

Running head: OLDER ADULTS' PATHWAYS TO MENTAL HEALTH SUPPORT

Older Adults' Pathways to Mental Health Information and Treatment:

Bridging the Gap in Knowledge Translation

by

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A Thesis submitted to the Faculty of Graduate Studies of

The University of Manitoba

in partial fulfillment of the requirements of the degree of

DOCTOR OF PHILOSOPHY

Department of Psychology

University of Manitoba

Winnipeg

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Abstract

A growing body of research has emphasized the prevalent mental health problems faced by the fastest-growing demographic segment of Canada's population, older adults, in addition to their particularly low rates of mental health service use. Research has also begun to demonstrate that although older adults express a desire to be involved in their health care decision-making, they are often not given sufficient information to participate in this process. In light of low rates of service use and generally poor mental health literacy, defined as knowledge and beliefs about the recognition, prevention, and management of mental health problems, several researchers posit that older adults experience a gap in the knowledge translation of mental health information. The present research explores older adults' pathways to mental health information and treatment. In Study 1, individual interviews were conducted with older adults who came to seek psychological treatment for mental health problems ($n = 15$), and analyzed according to narrative analysis. The main storylines across participants' narratives of treatment seeking included resistance to being labeled with mental health problems, muddling through the treatment seeking process, and interpretations of psychological treatment. Findings are discussed within the context of increasing efforts to enhance clarity in the complex process of seeking treatment for mental health problems. In Study 2, older adults' mental health information preferences and predictors of information preferences were examined in a sample of community-dwelling older adults ($n = 229$). Results demonstrated that despite being unfamiliar with mental health treatment options, older adults reported a strong interest in receiving detailed information concerning a variety of mental health treatment options. Family, friends, and health care providers were highly rated informational sources; and written formats and discussions with health care providers were highly rated informational formats. The most consistent predictors of

mental health information preferences included attitudes toward seeking psychological treatment and social support. Findings are contextualized within the importance of increasing the mental health literacy of older adults through knowledge translation efforts. Overall, findings of this research provide clear directions for decreasing the gap in mental health knowledge translation among older adults.

Acknowledgements

I would like to extend my gratitude to research participants, project stakeholders, my advisor and advisory committee members, the sources of funding that I have received throughout my doctoral degree, and my family and friends. First – to research participants in Study 1, thank you for sharing your stories, both big and small, with me. I am honoured that you gave me an inside view into your lives as people and patients. To research participants in Study 2, thank you for your sharing your important information preferences with me. Second, to project stakeholders – Ms. Connie Newman (Executive Director of the Manitoba Association of Senior Centres) and Drs. Lesley Koven and Lorne Sexton (clinical geropsychologists) – thank you for your involvement in this research. Third, thank you to my advisory committee members, Drs. Laura Funk, Lesley Koven, Maria Medved, and John Walker, for your research guidance and thorough, thoughtful, and timely feedback. To my advisor, Dr. Corey Mackenzie, thank you for your time and dedication to this project, and all of the projects we have completed together since I began graduate studies in 2009. It has been a fantastic journey. Fourth, I would like to acknowledge the funding support that I have received from the University of Manitoba Centre on Aging, Manitoba Graduate Scholarship, University of Manitoba Graduate Fellowship, and Canadian Institutes of Health Research throughout my doctoral degree. Finally, to my family and friends, thank you for your support and encouragement. A special thank you to my parents, Karen and Sheldon, for instilling in me the value and importance of learning, for your inspiration, and your constant cheerleading; and to my husband, Dan, for your love, support, and partnership.

Dedication

I dedicate my thesis to my grandparents, John and Audrey. I love and appreciate you beyond words, and best understood by the stories we share. You have impacted and enriched my life in tremendous ways, and I am forever grateful for our relationship. You are truly grand.

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Chapter 1: General Introduction

Preface

The extant research literature emphasizes the prevalent, complex, and severe mental health problems that older adults face. Of concern, national and international population health surveys indicate that in comparison to younger and middle-aged adults, older adults are particularly unlikely to seek professional help for mental health problems. There is an expanding body of research investigating barriers to service use among older adults, including particular sociodemographic characteristics, a lack of perceived need for help, a preference for self-sufficiency, and the significant cost of treatment, as barriers impeding mental health service use. Another probable barrier to older adults' use of mental health services that has received less research attention is their inadequate mental health literacy, leading to less proficiency in recognizing, managing, and preventing mental health problems compared to younger age groups. Although this literature suggests that older adults have less knowledge about mental health, what remains unknown is the type of information that older adults would want if they were experiencing a mental health problem, how much information they would want, in what format they would like to receive the information, and from what source they would like to access this information.

Furthermore, for older adults who have sought treatment for mental health problems, research has yet to explore their experiences seeking mental health treatment, in addition to the meaning that they ascribe to this process. The scarcity of research in these areas is especially problematic given older adults' preference for involvement in their health care decision-making. These gaps in knowledge translation – defined as providing individuals with health problems and interested members of the public with research knowledge that they deem pertinent, in order to

facilitate treatment decision-making – can lead to poor quality and potentially harmful treatment, in addition to lower satisfaction with treatment. Although there is a paucity of research investigating mental health knowledge translation, there has been an exponential increase in this topic over the past decade. Unfortunately, this interest has yet to lead to developments in research exploring mental health knowledge translation among older adults.

The overarching objective of this research is to contribute to decreasing the gap in geriatric mental health knowledge translation in order to improve mental health treatment decision-making and access to mental health treatment among older adults. The first objective of this dissertation is to explore older adults' experiences seeking treatment for mental health problems. The second objective is to determine older adults' mental health information preferences, and the sociodemographic and psychosocial predictors of these preferences. I begin this introduction by describing relevant background literature that provides support for the importance of this research. This includes literature on mental health problems and treatment seeking in later life, barriers to mental health services among older adults, treatment decision-making, and the knowledge translation of mental health information among older adults. I conclude by providing an overview of the design of the current set of studies.

The Epidemiology of Mental Health Problems Among Older Adults

Research has demonstrated that the rates of mood and anxiety disorders among children and adults living in the United States have been steadily increasing over time (Compton, Conway, Stinson, & Grant, 2006; Twenge, 2000). For example, Compton and colleagues (2006) demonstrated that from 1991-1992 to 2001-2002, the prevalence of major depression among American adults increased from 3% to 7%. Significant increases in major depression during this period of time were evident across all ages and racial/ethnic groups. Furthermore, research by

Twenge (2000) demonstrated a significant linear increase in anxiety among American children and college students between the 1950s and the 1990s (Twenge, 2000). Twenge attributes the increase in rates of anxiety over time to decreases in social connectedness and increases in environmental threats such as violent crimes, increased fear of diseases, and a greater perception of environmental threats due to increased media coverage.

In addition to increased rates of mental health problems among children and adults, researchers have predicted increased rates of mental health problems among our growing population of older adults. We are currently experiencing a worldwide demographic shift in population aging, and the number of adults ages 65 years and older in Canada is increasing dramatically (Statistics Canada, 2015). Due to population aging, increased life expectancy rates, elevated prevalence rates of mental health problems among adults in the Baby Boom generation, and a scarcity of mental health services designed to meet the needs of older adults, several prominent researchers have forecasted an impending crisis in geriatric mental health (Bartels & Drake, 2005; Jeste et al., 1999).

Exacerbating this concern, recent research has shown that mental health problems among older adults are prevalent, have complex associations with comorbid disorders, and may have severe outcomes. Representative population-based data from Canada and the United States indicates that between 3.0-6.8% of older adults ages 55 years and older meet diagnostic criteria for any past-year mood disorder, and between 2.5-11.4% of older adults meet criteria for any past-year anxiety disorder (Reynolds et al., 2015; Scott, Mackenzie, Chipperfield, & Sareen, 2010). Research also indicates elevated rates of emotional distress, anxiety, depression, and physical illness among older adults who identify as caregivers (Anderson, Linto, & Stewart-

Wynne, 1995; Cannuscio et al., 2002; Schulz & Martire, 2004; Vitaliano, Zhang, & Scanlan, 2003).

The complexity of mental health problems among older adults is evidenced by their heightened rates of co-occurring mental and physical health problems. Findings of recent research examining comorbid major depression and chronic health conditions indicated that 3.7% of Canadian older adults met the criteria for co-occurring past-year major depression and a chronic health condition, compared to 1.0% of older adults who met the criteria for major depression alone (Fiest, Currie, Williams, & Wang, 2011). Anxiety disorders are also more prevalent among older adults with physical health conditions, for example, increasing to 20.7% among Canadian older adults with chronic pain due to migraines (El-Gabalawy, Mackenzie, Shooshtari, & Sareen, 2011). Finally, mental health problems among older adults are severe, often leading to elevated rates of suicidal ideation, attempts, and completed suicide, when compared to older adults without mental health problems (Corna, Cairney, & Streiner, 2010; De Leo et al., 2001; Statistics Canada, 2012).

Barriers to Older Adults' Use of Mental Health Services

Unfortunately, despite a high prevalence of mental health problems, and the existence of effective, evidence-based treatment approaches (e.g., Ayers, Sorrell, Thorp, & Wetherell, 2007; Gonçalves & Byrne, 2012; Gould, Coulson, & Howard, 2012) older adults are particularly unlikely to seek professional help. Research demonstrates that approximately 70% of older adults with mood and anxiety disorders do not utilize professional mental health services (Byers, Arean, & Yaffe, 2012). There is growing support in the literature that poor mental health literacy, defined as “knowledge and beliefs about mental disorders, their recognition, management, or prevention,” is a barrier to service use among older adults (Jorm et al., 1997, p.182; Jorm, 2012).

For example, Gum and colleagues found that after reading a vignette describing an older adult with depression, only 41.0% of community-dwelling older adults correctly identified the older adult as depressed (Gum, Iser, & Petkus, 2010). Older adults' mental health literacy has been shown to be significantly poorer when compared to younger adults (e.g., Farrer, Leach, Griffiths, Christensen, & Jorm, 2008; Fisher & Goldney, 2003; Wetherell et al., 2009).

Treatment Decision-Making

Complicating these low rates of mental health literacy among older adults, research indicates that older adults report stronger preferences to be involved in their health care treatment decision-making as compared to younger adults (O'Neal et al., 2008). Providing information to patients prior to treatment decision-making is associated with improved understanding and recall of information, as well as increased patient satisfaction and compliance with treatment (Deyo & Diehl, 1986; Faden, Becker, Lewis, Freeman, & Faden, 1981; Hall, Roter, & Katz, 1988).

Although there is a plethora of research investigating information needs and preferences as they pertain to physical health problems (Buckland, 1994; Dey, 2004; Price, Pak, Müller, & Stronge, 2012; Voelker, 2005; Zhang & Fu, 2011), there is a scarcity of research exploring information needs and preferences regarding mental health problems. Findings in this limited area of research indicate that individuals with mental health problems and their families have many information needs that remain unaddressed (Drapalski et al., 2008; Fossey, Harvey, Mokhtari, & Meadows, 2012). How can people feel prepared to be involved in mental health care decision-making when they have limited mental health literacy and do not know what to do, who to go to, and what questions to ask?

A gap remains in the literature with regard to the experiences of older adults with diagnosable mental health problems who have sought information and treatment for mental

health problems, as well as the information preferences of older adults without diagnosable mental health problems. In addition to the dearth of research investigating mental health information preferences, there is a scarcity of research examining the predictors of mental health information preferences. Knowing older adults' mental health information preferences and the predictors of these preferences may help to enhance the knowledge translation of mental health information to older adults, by providing them with the information that they desire, at the time that they express their desire for the information, in order to help them make informed treatment decisions (Graham & Tetroe, 2009; Straus, Tetroe, & Graham, 2009).

The Knowledge Translation of Mental Health Information to Older Adults

Compared to other age groups in Canada, older adults may be especially likely to experience gaps in mental health knowledge translation. A variety of factors at the individual and systemic levels are evident in explaining the reasons why older adults may be at an increased risk of experiencing gaps in mental health knowledge translation, and as such, why they might not be receiving adequate information to guide decision-making around seeking mental health treatment and decisions concerning which type of treatment to pursue. At the individual level, older adults have been shown to possess poor mental health literacy, making it difficult for them to recognize the symptoms of mental health problems (Farrer et al., 2008; Fisher & Goldney, 2003; Wetherell et al., 2009). Similarly, their lower rates of professional help-seeking decrease the likelihood that they will receive effective and unbiased mental health information (Byers et al., 2012; Mackenzie et al., 2010; Mackenzie et al., 2012). At the broader systemic level, our health care system is structured in such a way that primary care physicians act as gatekeepers of mental health information and referrals to specialty mental health care providers. As such, the small proportion of older adults who do seek professional help are more likely to visit primary care

physicians, who may fail to detect, diagnose and treat mental health problems in older adults (Mackenzie, Knox, & Gekoski, 1999), and often do not have sufficient time to discuss treatment options in a typical medical appointment (Karlin, Duffy, & Gleaves, 2008).

