2010

EXPLORING MENTAL HEALTH ISSUES OF RURAL SENIOR WOMEN RESIDING IN SOUTHWESTERN ONTARIO: A SECONDARY ANALYSIS PHOTOVOICE STUDY

Phaedra Panazzola
Western University

EXPLORING MENTAL HEALTH ISSUES OF RURAL SENIOR WOMEN RESIDING IN SOUTHWESTERN ONTARIO: A SECONDARY ANALYSIS PHOTOVOICE STUDY

Spine Title: Exploring the Mental Health of Rural Senior Women

Thesis Format: Integrated-Article

By

Phaedra Panazzola

Graduate Program in Health and Rehabilitation Sciences

A thesis submitted in partial fulfillment of the requirements

for the degree of Master of Science

The School of Graduate and Postdoctoral Studies

The University of Western Ontario

London, Ontario, Canada

THE UNIVERSITY OF WESTERN ONTARIO
SCHOOL OF GRADUATE AND POSTDOCTORAL STUDIES

CERTIFICATE OF EXAMINATION

Supervisor

Dr. Beverly Leipert

Supervisory Committee

Dr. Cheryl Forchuk

Dr. Don Morrow

Examiners

Dr. Cheryl Forchuk

Dr. June Matthews

Dr. Susan Ray

The thesis by

Phaedra Panazzola

entitled:

Exploring Mental Health Issues of Rural Senior Women Residing in Southwestern Ontario: A Secondary Analysis Photovoice Study

is accepted in partial fulfillment of the

requirements for the degree of

Master of Science

Date_____

_____

Chair of the Thesis Examination Board

Abstract

Purpose: To examine the mental health issues and factors that positively and negatively affect the mental health of rural senior women in southwestern Ontario.

Methods: A secondary analysis of a photovoice study that investigated the mental health and factors that affect the mental health of 31 participants in southwestern Ontario. A feminist approach was employed for this study.

Results: Three mental health issues were identified. Three factors were found that positively affected participants' mental health, three factors negatively affected participants' mental health, and two factors both positively and negatively affected the participants' mental health.

Conclusions: By specifically focusing on mental health, senior women, and the rural context, the findings of this study substantially contribute to the knowledge base regarding rural senior women and mental health.

Keywords: rural, women, senior, mental health, photovoice, and secondary analysis.

Dedication

I dedicate this thesis to my Mom, Lena Panazzola. Thank you for always believing in me, pushing me to reach for the stars, and teaching me never to quit. Thank you for sharing your wisdom and knowledge with me over the years; all of my accomplishments in life I greatly owe to you. Your true determination and willpower to succeed have been an inspiration to me. I love you.

Acknowledgements

First, I would like to acknowledge my thesis supervisor, Dr. Beverly Leipert, who assisted me along this interesting journey. Your expertise in rural senior women's health and your exceptional editing skills were of great importance in the completion of this thesis. I am also grateful for your true diligence and hard work in assisting me to make this thesis the best that it can be.

Second, I would like to thank members of my thesis committee, Dr. Cheryl Forchuk and Dr. Don Morrow, for their time and support during the research process. Thank you for taking the time to provide me with valuable and insightful feedback.

Finally, I would like to thank my Mom, Lena Panazzola, for teaching me that I can accomplish all of my ambitions as long as I have the perseverance to continue on even in the face of adversity. Thank you for your encouragement, guidance, and support. I also must thank my fiancée, Kyle Meldrum, for his patience and support during this process. Thank you both for always listening and providing me with direction and encouragement.

Table of Contents

CERTIFICATE OF EXAMINATION.....ii

ABSTRACT.....iii

DEDICATION.....iv

ACKNOWLEDGEMENTS.....v

TABLE OF CONTENTS.....vi

LIST OF FIGURES.....ix

LIST OF APPENDICES.....x

CHAPTER 1: INTRODUCTION

Introduction.....1

Definitions.....1

Literature Review.....2

Demography of Aging.....2

Rurality and Health.....2

Rural Senior Women and Mental Health.....3

Purpose of Study.....5

Methodology.....5

Background and Reflections of Researcher.....6

Significance.....7

References.....8

CHAPTER 2: EXPLORING MENTAL HEALTH ISSUES OF RURAL SENIOR WOMEN RESIDING IN SOUTHWESTERN ONTARIO: A SECONDARY ANALYSIS PHOTOVOICE STUDY

Introduction....12

Literature Review....12

Senior Women and Mental Health....12

Rural Senior Women and Mental Health....13

Research Questions....16

Methodology....16

Primary Study....16

Methodology and Method....17

Recruitment....17

Data Collection....18

Rigor and Trustworthiness....19

Current Study....19

Theoretical Approach....19

Data Collection....19

Data Analysis....20

Rigor and Trustworthiness....22

Findings....24

Mental Health Issues of Rural Senior Women....25

Factors that Positively Affect Rural Senior Women's Mental Health....28

Factors that Negatively Affect Rural Senior Women's Mental Health.....32

Factors that Positively and Negatively Affect Mental Health.....36

Discussion.....39

Nature of Rural Communities and Resources.....39

Stress and Mental Health.....40

Isolation and Loneliness Effects on Mental Health.....42

Limitations.....43

Conclusion.....45

References.....46

CHAPTER 3: IMPLICATIONS

Implications.....53

Implications for Rural Communities.....53

Implications for Practice and Service Delivery.....55

Implications for Research.....58

Conclusion.....60

References.....61

FIGURE 1.....65

APPENDICES.....66

CURRICULUM VITAE.....76

List of Figures

Figure	Title
1	Mental Health Issues and Factors that Affect Mental Health Issues of Rural Senior Women Residing in Southwestern Ontario……..65

List of Appendices

Appendix	Description
A	Socio-Demographic Questionnaire for all Participants.....66
B	Selected Participant Photographs.....67

Chapter 1: Introduction

The objective of this chapter is to introduce my Master's thesis research, which explored the mental health issues of rural senior women residing in southwestern Ontario using secondary qualitative analysis (Heaton, 2004). In this chapter, I briefly overview the literature relevant to rural senior women and mental health, explain the purpose of my research, introduce the methodology on which it was based, describe my background and reflections relevant to my research, and discuss the significance of the research.

The study upon which this Master's research was based, henceforth called the primary study (Leipert, 2010; Leipert, McWilliam, Forbes, Kelly, & Wakewich, 2007), focused on the health promotion needs and resources of rural senior women. The participants in this study included rural senior women from Aboriginal, Mennonite, and other cultural backgrounds. My research, which used a secondary analysis methodology (Heaton, 2004), included all of the data collected in the primary study: transcribed focus groups, photographs, socio-demographic questionnaires, and participant logbooks.

Definitions

In this section, three important concepts central to the research topic will be defined: rural, senior, and mental health. There are numerous definitions of rural, but in this study, rural is defined as living "outside of urban centres with 10,000 or more population" (du Plessis, Beshiri, & Bollman, 2002, p. 1) and as a "place for older residents that can be characterized by social exclusion from material resources, social relations, services, and community" (Leipert et al., 2007, p. 2). This definition of rural is used because it was the definition employed in the primary study. In my study, both older and senior women will be defined as anyone 65 years of age and older. This definition has also been chosen because it was used in the primary study as a participant inclusion criterion. In this study, mental health is defined as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (World Health Organization, 2005, p. 11). Unlike other definitions of mental health, this definition focuses on the overall well-being of the individual, not just the lack of a mental illness.

Literature Review

Demography of Aging

Limited information is available in Canada about rural senior women and mental health. This information will be introduced in this chapter and elaborated in chapter two.

The World Health Agency (2002) estimates that by the year 2025, Canada will be one of the top ten countries in the world with the highest percentage of seniors. Currently, there are 3.8 million Canadians aged 65 years and above (Bedard, Gibbons, & Dubois, 2007), and projections are that by 2021 the senior population in Canada will reach 6.7 million, and one in four of these seniors will reside in a rural setting (Health Canada, 2002). Leipert and Smith (2009) point out that older women represent a large proportion of the senior population in rural areas due, in large part, to the fact that women on average live longer than men (Leipert et al., 2007). For example, Statistics Canada (2002) reports that the average life expectancy in Ontario for women is eighty-two years, whereas for men it is seventy-seven. In addition, many seniors prefer to age in a rural setting because these areas are often perceived to be characterized by peace, tranquility, and community togetherness (Leipert et al., 2007).

Rurality and Health

Rural residents tend to have lower levels of formal education, higher disability rates, higher rates of alcohol consumption, and their average life expectancy is lower than the national average (McPherson, 2004; Standing Senate Committee on Agriculture and Forestry [SSCAF], 2006). Currently, what is known about rural senior women is that they are often disadvantaged at both individual and community levels due to their living environments. The individual level disadvantages that rural senior women frequently experience are decreased incomes, decreased health status, lower education, and geographic isolation (Leipert, 2006; McCulloch & Kivett, 1995; Patrick, Cottrell, & Barnes, 2001). Community disadvantages that rural senior women commonly experience include deficient public transportation systems, inadequate affordable housing, and decreased health and social service availability (Keating, 2008; Leipert, 2006; Patrick et al., 2001; McPherson, 2004). The Canadian Research Network for Care in the Community (2006) recognizes in their report on mental health and addictions in rural senior populations that many of these factors negatively affect and/or accelerate mental

health issues. For example, limited health care resources or transportation challenges may cause stress in rural senior residents. In summary, the community and individual disadvantages that rural senior women often experience may put their psychological, physical, and economic well-being at risk (Patrick et al., 2001).

Rural Senior Women and Mental Health

Presently, there is inadequate knowledge regarding the prevalence, nature, and severity of mental health issues for rural senior women (Califoux, Neese, Buckwalter, Litwak, & Abraham, 1996; Martens et al., 2007). In addition, the research that has been conducted tends to focus more on identifying mental illnesses that rural senior women experience, yet often overlooks the factors that contribute to mental health problems (Califoux et al., 1996; Martens et al., 2007; Public Health Agency of Canada [PHAC], 2002). Therefore, this research, in its examination of factors that negatively and/or positively affect rural senior women's mental health, will advance understanding of this important issue.

The U.S. Surgeon General suggests that "disability due to mental illness in individuals over 65 will become a major public health problem in the near future because of demographic changes" (Jurkowski, 2004, p. 496). It could be assumed that this phenomenon will occur in Canada as well as in the United States due to the increase in the numbers of baby-boom seniors that is expected in both countries in the near future. The baby-boomers in Canada make up the largest segment of the overall population; currently, one out of three Canadians is a baby-boomer (Bowlby, 2007; Stone, 2006). According to Health Canada (2002), by 2021, the senior population in Canada will increase by 2.9 million due to the aging population of baby-boomers in this country.

The research available in Canada reveals that senior women experience twice the rate of depression as senior men, and that, overall, senior women experience higher rates of all mental health issues compared to senior men (Canadian Mental Health Association, 2005; Public Health Agency of Canada, 2002). The most common mental illnesses found in the aging population in Canada are delerium, dementia, depression, and delusional disorders (Kirby & Keon, 2004). Rural senior women are not only at increased risk of experiencing depression and other mental health issues, but these difficulties can be further exacerbated by inadequate mental health services, undiagnosed mental health

issues, social isolation, stigma associated with mental health issues, and stress in relation to decreased incomes and health status, which have all been found to affect rural senior women's overall well-being (Bedard et al., 2007; Leipert, 2006; Martens et al., 2007; McCulloch & Kivett, 1995; Patrick et al., 2001; Whyte & Havelock, 2007). In addition, mental health issues in senior populations are often ignored because the symptoms may be perceived as being a normal part of aging (Kirby & Keon, 2004).

As Aboriginal women were included in this study, I will briefly overview the current research regarding Aboriginal women and mental health. Compared to the general population, the Aboriginal population in Canada is relatively young. For example, those, who are 19 years and younger make up 467,000 people of the Aboriginal population in comparison to those who are 65 years and older, who make up 56,465 people (Statistics Canada, 2006). Thus, those who are 55 and older are often considered older or senior adults in Aboriginal populations (National Advisory Council on Aging, 1999).

In regards to mental health, Aboriginal women experience high rates of depression, anxiety disorders, alcohol abuse disorders, and suicide; these experiences are often directly associated with the political, economic, social, and cultural inequalities Aboriginal women face, in addition to their daily life stresses (MacMillan, Walsh, Faries, & MacMillan, 2008). Furthermore, many senior Aboriginals experience various socio-cultural issues such as alcohol and tobacco misuse, inadequate nutrition, low self-esteem, and discrimination, which may be residual problems resulting from attending residential schools (National Advisory Council on Aging, 1999). All of these factors may affect an individual's mental and physical health.

Research regarding the health issues of Mexican Mennonite women in Canada is rather limited. Qualitative research conducted by Armstrong and Coleman (2001) in Elgin County in southwestern Ontario to identify the health care needs of Mexican Mennonite women found that these women's overall health is often at risk due to language barriers, their perceptions of health, differences in culture, and their lack of understanding of health care. Armstrong and Coleman found that the Mennonite women viewed health as the absence of disease and the ability to be able to provide for their families. Thus, Mennonite women may experience mental health issues but may not think of these issues as disease or illness because they are still able to provide for their family. Consequently,

they may not seek out assistance for their mental health issues. According to Armstrong and Coleman, some of the Mennonite women when asked 'What services would you like to see in Elgin County?' responded that they would like a person to talk with about 'feelings' and advice. Based on these findings, we can assume that Mennonite women likely experience mental health issues but may not seek out assistance because of language barriers, preconceived perceptions of what constitutes ill health, and limited access to or knowledge about available health care resources.

In summary, there is little research on the mental health issues of rural senior women in Canada. The limited research that does exist points out that rural senior women may be at increased risk of mental health issues because they may experience individual and community disadvantages in their environment that may negatively affect their mental well-being (Lawrence & McCulloch, 2001; Leipert et al., 2007).

Purpose of Study

The purpose of this study is to address the following questions: 1) What are the mental health issues of rural senior women in southwestern Ontario? and 2) What factors affect rural senior women's mental health both positively and negatively in southwestern Ontario?

Methodology

My Master's thesis is based on the primary study entitled *Using Photovoice Methodology to Explore Rural Women's Perspective on Ageing and Social and Health Promotion Needs and Resources* (Leipert, 2010; Leipert, McWilliam, Forbes, Kelly, & Wakewich, 2007). The purpose of the primary study was to identify the health promotion needs and resources of rural senior women. The methodology upon which my research was based is secondary analysis (Heaton, 2004), a research technique employed to re-analyze previously collected data with a new research question (Szabo & Strang, 1997). For my research, I re-analyzed the data from the primary study (Leipert, 2010; Leipert et al., 2007) with new research questions. Secondary analysis is effective in that it seeks to get the most out of qualitative data (Heaton, 2004). Due to feasibility and time constraints, researchers conducting qualitative research often focus their research on answering a few specific questions. Due to this practice, there is often rich data that may not be addressed, either because the data did not directly relate to the research questions,

or because there was such a large amount of data that it was simply not feasible to analyse it in one study (Heaton, 2004). Therefore, secondary analysis is a useful research tool because it allows for a further analysis of important qualitative data.

