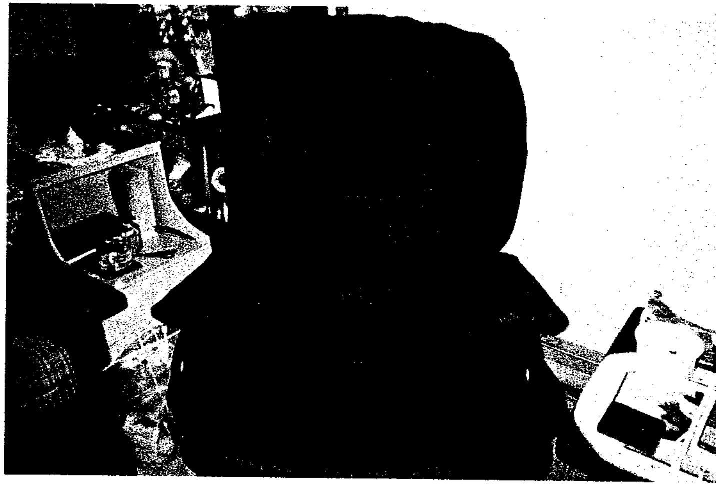


Figure 37: Obus form provides extra comfort

Gender Comparison of Ignace Data

Overall, the men and women of Ignace described many similar resources and barriers throughout this project. Both groups appeared concerned with the accessibility of health services available, as well as the hazards related to weather. The male participants were more concerned about infrastructure problems than the women. Both groups performed home modifications as a way to increase their well-being. The home modifications performed by the men generally were seen as a way to increase not only their well-being but the well-being

of the spouses, for example fixing cupboard doors at the insistence of their wives. The men also expressed an interest in helping neighbours, "I think those seniors that have ramps and steps, they should be kept clean in the winter and if they can't do that themselves, I think there should be a neighbour or they should get someone to clean it." The home modifications made by the women were of benefit primarily to them and their families. Men identified pets as a barrier to health, obstructing passageways and serving as potential dangers if they were to get underfoot. Women on the other hand, viewed pets as companions and did not mention the potential dangers of tripping over a pet, viewing only the positives aspects of having a companion.

Both groups commented on the necessity of recreational activities to remain healthy and active; however, the male participants described their activities at great length, whereas the women either did not participate or chose not to discuss their activities at any length. Both groups also reported strong ties to the community and spoke highly of the community supports available in Ignace. The female participants put more emphasis on the importance of socializing and remaining connected, whereas the male participants viewed community supports as a way to help others. The male participants appeared to be concerned with ensuring others were being cared for, especially elderly women, rather than themselves.

With regard to the objects featured in participants' photographs, a gender difference was observed. The men photographed landscapes, buildings around town, and objects within the home. There were few photos containing people or pets. The women photographed landscapes, objects within the home, and buildings around town. Many women also took photographs of people and pets. The women photographed other people participating in the activities they identified as resources for health, whereas the men did not.

Comparing the Themes Discussed Across Communities

Atikokan and Ignace have similar geographical locations and the participants from both towns share similar socio-demographic characteristics. The similarities associated with location and demography would suggest potential commonalities when exploring gender differences associated with photovoice as participants could be expected to have similar backgrounds, points of view and attitudes. Each town has similar resources and services available and would encounter similar transportation issues and weather hazards. While broader commonalities do exist between the communities, not all gender differences were equally observed in both study sites.

In both communities the men consistently validated their photographs by expressing how the barriers and resources they examined not only affected them, but others as well, for example in Atikokan when discussing sidewalk deterioration and in Ignace when describing ice build up in parking lots and cupboard doors at home. The men were also interested in making improvements for the physical betterment of their respective communities.

While the definition of barriers or resources was left open to interpretation to allow participants own perspectives to emerge, men in both communities chose to interpret these factors as primarily physical and structural in nature. Barriers identified included infrastructure in the form of buildings, roadways, sidewalks, and stairwells; transportation; weather hazards; and accessibility issues. With the exception of the declining economy in Atikokan, all barriers identified by male participants were physical in nature. The resources identified by the men were also physical in nature. In both communities the men emphasized the importance of community supports in maintaining a high quality of life for elderly residents as well as emphasizing the importance of community. In Atikokan, only one

participant thought to photograph his volunteer experience even though all participants were volunteers in the community. In Ignace, all men chose to share recreational activities.

Female participants from both communities were concerned with mobility issues, but also with pollution and the social and emotional isolation associated with aging. Pollution was an issue that neither group of male participants raised as being a barrier, yet it was identified by women in both participant groups. In both Atikokan and Ignace consideration of others was evident in the various barriers and resources described by the men, however the women did not present each issue as of concern to the community as a whole.

Physical aspects of health were not the only concern the women recognized. They also perceived barriers and resources to include emotional and mental aspects of health. The concepts of isolation and loneliness that accompany old age were expressed in both communities, as well as a deeper understanding that women must support one another in order to retain good health. The idea of socializing as a resource for health was presented by both groups. Compared to the male participants, the female participants defined health in a broader fashion. Health was viewed as a combination of physical, mental, and emotional well being, whereas for the men the concept of health was consistently linked to physical limitations and structures.

Along with identifying various aspects of health, the women also chose to photograph different objects than the men. Men in both communities focused their images on objects of a physical nature, such as buildings or landscapes. While women also photographed these items, they also chose to photograph people, to a greater extent than the men.

Not all gender differences in theme were seen in both communities. In Atikokan, the men made little mention of recreational activities, with the exception of one man's volunteer

experiences and one man's discussion of repairing the hiking trail system for use by town residents. By contrast, the women discussed numerous recreation and leisure activities. In Ignace, the men presented a variety of recreation and leisure activities as health resources, while the women only mentioned a few activities. The two communities have similar recreational opportunities, however the men in Atikokan did not highlight these in their photos. The men and women of Ignace also photographed health barriers and resources within their own homes taking pictures of cupboards, walkways and their pets, whereas the men and women of Atikokan did not.

Part II: Examining Gender Differences within the Photovoice Methodology

While the first part of this study explored gender differences associated with defining health barriers and resources in the two communities, the second part of this study concentrated on exploring the gender differences associated with the use of photovoice methodology itself. As discussed previously, the methodological components of photovoice include orientation, camera operation, focus group sessions and individual interviews. Gender differences were evident throughout the orientation session, in the dynamics of the focus groups and with camera use and operation. There were no apparent gender differences evident in the individual interviews. The gender differences encountered throughout the photovoice methodology were consistent in both research locations thus they are discussed collectively below.

Orientation Sessions

Some gender differences were observed throughout the orientation session that was held to familiarize participants with the project and to explain the operation of the camera. The men appeared to be more concerned with the overall concept of the project, for example the implications of this project for the community, and how to best involve the maximum number of people. The women were more concerned with the overall time line of the project (whether they would have enough time to successfully complete it), the definition of an acceptable photograph and how to operate the cameras. The women were keen to discuss their ideas of barriers and resources for health in the orientation sessions in order to determine whether these would be suitable subjects for photos. Additionally, the women were eager to share their ideas with one another and sought group consensus for their suggestions, while the majority of the men remained quiet, did not ask specific questions or make suggestions on what they might photograph, or seek approval from their peers.