Individuals with mental health problems who are able to recognize the symptoms of a mental health problem and decide to seek professional help are faced with a variety of complex treatment decisions and a scarcity of unbiased information and helpful decision-making tools. These decisions concern treatment alternatives in the form of psychotherapeutic, pharmacological, combined, or self-help treatments. Each treatment alternative is associated with advantages and disadvantages in terms of treatment effectiveness, cost, duration, and side effects. Ideally, the person seeking help should have easy access to helpful and unbiased information in order to make an informed treatment decision. Unfortunately, there is a lack of research investigating geriatric mental health knowledge translation, and a need for research exploring the pathways to mental health information and treatment among older adults who have sought information and treatment for mental health problems. There is a further need for research examining the type of information that older adults want about mental health problems and treatment, how much information they would prefer, in what format they would like to receive the information, and from whom they would like to access their information (Bostrom, Slaughter, Chojecki, & Estabrooks, 2012). Subsequently, there is an absence of research examining the predictors of mental health information preferences among older adults. Understanding and applying this information in mental health care settings would allow for the potential to make much needed revisions to current practices concerning knowledge transfer of mental health information, mental health treatment decision-making, and mental health treatment seeking.

Integrated Knowledge Translation Approach

The current dissertation research seeks to address these limitations in the aging and mental health literature. The overarching methodology of the current research drew on the principles of an integrated knowledge translation (IKT) approach – a collaborative framework that engages researchers and knowledge users (e.g., individuals with mental health problems, community members and organizations, and health care providers) in the research process (Bullock, Watson, & Goering, 2010). Advantages to using this approach include the increased relevance of information due to its co-production by researchers and knowledge users, and the ease and speed with which the knowledge-to-action cycle – the movement of knowledge gained from research into action to improve health care services – can take place (Bullock et al., 2010). Through the IKT approach, the dissemination of research is expedited and enhanced due to the involvement of individuals in the community who value the importance of mental health information and treatment, who can act as advocates for increasing access to quality mental health information and services for older adults, and exchange important findings with peers, community organizations, and health care providers (Bullock et al., 2010). The IKT approach emphasizes the inclusion of project stakeholders, who are involved at important stages of the knowledge-to-action cycle, including: the development of research questions; the refinement of research methodology; data collection; interpretation of findings; and dissemination (Bullock et al., 2010; McGrath, Lingley-Pottie, Emberly, Thurston, & McLean, 2009).

Stakeholder groups who were involved in and integral to the current project include community organizations, clinical geropsychologists, and researchers from the University of Manitoba. Connie Newman, Executive Director of the Manitoba Association of Senior Centres, was involved as a representative for seniors' organizations, and helped with project design,

recruitment, and data collection for Study 2. Ms. Newman also helped to select community-based older adults to review study material and offer their feedback, which was incorporated in revising the mental health information questionnaire. Health care providers working as part of the Seniors Healthy Aging Resource Teams were also involved in helping to identify important questions to address on the mental health information questionnaire. Drs. Lesley Koven and Lorne Sexton, clinical geropsychologists at St. Boniface Hospital in Winnipeg, were involved as clinician stakeholders in this project. They helped with project design, recruitment, and data collection for Study 1. Finally, this project was conducted with the help of my advisory committee members, researchers from the University of Manitoba in the fields of qualitative health research (Dr. Maria Medved), aging and mental health (Dr. Corey Mackenzie), knowledge translation (Dr. John Walker), and health and aging (Dr. Laura Funk). Dr. Lesley Koven was involved as both a clinician stakeholder and advisory committee member. These stakeholder groups were thoroughly involved in development of research questions, the refinement of research methodology, data collection, and interpretation of findings. Though it is typical for committee members to be involved in dissertation research, it is atypical to involve community organizations and community members in research design and implementation. As such, it is my view that this is an important application of community-university partnership, collaboration, and knowledge exchange.

Overview of Research Design

The current research is comprised of two distinct and separate studies. Study 1 employed a qualitative research design informed by narrative analysis, with the objective of exploring older adults' experiences seeking treatment for mental health problems. Using quantitative methodology, the objectives of Study 2 were to describe older adults' mental health information

preferences (i.e., amount, content, format, and source), and to outline the sociodemographic and psychosocial characteristics associated with information preferences. These studies were conducted concurrently. Although studies 1 and 2 utilize differing methodologies (qualitative and quantitative) and answer specific research questions in line with their respective methodology, they are related under a broader, overarching topic concerning older adults' pathways to mental health information and treatment. Findings of both studies contribute important and additive information to paint a broader picture of older adults' pathways to mental health support, with Study 1 providing an in-depth, person-centered, and holistic analysis of the unique experiences involved in seeking psychological treatment for mental health problems in late life; and Study 2 providing specific information on information preferences that one might consider if they were to seek help for a mental health problem. Both studies are complimentary in the information that they provide, in enhancing our understanding of mental health treatment seeking in late life, and in highlighting important implications for research, health care policy, and practice, which will be described in the concluding chapter of this dissertation.

In the pages that flow from this introductory chapter (Chapter 1), Chapter 2 focuses on Study 1, exploring older adults' narratives of treatment seeking for mental health problems, and Chapter 3 focuses on Study 2, examining older adults' mental health information preferences. This dissertation concludes with Chapter 4, the general discussion, which provides a summary of the entirety of the current research and offers implications and future directions.

References

- Ayers, C. R., Sorrell, J. T., Thorp, S. R., & Wetherell, J. L. (2007). Evidence-based psychological treatments for late-life anxiety. *Psychology and Aging, 22*(1), 8-17.
- Bartels, S. J., & Drake, R. E. (2005). Evidence-based geriatric psychiatry: An overview. *Psychiatric Clinics of North America, 28*(4), 763-784.
- Bostrom, A. M., Slaughter, S. E., Chojecki, D., & Estabrooks, C. A. (2012). What do we know about knowledge translation in the care of older adults? A scoping review. *Journal of the American Medical Directors Association, 13*(3), 210-219.
- Buckland, S. (1994). Unmet needs for health information: a literature review. *Health libraries review, 11*(2), 82-95.
- Bullock, H., Watson, A., & Goering, P. (2010). Building for success: Mental health research with an integrated knowledge translation approach. *Canadian Journal of Community Mental Health, 29*.
- Byers, A. L., Arean, P. A., & Yaffe, K. (2012). Low use of mental health services among older Americans with mood and anxiety disorders. *Psychiatric Services, 63*(1), 66-72.
- Compton, W. M., Conway, K. P., Stinson, F. S., & Grant, B. F. (2006). Changes in the prevalence of major depression and comorbid substance use disorders in the United States between 1991-1992 and 2001-2002. *American Journal of Psychiatry, 163*(12), 2141-2147.
- Corna, L. M., Cairney, J., & Streiner, D. L. (2010). Suicide ideation in older adults: Relationship to mental health problems and service use. *Gerontologist, 50*(6), 785-797.
- De Leo, D., Padoani, W., Scocco, P., Lie, D., Bille-Brahe, U., Arensman, E., . . . Farla, S. (2001). Attempted and completed suicide in older subjects: Results from the WHO/EURO

- Multicentre study of suicidal behaviour. *International Journal of Geriatric Psychiatry*, 16, 300-310.
- Dey, A. (2004). Consumer health informatics: an overview of patient perspectives on health information needs. *The HIM journal*, 33(4), 121-126.
- Deyo, R. A., & Diehl, A. K. (1986). Patient satisfaction with medical care for low back pain. *Spine*, 11(1), 28-30.
- Drapalski, A. L., Marshall, T., Seybolt, D., Medoff, D., Peer, J., Leith, J., & Dixon, L. B. (2008). Unmet needs of families of adults with mental illness and preferences regarding family services. *Psychiatric Services*, 59(6), 655-662.
- El-Gabalawy, R., Mackenzie, C. S., Shooshtari, S., & Sareen, J. (2011). Comorbid physical health conditions and anxiety disorders: A population-based exploration of prevalence and health outcomes among older adults. *General Hospital Psychiatry*, 33(6), 556-564.
- Faden, R. R., Becker, C., Lewis, C., Freeman, J., & Faden, A. I. (1981). Disclosure of information to patients in medical care. *Medical Care*, 19, 718-733.
- Farrer, L., Leach, L., Griffiths, K. M., Christensen, H., & Jorm, A. F. (2008). Age differences in mental health literacy. *BMC Public Health*, 8.
- Fiest, K. M., Currie, S. R., Williams, J. V. A., & Wang, J. (2011). Chronic conditions and major depression in community-dwelling older adults. *Journal of Affective Disorders*, 131(1-3), 172-178.
- Fisher, L. J., & Goldney, R. D. (2003). Differences in community mental health literacy in older and younger Australians. *International Journal of Geriatric Psychiatry*, 18, 33-40.

- Fossey, E., Harvey, C., Mokhtari, M. R., & Meadows, G. N. (2012). Self-Rated Assessment of Needs for Mental Health Care: A Qualitative Analysis. *Community Mental Health Journal, 48*(4), 407-419.
- Gonçalves, D. C., & Byrne, G. J. (2012). Interventions for generalized anxiety disorder in older adults: Systematic review and meta-analysis. *Journal of Anxiety Disorders, 26*, 1-11.
- Gould, R. L., Coulson, M. C., & Howard, R. J. (2012). Efficacy of cognitive behavioral therapy for anxiety disorders in older people: A meta-analysis and meta-regression of randomized controlled trials. *Journal of the American Geriatrics Society, 60*(2), 218-229.
- Graham, I. D., & Tetroe, J. M. (2009). Getting evidence into policy and practice: Perspective of a health research funder. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 18*(1), 46-50.
- Gum, A. M., Iser, L., & Petkus, A. (2010). Behavioral health service utilization and preferences of older adults receiving home-based aging services. *American Journal of Geriatric Psychiatry, 18*(6), 491-501.
- Hall, J. A., Roter, D. L., & Katz, N. R. (1988). Meta-analysis of correlates of provider behavior in medical encounters. *Medical Care, 26*(7), 657-775.
- Jeste, D. V., Alexopoulos, G. S., Bartels, S. J., Cummings, J. L., Gallo, J. J., Gottlieb, G. L., . . . Lebowitz, B. D. (1999). Consensus statement on the upcoming crisis in geriatric mental health: research agenda for the next 2 decades. *Archives of General Psychiatry, 56*(9), 848-853.
- Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist, 67*(3), 231-243.

- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166, 182-186.
- Karlin, B. E., Duffy, M., & Gleaves, D. H. (2008). Patterns and predictors of mental health service use and mental illness among older and younger adults in the United States. *Psychological Services*, 5(3), 275-294.
- Mackenzie, C. S., Knox, V. J., & Gekoski, W. L. (1999). Do family physicians treat older patients with mental disorders differently from younger patients? *Canadian Family Physician*, 45, 1219-1224.
- MacKenzie, C. S., Pagura, J., & Sareen, J. (2010). Correlates of perceived need for and use of mental health services by older adults in the collaborative psychiatric epidemiology surveys. *American Journal of Geriatric Psychiatry*, 18(12), 1103-1115.
- Mackenzie, C. S., Reynolds, K., Cairney, J., Streiner, D. L., & Sareen, J. (2012). Disorder-specific mental health service use for mood and anxiety disorders: Associations with age, sex, and psychiatric comorbidity. *Depression and Anxiety*, 29(3), 234-242.
- O'Neal, E. L., Adams, J. R., McHugo, G. J., Van Citters, A. D., Drake, R. E., & Bartels, S. J. (2008). Preferences of older and younger adults with serious mental illness for involvement in decision-making in medical and psychiatric settings. *American Journal of Geriatric Psychiatry*, 16(10), 826-833.
- Price, M. M., Pak, R., Müller, H., & Stronge, A. (2012). Older adults' perceptions of usefulness of personal health records. *Universal Access in the Information Society*, 1-14.

- Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in older adults: Findings from a nationally representative survey. *World Psychiatry, 14*, 74-81.
- Scott, T., MacKenzie, C. S., Chipperfield, J. G., & Sareen, J. (2010). Mental health service use among Canadian older adults with anxiety disorders and clinically significant anxiety symptoms. *Aging and Mental Health, 14*(7), 790-800.
- Statistics Canada. (2012). Suicides and Suicide Rate, by Sex and by Age Group. CANSIM, table 102-0551 and Catalogue no. 84F0209X. 2010. Retrieved from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/hlth66a-eng.htm>
- Statistics Canada. (2015). Canada's Population Estimates: Age and Sex, July 1, 2015. Retrieved from <http://www.statcan.gc.ca/daily-quotidien/150929/dq150929b-eng.htm>.
- Straus, S. E., Tetroe, J., & Graham, I. (2009). Defining knowledge translation. *Canadian Medical Association Journal, 181*(3-4), 165-168.
- Twenge, J. M. (2000). The age of anxiety? Birth cohort change in anxiety and neuroticism, 1952-1993. *Journal of Personality and Social Psychology, 79*(6), 1007-1021.
- Voelker, R. (2005). Seniors seeking health information need help crossing "digital divide". *Journal of the American Medical Association, 293*(11), 1310-1312.
- Wetherell, J. L., Petkus, A. J., McChesney, K., Stein, M. B., Judd, P. H., Rockwell, E., . . . Patterson, T. L. (2009). Older adults are less accurate than younger adults at identifying symptoms of anxiety and depression. *Journal of Nervous and Mental Disease, 197*(8), 623-626.
- Zhang, Y., & Fu, W-T. (2011). Designing consumer health information systems: What do user-generated questions tell us? *Lecture Notes in computer Science, 6780 LNAI*, 536-54.