There are several types of secondary analyses employed by researchers in social sciences. In this study, I used supplementary analysis, which involves "a more in-depth focus on an emergent issue or aspect of the data which was not addressed, or was only partially addressed, by the primary research" (Heaton, 2004, p. 41-42). The reason that I chose a supplementary analysis is because there were rich data on mental health issues of rural senior women in the primary study that were amenable to more in-depth analysis (Heaton, 2004). Thus, the purpose of my research was to investigate in greater depth the data that had been collected in the primary study to specifically focus on mental health issues of rural senior women.

Background and Reflections of the Researcher

In this section, I will summarize my background regarding my research. I became interested in rural women's health issues during my undergraduate studies while taking a course on rural health. My goal in undertaking this research is to advance the knowledge of rural senior women's mental health in hopes that this information will be used to inform rural practitioners, policymakers, and rural senior women. I do not claim to have a clear understanding of rural senior women's experiences in regards to mental health because I am not a senior, nor have I dealt with any mental health issues. Therefore, throughout the research process I attempted to familiarize myself with these women's circumstances and rural factors that affected their lives. I have diligently researched the available data on mental health and rural senior women to advance my knowledge of this subject and to gain a more thorough understanding of mental health in this population. In regards to rural living, I resided in a rural community during my childhood and adolescence and through this experience gained an understanding of some of the challenges of rural living. However, because of my age, I was not able to comprehend many of the challenges that older adults experience in rural communities. Therefore, I acknowledge that certain factors such as my age and limited rural experience may affect my ability to completely understand rural senior women's positions in regards to their mental health.

Significance

Research in Canada indicates that the number of Canadians aged 65 years and older is expected to increase significantly in the coming years, and that many of these seniors will reside in rural settings (Health Canada, 2002; Leipert & Smith, 2009). Moreover, a large proportion of the seniors in these areas will be women (Leipert & Smith, 2009). Current research on the mental health of rural senior women suggests that these women may experience factors that contribute to mental health issues (Martens et al., 2007; PHAC, 2002; Troller, Anderson, Sachdev, Brodaty & Andrews, 2007). Despite significant findings this research only minimally addresses how factors in the rural environment can positively and/or negatively affect the mental health of rural senior women. My research, therefore, will help to advance knowledge on this issue and could provide critical information for rural policymakers, practitioners, and rural senior women. Furthermore, my research will also be important in identifying gaps that still exist in the research on rural senior women and mental health, which will be useful to future researchers interested in this topic.

References

Armstrong, D., & Coleman, B. (2001). *Health care needs of Mennonite women.* Elgin-St.Thomas Health Unit. Unpublished manuscript.

Bedard, M., Gibbons, C., & Dubois, S. (2007). The needs of rural and urban young, middle-aged and older adults with a serious mental illness. *Canadian Journal of Rural Medicine, 12(3)*, 167-175.

Bowlby, G. (2007). *Defining retirement.* Ottawa, ON: Statistics Canada.

Califoux, Z., Neese, J., Buckwalter, K., Litwak, E., & Abraham, I. (1996). Mental health services for rural elderly: Innovative service strategies. *Community Mental Health Journal, 32(5)*, 463-479.

Canadian Mental Health Association. (2005). *Seniors and mental health: Demographic and prevalence statistics*. Retrieved from the Canadian Mental Health Association website: www.ontario.cmha.ca

Canadian Research Network for Care in the Community. (2006). *Seniors' mental health and addictions.* Toronto, ON: Author.

du Plessis, V., Beshiri, R., & Bollman, R. (2002). Definitions of rural. (Catalogue 21-006-XIE). *Rural and Small Town Canada Analysis Bulletin, 3*(3), 1-16. Ottawa, ON: Statistics Canada.

Health Canada. (2002). *Canada's aging population.* Ottawa, ON: author

Heaton, J. (2004). *Reworking qualitative data*. London, England: Sage Publications Ltd.

Jurkowski, E. (2004). Promoting the mental health of older adults in an aging society. *The Gerontologist, 44(1),* 496-496.

Keating, N. (Ed.). (2008). *Rural ageing: A good place to grow old?* Bristol, UK: The Policy Press.

Kirby, M., & Keon, W. (2004). Mental health, mental illness: Issues and options for Canada. Interim report of the Standing Senate Committee on Social Affairs, Science and Technology. Retrieved from the Parliament of Canada website: www.parl.gc.ca

Lawrence, S., & McCulloch, J. (2001). Rural mental health and elders: Historical inequalities. *Journal of Applied Gerontology, 20,* 144-169.

Leipert, B. (2006). Rural and remote women developing resilience to manage vulnerability. In H. J. Lee & C. A. Winters (Ed.), *Rural nursing* (pp. 79-95). New York, NY: Springer.

Leipert, B. (2010). Rural and remote women and resilience. Grounded theory and photovoice variations on a theme. In C. Winters & H. Lee (Ed.), *Rural nursing concepts, theory, and practice* (pp.105-129). New York, NY: Springer Publishing Company.

Leipert, B., McWilliam, M., Forbes, D., Kelly, M. & Wakewich, P. (2007). Using photovoice to explore rural women's perspectives regarding ageing, and social and health promotion needs and resources. Funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) Research Development Initiative (RDI), 2007-2009.

Leipert, B., & Smith, J. (2009). Using photovoice to explore rural older women's health promotion needs and resources. In P. Armstrong & J. Deadman (Ed.), *Women's health: Intersections of policy, research, and practice* (pp. 136-150). Toronto, ON: Women's Press.

Macmillan, H., Walsh, C., Faries, E., & MacMillan, A. (2008). First nations women's mental health: Results from an Ontario survey. *Archives of Women's Mental Health, 11,* 109-115.

Martens, P., Fransoo, R., Burland., E., Burchill, C., Prior, H., & Ekuma, O. (2007). Prevalence of mental illness and its impact on the use of home care and nursing homes: A population-based study of older adults in Manitoba. *The Canadian Journal of Psychiatry, 52*(9), 581-590.

McCulloch, B., & Kivett, V. (1995). Characteristics of the survivorship among the very old: Implications for rural families and service delivery. *Family Relations, 44,* 87-94.

McPherson, B. (2004). *Aging as a social process* (3rd ed.). Toronto, ON: Oxford University Press.

National Advisory Council on Aging. (1999). *Challenges of an aging Canadian society.* Ottawa, ON: Minister of Public Works and Government Services.

Patrick, J., Cottrell, L., & Barnes, K. (2001). Gender, emotional support, and well-being among the rural elderly. *Sex Roles, 45,* 15-29.

Public Health Agency of Canada. (2002). *A report on mental illness in Canada.* Retrieved from the Public Health Agency of Canada website: http://www.phac-aspc.gc.ca

Standing Senate Committee on Agriculture and Forestry. (2006). *Understanding freefall: The challenge of the rural poor.* Ottawa, ON: Author.

Statistics Canada. (2002). *Life expectancy, by age, and province*. Retrieved from www.statcan.ca

Statistics Canada. (2006). *Aboriginal identity, sex, and age groups for the population of Canada.* Retrieved from www.statcan.ca

Stone, L.O. (Ed.). (2006). *New frontiers of research on retirement.* Ottawa, ON: Statistics Canada.

Szabo, V., & Strang, V. (1997). Secondary analysis of qualitative data. *Methods of Clinical Inquiry, 20(2)*, 66-74.

Trollor, J., Anderson, T., Sachdev, P., Brodaty, H., & Andrews, G. (2007). Prevalence of mental disorders in the elderly: The Australian national mental health and well-being survey. *American Journal of Geriatric Psychiatry, 15(6)*, 455-480.

Whyte, J., & Havelock, J. (2007, March). *Rural and remote women and the Kirby-Keon report on mental health. A preliminary gender-place analysis.* Winnipeg, MN.

World Health Agency. (2002). *Active ageing: A policy framework.* Geneva, Switzerland: Author.

World Health Organization (2005). *Promoting mental health: concepts, emerging evidence, practice: A report of the World Health Organization, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne.* Geneva, Switzerland: Author.

Chapter 2: Exploring Mental Health Issues of Rural Senior Women Residing in Southwestern Ontario: A Secondary Analysis Photovoice Study

In this chapter, I address the current literature on rural senior women and mental health, and the methodology and findings of this research study. I also discuss how these research findings confirm and advance the current research on rural senior women and mental health.

Literature Review

The purpose of this literature review is to identify the current research that has been undertaken on senior women in rural areas and mental health. The literature review will be organized into two sections: senior women and mental health, and rural senior women and mental health. The databases that were searched included JSTOR, Google Scholar, Scopus, Scholars Portal, and Proquest. Search terms included rural, women, senior, mental health, mental illness, and mental well-being. Articles and grey literature, such as government documents and books, were included if they were published in Canada or the United States between 1990-2010 in order to ensure that relevant up-to-date research in North America was examined in this review. Twenty-one research-based articles and twenty-one grey literature publications were found; eight of the research-based articles and twelve grey literature publications have been addressed in chapter one, instead of chapter two, due to space restrictions.

Senior Women and Mental Health

A report published by the Public Health Agency of Canada [PHAC] (2002) states that senior women are more likely than senior men to experience mental illness. The report also notes that seniors are less likely than any other age group to be admitted to the hospital for a mental illness, but that when they are admitted, they will often stay for long periods of time. Although the research indicates that seniors may experience fewer mental health issues, as evidenced by their low admissions to hospitals (PHAC, 2002), this data may be misleading. There may be an underreporting of mental illness in senior populations, and research indicates that certain mental illnesses experienced by seniors, such as depression, may not be treated because symptoms often go unrecognized by health care professionals (PHAC, 2002).

The most common mental health issues that seniors experience are depression and dementia (Health Canada, 2002). The rate of depression in senior populations in Canada is around 2% (Statistics Canada, 2002). However, this figure may be higher because depressive symptoms experienced by seniors often differ from the rest of the population, and, therefore, may go unrecognized by physicians (Conn, 2002). Gallo and Lebowitz (1999) note that alcohol abuse, chronic health issues, and being a woman or a widow are all risk factors for depression. In later life, seniors may experience many losses, such as the death of a spouse, loss of friends, and retirement that may contribute to mental health issues (Canadian Mental Health Association [CMHA], 2009). Furthermore, because senior women tend to outlive their husbands, they often end up taking care of their husbands during the final stages of their lives, which can be demanding and stressful. Because of these extended duties that many senior women undertake, they may be at increased risk of experiencing depression (CMHA, 2009).

Rural Senior Women and Mental Health

There is currently limited information on rural senior women in Canada (Parikh, Wasylenki, Goering, & Wong, 1996); therefore, I have incorporated research that focuses on both rural seniors and rural women in Canada and the United States.

Stressors that have been shown to affect rural women's mental health include chronic illness, poverty, isolation, and limited power (Gold, Dominick, Ahern, & Heller, 2005; Gucciardi & Birnie-Lefcovitch, 2002). Regarding chronic illness, Health Canada (2002) reports that four out of five seniors suffer from a chronic health issue, such as arthritis or depression, and women experience chronic health issues at somewhat higher rates than senior men. Because women live longer than men and have more chronic illnesses, they may also experience increased stress and depression (Gold et al., 2005; Gucciardi & Birnie-Lefcovitch, 2002).

Senior women in rural areas often live in poverty (Ministry of Industry, 2006) and "are one of the most economically-deprived populations in Canada" (Leipert, McWilliam, Forbes, Kelly, & Wakewich, 2007, p. 4). Poverty and marital status tend to be associated with widows being at greatest risk of living in impoverished conditions (Mulder & Lambert, 2006). As women age in rural communities, the likelihood of widowhood increases. Widowhood has been associated with increased feelings of loneliness and

isolation, which can be particularly overwhelming in senior women with chronic medical conditions (Gold et al., 2005). This situation may be even more difficult for rural senior women because many of these women may not drive or have access to transportation and, therefore, be housebound.

Gucciardi and Birnie-Lefcovitch (2002) point out that "social isolation, a feeling of separation from other people, and lack of services have all been found to affect the mental health of rural women" (p. 379). Rural areas are often characterized by small populations, inadequate health care services, and lack of public transit. Senior women living in these areas must find transportation to access social contacts and health care facilities which can be stressful because family members may live far away. As a result, these women may frequently end up staying at home, isolated and unable to receive health care in a timely manner.

Social isolation and loneliness can affect the life satisfaction of rural senior women (Havens, Hall, Sylvestre, & Jivan, 1996), negatively affect their mental health, and are positively correlated with depressive symptoms (Ganguli, Fox, Gilby, & Belle, 1996). Furthermore, experiencing mental health issues may contribute to other health issues. In a study on primary care patients in a rural community in the United States, Rohrer, Bernard, Zhang, Rasmussen, and Woroncow (2008) found that rural senior women who experience depression tended to be less healthy. This may occur because rural senior women in Canada or in the United States experiencing mental health issues, such as low mood and tiredness, may not be able maintain their health by having routine physical examinations, which may contribute to the development of other health conditions. From this information, we can gather that rural senior women, who are often at risk of being isolated, may be at increased risk of experiencing mental and physical health issues.

Significant socio-cultural factors within rural communities that may also negatively affect rural senior women's mental health include patriarchal traditionalism (Leipert & Smith, 2009) and stigma towards individuals with mental health issues (Mulder & Lambert, 2006). Stigma surrounding mental health issues has been noted as a concern in rural communities (Mulder & Lambert, 2006) and may deter residents from seeking assistance for their mental health issues. The Public Health Agency of Canada (2002) reports that stigma and discrimination surrounding mental health issues in Canada is a

major concern for persons with mental health issues and may "result in stereotyping, fear, embarrassment, anger and avoidance behaviours" (p. 6). Persons with mental health issues are often fearful of experiencing stigma and, therefore, may put off seeking treatment and disclosing this information to their friends and family (PHAC, 2002). Furthermore, due to lack of anonymity in rural communities (Leipert & Reutter, 2005), persons experiencing mental health issues may not seek out treatment for fear of public scrutiny. Therefore, rural senior women may fear being stigmatized for experiencing mental health issues, and because of that fear they may not seek out assistance from a health care professional.

Regarding patriarchal traditionalism in rural communities, women, particularly rural senior women, often lack a voice, experience limited power, and are sidelined or ignored (Bernard, 2001; Leipert & Smith, 2009). Many of these women are also expected to take on community and caregiving responsibilities for their family members, work which tends to be undervalued and unrecognized (Forbes & Janzen, 2004; Leipert & Smith, 2009; Sutherns, McPhedran, & Haworth-Brockman, 2004). Furthermore, the invisibility and limited power these women sometimes experience may be associated with conservative gender roles (Forbes & Janzen, 2004; Leipert & Smith, 2009) that are often present within the rural culture. A consequence of this situation for rural senior women is that their position within the rural culture may exclude them from fully participating in their community (Bernard, 2001; Leipert & Smith, 2009) and limit their opportunities to benefit from the economic and collective benefits of their community (Shookner, 2002). The social issues that are present in many rural communities, such as patriarchal traditionalism (Leipert & Smith, 2009), may negatively influence rural women's self-esteem and self-concept (Sutherns et al., 2004) by limiting the power and position they hold in their community. Self-concept is defined as the perception an individual has of themselves based on their traits, characteristics, and values (Campbell et al., 1996). In particular, the value these women place on themselves, specifically their self-concept, may be negatively affected by being invisible and undervalued in their community.