Focus Group Sessions

The women's focus group sessions had the feel of friendly, social gatherings. They were excited to share their photographs and discuss the photos belonging to other participants. Several shared their pictures with one another while they were waiting to begin the group discussion. When someone would hesitate or struggle for words to describe her photo or give it a title, the others eagerly and supportively made suggestions. A good example is when one of the participants, Connie, was asked what she would title her photograph of a gravel pathway, "I don't know what'd you call it…" While she paused to

think about it, another woman stepped in with a suggestion, "the path that you can't walk on!" The rest of the group audibly agreed with this suggestion, and Connie was appreciative.

Such suggestions prevented any of the women from appearing to stand out of the crowd and helped to create a cohesive and comfortable group environment. The women were evidently friendly with one another, leaning towards each other to examine photos and passing around journals and whispering additional bits of information. There was sense of pride and collective recognition when the group had reached a consensus and understanding regarding the title and explanation of a particular barrier or resource. They were aware of the importance of a focus group discussion and benefited from having a chance to share and learn with other participants, as Barbara commented,

> "I think just going to that [focus group] I heard a lot of things I wasn't aware of, like when [a participant] was speaking about [being] unable to get proper home care for some people you know...I just wasn't aware of that, that they couldn't actually have a real bath every day, you know if they wanted to."

There was also considerable laughter in the women's focus group. They seemed to enjoy being together and participating in the project and seemed reluctant to bring the focus group session to a close.

The men's focus groups were also filled with laughter and enjoyment. The men were friendly toward one another; however there was not the same group cohesiveness and collective discussion of particular pictures that was evident in the women's focus groups. The men did not exchange pictures with one another or collectively discuss their additional pictures other than those selected for focus group discussion. If a participant was at a loss for words or did not know what to say, everyone sat quietly waiting for him to decide what he was going to say. The other men did not spontaneously help and only did so when specifically asked,

John: And this is, I don't know what you'd call it...
Pause
John: What you think, Bill?
Bill: Well...

The men discussed the importance of the focus group as being a way to exchange ideas and see different perspectives, as Bill noted, "[I] saw [the pharmacy] as a positive thing for our community and hearing Gary's take on the same picture from a negative perspective [he] kinda made me think, you know it's both." In general, the men adopted a more individual approach to the presentation and discussion of their photos.

While the women appeared to all relate well to one another, and freely share their perspectives, some men were more reserved with their comments. One participant in particular did not appear to relate well to the other male participants. He kept his opinions to himself, and only participated when specifically addressed. He appeared to enjoy participating in the photography part of project, but not in the focus group. When the other men conversed amongst themselves, he was not invited to participate and did not spontaneously do so. At a luncheon we held for all of the focus group participants on the day of the focus group, this man joined the ladies' table and engaged in animated and comfortable conversation with them. He appeared to relate considerably better to the female participants than the male participants. This particular participant was also very talkative during the phone interview, but his voice in the focus group was limited almost solely to the brief presentation of his two photographs. In this case the single sex focus group seemed to hamper this participant's comfort in participating in the group discussion, as he appeared to be much less comfortable sharing his views with the other men. This participant only chose to highlight a single resource in Atikokan, the positive aspects of volunteering. He was the only male participant in Atikokan to discuss a resource that was purely emotional in nature.

Camera Usage

Overall, both women and men had success utilizing the disposable cameras provided; however, the women experienced more difficulties initially than the men. Several of the women expressed concerns about reading the operational instructions on the camera, being able to see the picture counter to determine how many photos were left and operating the flash; "[The flash] didn't flash for me. You have to hold [the flash] and then, you have to hold [the flash while taking the picture]", "I think mine didn't flash either", "I even had the lifeguard take it [so it would work better]."

Some of the women were not the primary photographers at home, were not used to operating cameras and they and had trouble remembering to use the camera or remembering how to take photos; "I am not used to cameras either. I took pictures years ago but then I just sort of got away from it..." When asked if they would have preferred to use their own camera, or a digital camera, a majority of female participants opted for the provided disposable camera. However, the anxiety associated with operating the camera may have translated to one participant's hesitation to use the camera. One female participant who came to the orientation session was unable to participate in the project because of the limitations of the disposable camera. As she noted, "I have a macular hole in this eye and [I] can't see. If I close my eye and look at you, your face is a black circle but I can see all the way around, but I can't see detail...I have a digital camera [that I can use]." Those participants who were more comfortable using the cameras appeared to take more pictures, and to be more concerned with the quality of the photos they took. They expressed frustration about their inability to control the quality of the photos with the disposable cameras.

The male participants appeared quite comfortable with use of the cameras and expressed fewer problems with them overall. A majority of the male participants commented that the use of a digital camera would have been easier, as they would have liked to preview their photos to ensure high quality prior to printing. The men also discussed how they would have been able to produce better quality photos using a digital camera. Gary commented, "those [disposable] cameras aren't any good taking a picture inside unless it's something close…mine would have done better." While both men and women discussed the importance of high quality photographs, this issue appeared to be of greater importance to the men. Disposable cameras were chosen for a variety of reasons, including convenience of developing. In the future the men suggested being able to use their own cameras as an alternative. The men appeared to be very comfortable with the technology, presenting less questions and anxieties surrounding the cameras.

Summation of Findings

As discussed earlier, some gender differences were evident within and between the research sites. The men in Atikokan primarily identified physical health barriers through images of poor road conditions, limited infrastructure, or problems associated with travel and mobility. While women also noted the poor condition of roadways in Atikokan, they also photographed and discussed concerns about availability of care associated with decline in home care hours for seniors. The women identified the importance of social connectedness and inclusion for good health, demonstrated through pictures of community groups and organizations, whereas the men viewed these same groups as providing supportive services, such as meals and medication delivery.

In Ignace, the men identified physical challenges and infrastructure as barriers to health. The women also identified various physical limitations but to a lesser extent than the men. The men and women in Ignace as well as the women in Atikokan identified numerous recreational and leisure activities as resources for health. Overall, the men's pictures and dialogue presented a definition of health concerned mainly with physical limitations relating to other community residents. The women defined health in a broader context; encompassing physical, mental, and emotional health of themselves and others. Both groups of female participants experienced some challenges with the cameras, appeared more anxious about taking the right type of picture in the orientation, and appeared to be more comfortable with one another throughout the focus group sessions. The men did not exhibit a level of cohesiveness in the group dynamic that was achieved between women participants. While gender differences were found in both communities with respect to perceived health barriers and resources and within the actual elements of the photovoice methodology, the reasons behind these differences are discussed below.