Chapter 2, Study 1: Older Adults' Narratives of Treatment Seeking for Mental Health Problems

Older adults experience prevalent, complex, and severe mental health problems for which they are unlikely to seek professional help (e.g., Byers, Arean, & Yaffe, 2012; Crabb & Hunsley, 2006; Gum, King-Kallimanis, & Kohn, 2009; Jeste et al., 1999; Kessler, Foster, Webster, & House, 1992; Kessler et al., 2005; Mackenzie, Reynolds, Cairney, Streiner, & Sareen, 2012; Mosier et al., 2010; Reynolds, Pietrzak, El-Gabalawy, Mackenzie, & Sareen, 2015). In addition to elevated rates of past-year anxiety (2.5-11.4%) and past-year mood disorders (3.0-6.8%) (Reynolds et al., 2015; Scott, Mackenzie, Chipperfield, & Sareen, 2010), many older adults report caregiver stress (19%; Statistics Canada, 2012), which can lead to elevated rates of mental and physical health problems (Pinquart & Sörensen, 2003; Vitaliano, Zhang, & Scanlan, 2003). Caregivers endorse a number of negative health consequences, including anxiety (55%), fatigue (51%), irritability (36%), feeling overwhelmed (35%), having disturbed sleep (34%), and feeling depressed (20%) (Statistics Canada, 2012).

Epidemiological research has demonstrated that only 30% of older adults with mental health problems utilize mental health services (Byers et al., 2012). Older adults are a demographic group that is especially unlikely to seek professional help when they need it (e.g., Mackenzie et al., 2012). For older adults with mental health problems who have accessed formal health care services, as many as 80% report receiving treatment through the general medical service sector from their primary care physician (Bogner, De Vries, Maulik, & Unützer, 2009; Cairney, Corna, & Streiner, 2010; Han, Gfroerer, Colpe, Barker, & Colliver, 2011; Lippens & Mackenzie, 2011; Nyunt, Chiam, Kua, & Ng, 2009; Prévile et al., 2009). Mood, anxiety, and caregiver stress are often undetected in primary care settings, making pathways to mental health

treatment particularly difficult for older adults (Park & Unützer, 2011; Unützer, 2002). This is especially concerning given older adults' preference for psychological treatment in comparison to pharmacological treatment (e.g., Areán, Alvidrez, Barrera, Robinson, & Hicks, 2002; Landreville, Landry, Baillargeon, Guérette, & Matteau, 2001; Lundervold & Lewin, 1990; Rokke & Scogin, 1995; Wetherell et al., 2004), as well as the strong support for the efficacy of psychological treatment for late life mood and anxiety disorders (e.g., Andreescu & Reynolds, 2011; Ayers, Sorrell, Thorp, & Wetherell, 2007; Blank et al., 2006; Gonçalves & Byrne, 2012; Gould, Coulson, & Howard, 2012; Hunsley, Elliott, & Therrien, 2014; Karlin & Fuller, 2007; Mohlman, 2004; Mohlman et al., 2003; Park & Unützer, 2011; Payman, 2011; Splevins, Smith, & Simpson, 2009; Stanley & Beck, 2000; Stanley et al., 2009; Unützer, 2002; Wetherell et al., 2009; Wetherell et al., 2011; Wetherell, Lenze, & Stanley, 2005; Wolitzky-Taylor, Castriotta, Lenze, Stanley, & Craske, 2010). Patterns of service use are even less well understood for older adults experiencing caregiver stress. Caregiver support services offered through the community and through more formalized health care settings are associated with many positive outcomes for caregivers, including increased knowledge, skills, and physical and emotional support (Lim, Goh, Chionh, & Yap, 2012). Unfortunately, in line with research in the area of service use for mental health problems, caregivers are reluctant to seek professional help for issues related to caregiving (Bookwala et al., 2004; Lim et al., 2012).

Although a growing body of literature has examined the prevalence estimates of mental health problems and mental health service use among older adults, the experiences of older adults who seek specialized psychological treatment are less well understood, as are the unique voices of older adults who have navigated through their complex mental health problems and systems of care to arrive at psychological treatment. As such, narrative analysis exploring older

adults' unique experiences seeking psychological treatment for mental health problems, as well as the meaning they attribute to their experiences, is vital. Further, given the low rates of mental health service use among older adults with mental health problems, it is important for research to shed light on the experiences of older adults who do seek psychological treatment, as a way to increase our understanding of the complex processes involved in this experience. The aim of the current research is to explore the experiences and meaning making processes of older adults with mental health problems who have sought psychological treatment. In the current study, I begin by reviewing relevant research in the areas of theoretical models of mental health service use, health care treatment-decision making, treatment seeking experiences of older adults with mental health problems, and narratives of mental health problems and treatment seeking. I then turn to a description of the objective of the current research, research methodology, and findings, and end by discussing important conclusions and implications.

Theoretical Models of Mental Health Service Use

Although the current research seeks to examine the experiences of older adults who have sought psychological treatment for mental health problems in later life, thereby focusing more heavily on persons as opposed to processes, it is important to situate the current research within the extant body of knowledge in the area of mental health service use. Prominent scholars in the field of mental health service use have developed theoretical models using qualitative and quantitative research methods, in attempts to examine the processes by which individuals come to seek mental health treatment. Models that are most applicable to this research include:

Parsons' illness career model (1951); Goldberg and Huxley's filter model (1980); Andersen's behavioural model of health service use (1995, 2008); Vogel, Wester, Larson, and Wade's information-processing model (2006); Henshaw and Freedman-Doan's adaptation of the health

belief model (2009); and Pescosolido's network episode model (Pescosolido, 1991; Pescosolido, Boyer, & Medina, 2013).

Credited with developing the first model of illness behaviour and health service use, Parsons' Illness Career Model (1951) suggests that following initial onset of symptoms, individuals make rational and scientific decisions to enter a sick role or return to normal roles. Parsons saw health service use as an integral component of the sick role, and noted that, at the stage of health service use, the individual transitions from sick role to patient role. Parsons' model also depicts a change from patient role to recovery or normal role following treatment. This model assumes the presence of rational decision-making and active choice to pursue health service use on the part of the patient, as well as return to normal role following illness and patient roles. These assumptions may not be in line with the treatment seeking experiences of older adults.

Goldberg and Huxley's filter model (1980) illustrates the various pathways to mental health services that are mediated by the severity of the disorder, the characteristics of the person seeking help (i.e., socioeconomic status, insight into mental health problems, knowledge regarding mental health treatment, and attitudes toward mental health treatment), and the recognition of the mental health problem by a primary care physician. This model highlights the important role of the primary care physician in the help-seeking process. The physician acts as a gatekeeper to mental health treatment and is responsible for referring to more specialized outpatient or inpatient treatment services.

Andersen's behavioural model of health service use (1995, 2008) places greater emphasis on the individual as opposed to the primary care physician and the health care system. This model describes the contextual and individual predisposing characteristics (i.e., demographic,

social, health care beliefs), enabling resources (i.e., financial, organizational), factors associated with need (perceived or evaluated), as well as personal health practices (use of personal health services) that promote or detract from one's use of health care services. Originally developed to explain reasons for why families use physical health care services, this model has since been applied to varying age groups including young and older adults, and persons with a wide range of physical and mental health problems including cancer, dementia, anxiety, mood, and substance use disorders (e.g., Mackenzie, Pagura, & Sareen, 2011; Toseland, McCallion, Gerber, & Banks, 2002; Treanor & Donnelly, 2012). Although Andersen's model addresses the factors that encourage or hinder mental health service use, it does not address the decision-making process that one might go through when considering mental health treatment. Further, the influence of the health care system on patients' treatment decision-making is largely absent from this model.

The information-processing model outlined by Vogel and colleagues (2006) examines the factors that influence the mental health treatment decision-making process that individuals follow when they experience symptoms of a mental health problem. Specifically, this model posits that individuals proceed through four cognitive and affective steps when processing information to make decisions concerning mental health service use. This process begins by encoding and interpreting internal and external cues. Of prime importance at this stage is the individual's ability to recognize the symptoms they are experiencing, and understand these symptoms as problematic and related to a mental health problem. At the second step, individuals generate response options based on their interpretation of symptoms. If symptoms are interpreted as severe and in need of further support, individuals generate behavioural response options based on their goals to reduce symptoms. The third step of this model entails making a decision on a

response option that was generated in the previous step. This decision-making process involves comparing the advantages and disadvantages of response options, and results in the selection of the response option associated with the greatest number of advantages. The anxiety that individuals may experience while making a decision, their perception of stigma surrounding mental health service use, and a lack of sufficient information regarding a range of possible response options are a few of the barriers that inhibit a help-seeking response at this stage. At the fourth and final step of this model, individuals evaluate the outcome of their behavioural response to their symptoms. If this evaluation is not favourable, individuals may attempt to formulate new response options. In line with previously described models, this model implies active choice and rationality in the treatment seeking process, and largely ignores systemic factors, including the influence of the health care system in treatment decision-making.

The health belief model, although originally developed with a focus on physical health problems (Rosenstock, 1966, 1974), has since been refined in its application to mental health service use (Henshaw & Freedman-Doan, 2009). In the revised conceptualization of this model, mental health service use is determined by the following factors: a) perceived threat of mental health problems – perception of susceptibility to problems and perceived severity of mental health symptoms; b) expectations of treatment – belief in the effectiveness of treatment, perceived barriers to treatment, and perceived belief in self-efficacy to change through treatment; and c) social cues such as media campaigns and spoken views of family and friends that serve as reminders of the severity of the disorder and promote treatment seeking. According to this model, all of these factors are influenced by sociodemographic characteristics including age, sex, race/ethnicity, and education. Although this model provides additional information concerning treatment decision-making, including the important factor of social cues, this model is depicted

as static and unchanging, and does not specifically include the influence of the health care system in this complicated process.

The network episode model (NEM; Pescosolido, 1991; Pescosolido et al., 2013) extends beyond previously described models by capturing the holistic and complex processes influencing how and why individuals come to seek mental health treatment. The NEM holds that the treatment seeking process is influenced by person-related and service-related factors. According to the NEM, pathways to treatment are not efficient, nor are they rational or individualistic, rather, they are complex, and embedded in social networks, cultures, and systems. In a seminal study influenced by the NEM, Pescosolido and colleagues (1998) address gaps of other models by emphasizing the ways in which individuals make decisions to utilize formal mental health services. This mixed methods research highlighted three main themes when investigating the types of pathways to treatment, “choice,” “coercion,” or “muddling through” (Pescosolido et al., 1998, p. 275). Participants who described making a decision to seek help on their own or with the help of others were classified as making an individual or supported choice. The theme of coercion to seek mental health treatment depicted participants’ lack of agency and control in making this important decision, which was made by a combination of friends, family, employers, and professionals in law enforcement (e.g., police, judges). Finally, participants who did not identify an active resistance or active interest in pursuing treatment were classified as muddling through. Subsequent quantitative evaluation of these qualitative findings suggested that 45.9% of participants reported the notion of choice in treatment decision-making, 22.9% of participants reported being coerced into treatment, and 31.2% of participants described neither resisting nor actively pursuing treatment, and were therefore classified as muddling through. It is important to highlight that more than half of participants did not report a rational, individual, active, and

choice-based pathway into treatment. This runs contrary to previously described models of mental health service use that assume their presence or imply these processes as general truths.

These models and previous research provide us with valuable information on the factors that lead to or deter individuals from using mental health services. The role of mental health literacy (the importance of knowledge and beliefs regarding the recognition and management of mental health problems) is highlighted in these models as supporting mental health treatment seeking (Jorm et al., 1997; Jorm, 2012). For example, Andersen's behavioural model of health service use, the filter model, information-processing model, health belief model, and NEM all describe the primary step of recognizing the symptoms of a mental health problem and labeling these symptoms as severe, in order to seek treatment. Most of these models explain the importance of having knowledge concerning existing services for the treatment of mental health problems. Andersen's behavioural model of health service use and the health care belief model emphasize the role of health care beliefs (e.g., beliefs in the effectiveness of treatment) in affecting one's use of mental health services. Many of these models highlight the important role of the primary care physician in the mental health treatment seeking process, acting as a gatekeeper of mental health treatment and referrals to specialized treatment services. Finally, providing a distinct and dynamic framework, the NEM highlights the importance of social network members and treatment providers in influencing treatment seeking (Pescosolido, 1991; Pescosolido et al., 2013). Further, the NEM emphasizes the dynamic and changing nature of treatment seeking, and it emphasizes that not all pathways into treatment are choiceful and rational.