In summary, rural senior women experience socio-economic disadvantages, stresses, and life circumstances that put them at risk for experiencing mental health issues.

Research Questions

The research questions used for this study are: 1) What are the mental health issues of rural senior women in southwestern Ontario? and 2) What factors affect rural senior women's mental health both positively and negatively in southwestern Ontario?

Methodology

This research employs the qualitative methodology of secondary analysis. Secondary analysis uses previously collected qualitative data to form the basis of analysis for a new study with a new research question (Heaton, 2004; Szabo & Strang, 1997). Secondary analysis is a recently developed methodology in qualitative research, and has become a valuable research tool because it is cost effective and utilizes the large amount of data that is typically obtained in the primary study (Heaton, 2004). This approach is particularly important for qualitative research as it allows researchers to get the most out of rich qualitative studies by reexamining data using a different but relevant research question.

Supplementary secondary analysis was employed in this research study. Supplementary secondary analysis focuses on a specific theme that surfaced in the primary study but that was not addressed in-depth. In this case, mental health issues arose in the primary study as an important subject for the rural senior women participants; however, due to the focus of the research, mental health issues were not thoroughly addressed. In supplementary secondary analysis, all of the data or select datum from the primary study can be utilized (Heaton, 2004). For this study, all of the data obtained in the primary study were used and included transcribed focus group sessions, logbooks, photos, and socio-demographic questions.

Primary Study

This secondary analysis study is based on data from the primary study entitled *Using Photovoice Methodology to Explore Rural Women's Perspective on Ageing and Social and Health Promotion Needs and Resources (*Leipert, 2010; Leipert, McWilliam, Forbes, Kelly, & Wakewich, 2007). The purpose of the primary study was to identify the health promotion needs and resources of senior women residing in four counties in southwestern Ontario.

Methodology and method

Photovoice, the research approach used in the primary study is both a methodology and method (Wang & Burris, 1997). The photovoice approach is a unique qualitative participatory research method where participants are provided a camera and invited to take photographs, then asked to discuss their photos, experiences, and perspectives in interviews and logbooks (Redwood-Jones & Wang, 2001; Wang & Burris, 1997). Photovoice was initially created to conduct research on the health realities of rural women living in China (Wang, Burris, & Ping, 1996) and has since been used in several research projects including those that investigated Aboriginal women with breast cancer (Brooks, Poudrier, Thomas-MacLean, 2008), individuals suffering from a mental illness (Thompson et al., 2008), and rural senior women (Leipert & Smith, 2009). The theoretical basis of photovoice is feminist theory and empowerment education (Wang et al., 1996). The main tenets of feminist theory that are evident in photovoice are: a valuing of women's ideas; representation of women's perspectives in research and policymaking; and a focus on women's voices and visions (Wang et al., 1996). Photovoice seeks to empower participants through education and policy change (Wang et al., 1996).

Empowerment education focuses on integrating "conscious-raising and dialogue with teaching efforts directed at individual change, the community's quality of life and policy change aimed at achieving social equity" (Wang et al., 1996, p. 1391-1392). Through the education and conscious-raising that participants often achieve during the photovoice research process, they can learn about and critically appraise the social, cultural, political, and gendered relations within their community and advocate for change in the policy arena (Wang et al., 1996).

Recruitment

Ethical approval was obtained from the University of Western Ontario Health Sciences Research Ethics Board for the primary study. Participants were recruited from four communities in southwestern Ontario which will be called community A, community B, community C, and community D. Communities A, B, and C each had one group of participants; in community D two separate groups of women participated in the study. One group of women consisted of Mennonite women and the other group consisted of women from mixed white European backgrounds.

A purposeful snowball sampling technique was used to recruit participants, which is where information rich cases are sought out by the researcher by locating key organizations and/or persons interested in the research topic and then asking these persons and/or organizations who else could be approached to participate in the research and so on until the researcher reaches their desired sample size (Patton, 2002). For instance, information regarding the study was sent to various interests groups, for example the Federated Women's Institute of Ontario. There were thirty-one participants in the primary study ranging from 65 to 89 years, although the Aboriginal women who participated in the study were 55 years and older due to the lack of 65 year old adults on the reserve (Leipert, 2010; Leipert et al., 2007). Four participants were Mennonite, five participants were First Nations (on-reserve), and the remaining women represented mixed white European backgrounds (see Appendix A, Participant Socio-Demographic Questionnaire; Leipert, 2010; Leipert et al., 2007).

Data collection

Focus group sessions, logbooks, socio-demographic questionnaires, and photos were used to obtain the findings in the primary study. All of the women participated in two focus group sessions, each group consisting of four to eight women; all of the focus groups were audiotaped. At the camera orientation session, the women were introduced to the research objectives and photovoice methodology and given disposable cameras to use. In addition, these women were also given a logbook and asked to document their thoughts regarding the pictures they had taken or any information relevant to their health promotion needs and resources. The length of this session varied from 45 minutes to 1 hour and 30 minutes. Participants were given two weeks to take pictures they viewed as relevant. At the second focus group session, each woman was asked to select one picture that best described a social and health promotion need and another picture that best represented a social and health promotion resource. After selecting these two photographs, participants were asked to give each picture a title and share how they saw their picture as being a social and health promotion need or a social and health promotion resource. At the end of the second focus group session, participants were asked to complete a brief written socio-demographic questionnaire. The second focus group session lasted 1 hour and 30 minutes to 2 hours.

Rigor and trustworthiness

Focus groups were audiotaped and then transcribed verbatim. Transcriptions were checked for congruency with audiotapes by an experienced research assistant. The themes and research findings were acquired through the participants' perspectives and language. To ensure that this study obtained interpretive rigor, a minimum of two research assistants analyzed the data.

Current Study

Theoretical approach

My research took a feminist approach (Carpenter & Suto, 2008), which means that I was attentive to the ways in which gender and culture were constructed, and how these gender and culturally constructed ideologies and practices affect mental health. Using this approach affected my research purpose, questions, and methods in that I was always conscious of the feminist approach I was taking and how methods and questions I chose to ask fit with the feminist approach I chose to take for this research. For example, during the analysis process I was sensitive to the roles many of the women took on, and how these roles were gender based. A feminist approach to research focuses on the importance of women's perspectives and represents women's perspectives in research (Leipert et al., 2007). For this research I took the approach that gender inequality exists within the rural environment in politics, social institutions, education, and cultural practices. During the entire research process, I attempted to identify how rural senior women's roles, responsibilities, perspectives, and positions within the rural culture may affect their mental health status.

Data collection

The data used in this study included ten audiotape recordings, 27 logbooks (37 pages total), 28 socio-demographic questionnaires, 579 photos, and 10 transcribed focus groups, which ranged from 20-35 pages for each group session, for a total of 379 pages. The total number of photos taken by participants was 593; fourteen were eliminated due to clarity issues. Thus, 579 photos were included in this secondary analysis study.

Data analysis

Throughout the analysis of the focus group interviews, logbooks, and photos, I met frequently with my thesis advisor, Dr. Beverly Leipert, the researcher of the primary study, to discuss data collection, analysis, and study findings.

Focus group interviews and logbooks

To facilitate analysis, I listened to all of the audiotaped recordings of the focus group sessions to familiarize myself with each participant's tone of voice, expressions, and perspectives (Ritchie & Spencer, 1994; Szabo & Strang, 1997). As transcripts often lose certain elements, such as emotions, tones, emphasis, and language style, by listening to the audiotapes I was able to attend to information that may not have been captured in the written transcripts (Szabo & Strang, 1997).

After all of the audiotapes had been reviewed, analysis of the transcribed logbooks and focus group sessions transcripts was undertaken. Camera orientation sessions were included in the analysis as participants highlighted important issues relevant to their mental health during these sessions. Analysis of the data occurred in the following way. First, for each community I analyzed the two focus groups and logbooks concurrently. The analysis of each transcript (focus group interviews and logbooks) occurred in the following way. I read over each transcript to identify issues and ideas that affected the mental health of the rural senior women participants positively and negatively. After identifying these issues and ideas, I coded the information by labeling (coding) according to relevant meaning, for example, lack of health services (Dey, 1993; Lofland, Snow, Anderson, & Loftland, 2006). Therefore, the label (code) directly related to the idea/meaning expressed in the interview/logbook. There were two types of codes used in the analysis, free codes and tree codes (Bazeley, 2007). Free codes represent an idea/thought/issue presented, whereas tree codes are subcategories of free codes. Tree codes directly relate to a free code, so they are attached to the free code as a type of subcode (Bazeley, 2007). Thirteen free codes and two hundred and nineteen tree codes were identified during analysis. An example of a free code would be 'Decreased funding in rural areas', and an example of an tree code would be 'Lack of health care services' because this is directly related to lack of funding in rural areas. By using NVivo 8, which

is a qualitative computer software program I was able to organize my data in a meaningful and easily accessible way, which assisted me in identifying study findings.

After the focus group sessions and logbook transcripts were analyzed for each of the four communities, I reviewed all of the codes and identified several key themes (Ritchie & Spencer, 1994). When determining key themes, I considered common factors that the women identified as affecting their mental health, as well as the intensity with which participants spoke about issues related to mental health. For example, many of the women identified loneliness as affecting their mental health. Thus, loneliness was assigned as a free code and later became a key finding of this research.

Photographs

A four-stage analysis process to examine participant's pictures (Leipert et al., 2007; Oliffe, Bottorff, Kelly, & Halpin, 2008) similar to the process used in analyzing the photos in the primary study was used in this research. The first stage of picture analysis involved previewing each woman's photos by community. While previewing each woman's photos, I considered what the women had spoke about in the focus groups, the titles the photos were given, and the comments they had made regarding each photo in their logbook. The focus of this stage of analysis was to attempt to understand the women's perspectives regarding the pictures they had taken in relation to their mental health (Leipert et al., 2007; Oliffe et al., 2008.). For example, in one community, many of the participants took pictures of their community church. While previewing their pictures of this church, I considered the comments many of the women had made regarding the significance of this church to them.

The second stage of picture analysis involved reviewing the photos by community to consider what the participants were trying to convey (Leipert et al., 2007). In this stage, I focused on identifying the pictures that the women highlighted as affecting their mental health, and disregarded pictures that were inconsistent with the research focus. For example, a few participants took pictures of food, such as fruit, which was not highlighted in the logbook or focus group transcripts as affecting these women's mental health; therefore, these pictures were not deemed as significant in the analysis because they were not relevant to the research focus.

The third stage of the analysis process was cross-photo comparison. In this stage, I viewed all of the participants' photos by community, and sorted each photo into categories of common themes. For example, due to the large number of pictures of cars and trains, a common theme that arose was transportation; therefore, all of the pictures of cars and trains were organized into the category of transportation. And finally, the fourth stage involved reviewing all of the photos together and determining key themes (Oliffe et al., 2008). I determined key themes by considering themes that emerged from participants' photographs collectively, as well as considering the intensity with which issues were discussed in the focus groups and logbooks. For example, a participant spoke intensely about the domestic abuse she experienced in her marriage and how she experienced fear for her own safety, which illustrated that this situation affected her mental health. Therefore, due to the intensity with which this woman and others spoke about issues related to fear and their mental health, fear was included in the findings of this study.

Rigor and trustworthiness

Trustworthiness of research is focused on "establishing confidence in the findings" (Golafshani, 2003, p.602). Rigor is conceptualized as attempting to ensure that methods and research findings are credible and reliable regarding the phenomenon studied (Byrne, 2001; Golafshani, 2003). For this study, secondary analysis principles of rigor were used to determine the trustworthiness of this research, and included credibility and confirmability (Szabo & Strang, 1997). Credibility can be considered to be the reliance on the research findings as the 'truth' of the phenomenon studied (Lincoln & Guba, 1985). To achieve credibility in my research, I compiled theoretical memos, in which I recorded my feelings, thoughts, and biases during the research process (Szabo & Strang, 1997). Theoretical memoing is important for researchers to undertake to assist in reflecting on how their opinions, biases, personal backgrounds, and thoughts may affect the research findings (Szabo & Strang, 1997).

In addition, to maintain credibility, throughout the entire research process I prepared methodological memos in which I detailed the research process, such as data collection and analysis (Lincoln & Guba, 1985; Szabo & Strang, 1997). This entailed writing down the step-by-step data collection and analysis approach that was taken during

each stage of the research study. This process ensured that there was an audit and methodological trail that I could refer back to to check that strategies used were aimed at maintaining the rigor of my work (Guba, 1981).

Confirmability addresses whether the findings are representative of the perspectives and thoughts presented by the participants during the research process (Szabo & Strang, 1997). Confirmability in my research was addressed by using participant quotes and photographs as the bases of analysis and linking these to research findings (Lincoln & Guba, 1985; Szabo & Strang, 1997). By using participant quotes and photographs, I was able to demonstrate that findings were representative of the data obtained (Szabo & Strang, 1997). In addition, during the entire research process, I frequently met with my supervisor, Dr. Beverly Leipert, one of the researchers in the primary study to discuss my analysis and the themes that arose from my research work.

To address rigor in this feminist study, I used two criteria that have been previously used in feminist research. These criteria are reflexivity and dependability (Hall & Stevens, 1991). Reflexivity is based on the assumption that "knowledge is held to be jointly constructed by researchers and research participants" (Hall & Stevens, 1991, p.21). To address reflexivity, throughout the entire research process, I wrote theoretical memos (Szabo & Strang, 1997) in which I documented my feelings, biases, and thoughts about the research process, participants, and findings. This was important because it made me aware of the biases I had previously not recognized and how these biases may affect the research process. For example, when reading some of the participants' logbooks, I noticed numerous spelling mistakes that suggested that some of these women were not well-educated. However, when reviewing responses to the demographic questions, I realized from their answers that some of these women were well-educated; factors outside of their control, such as time constraints, may have affected these participants' writing abilities. By being reflexive, I was able to take into account various factors, (such as time constraints in this example), that may affect researchers' impression of the research participants. Furthermore, by reflecting on the data, I was able to interpret the data in a way that helped to reflect both the participants' responses and my interpretation, and to establish that the women represented a diverse and complex sample.

Dependability (Hall & Stevens, 1991) addresses whether the findings of the study are reliable and, therefore, can be obtained again in the future in case another researcher reviews the analyzed data (Lincoln & Guba, 1985). Heaton (2004) maintains that dependability, which she identifies as referential adequacy, is important in secondary analysis studies because it allows other researchers to validate research findings. Dependability in feminist research is addressed by "systematically documenting the rationale, outcome, and evaluation of all actions related to data collection, sampling, analysis, and dissemination of results" (Hall & Stevens, 1991, p.19). The way in which I addressed the dependability criterion in my research was by clearly outlining how I undertook the analysis process in methodological and theoretical memos. For example, I outlined in my methodological memos the entire step-by-step process of analyzing the photos. My aim in clearly outlining how I undertook this research process was to illustrate that my findings were dependable and based on the information provided by the research participants.