Chapter 5 – Discussions and Conclusions

This chapter explores the potential reasons behind the observed gender differences in senior women's and men's use of photovoice in Atikokan and Ignace and the health barriers and resources they identified. Part one explores the gender differences relating to the types of perceived health barriers and resources observed in each community. These differences are explained with reference to literature detailing how men and women are socialized differently, and how the loss of mobility threatens masculine ideals of independence. The narrower view of health held by the men contrasted greatly from the broader definition held by the women suggesting that the men are more preoccupied with the importance of physical health and physical attributes.

The second part of this chapter explores possible explanations for the observed gender differences evident in the ways men and women utilized the various components of photovoice, in particular anxieties surrounding the use of the camera and the expectations of the project, and the atmosphere of focus group sessions. The men were more comfortable with use of the technology, which may in part be explained by the overall masculine framing of technology as well as men's increased access to technology through work and leisure. The focus group component of the project proved to be well adapted for the female participants, as they were able to develop a stronger group dynamic than the male participants and connected on an emotional level.

Part I: Examining Gender Differences in Atikokan and Ignace

Gender differences were evident when perceived health barriers and resources were examined for both Atikokan and Ignace. Men in both communities consistently identified

barriers to health as being physical in nature, such as roadways, icy parking lots and sidewalks. The need to identify limitations to mobility may be linked to men's feelings of declining masculinity. As some men age, they lose control over their movements, their independence and subsequently their masculinity (Canham, 2009; Smith et al., 2007). Successful men are thought to be in control and strong (Kimmel, 1994). Through the identification of physical barriers and resources men were able to reinforce their masculinity. A study conducted by Smith et al. (2007) concluded independence to be an important characteristic of both masculinity and 'successful aging'. In our society, men are socialized to feel useful and physically competent as they age as a way to establish and exert their masculinity (Kimmel, 1994; Calasanti, 2004). Aging is associated with a loss of these masculine traits; a loss of independence, strength and control (Calasanti, 2004). Through the identification of physical barriers, the men were able to identify not only health barriers but also barriers to their masculine identity.

Men also identified barriers and resources that they felt affected others and not just themselves. They presented barriers in such a way as to suggest that other community residents were struggling with these similar issues. While the barriers they chose to present could be interpreted as affecting them, for example an icy parking lot, it is interesting to point out that in a majority of the cases, the men provided examples as to how this particular barrier affected other residents. For example, when identifying a sidewalk as a health barrier, one participant discussed how this sidewalk was a barrier for mothers pushing strollers, those in wheelchairs and teenagers. The men are taking a leadership role and assuming responsibility for the other residents, while also distancing themselves from the physical limitations presented by these barriers. A great deal of time was spent in focus groups and

interviews explaining the relationship between an identified resource or barrier to the suffering of a particular age group, but few relationships were explained how senior men were affected. The men identified barriers and resources that affected themselves, but chose to distance themselves from these barriers and resources. If the men had chosen to identify barriers that solely affected them, they would be admitting that they were not in complete control and their masculinity might suffer (Spector-Mersel, 2006). A reduction in social power can also affect a man's sense of masculinity (Spector-Mersel, 2006). By identifying barriers affecting others and exercising their social power, the male participants were able to maintain their idea of masculinity. If one individual experiences a loss of independence it can be seen as an insult to their masculinity, but if multiple community members of both genders are facing the same barrier, then it becomes not an issue of masculinity but an issue of human interest. The men became helpers, rather than the helped.

Overall the men had a narrower definition of health, emphasizing physical descriptions of health. The World Health Organization defines health to be "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1946). By emphasizing only one facet, the men suggested that they view the physical aspect of health as being the most important. As men view their independence to be central to their masculinity, a decline in mobility or other physical constraints would be a threat to this idea of masculinity (Canham, 2009; Smith et al., 2007). Physical barriers, rather than emotional ones, can be easily solved, for example, fixing roadways, modifying stairwells, removing snow and ice. The identification of the barriers and accompanying solutions allow the men to retain their independence, thereby their masculinity (Smith et al., 2007). While the men did discuss relationships with their spouses

or other community members, they did not discuss the importance of these relationships to their health, suggesting that while they may value these individuals the relationships are not necessary to remain in good health. Men have been found to be less interested in making friends as they age and less likely to maintain social relationships (Field, 1999; Kalmijn, 2003). Also, the qualities associated with masculinity, such as independence and strength may have prevented the male participants from recognizing the importance of social networks to their health (Garfield et al., 2008).

On the other hand, female participants identified barriers and resources that were both physical and emotional. Similar to the male participants they identified barriers and resources that were physical in nature. However, the women also discussed environmental barriers to health. Women are socialized to be more attentive to the environment and its relationship to health (Mohai, 1997; Greenburg, 2005; Stafford et al., 2005). Greenburg (2005) found that women are more concerned about environment and pollution than their male counterparts. This concern surrounding the environment may be linked with the socially constructed roles of women caring for their family, where the environment may pose greater risk to their establishment of a home (Stafford et al., 2005). They also seemed to fully embrace the importance of friendship and socializing. Research has shown that as women age, they are more likely to need companionship and they remain interested in making friends (Stevens et al., 2006; Yasuda et al., 1997; Field, 1999). As a majority of the elderly women living in the two study communities were widowed, maintaining friendships as they age may help them cope with the loss of their spouse. This observation is consistent with previous literature; as women age their dependence on neighbourhood and community interaction increases (Yasada et al., 1997). One reason for this may be the differences of marital status between

men and women. In both communities, the men were all in relationships, whereas the women were either married or widowed, with half of the female participants in Atikokan widowed and one third of the participants in Ignace widowed. A woman must re-establish her identity upon the loss of her husband, and social connections play an important role in the creation of this identity (Jacobs 1990; Field, 1999).

Women are socialized to take on the role of being both family and community caregivers; therefore, it is of no surprise that women would be concerned with barriers and resources relating to the health of others (Dentinger & Clarkberg, 2002; Wakabayashi & Donato, 2005). As perpetual caregivers, concerns over the aspects of life that may hamper health are understood. Through the identification of barriers and resources that affect others, the women were acting as caregivers to the entire community. The men also appeared as caretakers, as they were concerned with caring for external environment and helping building or modify things for their neighbours; however, the caring was conceptualized differently between the men and women. The women were concerned with providing care to overcome not only physical barriers but also emotional and mental barriers that their family and friends encountered.

Overall the women used a much broader definition of health, encompassing physical, emotional and mental aspects. The women recognized the importance of physical environment on one's health, exploring structures and environmental hazards, but also recognized the role that relationships and emotional wellbeing play in health. The importance of care-giving pertaining to family, friends and community members was established as being a vital component of aging in these communities. While the men maintained relationships with their spouses, not all women had constant companionship thereby forcing

them to form other emotional relationships (Jacobs 1990). The women were also aware of the importance of emotions and mental well-being in association with health. This awareness could stem from being more mindful of their emotional state and better able to express these feelings (Bennett, 2007). As it is more socially acceptable for women to express their emotions, the women do not fear the social repercussions that men would fear (Simon & Nath, 2004).