Taken together, although these models provide us with an important place to start in the understanding of pathways to mental health treatment, none of them directly examine older

adults' experiences seeking treatment for mental health problems. These models can be described as having positivistic theoretical underpinnings, with a focus on determined and constrained categories, and relative lack of attention to subjective individual experiences. Models can also be critiqued for being overly simplistic and static, and largely overlooking the complex, fluid, and holistic nature of the treatment seeking process (Pescosolido, 2013; Pescosolido & Olafsdottir, 2013). Further, the majority of these models assume the presence of rational decision-making and active choice in the pursuit of mental health treatment. This also demonstrates an oversimplification of this complex process, and may unfairly place increased responsibility on the individual, while reducing the important influence of the health care system and broader sociocultural factors (Pescosolido, 2013; Pescosolido & Olafsdottir, 2013). These shortcomings of extant models and theoretical frameworks underscore the importance of narrative analysis in promoting a person-centered and holistic understanding of the unique stories told by older adults seeking psychological treatment for mental health problems.

Health Care Treatment Decision-Making

In addition to theoretical models of health service use, research examining the ways in which individuals come to make decisions concerning treatment options for health problems is useful in promoting our understanding of the various pathways to mental health treatment. Prior to the 20th century, medical decision-making followed a paternalistic approach, characterised by physician-driven decision-making and patient as a passive recipient of care (Kon, 2010). The past two decades have demonstrated gradual shifts in emphasis on patient autonomy and shared decision-making (Hack, Degner, Watson, & Sinha, 2006). In the shared model of decision-making, physician and patient are seen as working together, sharing information, and deciding on a mutually agreed-upon treatment decision (Kon, 2010). Although shared decision-making is a

growing and suggested model of evidence-based medical decision-making, its use depends on the preferences of the physician and patient, both of whom may hold varying comfort levels with this practice (Kon, 2010; Kon, Davidson, Morrison, Danis, & White, 2016). Further, the established power imbalance between medical professionals and patients may decrease the likelihood that patients feel able to participate in this process of shared responsibility.

Emerging in the late 1960s, sociological thought has critiqued the process of medicalization, described as a process by which life problems are “defined in medical terms, described using medical language, understood through the adoption of a medical framework, or “treated” with a medical intervention” (Conrad, 2007, p. 5). Supporters of the medicalization critique argue that becoming medicalized denies individual rational thought and action in favour of promoting authoritative action on the part of medical professionals, to instruct patients how to behave (Lupton, 1997). Marxist sociologist Howard Waitzkin states, “The medical encounter is one arena where the dominant ideologies of a society are reinforced and where individuals’ acquiescence is sought” (1984, p. 339). Both the process of being medicalized as well as paternalistic decision-making models, emphasize a system-induced passivity that can lead patients to take a less rational, active, and choice-based role in their treatment decision-making. This is concerning given findings indicating that older adults prefer to be involved in their health care treatment decision-making (Chiu, Feuz, McMahan, Miao, & Sudore, 2016; O’Neal et al., 2008).

Treatment Seeking Experiences of Older Adults with Mental Health Problems

A small but growing body of research has explored the treatment seeking experiences of individuals with mental health problems, with a limited focus on the experiences of older adults. Research that has examined older adults’ experiences seeking treatment for mental health

problems has highlighted the important role of stigma in their treatment seeking process (e.g., Conner et al., 2010; Jimenez, Bartels, Cardenas, & Alegria, 2013; Lawrence et al., 2006; Sirey, Franklin, McKenzie, Ghosh, & Raue, 2014). For example, research by Conner and colleagues (2010) investigating the impact of stigma on the treatment seeking experience of older adults with depression indicated that depressed older adults endorsed an elevated level of public stigma toward having a mental health problem and seeking treatment. In light of this perceived stigma, older adults reported not being engaged in, or intending to seek, mental health treatment for their depression. Similarly, research exploring the ways in which older adults cope with depression in late life found that participants stressed the importance of a personal responsibility for coping with depression above all other strategies, and a corresponding perception of stigma toward mental health service use (Lawrence et al., 2006). Participants in this research shared the belief that “when you have a mental health problem such as depression you should help yourself” (Lawrence et al., 2006, p. 1378). Conversely, research has demonstrated that stigma is less of a barrier for older adults, when compared to younger adults (e.g., Mackenzie, Gekoski, & Knox, 2006; Mackenzie, Scott, Mather, & Sareen, 2008).

In addition to stigma, recent research has highlighted other important and influential themes related to older adults’ experiences seeking mental health treatment. For example, Schtompel and colleagues conducted in depth interviews with older adults with chronic physical and mental health conditions and developmental disabilities to explore their experiences seeking treatment for these conditions (Schtompel, Whiteman, & Ruggiano, 2014). A key theme emergent from this research was that older adults wanted to speak with health care professionals who would hear and understand their feelings and experiences, in other words, listen to their stories. Other main themes included not wanting to be a burden to others in their life as a result

of their chronic conditions and treatment seeking processes, as well as the importance of seeking out additional, community-based sources of support beyond formalized treatment programs. The limited research that has explored the treatment seeking experiences of older adults with mental health problems has focused on barriers to service use, including mixed findings regarding the impact of stigma, as well as findings supporting the importance of being heard and understood by medical professionals, fear of being a burden to others, and interest in non-systemic treatment options. Beyond these identified barriers, there is a need to broaden our understanding of the multidimensional and dynamic experiences that older adults' face when seeking mental health treatment.

There is an absence of research examining the stories that older adults' narrate regarding their experiences seeking treatment for mental health problems. This highlights the importance of narrative analysis in this area, as a methodology and way to understand the unique and subjective treatment seeking experiences of older adults with mental health problems (Clandinin, 2007). Further, contextualized within the extant literature's history of positivistic and oversimplified models describing processes by which individuals come to seek mental health treatment, narrative analysis allows for the openness required to capture holistic experiences that reflect the relationship between the individual and their broader sociocultural context, and the ways in which individuals make sense of mental health problems and treatment seeking.

Narratives of Mental Health Problems and Treatment Seeking

Narrative analysis. Narrative analysis provides a route to explore the meaning making processes connected to older adults' experiences with mental health problems and seeking treatment (Andrews, Squire, & Tamboukou, 2013; Clandinin, 2007; Holstein & Gubrium, 2012; Riessman, 2008). Within this framework of analysis, narratives can be defined as "brief,

topically specific stories organized around characters, setting, and plot. These are discrete stories told in response to single questions; they recapitulate specific events the narrator witnessed or experienced” (Riessman, 2008, p. 6). It is through narratives that individuals make sense of their experiences and construct and reconstruct their sense of self (Connelly & Clandinin, 2006).

When describing the absolute importance of narrative, Randall and Kenyon write, “Not only are stories foundational to our emotions, pivotal to our relationships, central to our identity, and essential to our construction of experience itself, but even the self, it is argued, is narrative in nature” (2004, p. 333). Freeman echoes the importance of narrative in making meaning of experiences (Freeman, 1994). He supports the role of metaphor in narrative as well as the flexibility with which the self is continuously being reconstructed through narrative, “The process of autobiographical reflection is a fundamentally metaphorical one: a new relationship is being created between the past and present, a new poetic configuration, designed to give greater form to one’s previous and present experience. The text of the self is always being written” (Freeman, 1994, p. 30).

Illness narratives. When individuals experience life challenges such as illness that affects their very sense of self and core identity, they rely on the telling of narratives to reflect upon their experiences, communicate their experiences to others, and regulate their emotions (Frank, 1995). Within health care, the telling of narratives or stories is evident and impactful in the ways in which individuals describe and communicate their symptoms, to the chart notes that are documented by health care professionals, to the treatment options that are selected and eventually evaluated in oral and written communication methods. The resulting narrative that an individual has about their health problem and experience seeking and undergoing treatment is therefore an active co-construction of the individual/patient’s story, the story of health care

professionals, and the story of friends and family who have directly or indirectly witnessed these experiences. Eminent scholar in the field of illness narratives, Arthur Frank, highlights the importance of telling and listening to illness narratives when stating, “Serious illness is a loss of the destination and map that previously guided the ill person’s life. Ill people have to learn to think differently. They learn by hearing themselves tell stories, absorbing others’ reactions, and experiencing their stories being shared” (Frank, 1995, p. 1). In his book, *The Wounded Storyteller*, Frank later elaborates, “Stories have to repair the damage that illness has done to the ill person’s sense of where she is in life, and where she may be going. Stories are a way of redrawing maps and finding new destinations” (Frank, 1995, p. 53). While recognizing that each individual who experiences an illness tells a unique story, Frank outlines three main shared types of illness narratives: restitution, chaos, and quest. He notes that the restitution narrative, the most common illness narrative type, exemplifies the storyline, “Yesterday I was healthy, today I’m sick, but tomorrow I’ll be healthy again” (Frank, 1995, p. 77). The restitution narrative is the culturally preferred narrative, as told by television and film, commercials, sociology, psychology, and medicine. Individuals who tell restitution narratives attempt to distance themselves from illness by describing it as temporary. Unlike the restitution narrative, which tells a story of return to health, the chaos narrative tells an anti-story of the progression of illness. Chaos narratives have an absence of narrative order, lack coherent sequence, and are referred to as anti-narratives due to their lack of narrative plot and structure. In Frank’s last narrative type, the quest narrative, the narrator accepts their illness and seeks to understand and learn from their illness experience. Illness is described as a journey in quest narratives, with the main character traveling through stages of departure (e.g., diagnosis), initiation (e.g., treatment), and the return to health (no longer ill but marked by illness).

Narrative gerontology. Illustrated by the field of narrative gerontology, the telling of narratives as a way to make meaning of experiences is a particularly important and fruitful endeavour for older adults. First, and perhaps most immediate in supporting the importance of the telling of narratives for older adults, the challenges and changes of later life such as loss of friends, family members, occupational status, and previously-held roles, as well as possible decline in physical health and mobility, can lead to what Randall refers as a “crisis of self understanding” (Randall, 2011, p. 24). Prominent questions that might follow these late-life challenges include, “Who am I and what is my story now that I am no longer employed or needed or able” (Missine, 2003, p. 113). In addition to old age being a time to confront possible crises of identity and meaning, the telling of narratives and corresponding meaning making process is also particularly important and timely for older adults, as indicated by prominent lifestyle and cognitive changes that accompany older age (Cohen, 2005; Coleman, 1999; Randall, 2011). With regard to lifestyle changes, aging may promote enhanced self-reflection through the increased availability of time due to retirement and corresponding change of pace. Age also provides older adults with a lifetime of stories to tell and the potential to make meaning of these stories and experiences (Randall, 2011).

Shared thematic storylines in the narrative gerontology literature include stories of the ‘reminiscence bump’ and the telling of big and small stories (Kenyon, Bohlmeijer, & Randall, 2011). Stories commonly told in the reminiscence bump period of life are events that have occurred in one’s young adulthood, when developmental tasks included leaving one’s home and family of origin, seeking to further education or obtain a career, forming a relationship and/or family, and creating a home for oneself (Kenyon & Randall, 1997). The telling of big stories

refers to life stories, and the telling of small stories, to the narration of topically oriented stories derived from everyday events and exchanges (Bamberg, 2007; Freeman 2007).

Making meaning of mental health problems. Using narrative analysis, a growing body of research has examined the meaning that individuals construct regarding their experiences with mental health problems and treatment seeking. This research includes studies on changes in identity with mental health problems and studies on descriptions of mental health problems and treatment seeking (e.g., Boschma, 2007; Casey & Long, 2002; Casey & Long, 2003; Davies, 2001). A small subset of this research, within the field of narrative gerontology, has focused on the experiences of older adults with mental health problems (e.g., Hiskey & McPherson, 2013; Holm & Severinsson, 2014; Ogden, 2014; Perry, Ruggiano, Shtompel, & Hassevoort, 2015). Research in the area of identity change with illness indicates that mental and physical health problems and their corresponding symptoms threaten identity and sense of self when narratives of illness and decline overwhelm one's life story (e.g., Baldwin, 2005; Crossley, 2000). Mental health problems challenge previously established identities by changing the ways individuals think, feel, and behave, therefore changing their experiences, relationships, and roles. When this identity change occurs, people attempt to restore coherence in identity and meaning of experiences through the ordering of chaotic events in a narrative (Crossley, 2000). Research has also delineated that the ways in which individuals understand their mental health problems affect their experience with mental health problems, the ways in which they integrate their problem into their identity, as well as their pathway to treatment (e.g., Cardano, 2010; Kokanovic et al., 2013; Mallinson & Popay, 2007).