In summary, the methodology used for this research was secondary analysis and the theoretical approach was feminist theory. I aimed to maintain rigor and trustworthiness in this study by choosing criteria used in other secondary analysis and feminist based studies. To the best of my ability, I have undertaken various steps to ensure that my research is reliable and trustworthy.

Findings

Study findings emerged from focus group transcripts, logbooks, and photographs taken by participants. The mental health issues of the study participants were loneliness, fear, and negative self-concept (see Figure 1). Factors that positively affected their mental health included social and community resources, personal characteristics and resources, and faith, culture, and belief systems. Factors that negatively affected their mental health were isolation, inadequate resources and loss in community, and devaluing of rurality, ethnicity, and gender. Lastly, factors that were found to both positively and negatively affect mental health included family or life histories and rural living. The numbers of participants are noted for some findings, not for others, based on if the number of specific participants could be identified for the theme.

Mental Health Issues of Rural Senior Women

Three mental health issues were identified by the study participants. First, several of the women discussed issues related to *loneliness*. Many of the women talked about isolation (n=11), which often resulted from not being able to drive a vehicle; a consequence of isolation was loneliness. Some of the women spoke about having to depend on others and not wanting to inconvenience their families because they had enough to worry about. This situation resulted in women staying at home alone often because they did not want to ask their family members for transportation. As one woman noted, "Talking about it, you realize how isolated you are. You know we're on our own."

Many of the women who participated in this research were widows. For many of these women, widowhood meant spending time alone without their partner, which they associated with loneliness. One woman who had recently moved her husband to a nursing home said, "The only pain I have…I'm lonely". Another woman, who had lost her husband, talked about having good days and bad days, and commented, "evenings can be somewhat scary and lonely." Many of the participants did not have a driver's license and depended on their husbands for transportation, therefore the loss of their husbands often resulted in these women becoming isolated.

The second theme that emerged as a mental health issue was *fear.* Some of the women (n=6) spoke about how they felt fear in their life. For many of the women, fear related to loss and violence they currently experience or previously have experienced in their lives. Many of the women also noted that the fear they felt resulted from stress in their lives, such as that related to night partying and crime activity in their community. One Aboriginal participant had this to say about the situation,

> This is a source of aggravation for me. One of the difficult things about living in my area is the heavy partying, noise, and drinking that comes from the rental units in the community. Unfortunately for me, some of these units are directly across the road from me.

Night parties caused fear in this Aboriginal woman participant because she was unable to sleep at night, and she worried that someone might break into her house while she was not at home. Another woman who participated in the Aboriginal focus group spoke about how she finds it frightening when she hears ambulances in her area, "Another thing that [is] really scary is…when you hear the sirens coming and they keep on coming more than

one." This woman went on to explain that there is often violence in her community, which has resulted in several deaths in the past. Thus, she feels frightened when she hears multiple ambulances because she fears that someone may have died.

A sensitive issue that arose during the focus group sessions with the Mennonite women was domestic abuse. A Mennonite woman discussed the abuse she withstood from her husband saying, "[Things were] not very good in my marriage so he-my husband left. And so, I was always scared of him, all the time, I was always scared of him." This woman went on to comment that her husband's abusive behaviour caused her to fear for herself and her children.

According to participants, two communities in this study experience high cancer rates. Many of the women in these two communities had family members, friends, and, in some cases, themselves who had experienced cancer. The women noted that they worried about their family member's health problems as well as their own health issues, which resulted in the women feeling fearful over their families' well-being. The women in these focus groups also discussed pollution in their communities and how they felt that cancer rates and area pollution were related. In one logbook entry, a woman identified how air quality, breakdown of the eco-system, and poor water quality concerned her, "here also we worry [about cancer rates]. [Because] we have a significant rate of cancer in [our community]."

The third mental health issue that arose in this research related to *negative self-concept*. Some participants talked about not being able to praise themselves, which they viewed as the result of seldom being praised for their good work. As one woman put it, "you were taught not to blow your own horn in our generation, so you don't do that." In the focus groups, the behaviours of a few women illustrated that they had a negative self-concept. When asked about their backgrounds and life experiences, some women shied away from talking about themselves, and one woman said, "There's nothing about me." This comment indicates that this woman feels that her life experiences and accomplishments are not important enough to note and, thus, reflects a negative self-concept.

The Aboriginal participants spoke about issues related to residential schools, Indian day schools, and land ownership disputes, which for many of them resulted in severe

emotional turmoil and often negative self-concept. One participant highlighted this in a logbook entry,

> Residential schools' effect on Native people overall was horrific. On the other hand, education on the reserve was not good either. Although we had well meaning teachers, they too came with a mission to either teach us how to live like the rest of the world (we were encouraged to learn the non-native ways) or to Christianize us. I do not regret any of this teaching, it was just the way it was done. Discipline was harsh, but mostly very demeaning, very emotional and psychologically abusive.

Furthermore, many of these women noted that the psychological abuse they experienced in Indian day schools caused them to constantly try to prove to themselves that they were not what the teachers and administrators told them they were. This point is illustrated by one participant who said that her grade eight teacher would yell at the students saying, "Do you want to be stupid Indians all your life?" which resulted in her constantly trying to prove to herself that this was not true. The same woman wrote in her logbook that residential schools have

> caused a significant loss in native cultural/identity…in areas such as language, parenting skills, family and community values and roles....day to day living values. [They] inflicted physical, psychological, emotional, and sexual abuse that has resulted in generations of mental health issues and generations of posttraumatic stress disorders.

A photo taken by one of the Aboriginal participants reflected issues related to negative self-concept. The participant had taken a picture of a board she had created for the study (see Appendix B, photograph 1) that had the words "weak, worthless, woman, why?" The words chosen for this collage reveal issues related to this woman's negative self-concept. In addition, pictures were taken of the buildings that were used for Indian day schools and which represented, according to the logbooks, the abuse women experienced in these institutions.

In summary, three mental health issues were found to affect the participants of this study. The first issue was loneliness, which was related to widowhood, isolation, and transportation issues. The second issue was fear, which was related to the violence and loss these women had experienced in their lives. Lastly, the women experienced negative self-concept which related to not being able to praise themselves, undervaluing, and abuse they had experienced in the past.

Factors that Positively Affect Rural Senior Women's Mental Health

Three factors in the rural environment were found to positively affect the mental health of participants in this study. *Social and community resources* emerged as an important factor affecting participants' mental health. The women took many pictures of friends and family. The titles that these women gave these pictures included 'Connected for Life', 'Happiness', 'Enjoyment of Socializing', 'Merry Widows', and 'Pride of Family' (see Appendix B, photographs 2 and 3). Many of the women commented that they looked forward to seeing their friends because they boost them up and, as one woman put it, "mentally [it] helps talk[ing] to others." Another woman spoke about her group of friends who call themselves the 'Merry Widows', "We get together and we have a great time…we give each other a boost…you know help each other out whenever somebody needs to talk we're there for each other." The importance of friendship and socializing for rural senior women was illustrated by another participant's comment, "I think all women need to get out and socialize, if you're rural and you're away from people. This gives you the opportunity … by making new friends, you discuss new ideas."

Family was an important source of social support for many of the women who participated in this research. This was illustrated by the numerous pictures of children and grandchildren that were taken, logbook entries, and discussions during the focus groups surrounding the importance of family. Many of the women pointed out that their families helped them with daily chores, transportation, and support. As one woman put it, "my children are very helpful and will do anything I ask them to do. They check up on me daily to make sure I'm safe and healthy—I am blessed." Another woman highlighted this point by saying, "I have a lot of company all of the time … I enjoy that."

The resources within their communities that were listed as important for these women's mental health included community physician services, pharmacy services, grocery stores, community seniors' programs, and banking services. Having these services in town meant that these women did not have to travel long distances, which resulted in services being more accessible and less stressful to utilize. As one woman highlighted in her logbook, "Drs' offices—every area needs them … we are an aging society, medical help and assistance is a necessity." Another woman commented on how

important the local grocery store was, "a necessity to our community—supports local farmers, provides fresh produce and meats … as well is a one stop shopping place for seniors—provides economical and low prices for seniors." In addition to the women's numerous comments about the importance of these resources, they also highlighted their significance by taking pictures of doctors' offices, pharmacies, banks, and community centres (see Appendix B, photograph 4).

The second factor that was identified as positively affecting these women's mental health was *personal characteristics and resources*. In the focus groups, logbooks, and photos, participants' personal characteristics emerged as positively affecting their mental well-being. The personal characteristics that were identified as having a positive effect on their mental well-being included resilience and hardiness. Resilience is defined "by flexibility in response to changing situational demands, and the ability to bounce back from negative emotional experiences" (Tugade, Fredrickson, & Barrett, 2004, p.5). The ways in which the participants expressed this personal characteristic included speaking about how they always found a way to cope with a bad situation they encountered, and how they kept a positive outlook on life. This point was illustrated by one woman, who said,

> I always wanted to be a nurse …I got married—it came up in Simcoe that the RNA course would be given and I jumped to the ceiling … my husband didn't want me to work even in the hospital … he says he didn't want me to take bedpans and all that to patients. So I worked nights … I did go and he got me pregnant. I finally got it [RNA Diploma] in 1958. So I did get it and I was very happy.

Although this participant experienced obstacles to fulfilling her dream of becoming a nursing assistant, by being resilient she still thrived and never gave up, and, eventually, she accomplished her dream.

A few of the women who had immigrated here from other countries talked about the struggles they endured when they arrived in Canada and how they overcame these struggles and carried on. A Mennonite participant commented,

> I was born in Mexico … I had eight children … we came here in 1987—came to Ontario. Have a good life. We are going through hard times, but that's life. I am not unhappy because of circumstances. I'm glad I came to Canada.

Although these women experienced adversity in their daily lives after coming to Canada, they adapted to the new ways of life, which demonstrates the resilience of these women.

Hardiness is "the resistance we have to stress, anxiety, and depression [and] includes the ability to withstand grief and accept the loss of one's loved one" (Sharma, p.1, 2006). Hardiness is illustrated by this 83 year old participant's experience of working nights as a registered nursing assistant when she was younger and then coming home and farming: "I used to work nights all the time from five o'clock to eight o'clock, worked that for years … I used to come home and jump on the tractor and go out to the fields and think" (see Appendix B, photograph 5). Although this woman had a full-time job as a nursing assistant, she still assisted her husband with farming duties during the day. This shows hardiness in coping with a situation that may not be ideal. Remarkably, this 83 year old participant still actively farms today. Another participant illustrated her abilities to be self-reliant and hardy by stating,

> I wouldn't call my family (in the case that I needed to go to the doctor) because some of them do work but also because there are a lot of things going on in my family, and I think they have enough things to worry about without worrying about me also.

This woman clearly conveyed that she deals with her issues herself and does not depend on others to help her.

A personal resource that was important for these women was their pets. Many of the women took pictures of their pets, entitling them 'My Buddy', 'Happiness and Joy', and 'Animals are Friends' (see Appendix B, photograph 6). One woman stressed the importance of owning a pet by saying "my stress reliever—what I love to do the most, if I'm feeling down about something, pick up my cat and pet'im, I feel so much better. That's my big stress relieve (relief)." The women who owned pets spoke about their pets as bringing them joy, companionship, happiness, and a sense of security. It was also noted that these pets helped with feelings of loneliness and sorrow and made participants feel needed. For example, one participant highlighted this by saying, "there are times when I see the bird [and] I can't see any sorrow ... no pain … The bird is the joy I feel."

Regarding other personal resources, many of the women (n=15) who participated in this research emphasized the importance of recreational activities and hobbies as positively affecting their mental health. For example, one woman participated in a craft circle, "I've been doing crafts for the seniors place for 17 years … we have coffee, we crochet something … it's good for your mental state." A few of the other recreational activities that these women participated in included lawn bowling, shuffleboard,

swimming, and golfing (see Appendix B, photograph 7). The women noted that these activities were important because they fostered new friendships, relieved stress, exercised mind and body, facilitated relaxation, and helped them to socialize with old friends. One participant explained, "I took up golfing when I retired … I was 60 years old and I love it. It's good exercise, fresh air and socializing with friends." Another woman commented on the importance of joining a lawn bowling team after she lost her husband by saying, "My husband passed away, and I went there and it's mentally good for you. It helped me [an] awful lot." Other hobbies that the women enjoyed included quilting, senior craft groups, making dream catchers and floral arrangements, and doing puzzles and Sudoku (see Appendix B, photograph 8).

Regarding the third factor, *faith, culture, and belief systems,* some of the women (n=8) identified religion, spirituality, cultural practices, and individual belief systems to be important for their mental well-being. This theme was reflected in the many pictures of bibles, churches mentioned in logbook entries, and during the focus group interviews (see Appendix B, photograph 9). Participants identified the importance of religion and beliefs in finding happiness, joy, forgiveness, peace, and support. Many of the women in the focus groups attended church and as one woman noted, "I'm not Hungarian, but I attend their church. And I find that you meet friends, and you talk over your problems ... you get … quite a … good feeling." The women defined church as an institution that helps you through your problems, makes you feel good, and is a great place to socialize and meet new friends. For example, two women spoke about the importance of their faith by saying, "I think you feel better when you've been …You know if you got problems, you go in," and "[as women we] embrace a belief system and that becomes very important to you … that's what guides you in your everyday life." The bible was important to all four of the Mennonite women who participated in this research, as illustrated by one Mennonite woman's comment, "[The]Bible ... gives me happiness, joy, peace, and forgiveness in sin" (see Appendix B, photograph 10).

Aboriginal women also discussed attending church, but in addition to attending church they also noted that they feel a sense of spirituality that is linked to their cultural identity. One woman said,

> I believe that to have a healthy sense of well-being, it has to be holistic including social/emotional, physical, cognitive, and spiritual. Native people are spiritual

> people. They, therefore, embrace their spirituality in a strong and meaningful sense, usually in a belief system that can be Native Traditional, or Christian Belief. In our community, most people choose one of these belief systems bringing a sense of identity, belonging, and self-worth.

In summary, three factors were found to affect the mental health of rural senior women. These factors include community and social supports, personal characteristics and resources, and importance of faith, culture, and belief systems.

Factors that Negatively Affect Rural Senior Women's Mental Health

Three factors were identified as negatively affecting rural senior women's mental health. *Isolation* was identified by many of the women (n=11) in the focus groups as negatively affecting their mental health. Degree of isolation was affected by transportation availability and weather conditions. This theme was illustrated by numerous pictures of vehicles (see Appendix B, picture 11) and road distance signs. The women noted in the focus groups that winter weather conditions hindered their ability to get out of the house; however, due to the research being conducted in the summer, the women were unable to take pictures of winter weather conditions. For example, one woman highlighted during a discussion about driving to the city in winter for supplies and recreational activities, "it becomes a time issue, a financial issue, with the gas prices," and another participant added "winter driving" conditions as a factor in determining whether you were able to drive to the city.