Part II: Examining Gender Differences in the Use of Photovoice Methodology

Throughout the project it became evident that differences between men and women were observed in the use of photovoice as a methodology. As previously mentioned, the methodology can be divided into four separate parts: orientation sessions, camera usage, focus groups, and individual telephone interviews. With respect to gender, differences between men and women were observed in orientations sessions, focus groups and camera usage.

The men appeared more confident in their abilities throughout the orientation session whereas women were anxious, asked many questions, and sought reassurance from both the group facilitators and their peers that their ideas for photos were correct and useful. There was more dialogue with the women, as they asked questions and sought group consensus, while the men asked few questions and provided few comments. The men appeared to be more comfortable with the expectations of the project and use of the camera, which is supported by research surrounding the increased comfort level and enjoyment men experience in using technology (Bray, 2007; Fallows, 2005). The men were concerned with the overall concept and outcome of the project. The women were less comfortable with their

role associated with the camera and project expectations, which is similar to previous findings as women were found to be less comfortable with the use of technology (Bray, 2007; Wajcman, 2007). Also, the women appeared to require approval throughout the orientation session and as they took their photographs. The women were more preoccupied with the foundations of the project, such as the operation of the camera and timeline of the project, and they had less time and energy to concern themselves with the broader applications of photovoice.

While in focus groups, the group dynamic observed between the men and women was quite different. The women eagerly shared their photos with one another, offered suggestions for picture titles, and showed pride when the group enjoyed their photo. The women seemed to thoroughly enjoy the focus group, treating this time as a casual visit among friends. As the women were all acquainted and generally showed a great disposition to interact on a personal level, this observation is valid and expected (Stevens et al., 2006; Yasuda et al., 1997). The men were more reserved, examining only those photos selected for discussion. The men required more encouragement to share their ideas. Oliffe and Bottorff (2007) have previously noted the difficulty in encouraging men to open up and share their emotions, and this difficulty was also observed in this study. They found that encouraging the men to share helped remove some of the negative connotations associated with emotional expression and masculinity (Oliffe & Bottorff, 2007). Men are seen to exercise "emotional self-control" as a way to maintain their masculinity and not appear weak (Bennett, 2007, p. 348; Lee & Owens, 2002). Also, not all the men related well to one another. In particular, one man appeared to relate better with the female participants, opening up for discussion at lunch with the women, rather then sharing with his male counterparts.

Both men and women created successful images with the provided disposable cameras. The women did struggle more with the use of the camera, especially with the use of the flash and reading the printed directions on the back of the camera. As discussed earlier, women, particularly those of a senior age, are less likely to be familiar with technology and less comfortable using it (Bray, 2007; Bimber, 2000; Cullen, 2001). The women were also uncomfortable with the idea of using a digital camera, preferring the simpler disposable camera. The men would have liked the option of using a more technologically advanced camera, such as a digital camera, demonstrating their overall comfort with this technology (Fallows, 2005).

Conclusion

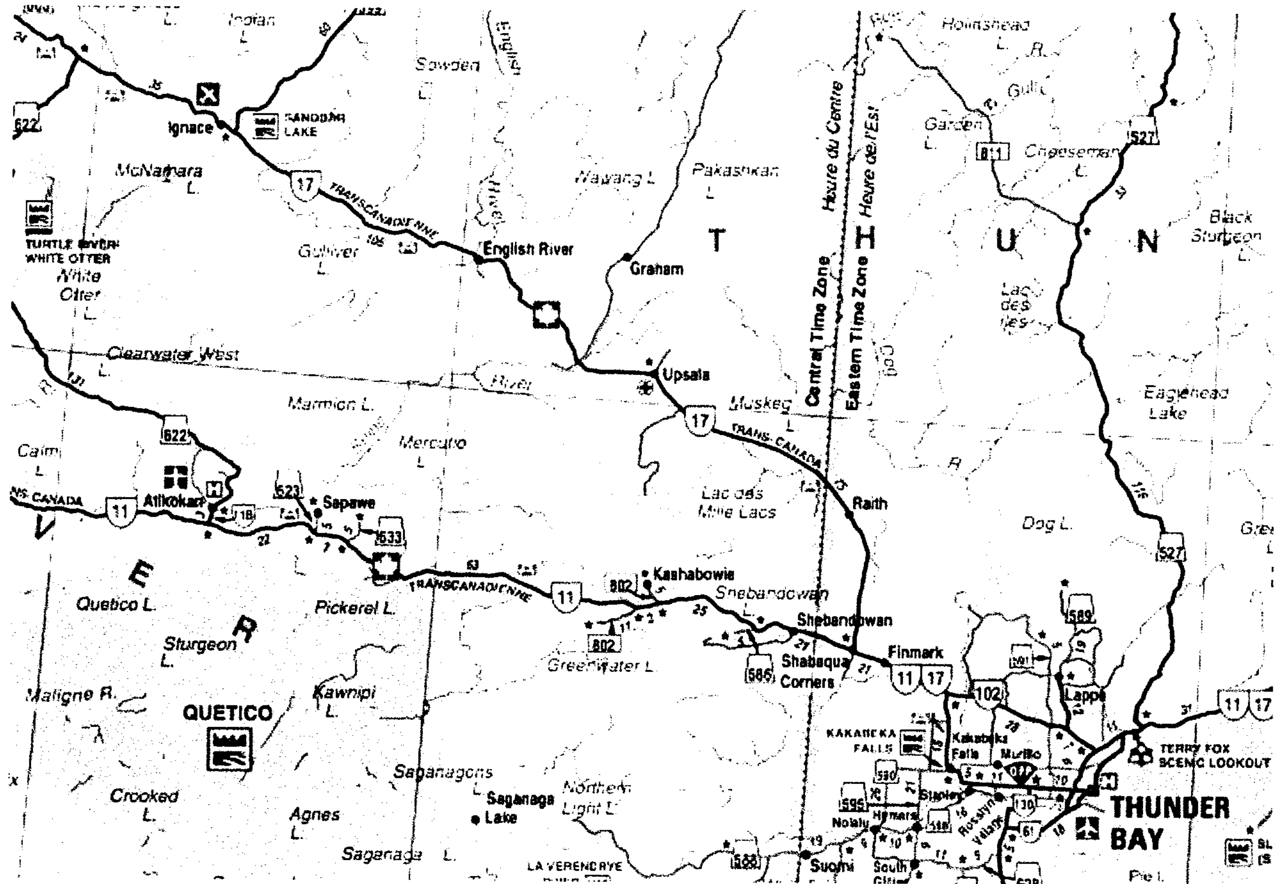
This project sought to understand the gendered use of photovoice among seniors in a small case study in Northwestern Ontario. While previous research has shown the ways in which men and women view health and technology differently, no prior studies were found exploring how gender may affect this methodology. This study examined perceptions of health barriers and resources from the perspective of elderly men and women in two Northwestern, rural communities in order to determine where potential gender differences exist. Two areas where gender differences are present were identified: the first was the perceived health barriers and resources identified by elderly men and women, which also reflected gendered differences in how they defined health; and the second relates to gendered uses of photovoice methodology itself, in particular how gender influences the comfort with technology and the dynamics of focus groups.