Research by Davies (2001) examined the narratives of adults with mental health problems. The main themes emergent from participants' narratives included stories of loss

(physical, mental, and social loss), stories of survival and self-discovery (fighting illness), and stories of the self as patient (medicalized experiences). Further analyzing narratives of mental health, Boschma (2007) investigated family responses to psychiatric treatment through individual interviews with family members who experienced mental health problems themselves or in the context of their family. The main thematic storylines emergent from this research included, but were not limited to, attempts to normalize the past (to view past experiences with mental health problems as normal); the complexity of mental health problems; and ambivalence about the dominant biomedical explanation of mental health problems (for some, having a specific diagnosis was comforting and freeing, while for others, its meaning was limited and failed to map onto, and explain, their complex experiences). Research by Casey and Long (2002) detailed the changing sense of identity that adults with mental health problems come to experience, through a narrative analysis of an interview with Gary, a man experiencing mental health problems. For Gary, having a diagnosis was integral to him feeling heard and understood, and in leaving him with a sense of control and sense of connectedness to others with mental health problems. It was also important to Gary's identity that he made sense of his symptoms, and the ways in which they affected his identity.

Research by Cardano (2010) also explored the relationship between mental health problems and identity construction. In this research, participants' narratives were marked by three explanations for the cause of mental health problems: biomedical; spiritual-religious (devil and evil spirits); and psychosocial (family relationships and occupation). These explanations helped participants to make sense of their experiences and integrate these experiences into their identities. This multi-causal explanation of symptoms was also shared in research by Kokanovic and colleagues (2013), who explored the ways in which primary care adult patients in Australia

spoke about depression. Participants in this study spoke about depression in terms of multi-causal explanations (i.e., biological, social, psychological) and their uncertainty about the concept of depression. Research exploring the ways in which Pakistani and White adults from the United Kingdom spoke about depression indicated the use of everyday words and images, medicalized terms, as well as somatic experiences (Mallinson & Popay, 2007).

As indicated above, there is limited research that examines the experiences of older adults with mental health problems and the meanings that they derive from their experiences with mental health problems and treatment. Using Erikson's developmental theory as a framework, recent research by Perry and colleagues (2015) explored the ways in which older adults managed changes in physical and mental health, and the ways in which these changes impacted their identity and progression through Erikson's developmental stages. The ultimate goal in Erikson's theory is to move through the last developmental stage and resolve the psychosocial crisis between the conflicting forces of ego integrity versus despair (Erikson & Erikson, 1997). Erikson explained that if individuals reflect back on their lives and believe that they accomplished goals and led a successful life, this results in ego integrity; however, if individuals reflect on their lives and feel that they did not accomplish their goals, this results in despair. Overcoming this last crisis is complicated by changes in physical and mental health, and the ways in which these changes affect one's sense of self. Findings of research by Perry and colleagues (2015) indicated that the older adults they interviewed engaged in creative strategies to maintain autonomy in the face of their illness, and applied earlier learning and skills to resolve complicated challenges in later life, thus navigating the final stage of Erikson's Developmental Theory.

In exploring the experiences of older adults who had experienced life-long schizophrenia, Ogden (2014) noted the key theme of "my life as it has value." Participants explained that

although they had experienced schizophrenia throughout their lives, their illness did not define them, and it was less important to them than other areas of their lives. This allowed participants to hold on to their pre-illness identities. Narrative research has also explored the ways in which older adults define their experience of traumatic events (Hiskey & McPherson, 2013). Hiskey and McPherson conducted focus groups with older adults in the UK concerning their perceptions of traumatic events and the term trauma. “That’s just life” emerged as a core storyline in the ways in which older adults talked about the term trauma, minimizing experiences of hardship or the effects of war, and describing traumatic events as a normal part of life. A second theme that arose from focus groups was a response of “don’t tell anyone” concerning traumatic events and resulting distress, and the third and related theme was “no self indulgence,” likening treatment seeking to being a frivolous or indulgent act. Finally, in a recent systematic review of older adults’ narratives of depression, Holm and Severinsson (2014) highlighted core narrative threads in the ways in which older adults spoke about depression. The need for courage, strength, and self-reliance; holding responsibility for illness; and “wearing a mask of normalcy to hide the shame,” were key storylines in this research.

Objective

Research in the area of narratives of mental health problems is lacking the voice of older adults. However, extant research in this area provides support for the importance of understanding the meaning that individuals construct regarding mental health problems and seeking psychological treatment; the change in identity that individuals experience when faced with mental health problems; the importance of defining and explaining mental health problems in ways that fit with one’s evolving understanding of the self; and the silence and stigma surrounding mental health problems and treatment. The objective of the current study is to

explore the experiences and meaning making processes of older adults with mental health problems who have sought psychological treatment. Through the use of narrative analysis, I hope to give voice to older adults' unique experiences seeking treatment for mental health problems. The main research question that I sought to examine through this study was: how do older adults describe and assign meaning to their experiences seeking psychological treatment for mental health problems? Findings of this research contribute to the developing literature in the area of narrative gerontology and literature in the area of mental health service use among older adults, with the ultimate aim of reducing the gap in mental health treatment for older adults.

Method

Participants and Recruitment

I obtained ethics approval for this study prior to commencing data collection. Two clinical geropsychologists working at a tertiary-care hospital setting facilitated the recruitment process. These collaborators described the proposed research study to their patients who were pursuing outpatient psychological treatment, at least 60 years old, and with no noticeable signs of cognitive impairment (Appendix A). Recruitment, interviews, and data analysis occurred concurrently.

Data Collection Procedure

To address transportation as a potential barrier to participation, participants had the option of completing the interview at the University of Manitoba (1), in their home (12), or in a research room at a local hospital (2). Data collection for this study occurred between October 2013 and July 2014. Participants began by completing an informed consent form (Appendix B), followed by a background questionnaire containing basic demographic information in order to describe the sample (Appendix C). Following the completion of the background questionnaire,

participants completed an in-person semi-structured in-depth individual interview. Interviews ranged in length from 60 to 120 minutes and began with the central question: “What brought you in for treatment?” Depending on the comprehensiveness of participants’ responses to this initial question, I asked more specific follow-up questions and employed neutral probes such as ‘could you tell me more’ for additional information (Appendix D). Participants received a \$10.00 gift card to a local coffee shop for participating in this research.

Analytic Procedure

Interviews were audio-recorded and professionally transcribed. I analyzed transcripts according to Riessman’s method of narrative analysis (2008). I chose to analyze narratives according to Riessman’s approach due to the integration of story content, form, organization, and dialogic/performative aspects that is stressed in this approach (Riessman, 2008). Further, although other narrative analytic approaches, including Fraser’s line by line approach, are rigorous, the depth and holistic nature of Riessman’s approach in the integration of the aforementioned areas of analysis is well-suited to the complex nature of the current work (Andrews et al., 2013; Fraser, 2004; Riessman, 2008). The depth of this analytic approach allows researchers the opportunity to investigate the “inside” aspects of aging (Kenyon & Randall, 1999, p. 1). As indicated above, Riessman’s approach to narrative analysis provides the opportunity to analyze specific dimensions of story telling; namely thematic, structural, and dialogic/performative, as well as the opportunity to integrate these analytic dimensions into the understanding of a global and holistic story (Riessman, 2008). I began my analysis by examining each dimension (i.e., thematic, structural, performance) separately across each individual interview. After completing this process, I re-analyzed transcripts to compare and contrast interview findings at each level of analysis. After comparing interview findings at each level of

analysis, I integrated the three levels of analysis into my emergent and holistic understanding of participants' narratives. I documented observational field notes during each interview, and incorporated interview field notes into ongoing analysis.

At the thematic level of analysis, I focused my attention on the substantive content of the narrative. When analyzing at the thematic level, emphasis is placed on what is being said as opposed to how, why, or to whom (Riessman, 2008). Therefore, the "act of narrative reports and the moral of the story" are the pointed areas of exploration at the thematic level (p. 62). This level of analysis allowed me to address the main thematic storylines related to older adults' experiences with mental health problems and treatment seeking.

At the structural level of analysis, my focus changed from the content of the narrator's experience to the narration of the narrator, in analyzing the way in which the content was communicated. When analyzing at the structural level, attention is focused on the organization of the narrative (e.g., does the story that is told have a beginning, middle, and end), the structure of the narrative (e.g., is the story organized in a linear or chaotic manner), the main plot in the narrative and main character(s) of the plot, and the use of language (e.g., syntax, metaphors). In the narrative gerontology literature, researchers pay particular attention to the temporal structural of narrative, as a way to capture important information pertaining to the ways in which the individual views their identity, illness, and life as a whole (Randall & Kenyon, 2004). With many changes in role-status and health throughout the late lifespan, many older adults are faced with questions of identity. Brockmeier (2000) elaborates on the importance of examining temporal dimensions in autobiographical narratives when noting that narrative "is not so much about time but about times . . . every narrative about my past is always also a story told in, and about, the present as well as a story about the future" (p. 56). The structural level of analysis

allowed me to examine the underlying nature of the stories that are told by participants. It also promoted my interpretation of multiple narratives including illness narratives.

Finally, at the performance level, I examined the following core question: Why is the storyteller telling this particular story at this particular time, to this particular listener? At this level of analysis, I explored the relationship between myself and participants and our interaction in co-constructing the resulting narrative. When analyzing narratives at the performance level, I was also concerned with the context of the interview (e.g., environment), my influence on participants' telling of narratives, and the societal pressure that participants might have been under to tell certain narratives. The structural and performance levels of analysis provided me with the opportunity to further explore the construction of meaning within older adults' treatment seeking experiences.

Epistemological Framework

I analyzed narratives through the lens of social constructionism. In line with narrative analysis, social constructionism flows from the interpretive tradition, and views narratives as an active co-construction of the participant and the interviewer, both having influenced the telling of the story and its meaning (Riessman, 2008). According to this approach, participants' narratives are not factual reports of ultimate and confirmable truths, but rather, accounts of the experiences that they wish to share at a particular time and place and to a particular listener. Furthermore, I view the resulting narratives as demonstrating participants' efforts to understand, interpret, and construct meanings of their complex experiences in the context of their overarching sociocultural resources (e.g., their dominant cultural values and beliefs).

Trustworthiness

Although there are many different ways to assess the rigor or trustworthiness of qualitative data, I remained consistent with my guiding analytic and epistemological frameworks – namely, narrative analysis and interpretive/social constructionist paradigm – and followed the “sensitizing concepts” of trustworthiness outlined by Riessman (2008, p. 185). Given the philosophical underpinnings of narrative analysis – the social constructionist approach that delineates multiple truths in experience as opposed to a single factual truth of experience – it is methodologically inconsistent and inappropriate to include other commonly used methods applicable in assessing the validity of more positivistic qualitative approaches, such as checking factual details of interview transcripts with participants. Stories evolve and change as participants reflect on their experiences and actively attribute meaning to these experiences. This is particularly true for individuals who experience traumatic events, including mental health problems, which disrupt a previously established story, identity, and coherent narrative flow. Therefore, I supported trustworthiness by identifying points at which participants’ narratives unite and converge thematically and structurally, as well as points at which narrative storylines and structures diverge. I also supported trustworthiness by considering alternative interpretations of dominant narrative storylines, as well as providing verbatim quotations from participant narratives and contextualizing narratives in time, place, and story teller.

Audit trail. As an additional sensitizing concept in a trustworthy research design, I kept a detailed research diary and clearly documented the steps that I took in my analytic procedure, as well as important decisions that I made throughout the research process. I documented detailed field notes after each interview, and compared convergence and divergence of field note observations with emerging narrative storylines. I paid particular attention to, and documented,

reflexivity, defined as “a confessional account of methodology or as examining one’s own personal, possibly unconscious, reactions. It can also mean exploring the dynamics of the researcher-researched relationship and how the research is constituted” (Finlay, 2002, p. 536).

Negotiated validity. I consulted with qualitative research group members regarding my analysis of narratives. This process helped to illuminate the concept of reflexivity in the ways in which I was thinking about this research topic, research participants, and emerging narrative storylines. This process also helped me to increase the flexibility, creativity, and thoughtfulness with which I was analyzing data.

Reflexivity. The documentation of reflexivity is vital given the philosophical underpinnings of social constructionism in this study, as well as my narrative analysis at the performative level. I am a White, 30 year-old female doctoral candidate in clinical psychology. I have had extensive training in clinical psychology through course work, practicum placements, employment in private practice, predoctoral residency in clinical psychology, teaching, and research. My clinical training and experiences have included hundreds of intake interviews and thousands of hours of therapy with clients. These experiences and skills helped me to convey openness and empathy toward participants, which I believe was pivotal to making them feel comfortable and at ease during the interview process, leading to the co-construction of narratives that were rich in depth and scope. Central values that I have in relation to this research topic include my deep respect for older adults, desire to listen to their narratives, my belief in the efficacy of psychological treatment, and my view that psychological treatment should be made more accessible to older adults.