Another factor that affected these women being isolated was the fact that they were often alone. There were various reasons for this that included being a widow, family living far away, and husband residing in a nursing home. Being alone meant that some participants experienced boredom. For example, one participant commented that "There's a lot of people that retire from a job and they have nothing to do … they're bored to death really." There is risk for isolation after retirement if activities are not found to fill seniors' time. Furthermore, it was discussed in a few of the focus group sessions that participants did not want to burden others for transportation. This often caused stress because they required transportation to the grocery store and doctors' appointments; because of these transportation issues they often stayed at home, which left them isolated. A participant, when asked by the researcher what caused her stress,

emphasized this point by stating, "Not being able to get away ... if I wanted ... It's really hard to get [to] any place."

Inadequate resources and loss in community were identified as negatively affecting the participants' mental health. Pictures were taken by the women of closed signs in windows, infrastructure issues (e.g. cracked sidewalks), desired but unavailable recreational programs (such as an indoor swimming pool for winter recreation), and closed churches. The women titled some of these pictures 'Loss of Pharmacies in Rural Areas', 'Unforgiven Priorities', 'Loss of Community Church', 'Sign of the Times', and 'An Accident Waiting to Happen' to name a few.

Community infrastructure issues included cracked sidewalks and poor road conditions; some of the participants felt these issues resulted from inappropriate use of money by town administrators (see Appendix B, photograph 12). For example, one woman wrote about this issue in her logbook and took a picture of one of the sidewalks in her community, "uneven sidewalks where we can trip are plentiful in our town so we always have to look down instead of enjoying our surroundings." These situations affected these women's ability to enjoy walking on the sidewalk and maintain a healthy lifestyle. For example, as one woman commented on this situation,

> What made me really upset last year was, in front of the library, they dug up a perfectly good sidewalk had maybe a crack or two in it but it was not heaved up, not at all. And they used all the money they had for sidewalks right there.

Many of the participants also commented on how there were inadequate health care resources in their towns, which meant they had to travel to large cities for health care services. This situation was stressful for women who did not drive, and the stress they experienced affected their mental health. For example, in one of the communities they had recently lost a drugstore and, as one woman noted, "Well, like I say, this is the negative in that we're losing a drug store."

In one community, the women discussed the loss of economic stability in their town due to the tobacco industry's decline, which had sustained their communities' economic well-being for years. This decline had a negative effect on the town's resources, which directly resulted in many stores closing. One woman commented about this situation, "stores closing is a sign of the times and it makes me sad to see towns going." Another woman commented on the effect of this situation on the town residents,

"Well, I find that the community just gets run down.... And everybody feels bad because there's nothing in the town anymore" (see Appendix B, photograph 13). In this community, the church was also closing, which had a direct effect on many of the women who participated in this research. Many of the women had memories of marriages, baptisms, funerals, and other events at this church. Therefore, it was difficult to consider not having this important institution in their town any longer; as one woman pointed out, "It's a hard thing to lose. Especially a beautiful church like this one." Several participants in the focus groups also noted that this situation caused them stress, "[The] church closing ... has [caused] a lot of stress."

Some participants commented that more resources, such as community seniors programs, were needed. For example, in one community, they did not have any pool facilities or recreational facilities open during the winter. One woman said, "I only wish that we would have a pool ...I wish we could have something that older people can enjoy in the winter ... Because [now in winter] you have to go [outside of the community]." It was also noted by a participant in one community that the current programs, such as aerobic classes, were geared towards younger people, instead of seniors. This situation was frustrating for many of the seniors because they enjoyed participating in recreational activities but were unable to do so or to participate effectively.

Loss of relatives, friends, and members of their communities was noted by some of the women as negatively affecting their mental health. In two of the communities, participants noted that cancer rates and, consequently, death rates, were very high. Participants in these communities spoke about how much loss their communities had experienced. They spoke about grandmothers watching their grandchildren go through treatment for cancer, and how this situation affects not only the families of these young people, but the community as a whole. The community members feel fearful and worry for the health of their families, as well as grieve the loss of those who have deceased. One woman stated, "Because this is a small close- knit community, everyone has known and usually has had a connection with the deceased person, so a death is very significant."

Crime in their communities was also viewed as negatively affecting participants' mental health. A few of the women noted that their thoughts and feelings were disrupted by the crime that had occurred in their community. One woman talked about her elderly

brother who had been assaulted by the thieves trying to break into his house. She spoke about this incident and said, "I found this situation very difficult, 'cus you are filled with compassion." The Aboriginal women were particularly concerned about crime in their community. For example, one woman commented that she feared that drunk partiers living across the road from her house "might come in when [she's] not home." The participants also noted that they felt frustrated by this situation because the partying disrupted their sleep.

Devaluing of rurality, ethnicity, and gender was also described as negatively affecting rural senior women's mental health. Some of the women (n=7) discussed being negatively labeled based on their living environments. For example, one woman pointed out that rural people are sometimes called "hicks", "rednecks", or "hillbillies", which can be hurtful. Furthermore, the Aboriginal women discussed experiencing discrimination based on their race. As one woman commented,

> It can be pretty hurting…how you were treated. When I went to high school I thought I had a real good friend and we were going down the co-op to get popsicles and she says, "Are you an Indian?" And I said, "Ya." She says, "Well I 'gotta' go over here then."

The Aboriginal women went on to speak about other experiences of being discriminated against and how they felt hurt by these situations. For example, when speaking about being Aboriginal and being discriminated against one woman had this to say, "You grow up with it [covert discrimination]." You feel stuff and you feel how you're supposed to act or not act." This woman went on to explain that Aboriginal people in her community were discriminated against by the individuals who lived in the neighbouring town, but this discrimination was not always evident and noticeable by others. They also spoke about government initiatives, such as residential schools, land severance, and the Ipperwash incident that have had a great negative impact on them, their communities, and Aboriginal women in general.

A photograph was taken by one of the Aboriginal participants of a reserve that was appropriated by the government many years ago and only recently returned to the Aboriginal people. This picture was not included in the photograph section to protect the anonymity of the Aboriginal participants. The Aboriginal participant took this picture to depict how she felt the government's actions (i.e. land appropriation) were devaluing to

Aboriginal people, which was noted by the women as having a negative impact on their mental health. For example, one participant's comments highlighted the effect of the Ipperwash inquiry on herself and other Aboriginal persons, "The day the results were announced, I cried. I felt great sympathy for the family, for our First Nation, and for myself. It has been a long and damaging process."

Rural women not being heard in their community was identified as negatively affecting rural senior women's mental health. Some of the women noted that they felt ignored and undervalued in their community. Particularly in the Mennonite focus group, the women spoke about being ignored by others in their community. As one Mennonite woman said, "We got a problem because we get ignored here." Participants from another focus group spoke about lack of awareness by women in getting their voices heard, which caused frustration. As one participant firmly emphasized, "Just more awareness even for women that they are able to get their voices across." Although participants spoke about gender as being the main factor that affected their voices not being heard in their communities, lack of voice may also be related to ageism, which is discrimination based on age (Canadian Network for the Prevention of Elder Abuse, 2010)

In summary, three factors were found to negatively affect rural senior women's mental health: isolation, inadequate resources and loss in community, and devaluing of rurality, ethnicity, and gender. As illustrated in the study findings, limitations inherent in rural communities, such as traditional gender roles, may result in mental health issues for rural senior women, such as loneliness, fear, and negative self-concept.

Factors that Positively and Negatively Affect Mental Health

Two factors were identified as both negatively and positively affecting mental health. The first factor identified was *family or life histories*. Pictures taken by many of the women illustrated this factor: a picture of an old farmhouse that had been knocked down, a nursing home where a woman's husband lived, swimming with grandchildren, and family portraits. Picture titles included 'Family Traditions', 'Joy', 'Being Taught Correctly-Soccer Crazy', 'Promise of Return by our Government', and 'Memories' (see Appendix B, photograph 14). The women spoke of life histories that were positive, such as family traditions, relocating houses, cultural traditions, such as Polish dancing, and enjoying their time as grandparents. These occurrences were viewed as joyful and

positive to the participants' mental health. For example, one participant spoke about her Polish background and how Polish dancing has influenced her life,

> The Polish Hall in Stocksville was where all the Polish people met years ago to socialize with their friends. Families were able to come together and maintain culture, language, food, and socializing and especially dancing. I enjoy dancing even today.

A sense of tradition within family was also positively illustrated by another participant, who spoke about yearly baking with her children, "It is something in our family that's been going from generation to generation ... my mother-in-law started all this years ago" (see Appendix B, photograph 15). Another woman, when asked how her grandchildren impact her health, responded, "They're fun to be with ... so you have a sense of humour when you're with your grandchildren."

However, life histories could also be negative as when participants discussed spousal abuse, government removal of land, residential schools, death of husband, and admission of husband to nursing home (see Appendix B, photograph 16). An Aboriginal participant spoke about the negative effects of the government's actions,

> [The] government..booted us out ... Everybody went on their way and a lot of them, their life was changed.... I call that fiscal (physical) abuse ... for what they've done to the people ... My dad and mom's life changed after that, not in a good way either.

Locations, houses, and other memorable places and items in these women's communities were identified as reminding some of these women of negative memories. As an example of this, one woman shared her story,

> We had a very bad experience at a rural cemetery. Our son was killed in an explosion in our own place of business. He was a very loved man.... More than a thousand people attended only the immediate family could get to the cemetery to lay him to rest in the mausoleum... That was bad enough but we had to make another terrible journey in April to actually [re]bury him. The reason was the cemetery has no steamer, so they [couldn't] dig a grave [for the original burial].

She spoke about this event and cried; it was an overwhelming occurrence in her life, and now, every time she visits the cemetery or drives by, she remembers this situation (see Appendix B, photograph 17).

The second factor that was identified as both positively and negatively affecting these women's mental health was *rural living* in itself. The women highlighted the positives of rural living by talking about the natural beauty and serenity of the country

and the social support experienced in a rural community (see Appendix B, photograph 18). For example, a conversation between two participants illustrates this point: (Participant 1) "In early spring, the Canadian geese come and hatch their young there. Very pretty and peaceful to sit and watch nature." (Participant 2) "It's just the tranquility, isn't it?" Another woman wrote in her logbook about a picture she had taken of her backyard, "I love my water pond.... It's so peaceful." Many of the women spoke about how important friendship was in their lives. Participants talked about being involved in recreational activities and craft groups in their communities with their friends that enhanced their mental health. As one woman put it, "We have a wonderful bunch of friends, we have a great time … we boost each other up."

However, some aspects of rural living could also have negative influences on mental health. For instance, limited resources, such as health care and shopping centres, create additional challenges for rural senior women. Participants noted that this was an issue because as one woman put it, "You always have to depend on somebody" which can be frustrating and stressful, especially when you need to find transportation to far distances, a common occurrence for many older rural residents. Furthermore, the women talked about long driving distances to buy supplies that were not offered in their small communities. One woman pointed out that, "There's a lot of people that are sitting home, they don't want to … they don't have any way of getting anywhere." This paired with winter weather conditions was stressful for the women and was a drawback of rural living.

In summary, participants identified three mental health issues: loneliness, fear, and negative self-concept. Three factors were found to positively affect rural senior women's mental health: social and community resources, personal characteristics and resources, and faith, culture, and belief systems. Three factors were found to negatively affect rural senior women's mental health: isolation, inadequate resources and loss in community, and devaluing of rurality, ethnicity, and gender. Two factors that both positively and negatively affected mental health were life histories and rural living. These findings suggest that there are social, cultural, and environmental factors that affect the mental health of rural senior women.

Discussion

The findings of this study are significant for a number of areas, in particular, the nature of rural communities, stress and mental health, effects of isolation and loneliness on mental health, and limitations of secondary analysis.

Nature of Rural Communities and Resources

A major issue that arose for the women in this study was inadequate community infrastructure. The women spoke about cracks in sidewalks and poor road conditions which caused them constant worry because they feared that they may fall. This fear of falling, especially in the winter months, isolated them, and being isolated was identified as negatively affecting participants' mental health. Poor road conditions (like cracks in sidewalks) and limited infrastructure have been noted as issues for rural communities and identified as causing increased injuries to rural residents (Canadian Institute of Health Information [CIHI], 2006). Although these issues have been noted as being a problem in rural communities, my research advances knowledge on this topic by illustrating the effects, such as increased worry and stress in relation to falling, that inadequate road conditions and infrastructure have on rural senior women and their mental health.

Additionally, some of the participants thought that funding for infrastructure in their town was being improperly used. The participants indicated that this situation resulted in their feeling angry and frustrated because town administrators and elected officials, who often do not understand older persons' needs (e.g., issues surrounding accessibility), may frequently make inappropriate decisions regarding infrastructure. Furthermore, the women noted that inappropriate allocation of funds for infrastructure, which resulted in infrastructure issues in their communities, affected their ability to enjoy outdoor activities, such as walking and biking, activities which were characterized by the participants as positively affecting their mental health. Therefore, my research advances understanding of the effects of infrastructure issues on rural senior women by highlighting that if these women are unable to enjoy outdoor activities due to poor infrastructure, their mental health may be negatively impacted.

Loss of resources or lack of resources can be an issue for many rural communities (Romanow, 2002). My findings advance current knowledge on how loss of resources in rural communities can affect rural senior women by emphasizing that loss of community

resources, such as churches, can greatly affect rural senior women's mental health. Churches in rural communities are often the centre of the community and offer opportunities for community members to socialize. Socialization has been identified as important for rural senior women's self-identity and well-being (Arbuthnot, Dawson, & Hansen-Ketchum, 2007), as well as contributing to a strong sense of community connection. Thus, loss of community churches contributes to a loss of identity, diminished opportunities to socialize, and decreased community connection. Therefore, although the closing of churches in rural communities may have a negative effect on all community members, it may be especially significant for rural senior women, due to their history, commitment to, and longer term connectedness to their rural communities.

Federal and provincial funding cuts for health services in past years have resulted in hospital closures and downsizing of rural communities, which has greatly affected seniors' ability to access medical care (Armstrong et al., 2001; Division of Aging and Seniors, 1998; Romanow, 2002). My findings advance understanding of how funding cuts have negatively affected rural senior women and their mental health. For example, the loss of pharmacies in rural communities was noted as an issue for participants of this study, especially for seniors who were unable to drive. These seniors must find transportation, which was identified as frustrating and stressful by participants. Due to transportation issues, these seniors may not be able to fill their prescriptions which may lead to increased health issues. Participants also noted that emergency services, such as hospitals and ambulances, were often located far from their homes. The women expressed their worry and fear that, in an emergency situation, an ambulance would not arrive in time to help them or their loved ones. Therefore, the findings of my study provide useful information about how government funding cuts have negatively affected rural senior women and their mental health.

In summary, my research findings advance understanding of how certain factors in the rural environment may be detrimental to rural senior women and their mental health.