It is important for researchers to be aware of the differences between research participants, such as age, sex or gender, in order to ensure study results are accurate and applicable to a wider population. This small scale study illustrates how gender can influence research methodologies in both overt and subtle ways, for example, in the content the participants chose to present and the context in which they presented it. As the popularity of methods such as photovoice increases, other researchers should be aware of these issues and take them into account in future study design.

There are many possibilities for future work stemming from this study. An exploration of perceived health barriers and resources by senior women and men in varying geographical locations or among community members of varying age and status, such as young residents or confined seniors, may provide other insights into gendered similarities and differences in photovoice use. Also, a study by Bimber (2000) comments on the digital divide as affecting seniors to a greater extent than younger adults, so it would be worth exploring whether gender differences with respect to technology were observed in cross-age studies.

Exploring how gender interacts with methodologies is a vital part of ensuring reliable and accurate results are obtained. If a researcher cannot be sure that all participants are allowed to fully express themselves, the researcher cannot be sure the data holds any merit. With respect to health research, the data gathered must be representative of an entire participant group, not one subset, if the research is to contribute to a better understanding of the relationship between health, behaviour and society.

Appendix A
Map of Northwestern Ontario



(Ministry of Transportation, 2009)

Appendix B
Letter of Invitation – Ignace & Atikokan
(Lakehead University Letterhead)

Dear [organization/representative body],
You are invited to participate in an exciting new research project on the topic of rural senior's health. The purpose of this research is to explore the usefulness of an exciting new research methodology called "photovoice" (photograph taking, reflection and discussion) while learning and sharing about seniors health promotion needs and resources in [insert community name] (and to have fun of course!).

When does all of this excitement happen?
Our aim is to begin this project in April, 2008. It would be concluded in about a month.

So, you may be asking at this point "What will I have to do?"
Basically, we are looking for 16 adults aged 55 or older (8 men and 8 women) to initially meet in a group where we will hand out disposable cameras and discuss the project. Participants will then be asked to take pictures in their neighborhood or community that depict needs and resources relevant to their health or that of other elderly people.

Images might include people, places and/or things that participants think either support or limit their health or those of other seniors. In addition to using the camera, they will be given a log book to record the reasons they chose each photo and meanings of those images. Two weeks afterward, we will develop the photos and meet again to discuss them and our experiences (by the way everything is to be kept confidential among those involved... but we'll talk more about this).

What are the benefits?
First hand experience of rural life and how it affects the health of older rural people is very important information that only rural older adults have. Information provided in this research project will be developed into presentations and articles that will be shared through journals, publications, at conferences and meetings. These views may help influence the services, programs, and policies that are put in place for rural seniors. Results may also help people in rural settings think about rural seniors' health and make changes. As appreciation for your valued

participation, a donation will be made to support the activities of the Ignace Silver Tops and the Atikokan Senior's Centre.

We realize that the [insert community name/organization] may have other plans during this time, but let us know what you think. If it is possible, we'd really look forward to working with you.
Sincerely, Dr. Mary Lou Kelley and Dr. Pam Wakewich

Mary Lou Kelley, MSW, PhD.
Professor
School of Social Work/Centre
for Education and Research
on Aging and Health
955 Oliver Rd.
Thunder Bay, ON
P7B 5E1
ph: 807-766-7270
email: marylou.kelley@lakeheadu.ca

Dr. Pamela Wakewich
Professor
Sociology/ Women's Studies

Lakehead University
955 Oliver Rd.
Thunder Bay, ON.
P7B 5E1
Ph: 807-343-8353
email:pam.wakewich@lakeheadu.ca

Appendix C
Research Proposal for Ethics Application

Research Proposal

Title: ***Using Photovoice Methodology to Explore Rural and Aboriginal People's Experiences of Aging and Health Promotion in Northwestern Ontario***

Researchers: Mary Lou Kelley, PhD, School of Social Work, Centre for Education and Research on Aging and Health, Lakehead University

Pam Wakewich, PhD, Department of Sociology/Women's Studies, Lakehead University

Heather Sullivan, MPH Student, Health Studies Program, Lakehead University

Liz Hester, MSW Student, Lakehead University

Summary of Purpose of the Research:

This research is part of a multi-site study funded by the Social Sciences and Humanities Research Council. The study is being conducted on two sites, in rural southwestern Ontario by Dr. Bev Leipert (University of Western Ontario) and three in rural Northwestern Ontario by Dr, Kelley and Wakewich (Lakehead University). In 2007 a pilot study, funded by the Vice President's Strategic Research Fund, was successfully completed in Ignace, ON.
This current study builds upon that pilot study.

Older people represent one of the fastest growing segments of the population, and a substantial proportion of seniors live in rural Canada. Lack of rural health care resources, lack of attention to senior health needs, and inappropriate application of urban health policies and practices in rural settings indicate that the health of older rural people is a particularly important consideration of health research. Nevertheless, knowledge about the nature of rural seniors' health needs and resources remains limited and unclear. This is true of both Aboriginal and non-Aboriginal seniors living in Northwestern Ontario. The purposes of this research are:(1) to pilot test the appropriateness and fit of the *photovoice* research method for exploring the health promotion needs and resources of older Aboriginal and non-Aboriginal rural people from the perspective of the people themselves, and (2) to obtain preliminary data about the social and health promotion needs and resources of older Aboriginal and non-Aboriginal rural people.

Photovoice is a research method which combines photography and social action by providing cameras to community residents. This method allows research participants to

express their perspectives using a camera; thereby providing a research tool that may be important for older rural people, who, due to literacy issues and their own undervaluing of their needs and resources, may find it difficult to articulate health needs and resources. There may be language and cultural barriers that make traditional methods of data collection ineffective. Moreover, with photovoice, residents have greater control over the research and are able to photograph, reflect upon, depict, and dialogue about strengths and problems in their communities, thereby providing powerful visual representations of community issues that can be used to influence policy makers as well as local residents themselves. Although photovoice as an innovative new research method has a reputation for effectively eliciting perspectives of research participants, its appropriateness and fit have not been explicitly examined with older rural people, whose perspectives are required for appropriate and sustainable health promotion programs. Also, the use of photovoice has not been examined with Aboriginal seniors. Thus, the primary aim of this project is to test appropriateness and fit of the method for exploring the health promotion needs and resources of older rural people, both Aboriginal and non-Aboriginal.

A secondary aim of this project is to collect preliminary data about the needs and resources of rural seniors in terms of social and health promotion needs. While the evidence to date suggests that older rural people require enhanced access to health promotion resources, more information is needed about these resources and needs.

The ultimate aim of this pilot project is to inform the development of data collection methods for a multi-site national study investigating health promotion needs and resources of older rural people, thereby effectively informing practitioners and policy makers about how they might better promote healthy aging for rural people.