The stories that I heard, and my interactions with participants, demonstrated that I was possibly both an insider and an outsider (Luttrell, 2000). I use the terms possible insider and

possible outsider, as the clear-cut boundaries of what might typically constitute these terms were often described in blurred ways. For example, the most obvious insider/outsider difference might appear to be age, as I was approximately 30 years younger than the youngest participant.

However, participants often spoke about themselves as being “young at heart” or “working well with young people,” supporting a possible insider relationship. Similarly, another possible distinct relationship might be that of patient and non-patient; however, participants often used phrases like “we all have difficulties,” diminishing these otherwise clear-cut roles or boundaries. Several participants also discussed a possible insider relationship when discussing the role of advocacy in health care and the importance placed on “us” to advocate for the rights of seniors.

One example that explains the possible outsider relationship is inherent in participants’ descriptions of the treatment seeking process, which highlights the patient as separate from health care professional, often prioritizing the voice of the health care professional. Several participants appeared to self-censor their experience with health care professionals, portraying a reluctance to mention names of doctors and clinics, and admitting fear of saying something derogatory about a physician in my presence. Further, several participants appeared to take on the role of teacher, viewing me in the role of a student. Examples of this include personal and professional advice giving regarding the potential for me to be a parent or caregiver in the future, career advice, and advice to shorten my lengthy dissertation title. In line with reflexivity, there is a growing literature exploring the impact of qualitative interviews on participant coping, with research supporting the therapeutic effects of qualitative interviewing (e.g., Corbin & Morse, 2003; Funk & Stajduhar, 2009; Lowes & Gill, 2006). This was evident in the current study, as participants noted that they were “honoured” to have been invited to participate in this research,

voiced empowerment and validation in having their voices heard and understood, and hoped that their interviews would be helpful or healing to others.

Findings

Participant Characteristics

The 15 older adults who participated in this study had a range of complex mental health problems including anxiety and depressive disorders and caregiver stress. Many had experienced traumatic events throughout their lifetime, most described experiencing comorbid physical health problems, and several were caregiving for a parent or a spouse with physical, cognitive and/or mental health problems. All participants were engaged in psychological treatment at the time of their interview. Eleven women and four men participated in this research. The average age of participants was 72 years (range 61 to 86). Overall, participants were highly educated, with an average educational attainment of 14 years (range 11 to 18 years). The majority of participants (8) were married, 4 were widowed, and 3 were separated/divorced. Regarding racial/ethnic background, the majority of participants identified as White (14), and one participant identified as Métis. When asked about work status, the majority of participants reported being retired (13), one participant reported working full-time, and the other participant part-time. Participants endorsed being retired for an average of 14 years (range several months to 50 years). Participants reported a varied household income, with 1 participant falling in the \$0-\$19,999 bracket, 5 in the \$20,000-\$34,999 bracket, 5 in the \$35,000-\$59,999 bracket, and 4 in the \$60,000+ bracket.

Narrative Storylines

Although each participant's life story and treatment seeking story is unique, there are shared, underlying storylines held in common from narrator to narrator. The main storylines that were prominent across participants' narratives of treatment seeking included: resistance to being

labeled with mental health problems (telling stories of resistance, defining mental health problems, and experiencing internal role conflict); muddling through the treatment seeking process (manifestations of chaos and system-level barriers); and interpretations of psychological treatment (lack of knowledge/understanding, awareness of stigma, and fear and mistrust). These storylines integrate thematic, structural, and performance levels of narrative analysis (Riessman, 2008). Throughout interviews I was primarily positioned as an audience member and a listener, poised to hear and understand participants' stories of the arduous journeys that they were on in their understanding of their mental health problems and their treatment-seeking experiences. I wondered why participants shared their stories with me, and one possibility that arose in my mind was that perhaps no one else had asked. Perhaps participants had been waiting to tell their story, and this was their opportunity.

Resistance to being labeled with mental health problems. Erving Goffman's seminal work in the area of stigma raised the concept of a *spoiled identity* as it relates to the impact of stigmatized labels (such as being labeled with a mental health problem) on one's developed sense of self (Goffman, 1963). Goffman writes, "...when the individual first learns who it is that he must now accept as his own, he is likely, at the very least, to feel some ambivalence; for these others will not only be patently stigmatized, and thus not like the normal person he knows himself to be, but may also have other attributes with which he finds it difficult to associate himself (p. 37)." He goes on to write, "Given the ambivalence built into the individual's attachment to his stigmatized category, it is understandable that oscillations may occur in his support of, identification with, and participation among his own (p. 38)." Consistent with Goffman's views, a central part of participants' narratives was the negotiation of where their mental health problems were situated within their identity. Participants described this as a search

for meaning and answers after experiencing illness and a corresponding change in functioning, for example, noting, “I now need to have an explanation of who me is.” The three narrative threads interlaced within this main thematic storyline include: telling stories of resistance; defining mental health problems; and experiencing internal role-conflict; and highlight the ways in which participants emphasized resistance to being labeled with mental health problems in their treatment seeking experiences.

Telling stories of resistance. Woven throughout participants’ narratives were stories of illness and health, of weakness and strength, and small (of mental health problems/treatment) and big (of broader/important life events) stories. The interplay of these storylines throughout interviews suggested meaning making – that participants were actively constructing meaning around their experience, and the way in which it could be integrated into their identity. Further, this fluctuation in storytelling highlighted participants’ deeper need to convey information that they viewed as important to their identities. Prominent authors in the field of narrative inquiry, and the telling of illness narratives in particular, refer to the narration of big stories as the tracing around wounds (e.g., Frank, 1995). Perhaps when the pain of telling small stories of mental health problems and treatment seeking became too much to bare, participants switched to telling big stories. The big stories that participants told were situated in the past and contained reflections on childhood histories and reminiscence bump stories – stories that pertained to participants’ lives when they were in their early adulthood (i.e., 18-30 years old) and were getting married, having children, moving into a first home, and beginning careers (Kenyon, et al., 2011). Another possible compatible and fitting explanation of participants’ telling of big stories is offered by Freeman (2007), who argues that big stories are a step removed from the immediate present moment, adding that big stories are sometimes viewed as renditions of ‘life on holiday.’

Freeman elaborates that big stories may reflect “abstract, even artificial, artifacts of just those kinds of reflective occasions that life story types wished to create (p. 155).” In line with the interpretation of big stories as tracing around wounds, perhaps the telling of big stories allowed participants the choice and flexibility of incorporating their small story of mental health problems and treatment seeking into their ever-evolving bigger story, actively reconstructing their sense of self.

One example of this integration of big and small story narration was evident in my interview with Mary (pseudonym), an 80 year-old widow who lives at home independently. I interviewed Mary in her home, where she had resided for over 50 years. Mary’s home, filled with objects, paintings, and piles of loose papers and newspapers, demonstrated signs of decline. Before starting the interview, Mary apologized, forecasting that she might cry during the interview, calling herself “weak” and “emotional.” Here, Mary positions me as her audience, to bear witness to stories of pain, perhaps prompting myself as the student to be a supportive listener. Mary was tearful throughout the first part of the interview, as she described her experience with depression, suicide attempts, social isolation, and chronic physical health problems. Midway through my interview with Mary, she veered away from the telling of small stories of mental health problems and treatment seeking to the telling of big stories, in particular, stories in the reminiscence bump period of her life. When she switched to the telling of big stories, Mary’s affect appeared to lift from sadness, as her narration transported her to a more joyous part of her life.

Mary: I think I lost my train of thought (pause). I had a very wonderful marriage. I had a very wonderful husband, but he died, 20, almost 20 years ago . . . We had 30 years of marriage . . . We never had much money but we enjoyed ourselves. We had fun.

One way to think about the switching from small painful stories of complex mental and physical health problems to big stories of a lifetime that was more enjoyable, allows Mary the capacity to distance herself from illness and hold onto her identity as a healthy, happy person.

As a further depiction of resistance to a stigmatized illness, participants oscillated between telling narratives of strength and health and narratives of weakness and illness. Perhaps participants were actively attempting to balance strength and weakness, creating sense and meaning around their current position, standing in the face of illness and a prescribed treatment for their illness.

My interview with Wayne, a 67 year-old married man, exemplifies this type of oscillation between illness and strength. I met with Wayne in a research room at the hospital where he sought psychological treatment. With assistance from a cane, Wayne ambulated slowly and cautiously to the office, bowing his head down. When Wayne reached the office, he sat comfortably in a chair in a relaxed and dignified posture, his confidence demonstrating a striking shift when he began speaking with advanced prose. When discussing what brought him in for psychological treatment, Wayne described an experience that was difficult and frustrating for him:

Wayne: I'd gone to the Re-Store on Archibald and parked in the parking lot and I was the first car, so it wasn't that far from the building to the car. And you know, I marched in, felt fine, looked around, and then when I came out and the car seemed like it was a long way away and I started to walk out. And I just felt kind of weird so I kind of went back to the area by the front doors and I walked around a bit back and forth to kind of loosen up a little bit and trying to, but it still didn't feel right. But now I was on the side of the

parking lot and I walked, you know, again, out to Archibald and back and trying and I thought, if I can walk that far, surely I can walk 20 feet to the stupid car.

Shortly thereafter, Wayne shifted away from weakness to strength as the dominant voice in his narrative. As Wayne juxtaposed these two extreme storylines, balancing weakness and strength, an active construction of meaning surrounding the way in which his illness had affected his identity was apparent.

Wayne: I was out at the beach, which is sort of a rougher, sort of a desolate kind of terrain, and I do some fashion photography at times and we were doing a shoot, and the person that I was with had brought like a variety of wardrobes and things. ... As I said, it's slippery, she just couldn't even hack it. So I took the three things she was carrying plus my stuff, and I was carrying all that stuff for her, and walking on these slippery rocks without the cane and it didn't bother me at all. So I don't know what that means, but I guess it's encouraging. Except when you need it you really work for it, like when you're walking in the mall, it all goes away.

Wayne positions himself as the central, masculine, heroic character, rescuing the struggling supporting character, and presenting himself in a desirable way. Apparent in the last line of this excerpt is Wayne's process of making sense of the integration of weakness and strength and illness and health, into his sense of self. He notes both encouragement, that there are times that he is able to exist without his disabling anxiety, as well as discouragement, that there are times that anxiety takes over his voice of strength, and overcomes his ability to exist in the world and complete daily tasks such as walking in the mall.

Defining mental health problems. In line with the ways in which older adults told stories of resistance, the ways in which they defined and spoke about their mental health problems may

have reflected their attempt to integrate their mental health problem into their evolving identities. Participants' narratives portrayed a difficulty defining and describing their mental health problems, as well as a tendency to describe mental health problems in mysterious and uncontrollable terms, in ways that minimized and distanced the problem from their established identities, as well as in dualistic and physical terms. Problem definitions were a focal part of interviews, and often changed or evolved throughout the interview, as participants actively searched for meaning in their experiences.

One example of the challenge of defining mental health problems can be heard in my interview with Maggie, a 70 year-old widowed woman. I interviewed Maggie in her home. After ringing the doorbell several times and returning to my car to try to reach her by telephone, Maggie finally answered the door and invited me into her home. She wore a medical emergency necklace, later noting that this increased her feeling of safety and security. Maggie spoke about what brought her in for psychological treatment:

Interviewer: So in general, what brought you in for treatment at St. Boniface Hospital?

Maggie: Well in September I was feeling really poorly and one night I phoned, in the evening I phoned one of my neighbours and asked them to come over, cause I said I was feeling so awful. And she came over and she said, I think I'll call an ambulance. I said, oh no, I don't need an ambulance. So she said, well then I'm taking you to the hospital.

Interviewer: Ok, tell me more about that.

Maggie: Yeah and that was in the evening and I was there until the next afternoon. And I guess they, then my sons came and I guess they hadn't realized what rough shape I was in and they said I needed help.

In the excerpt above, Maggie used vague terms to talk about her symptoms and difficulties, such as “feeling really poorly,” “feeling so awful,” and being in “rough shape.” Later on in the interview, as Maggie continued to make sense of what it was that she was experiencing, she noted:

Maggie: I guess you have to say it’s an abnormal fear of being alone or being, I think it’s really kind of a loneliness thing that’s sort of just grown into more than being just lonely, but I’m not sure.

Maggie’s description of her symptoms and difficulties evolves to become less vague, increasingly clear, and more meaningful as she describes “fears” and “loneliness,” as opposed to using unclear descriptors of her internal experience. This evolution of definition apparent in Maggie’s interview exemplifies her creation of meaning of her experience with mental health problems, and the ways in which her experience is internalized into her self-story. Further, Maggie’s understanding and labeling of her difficulty as loneliness, in comparison to possible diagnostic terms such as an anxiety or depression, is not pathologic, and is perhaps used as a way to soften the integration of this difficulty into her identity.