Stress and Mental Health

Rural women in the United States and Canada often experience stressors due to living in a rural environment (Gold et al., 2005; Gucciardi & Birnie-Lefcovitch, 2002; Mulder & Lambert, 2006). Stressors that have been shown to affect rural women's mental

health include isolation and violence (Mulder & Lambert, 2006). The current study confirms findings on stressors but is significant in its own right because it provides information about stressors regarding the mental health of rural older women in the Canadian context, of which there is little known. Furthermore, study findings reveal valuable insights on the mental health of various rural cultural groups, such as Mennonite women, a topic that has received very little attention in the literature.

Isolation was noted by many of the women as a stress to their mental health. Mulder and Lambert (2006) established that rural women may experience stress because they are often isolated from resources and sometimes social supports; my research confirms these findings. Isolation for participants was primarily related to not having ready access to transportation due to their inability to drive because of their age. Participants felt dependent on others for transportation, which they noted caused stress because they often worried about how they would get to appointments. Furthermore, some of these women did not have family living close by due to depopulation of young people from rural communities, which further limited their access to transportation.

In this study, violence was revealed as affecting the Mennonite and Aboriginal women who participated in this research. Violence in rural communities exists but often is not reported (Gucciardi & Birnie-Lefcovitch, 2002; Riddell, Ford-Gilboe, & Leipert, 2009), which may be due to strong social ties and rural culture. My research confirms that violence exists in rural communities, but also extends understanding by revealing how violence can affect the mental health of certain cultural groups of women, such as Mennonite women, for example, regarding fear related to domestic abuse. During the focus group sessions with the Mennonite women, one participant spoke about the domestic abuse and constant fear she experienced in her marriage, and how she traveled through the United States to Canada to be free of the abuse and begin a new life with her children. From this woman's tone and words, I could tell that this was a very difficult subject for her to discuss. This woman's strength and resilience was illustrated not only by her ability to leave an abusive relationship, but also by the courage she had to travel across two countries to begin a new life. Furthermore, spousal abuse within Mennonite culture is often not spoken about (Armstrong & Coleman, 2001), which illustrates this woman's bravery in speaking about such a sensitive topic in the presence of other

Mennonite women. Currently, there is very little literature on Mennonite women; therefore, my research is important because it advances current knowledge by providing information on domestic abuse and mental health in this population, as well as by illustrating the strength and resilience of these women in dealing with these situations.

The fact that this woman spoke about such a sensitive topic may indicate the power of the photovoice methodology. Perhaps the picture taking in phototovoice facilitates women's comfort in talking about sensitive issues, such as mental health issues. Thus, photovoice may be useful in exploring other sensitive topics related to rural women, such as reproductive decision-making, cultural norms and effects, and multicultural issues.

In summary, my research contributes significant information regarding rural senior women and mental health by identifying stressors that have negative effects on their mental well-being, offering insights about rural senior women' personal qualities, and providing feedback about the usefulness of the photovoice method.

Isolation and Loneliness Effects on Mental Health

Although current research on depression and rural senior women points out that there is an association between the conditions in which these women live and depression, it rarely specifies what these conditions may be or their relationship to rural senior women's mental health (Hauestein & Peddada, 2007). My research advances knowledge on this topic by examining the conditions that may positively and negatively affect mental health in this population. For example, a condition that positively affected the mental health of women in this study was accessible community resources, such as pharmacies and grocery stores, and a condition that negatively affected their mental health was living alone. Furthermore, loneliness for the participants of this study often resulted from losing a spouse, hospitalization of a spouse, and not being able to see friends and family frequently. In addition, my research advances understanding by revealing some of the effects of these conditions and factors on senior rural women's mental health. For example, some of the participants noted that they experienced stress related to living alone, being isolated, and not having family and friends living close by.

Key findings of this study suggest that rural senior women often work together to maintain their mental health and avoid feelings of isolation and loneliness. For example, many of the women assisted their friends, who were unable to drive, by giving them a

ride to the grocery store and doctors' appointments. Furthermore, many of these women participated in seniors' groups, volunteered in their community, and provided care to their friends with health conditions. These women cared for themselves, their friends, and their communities. This information is important because it shows how rural senior women take care of themselves and their communities, which we know very little about (Leipert & Smith, 2009). Therefore, the findings of this study advance understanding by demonstrating how rural senior women undertake activities in their communities and assist each other with daily activities to maintain and promote their own and others' mental health and deter mental health issues.

Limitations

Within this section I will review the limitations of the primary study as well as the limitations I encountered in using secondary analysis.

Limitations of primary study

In the primary study, participants were segregated by community for focus group sessions. For example, all of the Aboriginal women were from one community; therefore they collectively participated in focus group sessions separate from the women living in the other communities. A possible drawback of this approach is that important issues were identified in some focus groups, such as domestic abuse in the Mennonite focus group, but were not in others. Had the participants been interviewed in a large focus group setting and domestic abuse been highlighted, more participants might have spoke on this issue, but due to the organization of the focus group sessions this was not possible. Consequently we do not know if issues identified in one focus group, such as domestic abuse, were issues for all communities.

Another limitation of the primary study is related to the nature of the participants. The data obtained in this study, such as the mental health issues experienced by these women, were affected by the women who chose to participate in this research. Therefore, had other women chosen to participate in this research different findings regarding the mental health issues and factors that affect the mental health of rural senior women may have been identified.

Limitations of secondary analysis

There were some limitations in using secondary analysis, which I will overview in this section. The first issue was that I was not present during the primary research process. Consequently, my knowledge was limited regarding participants' non-verbal communication, such as their demeanors, attitudes and behaviours, that occurred during the focus group sessions. I was also not able to probe participants regarding their mental health issues or ask them to clarify or elaborate on their statements. Furthermore, because I undertook a secondary analysis of the primary research, and therefore was not present during the initial research I was not able to take my findings back to participants for verification.

During the research process I found it difficult to understand the transcripts at times because the women often spoke over each other, which made it challenging to clearly understand all of the information presented. In qualitative research, researchers often "engage in intense and/or prolonged contact with a 'field' or 'life situation' in order to capture data on the subjects' perceptions from the 'inside'" (Heaton, 2004, p. 60). The aim of engaging oneself in the life situation or field is "seeing through the eyes of the people being studied" (Heaton, 2004, p. 60), which will assist in understanding the social phenomenon being researched. To deal with the issue of not being present during the initial research process, I attempted to familiarize myself with the participants and their data by reading and re-reading their logbooks, repeatedly listening to the audiotapes, carefully reviewing their pictures, and frequently discussing the data collection and analysis process with Dr. Beverly Leipert, my thesis supervisor and the principal investigator of the primary study. All of these activities helped me to familiarize myself with the participants, their communication and data, and the contexts in which the research was conducted.

A limitation inherent in conducting a secondary analysis study is that some study findings cannot be substantiated with participant quotes and pictures because this information may not be available. Throughout the research process I worked in consultation with my thesis supervisor in determining key findings, as she was present during the initial research process, and therefore was able to highlight some data which may not have been available in the focus group transcripts. Therefore, a downfall of using

secondary analysis is that pictorial and transcript data may not be available or may not illustrate a particular theme, as some themes may arise in consultation with the principal investigator of the primary study and their knowledge on this data.

An issue that became apparent early on in the research process was the lack of information regarding how to undertake secondary analysis (Corti, Witzel, & Bishop, 2005; Szabo & Strang, 1997). Heaton (2004), one of the leading scholars on secondary analysis, reviews previous secondary analysis studies that have been completed, but does not specifically address the methods used to undertake these secondary analysis studies. Corti et al. (2005) point out that there needs to be more scholarly literature on various aspects of secondary analysis, such as the analysis procedure. I addressed this issue by meeting with my thesis advisor and committee several times to jointly discuss the analysis approach to take for this research.

In summary, although some limitations were encountered while using secondary analysis, with careful review of the research data and consultation with other researchers, especially investigators of the primary study and my thesis committee, it was possible to address these limitations and use secondary analysis effectively.

Conclusion

Currently, there is limited information on rural senior women and mental health. Therefore the findings of this study on the mental health issues and factors that positively and negatively affect the mental health of rural senior women significantly enhance our understanding of senior women's experience of mental health in a rural context.

References

Arbuthnot, E., Dawson, J., & Hansen-Ketchum, P. (2007). Senior women and rural living. *Online Journal of Rural Nursing and Health Care, 7(1)*, 35-46.

Armstrong, P., Amaratunga, C., Bernier, J., Grant, K., Pederson, A., & Wilson, K. (2001). *Exposing privatization: Women and health care reform in Canada*. Aurora, ON: Garamond Press.

Armstrong, D., & Coleman, B. (2001). *Health care needs of Mennonite women.* Elgin-St.Thomas Health Unit. Unpublished manuscript.

Bazeley, P. (2007). *Qualitative data analysis with NVIVO*. London, England: Sage Publications.

Bernard, W. (2001). Beyond inclusion: Diversity in women's health research. Retrieved from http://www.acewh.dal.ca/eng/reports/beyond-inclusion.pdf

Brooks. C., Poudrier, J., & Thomas-MacLean, R. (2008). Creating collaborative visions with Aboriginal women: A photovoice project. In Pranee Liampultong (Ed.), *Doing cross cultural research: Ethical and methodological perspectives* (pp. 193-212). New York, NY: Springer.

Byrne, M. (2001). Evaluating the findings of qualitative research. *AORN Journal Online.* Retrieved from http://www.findarticles.com

Cambell, J., Trapnell, P., Heine, S., Katz, I., Lavallee, L., & Lehman, D. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology, 70(1)*, 141-156.

Canadian Network for the Prevention of Elder Abuse. (2010). *Ageism*. Retrieved from the website www.cnpea.ca/ageism.htm

Canadian Institute of Health Information. (2006). *How healthy are rural Canadians?* Retrieved from the Public Health Agency of Canada website: www.phac-aspcaspc.gc.ca

Canadian Mental Health Association. (2009). *Seniors and mental health.* Retrieved from http://www.ontario.cmha.ca/seniors.asp

Carpenter, C., & Suto, M. (2008). *Qualitative research for occupational and physical therapist: A practical guide.* Ames, Iowa: Blackwell Publishing.

Conn, D. (2002). An overview of common mental disorders among seniors. *Writings in Gerontology.* National Advisory Council on Aging.

Corti, L., Witzel, A., & Bishop, C. (2005). Secondary analysis of qualitative data. *Forum: Qualitative Social Research, 6*(1).

Dey, I. (1993). *Qualitative data analysis: A user-friendly guide for social scientists.* London, England: Routledge.

Division of Aging and Seniors. (1998). *Canada's aging population. Federal report on aging.* Ottawa, ON: Health Canada.

Forbes, D., & Janzen, B. (2004). A comparison of rural and urban users and non-users of home care in Canada. *Canadian Journal of Rural Medicine, 9*(4), 227-235.

Gallo, J., & Lebowitz, B. D. (1999). The epidemiology of common late-life mental disorders in the community: Themes for the new century. *Psychiatric Services, 50, 1158-1166.*

Ganguli, M., Fox, A., Gilby, J., & Belle. S. (1996). Characteristics of rural homebound older adults: A community-based study. *Journal of the American Geriatrics Society, 44(4),* 363-370.

Golafshani, N. (2003). Understanding reliability in qualitative research. *The Qualitative Report,8 (4), 597-607.*

Gold, C. H., Dominick, K. L., Ahern, F. M., & Heller, D. A. (2005). Differences in mental health indicators and psychotropic drug use between rural and urban older women. In R. Coward, L. Davis, C. Gold, H. Smiciklas-Wright, & L. Thorndyke (Ed.), *Rural women's health: Mental, behavioral, and physical health issues* (pp. 45-62). New York, NY: Springer Publishing Company.

Guba, E. G. (1981). 'Criteria for assessing the trustworthiness of naturalistic inquiries'. *Educational Communication & Technology Journal, 29 (2)*, 75-91.

Gucciardi, E., & Birnie-Lefcovitch, A. (2002). *Ontario women's health status report: Rural and northern women.* Ottawa, ON: Ontario Women's Health Council.

Hall, J., & Stevens, P. (1991). Rigor in feminist research. *Advances in Nursing Science, 13(3)*,16-29.

Hauenstein, J., & Peddada, S. (2007). Prevalence of major depressive episodes in rural women using primary care. *Journal of Health Care for the Poor & Underserved, 18*(1), 185-202.

Havens, B., Hall, M., Sylvestre, G., & Jivan, T. (2004). Social isolation and loneliness: Differences between older rural and urban Manitobans. *Canadian Journal on Aging, 23*(2), 129-140.

Health Canada. (2002). *Canada's aging population.* Ottawa, ON: Minister of Public Works and Government Services Canada.

Heaton, J. (2004). *Reworking qualitative data.* London, England: Sage Publications Ltd.

Leipert, B. (2010). Rural and remote women and resilience: Grounded theory and photovoice variations on a theme. In C. Winters & H. Lee (Ed.), *Rural nursing concepts, theory, and practice* (pp. 105-129). New York, NY: Springer Publishing Company.

Leipert, B., McWilliam, M., Forbes, D., Kelly, M., & Wakewich, P. (2007). Using photovoice to explore rural women's perspectives regarding aging, and social and health promotion needs and resources. Funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) Research Development Initiative (RDI), 2007-2009.

Leipert, B., & Reutter, L. (2005). Developing resilience: How women maintain their health in northern geographically isolated settings. *Qualitative Health Research, 15*(1), 49 – 65.

Leipert, B., & Smith, J. (2009). Using photovoice to explore rural older women's health promotion needs and resources. In P. Armstrong & J. Deadman (Ed.), *Women's health: Intersections of policy, research, and practice* (pp. 136-150). Toronto, ON: Women's Press.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage.

Lofland, J., Snow, D., Anderson, L., & Lofland, L. (2006). Analyzing social settings: A guide to qualitative observation and analysis. Belmont, CA: Wadsworth.

Marshall, M. (1996). Sampling for qualitative research. *Family Practice, 13*(6), 522-525.

Ministry of Industry. (2006). *Women in Canada: A gender-based statistical report.* Ottawa: Statistics Canada.

Mulder, P., & Lambert, W. (2006). Behavioural health of rural women: Challenges and stressors. In R. Coward, L. Davis, C. Gold, H. Smiciklas-Wright, & L. Thorndyke (Ed.). *Rural women's health: Mental, behavioral, and physical health issues* (pp.15-30). New York, NY: Springer Publishing Company.

Oliffe, J., Bottorff, J., Kelly, M., & Halpin, M. (2008). Analyzing participant produced photographs from an ethnographic study of fatherhood and smoking. *Research in Nursing & Health, 31(5)*, 529-539. Retrieved from www.interscience.wiley.com

Parikh, S., Wasylenki, D., Goering, P., & Wong, P. (1996). Mood disorders: Rural/urban differences in prevalence, health care utilization, and disability in Ontario. *Journal of Affective Disorders, 38*, 57-65.

Patton, M. (2002). *Qualitative research and evaluation methods* (3rd ed.). London, UK: Sage.