Research Methodology

Participants

The participants in this research are older people (i.e., 55 years or older) living in three rural communities in Northwestern Ontario who are willing and able to use a camera (following demonstration of its use), and consent to participate in this research. The First Nation aspect of the research is being supported by the Kenora Chiefs Advisory, who deliver health services in the Treaty 3 area.

The three communities that will be invited to participate are Ignace, Atikokan, and Iskatewizaagegan Independent First Nation (Shoal Lake #39). In the winter 2007, a pilot study was conducted in Ignace and the researchers were invited by the seniors group, called the Silver Tops, to return for more data collection in non-winter months. The seniors club in Atikokan has expressed an interest to Dr. Kelley to participate in this research. Dr. Kelley, with Holly Prince, has done previous research with Shoal Lake #39 and it is anticipated this First Nation will be receptive. There will be two focus groups held per community (one group for men and one for women). Each focus group will consist of approximately 8 volunteers recruited from local senior organizations and through open community advertising.

Data Collection

The data collected for this project include a combination of qualitative and quantitative data. Qualitative data are participants' photographs and log books, as well as the focus group data. Quantitative data will be obtained from socio-demographic questionnaires.

The researchers will travel to each community to collect the data for this research project, and the data will be collected with the assistance of a community project assistant who lives in each community. In an initial meeting with project participants, disposable cameras will be given to each participant as they receive instructions regarding its use, including the procedures of taking pictures of other people should they choose to do this (see Appendix A).

Participants will be directed to take pictures in their community that depict social and health promotion needs and resources for themselves or other older rural people. Each participant will also be provided with a note book to keep a log of what they photographed and of what they decided not to photograph. The researchers will retrieve the logs and cameras two weeks after distribution. Films will be developed and a focus group interview of all participants will then be conducted.

In an audiotape-recorded 2 hour focus group interview moderated by a member of the research team (with the assistance of an Ojibway speaking First Nations assistant in Shoal Lake), each participant will be asked to select, from their own prints, one that best represents a social or health promotion need and one that represents a social or health promotion resource; these images will form the basis of the group discussion. A semi-structured interview guide will be used to elicit perceptions regarding the appropriateness and fit of the photovoice method (picture taking and focus group session) as well as the significance of the images. See Appendix B for the focus group guide. For those Aboriginal participants who prefer to communicate their perceptions in Ojibway, an Ojibway interpreter will assist them.

At the end of the focus group interview, participants will complete a brief easy-to-read written questionnaire to provide socio-demographic information (see Appendix C).

Data Analysis

Log books and audiotape recordings of focus group discussions will be transcribed verbatim and checked for accuracy. Transcriptions will undergo content analysis by a minimum of two researchers. Line-by-line review will be conducted to determine codes that identify key words and phrases regarding advantages and disadvantages of the Photovoice method; contextual factors, sampling issues, financial and personal costs, other methodological and conceptual issues (e.g. how social and health promotion needs and resources are represented in photos and in the focus group interview); and the nature of the data provided (e.g. pictures taken and explanations provided of social and health promotion needs and resources).

Codes will be examined for emerging themes and patterns about the appropriateness and fit of the photovoice method with the population of older rural people, and about social and health promotion needs and resources. Themes and patterns will be identified across

transcripts, participants, gender, and locations to be compared according to confirming, negative, and extreme cases in the data. The qualitative software program NVIVO will be used to assist with labeling and retrieving codes and themes during analysis. Samples of demographic data will be compiled.

Descriptive statistics will summarize the participants' socio-demographic data.

Recruitment Procedures

Potential participants will be identified by the project assistants in each community, and invited to participate in the project. Those who agree to participate will be oriented to the study by attending a local introductory meeting. All participants will receive a letter of introduction (Appendix D) and a consent form (Appendix E).

Prior to recruiting participants in the First Nations community of Iskatewizaagegan, permission will be sought from the Chief of that community to participate in the study and take photos in that community (See Appendices F & G). In the communities of Ignace and Atikokan, the researchers will meet with representatives of the seniors centre to discuss this project and invite qualifying members to participate (see letter of invitation- Appendix H). Following this invitation, interested individuals will contact the researchers.

Harm and/or potential risks to participants:

No adverse effects are known or expected to result from this research

Benefits to subjects and/or society

Participants will have the opportunity to voice their health concerns and contribute to research that will influence the services, programs and policies that are put in place for older rural people. Photovoice will aid in overcoming common barriers of illiteracy that could otherwise silence expression of these issues for this population. Participants will also benefit from sharing ideas on their health with others in the community. Testing and refining the photovoice methodology will contribute toward a multi site national project with Dr. Beverly Leipert at the University of Western Ontario on this subject proposed for next year.

Informed consent

Informed consent will be obtained from all study participants. Attached as Appendix D, is a copy of the letter of invitation and attached as Appendix E, is the consent form. In addition, participants will be instructed to provide a letter of information to, and obtain written consent from, any individuals of whom they take photographs as part of this study (See Appendix I and J respectively for those documents).

Anonymity and confidentiality

Participant anonymity and confidentiality cannot be guaranteed because of the focus group format; however, participants will be encouraged to respect one another's privacy. The need to maintain absolute confidentiality will be discussed with the Ojibway interpreter during their training. All of the data collected by the researchers will remain confidential,

accessed only by researchers. Names or other identifying information will not be revealed in research publications or presentations.

Storage of data

The data will be securely stored at the researchers' office at Lakehead University for 7 years and then destroyed as required by the university research ethics policy.

Peer review:

This is a collaborative pilot study between Dr. Pam Wakewich (Department of Sociology and Women's Studies) and Dr. Mary Lou Kelley (Social Work and Gerontology). Data will also be reviewed by Dr. Leipert (Department of Nursing at the University of Western Ontario and Chair of research in Canadian rural health care) who will be a collaborator on the multi-site project.

Research Partners and graduate students:

Heather Sullivan and Liz Hester are the graduate students involved in this project. Copies of their Tri-Council Tutorial certificate will be forwarded to the LU Ethics Office.

Dissemination of research results:

The results of this research will be provided to each community and all participants upon request. Research results will contribute to refining methodology and experience in this population for a multi site national project.

Information from this project will be prepared for publication in a professional journal and for presentation at professional conferences, ensuring confidentiality of the participants and participating communities. In all cases, findings will be reported in non-identifying and summary format, conforming to the guidelines for research ethics at Lakehead University. Through this process of dissemination, other communities and jurisdictions can benefit by the knowledge gained in this project.