Wayne’s narrative is a primary example of the dominant narrative that older adults’ employed to define mental health problems – definitions that were marked by ambiguity and included dualistic, physical, mysterious, and uncontrollable terms. Wayne’s narrative also emphasizes the primary voice of the health care professional in defining mental health problems for older adults. Wayne begins this excerpt by talking about his route to psychological treatment:

Wayne: So I saw a neurologist and my family doctor, and nobody really knew much. Dr. G was the last person I saw. It probably took a year and a half to get to see him and (pause), ah I was in his office and he said, come on down and walk down the hall, and

even that was, at that point, really traumatic for me because there was this huge waiting room with all these people in it, and ah as you probably know, any kind of anxiety elevates itself when there are people around.

Interviewer: Yes.

Wayne: So I walked down the hall. It was a hospital setting and they had these little things on the walls. I kind of just used them a little bit. And he watched me walk and he said, you know there's nothing wrong with your balance. It's probably psychosomatic, um and that was about the end of treatment. He didn't really describe anything.

Evident in Wayne's narrative is his difficulty defining his problem, and as well as a form of system-induced reliance on his team of health care professionals to help him to define and elaborate on the problem that he was experiencing. Wayne's affect was marked by frustration, as he narrated the last sentence in the excerpt concerning an absence of definition and lack of further support.

Wayne's definition of his mental health problem evolves throughout the telling of his story to become more descriptive. He goes on to elaborate on his own experience and definition of the problem that he is experiencing, and continues to express health care professionals' inability to describe or label his experience.

Wayne: So it is that kind of very weird um insidious, you know, lurking sort of um phenomenon . . . A sensation that kind of creeps up on you and it surprises you (pause). I thought somebody somewhere must have had some experience with it . . . It's so strange how something can take hold of your emotions or your brain or your thinking power, and just turn you into a wet noodle where you can't think for yourself. It's very strange (pause).

Further on in the interview, Wayne includes his psychologist's definition of his mental health problem, perhaps as a way to help him to construct and navigate through his own definition of his experience, and begin to incorporate a working definition of his experience into his identity.

Wayne: maybe I was overanalyzing because [my psychologist] feels that it's just straight ahead anxiety, the manifestation of a certain kind of anxiety, and you have to start channelling your thoughts and so on.

Highlighted in the excerpts above, Wayne uses distancing and minimizing language to describe his experience of mental health problems, including "it," "just straight ahead anxiety," and "certain kind of anxiety." He also uses the phrase "this anxiety" and "this sensation" as opposed to more internalizing and accepting phrases such as my anxiety, my sensations, my feelings, and so on. The use of minimizing and distancing language as well as evolving definitions of mental health problems throughout Wayne's interview may indicate his urge to present a desirable self in the story.

Physical definitions of mental health problems were shared across participant narratives. Barbara, a 66 year-old married woman, provides a central example of the use of physical terms to describe mental health problems when she speaks about how she recognized that she needed to seek help:

Barbara: My body, my body reacted. It was like shaky. I just felt physically, like when I heard the news – I knew my dad was gonna die, but when I got the news, it was tight right across my shoulders and my back . . . This was too hard of a blow and you know, you're knocked down. The Bible says, you're knocked down but you're not destroyed. I

felt destroyed . . . I recognized what was happening in my body and that my body was responding in ways that I was not used to, and I knew that I needed help.

Participants also used physical metaphors to describe their experience of mental health problems. For example, Beth noted, “I had reached a brick wall kind of by the time he got into the home and I was exhausted.”

Joanna’s narrative provides another powerful example of defining mental health problems in physical terms. When asked about what brought her in for psychological treatment, she replied as follows:

Joanna: Well it kinda all started when I had the heart palpitations, and it just, it just kinda snowballed into a lot of different things. When I had the heart palpitations, I had them when I was in [location] visiting my sister, and then I had a doctor’s appointment when I got here and they continued when I came back. So of course, I mentioned it to him and he did all the tests, you know, the echo and the stress test and I wore a heart monitor. . . .

Like I was even feeling the heart palpitations when they were okay but I was still feeling them and then it went to headaches and I had stomach problems.

Joanna went on to describe difficulty trusting her doctor when her doctor diagnosed her with anxiety, and her difficulty understanding that her physical symptoms were likely an indication of a mental health problem. Joanna takes us through her process of understanding and defining her mental health problem in the following excerpt:

Joanna: I kept doubting my doctor about the headaches. I mean, I knew the heart palpitations and it was being controlled by the medication, so, and I would take my blood pressure and the heart beat and it would be normal, but I would be feeling it, so I kept kinda telling myself, well that, you know, it’s fine. It’s fine. Your heart, cause they said,

my heart is fine. It's just the rapid heartbeat. So I kept telling myself, you're fine. You're fine. And I would write little sticky notes – relax, you'll be okay, all those things, so it would just kinda, I would just kinda try and stick it in my head. And then when the headaches started, ugh, well then, when I talked to my doctor he said, it's just related to the anxiety, and I was kinda thinking, well how does he know that. He never did any CAT scan or anything, so I was doubting him. And then finally I realized that he was right.

Interviewer: Okay. And how did you realize that?

Joanna: Well when, it's a funny thing, when I'd start feeling a little anxious and I'd feel light-headed and then it would kind of develop into a headache. When I started feeling like that, I thought, okay, I'm gonna just test myself with the Ativan because Ativan is not for headaches – it's just to make you relax. Well the headaches didn't completely go away but they were a lot better, so I knew it was related. So I think the thing was believing him and trusting him. . . it's hard to imagine that anxiety can bring on those physical symptoms. I guess I didn't believe that.

Here, Joanna describes her own active process of investigating whether her physical symptoms could be attributed to a mental health problem. It is apparent that although the health care system pulls for a form of patient-passivity in diagnosis and treatment decision-making, Joanna is initially resistant toward the diagnosis of an anxiety disorder from her doctor, and insists on taking an active approach to understand her symptoms and illness.

Experiencing internal role conflict. As participants narrated the integration of their mental health problem into their identity, they also explored the ways in which their mental health problem and new role as patient would fit with other, more established roles. A final

narrative in the main storyline of resistance to being labeled with mental health problems is the experience of internal role conflict that many participants faced when diagnosed with or treated for a mental health problem. Participants navigated the tension between self as patient and self as person, and for caregivers, changing roles that they experienced from daughter to caregiver/health care provider, and spouse to caregiver/ health care provider. Throughout interviews, participants expressed their desire to be seen as people within the health care system – people who have lived lives separate from illness and caregiving experiences.

My interview with George highlights this first role challenge, the challenge of being seen as a whole person as opposed to a patient. George is a 70 year-old widowed man. When he described his route to care, he noted his urge to hold onto his role as person, in the face of the health care system and health care professionals, who pulled him into taking the role of the passive, lone patient.

George: So the first meeting was a little, maybe because the nurse that was supposed to see me or the physiotherapist or whatever, occupational therapist, he wasn't there so I had to talk to somebody else, and I had to wait a long time, so it was rough going. But that's, and I thought, there has to be somebody who listens to a person like me. I mean, I contributed to this community. I've been on several boards. I worked for 20 years. I was actually a founding member of the [community group].

In this excerpt, George initially describes being ushered through the health care system in his role as patient. His speech gains momentum and fervour and his affect becomes more positive as he provides support for his role as person, and the importance of the health care system to treat him more like a person and less like a patient.

This challenge of role navigation, from person to patient and back again, and trying to preserve identity as person was evident across many interviews. Bill described this desire to be seen by health care professionals as a person in the following excerpt:

Interviewer: Was there anything that struck you about your experience going for treatment?

Bill: The only thing that was missing was they didn't offer me a coffee. I mean they could be more sociable, sat down and had a coffee rather than just go down to business right away. But their time is sure important, I'm sure.

In this excerpt, Bill may be equating the provision of coffee with a type of human normalcy or personhood. Perhaps offering Bill a cup of coffee would allow him to hold onto his role as person and decrease the prominent position of self as patient. Bill goes on to name this discrepancy between person and patient in his experience with the health care system when noting, "Sometimes I look at doctors as not seeing the person but only seeing the patient and that's not good."

The desire to bring person closer to identity and to be heard and understood as a whole person by health care professionals was also evident in my interview with Joan, a 75 year-old married woman who was providing care for her husband who has Alzheimer's disease.

Joan: At the Geriatric Centre they have a form – it's about a six-page thing – to get to know Henry [husband] better and so, because Henry can't be expressive, they asked me to fill it out. It was simple things, you know, name, brothers, marital status, what did you do for work, tadatadatada. I filled that out and so what they did, they put together a book for Henry that is in his room and they added pictures and they went online and found pictures of schools where he was [job title] at, and they found his mother's obituary and

they put that in there, and all these things and so then all the staff get to know Henry, have knowledge of Henry. So in trying to talk with him or whatever they can pull from that information. So I'm just wondering if filling out some kind of form like that beforehand [before psychological treatment] to have given to [psychologist] would be helpful?

Interviewer: Ok. Interesting idea.

Joan: Maybe at the first, I don't know. I don't know if that would have been helpful for that first initial meeting?

Interviewer: Yeah, that's a good point. Why do you think that would be helpful?

Joan: Cause when I first came, I'm thinking [the psychologist] doesn't know me from Adam, and so you're starting from scratch.

Here, Joan expresses her desire to be known as a whole person, as opposed to a patient. She expresses her desire to be asked about her big stories, including her family, marriage, work-life, and not just her small stories of illness and difficulty.

Participants who identified as caregivers and experienced difficulty with caregiver stress had a similar type of challenge in narrating the tensions between self as daughter and spouse and self as caregiver/health care provider. Complicating this tension is their newly established role of self as patient, and determining where this fits with these other, perhaps more established roles.

A primary example of this was my interview with Beth, a 67 year-old married woman who was providing care for her husband who has Alzheimer's disease. Beth describes the difficulty that she experiences making sense of her changing and conflicting roles as helper and person who needs help:

Beth: You hate to overload your friends with always talking about the same thing and dumping, cause you know, that's, that can be draining on friendships. You also don't want to overburden your children because, you know, this is their Dad. They're experiencing a loss as well that they're losing their Dad, their Grandpa. And they're young, and you know, just, like they have little children and busy lives, so you don't want to and it's, you know, as a parent you don't want to be the needy one. Your role has been to be the helper all this time and so now for the roles to change, that's hard.

Here, Beth describes her reluctance to talk to friends and family due to her established role as helper in their lives and her fear of overburdening them. She explicitly states the difficulty that she experiences as she faces the change in role between helper and person needing help. Perhaps as a way to increasingly try to balance roles as helper and person being helped, and as an attempt to integrate both roles into her sense of identity, Beth went on to start her own support group for caregivers:

Beth: And so, then as a result of that, then when that ended, then I was able to, through the Alzheimer's Society, we were able to start a caregivers' support group in [location]. And so then once a month, it helped you reach out into the community.

An additional narrative thread in caregivers' stories was their experience with role change from self as a person to self as a caregiver and a newly established full-time job of health care provider. In line with the above example, complicating this multifaceted role change is the added role change from self as person to self as patient. Caregivers are subject to the difficult integration of experiences and roles as person, caregiver, and patient. Bonnie, a 65 year-old woman describes this challenge when discussing her experience as a caregiver for her mother,

who had multiple physical health and mobility problems, as well as possible mental health problems and cognitive impairment.

Interviewer: What brought you in for treatment here?

Bonnie: Well actually I was referred from the [day hospital program], cause I was taking my mom there and ah, we had quite a year last year cause she broke her hip and she had all kinds of health issues, and so I was just running her to the hospital to here to there, to the doctors, back to the hospital. I think she was in the hospital five times since last September. And then she was hearing voices and stuff like that so finally I was able to get, I was able to get the right people in place to help me cause I didn't know what to do. I was a Sales Manager, right? I didn't know this whole health system. So then she got out of the hospital like in the end of October, so finally by about January I had things organized enough so I had some help, you know like Physio. Everything is six weeks wait, three months wait. Yeah we're gonna send her home and then Home Care will be there in maybe four months or two months or whatever, and I'm like, oh man. So I just was going through this whole thing so I was sitting down with this nurse at [hospital] and we were trying to figure like how to get the care that she needed, right? And she says, you know what? She says, you're a mess. Like she says, you need some help. I'm like, really? Really?

Apparent in Bonnie's narrative is the dominant voice of her mother, the person she is caregiving for. Bonnie's voice and her needs disappear, and her mother's needs become central and all encompassing. Her style of narration is fast-paced, her story is told without pause, and her affect is marked by frustration and sadness. It is not until a health care professional recognizes Bonnie's distress that she realizes that she may be having difficulty, and even then,

she is in disbelief that she needs help. This highlights the difficulty that caregivers experience balancing tension between roles of helper and person needing help. Furthermore, when Bonnie discusses her challenging experience helping her mother to find her way through disparate silos of health care, she follows this by saying “I was a sales manager, right?” Here, Bonnie may be making sense of how she as a person, caregiver, sales manager, caregiver, and patient, all fit together.