Public Health Agency of Canada. (2002). *A report on mental illnesses in Canada* Ottawa, ON: Health Canada Editorial Board Mental Illnesses in Canada.

Redwood-Jones, Y., & Wang, C. (2001). Photovoice ethics: Perspectives from Flint photovoice. *Health Education & Behaviour, 28*(5), 560-572.

Riddell, T., Ford-Gilboe, M., & Leipert, B. (2009). Strategies used by rural women to stop, avoid,or escape from intimate partner violence. *Health Care Women International, 30(1-2),* 134-59.

Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman & R. Burgess (Ed.), *Analyzing qualitative data* (pp. 173-194). London, England: Routledge.

Rohrer, J., Bernard, M., Zhang, B., Rasmussen, N., & Woroncow, H. (2008). Marital status, feeling depressed and self-rated health in rural female primary care patients. *Journal of Evaluation in Clinical Practice, 14*, 214-217.

Romanow, R. (2002). *Shape the future of health care: Interim report.* Ottawa, ON: Government of Canada: Commission on the Future of Health Care in Canada.

Sharma, V. (2006). Psychological hardiness is a buffer against aging. Retrieved from Mind Publications website: www.mindpub.com

Shookner, M. (2002). *An inclusion: Workbook for looking at social and economic exclusion and inclusion.* Halifax, Nova Scotia: Population and Public Health Branch, Health Canada Atlantic Regional Office.

Statistics Canada. (2002). *Life expectancy by age and province*. Retrieved from www.statscan.ca

Sutherns, R., McPhedran, M., & Haworth-Brockman, M. (2004). *Rural, remote, and northern women's health: Policy and research directions.* Winnipeg, MB: Prairie Centre of Excellence for Women's Health.

Szabo, V., & Strang, V. (1997). Secondary analysis of qualitative data. *Methods of Clinical Inquiry, 20(2)*, 66-74.

Thompson, N., Hunter, E., Murray, L., Ninci, L., Rolfs, E., & Pallikkathayil, L. (2008). The experience of living with a chronic mental illness: A photovoice study. *Perspectives in Psychiatric Care, 44(1)*, 14-24.

Tugade, M., Fredrickson, B. & Barrett, L. (2004). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Journal of Personality,* 72(6), 1161-1190.

Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education Behaviours, 24, 369-387.*

Wang, C., Burris, M. A., & Ping, X. Y. (1996). Chinese village women as visual anthropologists: A participatory approach to reaching policymakers. *Social Science & Medicine, 42*(10), 1391-1400.

Chapter 3: Implications

The purpose of this research was to identify mental health issues and factors that positively and negatively impact the mental health of rural senior women in southwestern Ontario. Mental heath issues of these women included loneliness, fear, and negative self-concept. Three factors shown to have a positive impact on these women's mental health were: 1) social and community resources, 2) personal characteristics and resources, and 3) faith, culture, and belief systems. Three factors that negatively influenced these women were: 1) isolation, 2) inadequate resources and loss in community, and 3) devaluing of rurality, ethnicity, and gender. Two additional factors highlighted by the women as both positively and negatively affecting their mental health were: 1) family or life histories, and 2) rural living. In this chapter, implications of these findings for rural communities, practice and service delivery, and research will be presented and discussed.

Implications for Rural Communities

Social supports in rural communities

Social programs, such as recreational and craft groups, were described by many of the participants as contributing to their overall positive mental health. These programs were described as being important for the mental health of participants because they enabled the women to get out of the house, socialize, and exercise their body and mind. It was noted by a few of the participants that social programs of this kind were limited in their communities due to lack of available funding. Without these programs in rural communities, some seniors may become isolated, a situation which may lead to mental health issues such as depression (Dugan & Kivett, 1994).

Numerous research studies (Lee & Russell, 2003; Menec, 2003; Silverstein & Parker, 2002; Unger, Johnson, & Marks, 1997) have revealed that social integration and significant community participation can positively contribute to healthy aging, increased quality of life, functional independence, emotional well-being, and decreased risk of mortality and morbidity. Fast and de Jong Gierveld (2008) point out that social integration and community participation are associated with social embeddedness, defined as "the evaluation of one's social situation as one of a satisfying interconnectedness and belonging" (p.63). Through recreational activities, volunteer opportunities, craft groups, and service organizations (e.g., Women's Institutes), senior

women are more likely to feel connected to their community. This connectedness is often associated with positive health benefits (Fast & Gierveld, 2008; Menec, 2003; Silverstein & Parker, 2002; Unger et al., 1997), especially for mental health (Clark & Leipert, 2007).

As decreased funding for programs is often an issue in rural communities, public resources, such as service clubs and churches, could be utilized to locate these activities. Participants could make donations to service clubs and churches to support any incurred costs. Participants also noted that day programs, for instance seniors' exercise classes, would be beneficial to support their physical and mental health, as well as provide opportunities for them to get out of the house and meet with other seniors to socialize. Increased social programming in rural communities may also result in decreased need for mental health services, because social integration has been associated with enhanced emotional well-being (Lee & Russell, 2003) and mental health (Clark & Leipert, 2007).

Infrastructure in rural communities

Infrastructure issues in rural communities, such as cracked sidewalks and poor road conditions, were significant for participants in this study. For instance, participants noted that because of these infrastructure issues, they were afraid of falling when walking or biking in their community, which negatively affected their participation in these activities. In the report *How Healthy Are Rural Canadians?* (Canadian Institute of Health Information, 2006), the authors noted that poor road conditions are often an issue in rural communities and have been identified as causing injury to residents living in these areas. Participants also noted that funding for infrastructure in their community was often used unwisely. For example, one participant noted that, in her community, entire sections of sidewalk would be removed and replaced, instead of fixing just the cracks in the sidewalk, which would be more cost effective. Therefore, it would be beneficial to include rural senior women in decision-making regarding community infrastructure, so that appropriate infrastructure decisions can be made and seniors' mental health promoted. Furthermore, including rural senior women in the decision-making process surrounding issues in their community may increase senior women's self-concepts by helping them realize that their suggestions are valued and included.

Transportation in rural communities

Transportation issues, such as lack of public transportation in rural communities, have been noted as an important issue affecting rural residents (Scharf & Bartlam, 2008; Sutherns, McPhedran, & Haworth-Brockman, 2004). My research extends understanding of how lack of this essential service particularly affects rural senior women by highlighting how challenges with transportation can affect their mental health. For example, participants who did not drive noted that they often felt stressed because there was no public transit in their community, and, therefore, they had to ask their friends and family to give them a ride to various places. Participants who were able to drive noted that road and weather conditions often caused them stress or prevented them from leaving their house. A possible solution to transportation challenges in rural communities may be a joint funding partnership between the provincial government, rural municipality, and rural senior women. Both the provincial government and rural municipalities could contribute funds to purchase a vehicle, while maintenance and gas fees could be supported by the contributions of rural senior women and rural service groups, such as the Kinsmen. Drivers could be volunteer seniors. Scharf and Bartlam (2008) identify that public transportation strategies in rural communities, such as community buses, may promote older residents' health by providing transportation to social activities, which would support opportunities for social inclusion and enhance mental health.

In summary, the findings of my research indicate that rural communities and the mental health of rural senior women could benefit from greater availability of social programs for senior women, greater participation of rural residents in decision-making surrounding community infrastructure issues, and enhanced community initiatives targeting transportation challenges experienced by rural senior women.

Implications for Practice and Service Delivery

Findings revealed that factors, such as social support and rural conditions, affect mental health. To effectively treat patients, health care practitioners should be aware of the factors related to rural living (Bushy, 2000). By being aware of the conditions that affect some women's abilities to access care, such as challenges with transportation, health care practitioners may be better able to assess older women's needs and provide appropriate care. For example, challenges related to transportation and weather conditions

were noted by the women in this study as negatively affecting their mental health by isolating them and hindering their ability to access services. To alleviate these challenges, health care professionals, such as public health nurses and nurse practitioners, could provide care to rural senior women in their homes. Due to the shortage of physicians in rural communities, as identified by participants, public health nurses and nurse practitioners could be utilized more in rural communities to fill this void, as they are educated in health promotion and illness prevention, and are able to assess patients' health needs and resources (Leipert, 1999). Furthermore, public health nurses often provide in-home care to patients, which may prevent the patient from experiencing stigma related to seeking assistance in the community. However, public health nurses and nurse practitioners are currently underutilized in many rural communities, and sufficient and continuous political support (MacLeod et al., 2004) and funding are required to create and sustain the effective provisions necessary for this type of health care (Kirby & Keon, 2006; MacLeod et al., 2004).

In the United States, a nurse practitioner education program that specializes in mental health has been developed (National Panel for Psychiatric Mental Health Competencies [NPPMHC], 2003). A similar program could be launched in Canada. Similar to the education of public health nurses, such a program would assist nurse practitioners in providing mental health care that focuses on health promotion, illness prevention, patient advocacy, open communication, and education (Trilla & Patterson, 1998). In addition, nurse practitioners can also provide some treatment and referrals to specialists (Nurse Practitioners' Association of Ontario, 2010). This type of care would be particularly helpful for rural residents, including rural senior women, due to the shortage of rural primary health care professionals (Romanow, 2002), the increasing aging population in rural communities (Leipert, McWilliam, Forbes, Kelly, & Wakewich, 2007), and the subsequent increase in mental health issues often experienced by older adults (Leipert et al., 2007).

Although nurse practitioners would be a useful asset in rural communities, there are barriers to nurse practitioners' full integration into the Canadian health care system. Some of these barriers include nurse practitioners' limited scope of practice, patients' lack of knowledge regarding nurse practitioners' roles, abilities, and competencies (Clarin,

2007), contentious relationships between nurse practitioners and physicians (Dicenso & Bryant-Lukosius, 2010), and restrictive, complex, and inconsistent and diverse legislation regulating nurse practitioners's responsibilities across Canada (Martin-Misener, 2010). Many of these factors have prevented nurse practitioners from being fully integrated into the Canadian health care system (Martin-Misener, 2010). A few strategies that may help to eliminate some of these barriers may be: 1) increased awareness by physicians and patients of nurse practitioner roles and scope of practice, and 2) increased consistency of nurse practitioner education and practice across Canada (Clarin, 2007). These and other strategies would help to support the role of nurse practitioners in rural communities so that they are able to offer effective physical, social, and mental health care in a timely manner (Martin-Misener, Reilly, Vollman, & Robinson, 2010) to rural senior women.

Participants in this study spoke about the need for more rural health care practitioners and about issues, such as stigma and stoic acceptance of poor health. Accordingly, public health nurses and nurse practitioners could enhance community awareness regarding mental health issues, promote acceptance of mental health issues in rural communities, and encourage those experiencing mental health issues to seek treatment. Furthermore, being resilient and hardy emerged as important self-care coping strategies in assisting participants in dealing with mental health issues. Therefore, resilience and hardiness could be promoted by nurse practitioners through self-care coping strategies. Programs they could offer or facilitate may include information sessions about mental health and factors that affect mental health in senior populations as well as self-care coping strategies. However, increased funding and support (Kirby & Keon, 2006; MacLeod et al., 2004) are needed for rural health care practitioners. By expanding services and launching programs offered by public health nurses and nurse practitioners, rural attitudes and behaviours could hopefully be changed to better promote seniors' mental health. As a result, senior women would receive patient-centred, in-home care and treatment for mental health issues, as well as care that could focus on health promotion and illness prevention.

Furthermore, as indicated by participants in this study and other researchers (Clark & Leipert, 2007; Sutherns et al., 2004), rural senior women experience diverse health issues specific to their age and gender, such as chronic health conditions, loss of family

and friends, and extended caregiving roles. (Clark & Leipert, 2007; Sutherns et al., 2004). However, current health care curricula at many Canadian universities often include only elective courses in gerontology and geriatrics (Canadian Association on Gerontology, 2007). As a result, only students specifically interested in the study of aging will learn about aging and seniors and have sufficient knowledge of the unique issues faced by seniors, or direct experience in providing care to this population. Therefore, an important recommendation based on these findings is that core gerontology courses be offered in all health care education programs in Canada.

In summary, increased funding and legislation that support expanded nurse practitioner and public health nurse roles and activities in rural communities, as well as specialized mental health education for nurse practitioners and others, may result in decreased stigma associated with mental health, increased acceptance of mental health issues in rural communities, and improved health of rural senior women. Furthermore, current health care curricula in Canada should be amended to include required courses on aging to ensure that health care practitioners are educated to deal with the issues facing rural senior women and others in our aging society today.

Implications for Research

The findings of this research reveal some of the mental health issues experienced by rural senior women in southwestern Ontario as well as some of the factors that positively and negatively affect the mental health of rural senior women. In addition, the findings also provide valuable insights into mental health issues experienced by certain cultural groups, such as Mennonite and Aboriginal women, and factors that affect their mental health, such as domestic abuse and long-term effects of residential and Indian day schools. Due to the vast differences in climate, primary industry, needs and resources across Canada, and the presence of various subgroup populations (e.g., Amish women) in rural communities, more research is needed to identify mental health issues of senior women in other rural and remote areas, such as northern Ontario, the Prairie provinces, the Maritimes, and the north.

Research targeted at effective treatment options that may help rural senior women with mental health issues would also be useful. For example, as current research indicates that mental health services in rural communities may not be readily available for these

women (Kirby & Keon, 2006; Lishner, Richardson, Levine & Patrick, 1996), it may be useful to conduct research on effective coping strategies that rural senior women use to deal with mental health issues, such as the strategies used by the women in this study. For example, study participants stated that having faith and attending church helped them in getting through difficult times and overcoming negative feelings. Therefore, future research could be conducted that identifies how coping strategies, such as having faith, may be effective in dealing with mental health issues for rural senior women. Because there are limited mental health services available in rural communities, these and other self-care coping strategies could be disseminated to rural women and practitioners to help promote the mental health of rural senior women. For example, public health nurses could incorporate self-care strategies for dealing with mental health issues in services and programs they offer in rural communities.

This research is one of the first secondary analysis studies of a photovoice research study. Advantages to using the secondary analysis method include decreased resources needed, such as money and time (Stage & Manning, 2003), which can be important for both master's students and other researchers, as funding is often limited. This approach also proved to be valuable in exploring mental health issues in a population that is often under-researched: rural senior women. Thus, secondary analysis could be used more often with other research studies that explore rural health topics, especially in under-researched populations, because it is a cost-effective approach and gets the most out of rich qualitative data.

Although there are advantages to using the secondary analysis approach, I did encounter some issues, particularly around analysis. For example, during the research process an issue that arose was the lack of information regarding how to undertake secondary analysis (Corti, Witzel, & Bishop, 2005; Szabo & Strang, 1997). Obviously more scholarly literature on various aspects of secondary analysis, such as the analysis procedure, is needed. Therefore, it is important that researchers who use secondary analysis document every stage of their research work and present their methodological findings both in conference papers and publications.