Appendix D
Tri-Council Tutorial Certificate

Certificate of Completion

This is to certify that

Heather Sullivan

has completed the Interagency Advisory Panel on Research Ethics' Introductory Tutorial for the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS)

Issued On: November 6, 2007

Appendix E
Ethics Approval

Lakehead
UNIVERSITY

Office of Research

February 25, 2008

Tel (807) 343-8283
Fax (807) 346-7749

Dr. Mary Lou Kelley, Dr. Pam Wakewich, Ms. Heather Sullivan & Ms. Liz Hester
School of Social Work / Gerontology and Sociology / Women's Studies
Lakehead University
955 Oliver Road
Thunder Bay, ON P7B 5E1

Dear Researchers:

Re: REB Project #: 039 06-07
Granting Agency name: N/A
Granting Agency Project #: N/A

On behalf of the Research Ethics Board, I am pleased to grant renewal of ethical approval to your research project entitled, "Using Photovoice Methodology to Explore Rural Women's Experiences of Aging and Health Promotion". This approval includes the amendments described in your request for renewal of ethics approval.

Ethics approval is valid until **February 25, 2009**. Please submit a Request for Renewal form to the Office of Research by January 25, 2009 if your research involving human subjects will continue for longer than one year. A Final Report must be submitted promptly upon completion of the project. Research Ethics Board forms are available at:

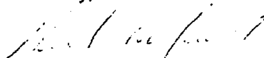
During the course of the study, any modifications to the protocol or forms must not be initiated without prior written approval from the REB. You must promptly notify the REB of any adverse events that may occur.

Completed reports and correspondence may be directed to:

Research Ethics Board
c/o Office of Research
Lakehead University
955 Oliver Road
Thunder Bay, ON P7B 5E1
Fax: (807) 346-7749

Best wishes for a successful research project.

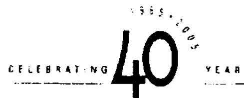
Sincerely,



Dr. Richard Maundrell
Chair, Research Ethics Board

/len

cc: Office of Research



955 Oliver Road Thunder Bay Ontario Canada P7B 5E1 www.lakeheadu.ca

Appendix F
Focus Group Semi-Structured Interview Guide

Introduction:
In this interview, we will ask you for your perspectives about using the camera and taking photographs, the meaning of your pictures, and about being in this group session. Your input is very valuable in helping us better understanding the appropriateness and fit of this research method and your views on social and health promotion needs and resources. We also ask that you respect the confidentiality of the other members of the group, and not repeat what was discussed outside of this room.

I. We would like to know your perspectives about using the camera and taking photographs and how this was helpful or not helpful for you in expressing your perspectives about social and health promotion needs and resources:

1. How did the taking of photos help you/not help you to accurately and fully illustrate your perspectives about social needs and resources for older rural women? Please explain.

2. How did the taking of photos help you/not help you to accurately and fully illustrate your perspectives about health promotion needs and resources for older rural women? Please explain.

3. Please discuss how you found using the camera and taking pictures in terms of:
   - the time this took
   - the effort required i.e. was this tiring? Invigorating?
   - the ease with which you could use the camera and take pictures
   - the interest this created for you in social and health promotion needs and resources for older rural women
   - your thinking about and the knowledge you gained about social and health promotion needs and resources for older rural women
   - your ability and comfort to speak about social and health promotion needs and resources for older rural women

4. What other comments do you have about the use of the camera or picture-taking?

5. What recommendations do you have for the researchers about how to enhance the use of the camera and picture taking in future research?

II. Now please select from your pictures the picture that best represents a social or health promotion need and a picture that best represents a social or health promotion resource.

Ask the following questions of each participant:

1. Please tell us about your picture(s).

2. What message about social or health promotion needs/resources do you want your picture to convey?

3. What made you select this picture over other pictures?

4. Can anybody else relate to this picture?

5. Was there anything else you would have liked to have taken a picture of but couldn't? What kept you from taking the picture?

6. From the discussion do you have other ideas about social and health promotion needs and resources for older women in rural settings?

7. Do you have any final comments about social and health promotion needs and resources for older women who live in rural or remote settings?

III. We would also like your perspectives about this group interview that we used as part of the photovoice research method.

1. How did participating in this group interview help you to accurately and fully communicate your perspectives about social needs and resources for older rural women? Please explain.

2. How did participating in this group interview help you to accurately and fully communicate your perspectives about health promotion needs and resources for older rural women? Please explain

3. Please discuss how you found participating in this group interview in terms of:
   - the time this took
   - the effort required ie. was this tiring? Invigorating?
   - the ease with which you could participate in the group discussion
   - the interest this created for you in social and health promotion needs and resources for older rural women
   - your thinking about and the knowledge you gained about social and health promotion needs and resources for older rural women
   - your ability and comfort to speak about social and health promotion needs and resources for older rural women

4. What other comments do you have about participating in this group interview?

5. What recommendations do you have for the researchers about the group interview for future research?

Appendix G
Socio-Demographic Questionnaire

1. In what year were you born? ________________

2. Where do you live? (please check all that apply)

   ☐ In northern Ontario ☐ In southern Ontario
   ☐ On a farm or acreage
   What is the distance from your farm or acreage to the nearest centre that you would call "your town"? ________ km.
   ☐ In a town
   What is the size of your town? ________ (Number of people)
   Other: (please describe) ________________________________.

3. What is your marital status? (please check one)

   ☐ Married ☐ Separated ☐ Widowed
   ☐ Common law relationship ☐ Divorced ☐ Single (never married)

4. How many children do you still have living *at home* in each of the following categories?

   Number of children under the age of 5 years: ________
   Number of children between 6 to 12 years of age: ________
   Number of children between12 to 16 years of age: ________
   Number of children 16 years of age & older: ________

5. What is the highest level of education you have completed? (please check one)

   ☐ Grade 1 to Grade 3 ☐ Trade or technical certificate / diploma
   ☐ Grade 4 to Grade 6 ☐ University undergraduate degree
   ☐ Grade 7 to Grade 8 ☐ University graduate degree
   ☐ Grade 9 to Grade 13

6. Which one of the following categories best describes you at present? (please check one)

   ☐ Employed full-time ☐ Retired
   ☐ Employed part-time ☐ Unemployed/on strike
   ☐ Full-time homemaker ☐ Unable to work due to illness or disability
   Other (please specify):________________________

7. What was your total household income in the past year before taxes? (please check one)

   ☐ Under $10,000 ☐ $40,000 to 49,999 ☐ $80,000 to $89,999

- ☐ $10,000 to $19,999
- ☐ $20,000 to $29,999
- ☐ $30,000 to 39,999
- ☐ $50,000 to $59,999
- ☐ $60,000 to $69,999
- ☐ $70,000 to $79,999
- ☐ $90,000 to $99,999
- ☐ Over $100,000

8. Regardless of your household income, how would you describe your financial circumstances during the past year? (check one)

- ☐ I have barely enough to make ends meet
- ☐ I have enough to get by
- ☐ I have a little left over after all my obligations have been met
- ☐ I am quite comfortable
- ☐ I have all I need and more

9. In general, would you say your health is:

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

10. **Compared to one year ago,** how would you rate your health in general **now?** (check one)

- ☐ Much better now
- ☐ Somewhat better now
- ☐ About the same
- ☐ Somewhat worse now
- ☐ Much worse now

11. During the **past 4 weeks,** to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbours, or groups? (check one)

- ☐ Not at all
- ☐ Slightly
- ☐ Moderately
- ☐ Quite a bit
- ☐ Extremely

12. Overall, how satisfied are you with the social and health resources (people, services, etc) that are in your community that help you promote your health?