In summary, by focusing on the under-researched topics of mental health, senior women, and the rural context, my research has substantially contributed to the knowledge

base regarding rural senior women and mental health. Nevertheless, there is still a need to further investigate this topic in relation to other issues, such as health promotion and treatment options, and the needs and strengths of other sub-groups of rural senior women. In addition, although secondary analysis is a useful method for qualitative researchers, more information is needed about its implementation. Therefore, it is important that researchers using this approach publish how they undertook their research so that others can learn about the importance of secondary analysis and how to best utilize secondary analysis in qualitative research.

Conclusion

Over the next ten years, there will be a significant increase in seniors residing in rural settings in Canada (Health Canada, 2002), with older women representing a large proportion of these seniors (Leipert & Smith, 2009). Based on the findings of this study, it can be assumed that some of these women may experience mental health issues in the future, which will lead to an increased need for effective mental health services in rural areas. However, only limited information is currently available on the mental heath issues of rural senior women (Parikh, Wasylenki, Goering, & Wong, 1996).

Thus, findings from this study provide valuable information regarding some of the mental health issues and factors that affect rural senior womens' mental health in southwestern Ontario. Recommendations that arise from this study are important for rural communities, practice and service delivery, and research and may assist rural senior women, rural policymakers, and rural practitioners in better understanding and promoting the mental health of rural senior women. Nevertheless, more research is needed, specifically regarding the mental health of rural senior women residing in other geographic locations of Canada, as these women may experience mental health issues and factors differently than the participants in this study.

References

Bushy, A. (2000). *Orientation to nursing in the rural community.* Thousand Oaks, CA: Sage.

Canadian Association on Gerontology. (2007). *Education: Programs and courses in gerontology.* Retrieved from http://www.cagacg.ca/education/600_e.php.

Canadian Institute of Health Information. (2006). *How healthy are rural Canadians?* Retrieved from the Public Health Agency of Canada website: www.phac-aspcaspc.gc.ca

Clark, K., & Leipert, B. (2007). Strengthening and sustaining social supports for rural elders. *Online Journal of Rural Nursing and Health Care, 7*(1), 13-26.

Clarin, O. (2007). Strategies to overcome barriers to effective nurse practitioner and physician collaboration. *Journal of Nurse Practitioners, 3(8)*, 538-548.

Corti, L., Witzel., & Bishop, C. (2005). Secondary analysis of qualitative data. *Forum: Qualitative Social Research, 6*(1).

Dicenso, A., & Bryant-Lukosius, D. (2010). The long and winding road: Integration of nurse practitioners and clinical nurse specialists into the Canadian health care system. *Canadian Journal of Nursing Research, 42(2)*, 3-8.

Dugan, E., & Kivett, V. (1994). The importance of emotional and social isolation to loneliness among very old rural adults. *The Gerontologist, 34*(3), 340-346.

Fast, J., & de Jong Gierveld, J. (2008). Ageing, disability and participation. In N. Keating (Ed.), *Rural ageing: A good place to grow old?* (pp. 63-74). Bristol, Great Britain: The Policy Press.

Health Canada. (2002). *Canada's aging population.* Ottawa, ON: Minister of Public Works and Government Services Canada.

Kirby, M., & Keon, W. (2006). *Out of the shadows at last: Highlights and recommendations.* Ottawa, ON: Senate of Canada.

Lee, C., & Russell, A. (2003). Effects of physical activity on emotional well-being among older Australian women: Cross-sectional and longitudinal analyses. *Journal of Psychosomatic Research, 54*, 155-60.

Leipert, B. (1999). Women's health and the practice of public health nurses in Northern British Colombia. *Public Health Nursing, 16(4)*, 280-289.

Leipert, B., McWilliam, M., Forbes, D., Kelly, M., & Wakewich, P. (2007). Using photovoice to explore rural women's perspectives regarding aging, and social and health promotion needs and resources. Funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) Research Development Initiative (RDI), 2007-2009.

Leipert, B., & Smith, J. (2009). Using photovoice to explore rural older women's health promotion needs and resources. In P. Armstrong & J. Deadman (Ed.), *Women's health: Intersections of policy, research, and practice* (pp. 136-150). Toronto, ON: Women's Press.

Lishner, D. M., Richardson, M., Levine, P., & Patrick, D. (1996). Access to primary health care among persons with disabilities in rural areas: A summary of the literature. *Journal of Rural Health*, 12(1), 45-53.

MacLeod, M., Kulig, J., Stewart, N., Pitblado, J., Banks, K., & D'Archy et al. (2004). *The nature of rural practice in rural and remote Canada.* Retrieved from the Canadian Health Services Research Foundation website: http://www.fcrss.ca

Martin-Misener, R. (2010). Will nurse practitioners achieve full integration into the Canadian health care system? *Canadian Journal of Nursing Research, 42(2)*, 9-16.

Martin-Misener, R., & Reilly, S., Vollman, A., & Robinson, A. (2010). Defining the role of primary health care nurse practitioners in rural Nova Scotia. *Canadian Journal of Nursing Research, 42(2)*, 30-47.

Menec, V. H. (2003). The relation between everyday activities and successful aging: A 6-year longitudinal study. *Journal of Gerontology: Social Sciences,* 58, S74-S82.

National Panel for Psychiatric Mental Health Competencies. (2003). *Psychiatric-mental health nurse practitioner competencies.* Washington, DC: National Organization of Nurse Practitioner Faculties.

Nurse Practitioners' Association of Ontario. (2010). *What is a primary health care practitioner?* Retrieved from http://www.npao.org/phcnp.aspx

Parikh, S., Wasylenki, D., Goering, P., & Wong, P. (1996). Mood disorders: Rural/urban differences in prevalence, health care utilization, and disability in Ontario. *Journal of Affective Disorders, 38*, 57-65.

Romanow, R. (2002). *Shape the future of health care: Interim report.* Ottawa, ON: Government of Canada: Commission on the Future of Health Care in Canada.

Scharf, T. & Bartlam, B. (2008). Ageing, disability and participation. In N. Keating (Ed.), *Rural ageing: A good place to grow old?* (pp. 97-108). Bristol, Great Britain: The Policy Press.

Silverstein, M., & Parker, M. (2002). Leisure activities and quality of life among the oldest old in Sweden. *Research on Aging, 24*, 528-47.

Stage, F., & Manning, K. (2003). *Research in college contexts: Approaches and methods.* New York: NY: Routledge.

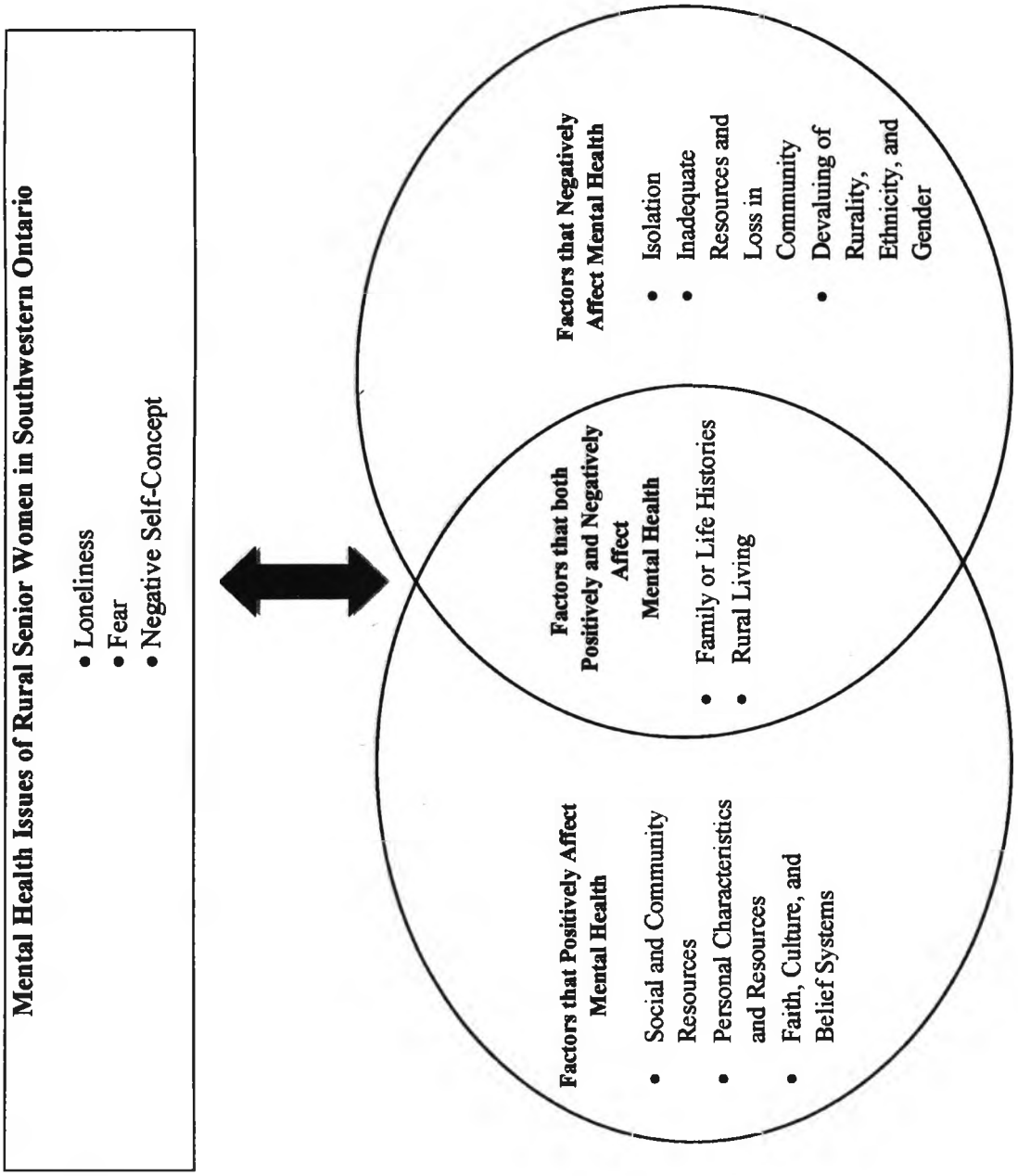
Sutherns, R., McPhedran, M., & Haworth-Brockman, M. (2004). Rural, remote, and northern women's health: Policy and research directions. Winnipeg, MB: Prairie Centre of Excellence for Women's Health.

Szabo, V., & Strang, V. (1997). Secondary analysis of qualitative data. *Methods of Clinical Inquiry, 20(2)*, 66-74.

Trilla, F., & Patterson, A. (1998). Physicians and nurse practitioners in collaborative practice. *Harvard Risk Management Forum.* Retrieved from www.rmf.harvard.edu/files/forum

Unger, J. B., Johnson, C. A., & Marks, G. (1997). Functional decline in the elderly: Evidence for direct and stress-buffering protective effects of social interactions and physical activity. *Annuals of Behavioral Medicine, 19*, 152-60.

Figure 1. Mental Health Issues and Factors that Affect Mental Health Issues of Rural Senior Women Residing in Southwestern Ontario



SOCIO-DEMOGRAPHIC QUESTIONAIRE FORMS OF PARTICIPANTS IN THE SSHRC PHOTOVOICE STUDY[¤]

AGE	AMT
Under 64	3
65-69	7
70-74	8
75-79	2
80-84	4
85-89	4
over 90	
Total	28

INCOME	AMT
<10,000	1
10,000-19,999	7
20,000-29,999	10
30,000-39,999	1
40,000-49,999	3
50,000-59,999	3
60,000-69,999	
70,000-79,999	
80,000-89,999	
90,000 - 99,999	
Over $100,000	
No Answer	3
Total	28

LOCATION	AMT
NORTHEN ONTARIO	
SOUTHERN ONTARIO	20
FARM OR ACREAGE	4
TOWN	14
ABORIGINAL RESERVE	2
NOT ON ABORIGINAL RESERVE	3
OTHER	
Total	43[¤]

PRESENT EMPLOYMENT STATUS	AMT
EMPLOYED FULL TIME	2
EMPLOYED PART-TIME	
FULL-TIME HOMEMAKER	2
RETIRED	22
UNEMPLOYED/ON STRIKE	
UNABLE TO WORK (ILLNESS)	2
OTHER	1
Total	29†

DURING PAST MONTH WHAT EXTENT HAS HEALTH INFERRED WITH NORMAL ACTIVITIES	AMT
NOT AT ALL	12
SLIGHTLY	8
MODERATELY	6
QUITE A BIT	2
EXTREMELY	
Total	28

REGARDLESS OF HOUSEHOLD INCOME, DESCRIBE FINANCIAL CIRCUMSTANCE OVER YEAR	AMT
BARELY ENOUGH	4
ENOUGH TO GET BY	7
LITTLE LEFT OVER	6
QUITE COMFORTABLE	7
I HAVE ALL I NEED	2
No Answer	2
Total	28

MARITAL STATUS	AMT
Single	
Married	8
Separated	
Divorced	2
Common-Law	1
Widowed	17
Total	28

GENERAL HEALTH	AMT
EXCELLENT	1
VERY GOOD	7
GOOD	11
FAIR	8
POOR	1
Total	28

SATISFACTION OF HEALTH RESOURCES	AMT
NOT SATISFIED	1
SOMEWHAT	5
SATISFIED	19
VERY SATISFIED	3
Total	28

NUMBER OF CHILDREN STILL LIVING AT HOME	AMT
AGE 0 - 5	
AGE 6 TO 12	2
AGE 12 TO 16	1
AGE 16 & older	5
Total	8[¤]

HEALTH NOW TO ONE YEAR AGO	AMT
Much better now	
Somewhat better	2
About the same	25
Somewhat worse	1
Much worse now	
Total	28

EDUCATION	AMT
< Gr. 9	11
Gr 9-13	9
College	
Trade certificate	8
Univ Undergrad	1
Univ Graduate	1
Some University	
Total	30‡

Total Number of Participants in Study N=31

*Sums of the total may equal more than the number of participants ("please check all that apply")

† One participant from the Community C focus group selected two options for this question: Retired and Full-Time Homemaker.

‡ One participant from the Community B focus group selected two options for this question: Grade 9-13 and Trade or Technical Certificant/D

¤ Three participants did not fill out the questionnaire, 2 from Community C, 1 from Community B.

Appendix B: Selected Participant Photographs

Photo titles bolded were labelled by participants. Titles not bolded were given by researcher, Phaedra Panazzola.

Photograph 1: "Worthless Women"

Photograph 2: **"Merry Widows"**

Photograph 3: "Pride of Family"

Photograph 4: "Accessible Community Resources"

Photograph 5: **"The Love of John Deers"**

Photograph 6: **"Animals are Friends"**

Photograph 7: **"Actively Enjoying the Summer"**

Photograph 8: "Keeping Busy"

Photograph 9: **"Faith"**

Photograph 10: "Belief"

Photograph 11: "Independence"

Photograph 12: "Need of Repair"

Photograph 13: **"Sign of the Times"**

Photograph 14: "Legacy"

Photograph 15: **"Family Traditions"**

Photograph 16: "Sadness"

Photograph 17: **"Unforgiven Priorities"**

Photograph 18: "Serenity of Rural Living"