- ☐ Not at all satisfied
- ☐ Somewhat satisfied
- ☐ Satisfied
- ☐ Very satisfied

13. Other comments:

Thank you for taking the time to complete this questionnaire

Appendix H
List of Analysis Codes

Atikokan: Male Participants

Accessibility	Fuel cost	New location	Staying active
Brand new bridges	Future	No economic growth	Staying involved
Bus Cancellation	Gathering	No options	Staying safe
Claustrophobic	Getting involved	Nutrition	Teenagers
Comfort level	Giving Back	Peril	Time
Community members	Good friends	Pharmacy	Trails
Cost	Hard to find items	Picture quality	Travel
Cracked	Healthcare workers	Print quality	Travel for doctor
Crumbling	Helping seniors	Purpose	Travel for job
Dancing	Independence	Relaxing	Travel for services
Decisions	Inexpensive	Relying on others	Trouble
Delivery programs	Isolation	Repaired trails	Trying their best
Dependence	Keeping active	Repairs	Unemployment
Deplorable	Lack of jobs	Safety hazard	Uneven
Digital cameras	Lack of privacy	Singing	Unusable
Distance	Lack of transportation	Sinking	Venues to sing
Economically depressed	Located near clinic	Small print	Volunteering
Enjoyment	Luncheon	Smaller	Walking
Factory closing	Mobility issues	Snow block sidewalk	
Families leaving	Native friendship centre	Snow dangers	
Flooded	Necessity	Snow removal	

Atikokan: Female Participants

Accessibility	Friendship	Library	Stairwells
Activities	Fundraisers	Lonely	Staying connected
Aquasize	Gardening	Meetings	Staying fit
Bathing	Gathering	Mobility	Staying in the north
Canoeing	Getting around	Museum	Swimming pool
Clinic	Golf course	Necessities	Tai-chi
Cracks	Gravel	Odour	Taking care of each other
Dancing	Hazards	Outdoor activities	Tea
Dangerous	Health concerns	Outflow pipe	Tight spaces
Dependence	Helicopter pad	Peaceful	Togetherness
Dusty	Helping others	Pharmacy	Town amenities
Embarrassing	Home care	Picnic	Town layout
Enjoyment	Hospital	Pioneer Club	Town van
Events	Hygiene	Pollution	Train tracks
Exercise	Inaccessible	Poorly planned	Uneven roads
Experiences	Inconvenience	Post office	Unsafe conditions
Extended care	Independence	Quilting	Walking
Family	In-town transit	Relaxing	Weeds
Family health team	Isolation	Remaining at home	Working for change
Feeling young	Keeping fit	Sharing	
Flash	Knowledge	Shopping	
Food	Lack of transportation	Small print	
Friends	Laughter	Social	

Ignace: Male Participants

Activities	Expense	Injuries	Safety hazards
Badminton	Falling	Isolation	Scary
Bands	Falling snow	Keeping busy	Shoveling
Being careful	Family	Keeping ramps cleared	Silver Tops
Challenges	Fixing	Lighting	Slippery
Closure	Floors	Lion's Club	Small print
Community health centre	Friends	Looking out for others	Snow
Community leaders	Head injuries	Low ceilings	Stairwells
Cost	Helmets	Mobility	Staying fit
Cupboards	Helpful	Music	Staying safe
Danger	Helping	Outdoor safety	Taking care of others
Dependence	Hobbies	Outdoors	Tripping
Digital cameras	Home modifications	Oxygen	Winter
Drawers	House hazards	Pets	Working for change
Enjoyable	Ice	Picture quality	
Enjoying surroundings	Inconvenient	Poorly lit areas	
Events	Independence	Print quality	

Ignace: Female Participants

Activities	Experiences	Meetings	Silver Tops
Appointments	Family	Mobility	Small print
Arthritis	Feeling young	Must travel	Snow
Back support	Flash	Nature	Snowmobile
Baking	Friends	Necessity	Snow removal
Buttons	Friendship	Neighbours	Social activities
Chairs	Fundraisers	No access	Socialize
Church	Handrails	Obus forms	Staying active
Companions	Health centre	Opening jars	Staying connected
Cooking	Hospitaals	Outdoors	Staying fit
Cost	Icy roads	Outreach	Staying in touch
Dangerous	Independence	Peace tranquility	Staying safe
Dealing with age	Isolation	Pets	Staying warm
Dealing with challenges	Knowledge	Pollution	Transportation
Dependence	Lifeline	Relying on others	Walking
Enjoyment	Looking out for others	Remaining active	Winter
Events	Make a difference	Road travel	Winter travel
Expense	Making friends	Service organizations	Work
Expense of health	Making life easier	Shoveling	

Appendix I
Consent Forms

My signature on this sheet indicates that I agree to participate in a study by Drs. Mary Lou Kelley and Pam Wakewich of Lakehead University entitled *Using Photovoice Methodology to Explore Rural and Aboriginal People's Experiences of Aging and Health Promotion in Northwestern Ontario*. It also indicates that I understand the following:

1. That I have received explanations about the nature of the project, its purpose, and procedures.
2. I understand that the focus group will be audio taped and transcribed in a non-identifying manner.
3. The researcher will safeguard the confidentiality of the discussion, but cannot guarantee that other members of the focus group will do so.
4. My participation is voluntary, I can refuse to answer any individual questions, and I can withdraw my participation in the research at any time.
5. It is not anticipated that I will experience physical or psychological harm.
6. My name will never be used; I will not be identified personally in any way in the written data or any research report.
7. The data I provide will be securely stored at Lakehead University for seven years.
8. I will receive a summary of the project, upon request, following the completion of the project.
9. I agree that my pictures may be used for presentations, research reports and research publications.

Surname: (Please Print) ___________________________________

Given Name (Please Print): ________________________________

Signature__________________________

Date: _________________________________

I agree to have myself identified in pictures used for presentations, research reports and research publications. ___yes ___no

Permission to Use Photograph

My signature on this sheet indicates that I agree to participate in a study by Drs. Mary Lou Kelley and Pam Wakewich of Lakehead University entitled *Using Photovoice Methodology to Explore Rural and Aboriginal People's Experiences of Aging and Health Promotion in Northwestern Ontario*. Your signature indicates that you agree to have your photo taken and used as part of the study. It also indicates that you understand the following:

1. I have received explanations about the nature of the study, its purpose, and procedures.
2. I am a volunteer and can withdraw at any time from the study.
3. There is no apparent risk of physical or psychological harm.
4. The data I provide will be securely stored at Lakehead University for seven years.
5. I will receive a summary of the project, upon request, following the completion of the project.
6. I agree that my pictures may be used for presentations, research reports and research publications.
7. My name will not appear in any presentation, report, or publication without my permission.

____

Signature of Participant　　　　　　　　　　Date

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