These examples provide support for the ways in which older adults with mental health problems actively engage in identity construction or re-construction throughout their experiences with mental health problems and treatment. Evident throughout these stories are attempts to preserve role and identity as a person, not just a patient – a person with both health and illness and strength and weakness – a person who has lived a whole other life beyond hospital walls. As indicated in Goffman’s work, (1963), having a mental health problem is highly stigmatized; therefore, trying to preserve or protect established (destigmatized identities) may be an adaptive coping strategy as it is applied. These examples also illuminate the challenges that caregivers face in balancing various tensions in roles and identities. Role changes from self as wife or daughter to self as caregiver/health care provider are difficult, as are changes from self as caregiver to self as patient.

Overall, this main storyline of resistance to mental health problems captured the ways in which participants emphasized resistance in the telling of their narratives. Participants emphasized the significant impact of being labeled as having a mental health problem on a person’s sense of self and identity in the structure and content of stories, as well as the ways in which stories were performed. Namely, by telling and portraying stories big and small and strong and weak, by defining mental health problems using distancing and minimizing strategies and

biomedical language, and by describing their experience of internal role conflict. I now turn to discuss the second main storyline that was prominent across participants' narratives, muddling through the treatment seeking process.

Muddling through the treatment seeking process. It is possible that the ways in which older adults integrated or resisted the integration of their mental health problems into their identity affected their subsequent pathways to mental health treatment. In line with Pescosolido's (1998) classified theme of muddling through the health care system in the mental health treatment seeking process, each older adult's narrative of their treatment seeking process exemplified a form of system-induced passivity, neither resisting nor actively seeking out psychological treatment, and meandering from one solution, referral, or treatment alternative to the next. The structure of the health care system promotes passivity among patients, while health care providers remain the active agents, directing patients to services based on their understanding of patients' health problems. Older adults' stories of their treatment seeking process shared a common storyline, narrated in thematic, structural, and performative dimensions, of the physically and emotionally draining process of traveling from one possible silo of care to another, in the absence of a clear "road map" to follow. Related to systemic factors, a loss of the older adult's voice in the treatment seeking process was evident across stories, in addition to passive routes to treatment, and the relative absence of active participation in treatment decision-making. The two narratives woven in this main storyline of muddling through the treatment seeking process, manifestation of chaos and system-level barriers, highlight experiences that compounded patients' abilities to navigate through the treatment seeking process.

Manifestation of chaos. Participants manifested chaos narratives through the telling of their stories, as well as through their contextual environment, and their range of affect throughout interviews (e.g., flat/absence of emotion, sadness, frustration, anger). I interviewed an 80 year-old married man named Bill at his home and was greeted by a small dog that barked loudly and had to be restrained by Bill's wife. The dog barked unceasingly throughout the interview. We sat down at the kitchen table, surrounded by stacks of past newspapers and flyers. A strong smell of cigarette smoke filled the air. Bill walked slowly and cautiously with a limp, and he later noted that he has a "bad leg." Bill's hair was uncombed, his feet were bare, and he was dressed in sweatpants and a t-shirt. Throughout the interview, he sat with his elbows on the table and rested his head on his hands. Periodically throughout the interview, he would release his hands to the table, folding his arms, and allowing his head to fall onto his folded arms. Bill's affect ranged from flat to tearful. Throughout the interview, he voiced his experience of persistent depression, as well as his experience of childhood abuse. Bill's story fluctuated from past to present, and exemplified chaos in his words, body language, and environment. In the following excerpt, Bill responds to an interview question asking him about his treatment seeking experience.

Interviewer: You noted that you've been 'searching for answers' for a long time, when did you start 'searching for answers?'

Bill: Ever since my Dad passed away back in 1986. It was at that time. Before that time I had lived in another world, which I call a 'blackout.' I'm living a very sheltered life as a little boy where I don't have any boy friends to speak of, and when I got into the army, suddenly everything seemed to evaporate in so far as what had happened in previous years. I held no hostility towards my folks. I had no real day to day memories of the tragedy that had occurred, but when I was in the army, it was nothing to see other men

walking around in the nude and I took that as just a normal thing in life, and it was wonderful to be normal. But then in 1986, things fell apart for me when my Dad (pause). I was hoping that he would say that he was sorry for what he did because like the clinic had told me, you know, it wasn't my fault. But he never, we never really spoke of it. I went to [hospital] and looked out the window and I seen this man with a child walking down the path and I felt so terribly jealous and terribly disappointed that I never had that from my Dad. So I just walked away from him, went to the funeral, went to my Mother's after that and then I broke down.

In this excerpt, Bill's story crosses temporal lines of past and present, uses an 'and then, and then, and then' style of continuous prose that is difficult to follow, and his response, although linked, veers away from the interview question into the telling of big stories. This form of storytelling was the dominant form of narration, with aspects seen across each participant's story.

System-level barriers. Wayne illustrates a prototypical example of systemic-level barriers to treatment seeking, including silos of care, lack of a clear road map to follow, lack of adequate guidance from health care professionals, and lack of care coordination between health care professionals. In his treatment seeking process, Wayne visited the emergency room, an MRI specialist, a neurologist, his family doctor, a physiotherapist, an occupational therapist, and finally, a psychologist. Each professional was located at a distance from the next, and difficulties sharing information between services were grave. Wayne spoke in a way that emphasized a deflated or saddened affect, and perhaps a sense of helplessness learned through this meandering route to treatment.

Wayne: It was sort of like limping from one possible solution to another, you know.

There were these different people along the way and some seemed to know more than others. Some knew nothing. Some knew a lot, but nobody was saying, aha, you know, here's what you have to do. Nobody said that. But you just sort of inch your way along from one possible resource to another . . . You know, I have to admit, nobody seemed very enthusiastic about solving the problem.

Telling a similar type of narrative, Brian's route to finding solutions for his difficulty with anxiety spanned approximately 20 years. He reported meeting with his family doctor, community mental health organizations, a psychiatrist, and a psychologist. He tried self-help treatment, medication treatment, and psychological treatment. With negative affect, Brian noted:

After a while it gets frustrating. You start grasping at straws, you know. Is there any hope of getting through this or getting some kind of, you know, is there a magic pill or surgery or something in the brain that they can hit a switch and shut this, you know, whatever activates these feelings?

This frustration and lack of direction was shared by others, including Bonnie, who noted: "You're just sort of putting together a road map, like where's the plan here? There is no plan. There is no plan. No map." Similarly, Bill described his treatment seeking process as "a long battle of me being stubborn, looking for answers, and looking for peace." George also shared the frustration that he experienced in his pathway to psychological treatment, comparing the relative ease with which individuals seek help for physical health problems, as compared to mental health problems. He stated, "You know, if you have a heart condition or if you have rheumatism and stuff like that, they help right away. This kind of stuff that people like me go through is just as important."

Maggie's narrative of her treatment seeking process emphasizes the dominant voice of health care professionals in her pathway to treatment, and correspondingly, a system-induced passivity on the part of the patient. Maggie's narrative also portrays the difficulty with which older adults navigate through silos of health care, the perceived duality of physical and mental health problems, as well as the importance of educating patients and involving them in treatment decision-making. When asked about her route to psychological treatment, Maggie responded as follows:

Maggie: They [emergency room doctors] told me they thought I had something called SIADH. They did a lot of tests at the hospital and that's what they came up with. And that's why I was so weak and I was dizzy and, but I am feeling better than I was but my doctor still isn't sure if I have that. So he sent me to a specialist and I just went there last month, to an endocrinologist and she did a test that I haven't heard the results from yet. So I'm seeing my doctor, he's away right now, so I see him in about two weeks.

Interviewer: Ok, ok.

Maggie: They also told me that they thought I should go to the day hospital, so that's how come I got there. And I said, 'well what am I gonna do at the day hospital?' And they said, well they would (pause) then there was a nurse who came to interview me and she sent the papers off. Well, I don't even know why she did, but she contacted my doctor and told him she was suggesting that I go to the day hospital and he didn't disagree. He said okay, so that's where I ended up. I'm not even sure when I started there but I remember she came on my birthday which was the [birth date] because that was the time that she was available to come for a home visit and I said, oh well, I guess it doesn't matter. It's my birthday but that's ok.

According to Maggie's narrative, which was shared among many participants, health care professionals actively directed her to and from multiple treatment services, in the absence of adequate information. Maggie's narrative was marked by a lack of knowledge – not knowing what her diagnosis was, when test results might come in, why she was being referred to certain services, and even having to schedule a treatment appointment on her birthday.

By the very nature of the difficulties that led them to seek psychological treatment, participants who identified as caregivers experienced difficulty accessing the care that they needed at the times that they needed it most. Narratives told by caregivers about their treatment seeking experiences featured the prominence of the needs of the person they were caring for, and the absence of their own voices and needs. Appointments centered on the person they were caring for, and there was no time to have their voice and their concerns heard during these appointments. This also highlights a systemic-level barrier, in that our health care system is designed to meet the needs of patients, however, in doing so, often forgets about an important unrecognized part of the healthcare system, those providing informal care. Bonnie, a caregiver for her mother, noted:

Bonnie: People came with help for, 'if you want I can take your mom to the doctor.' Or 'if you want, I can get you hooked up with this woman.' There was nothing about me. It was all about my Mom because that was always the focus, right?

Interviewer: Ok, your mother was the focus, not you.

Bonnie: Yeah, when I look back at it now, I don't know how I felt about it then, but now when I look back I can see I wasn't asking for any help for myself, I was asking for help for my mom, you know, that's what I was spending my time doing.

Although Bonnie was able to find her voice during the interview and discuss her difficulty obtaining treatment, many of the caregivers focused on the treatment seeking process of the person they were caring for, as opposed to their own pathways to treatment. The language that these caregivers used to tell the story of this process included “we” statements, as they were tightly woven into their spouses’ stories of treatment seeking. For example, when describing the treatment seeking process that she and her husband experienced in his treatment of Alzheimer’s disease, Joan noted: “We, we went and we followed what they told us to do.”

Overall, this main storyline of muddling through the treatment seeking process highlights the chaotic journey to psychological treatment that participants faced, influenced by the structure of the health care system that prioritizes the voice of the health care professional (often silencing the voice of the patient), as well as system-level barriers decreasing knowledge and access to services. By understanding the experiences of older adults throughout the treatment seeking process thus far, it is entirely comprehensible as to why rates of psychological service use are low, and particularly low for older adults. However, for the select number of people who do indeed arrive at the door of a specialty mental health service, one must wonder, what happens then? What is their understanding or interpretation of psychological treatment? I now turn to discuss the third and final main storyline that was prominent across participants’ narratives, interpretations of psychological treatment.

Interpretations of psychological treatment. At this point in their treatment seeking journey, when participants were notified that they would be meeting with a psychologist, participants reported varying levels of understanding and interpretations about their impending psychological treatment. Three narratives intertwined within this main storyline of

interpretations of psychological treatment include: lack of knowledge/understanding; awareness of stigma; and fear and mistrust.

Lack of knowledge/understanding. A lack of knowledge and understanding about what psychological treatment might be like was dominant across narratives, with a variation in attitudes toward beginning treatment. Wayne provided an example of this lack of understanding of psychological treatment and absence of information about what treatment would entail. Although Wayne was unsure about the specific details of psychological treatment, his attitude and affect reflected curiosity and optimism about treatment.

Wayne noted: I don't know that we found out much, but then they called me, I guess, because finally that whatever paperwork that was being generated somewhere made its way to somebody and they phoned me, and then I came down. So it was kind of a bit of a secure, discrete process in that way you know, to get down here, but I was optimistic because the article in the paper was quite glowing, you know, in its descriptions of what they [psychologists] are able to do. I had no idea what they did, whether they had this big gym full of psychologists or you know.

Bonnie and Joanna also exemplified optimistic and hopeful attitudes toward beginning psychological treatment in the absence of knowledge about treatment. Bonnie noted, "Oh absolutely, I just jumped on it. I thought, you know what? Maybe this would help if I can just go talk to somebody." Joanna expressed this shared storyline:

Joanna: I was anxious to go because I really, really wanted the help, so that's why I was actually quite excited to go. I thought well maybe this will help me, so I was pretty positive about going there.

Interviewer: What were you excited about?

Joanna: Well because I wanted somebody to help me. You know, I thought, oh maybe they can help me and maybe I can talk about all these things, and yeah, I was excited. I wasn't nervous one little bit.

While some participants such as Wayne, Bonnie, and Joanna emphasized a positive attitude toward beginning psychological treatment in the absence of knowledge about what treatment would entail, other participants portrayed a negative attitude toward treatment, held with a similarly described absence of knowledge. Maggie provided an example of this storyline when she discussed her negative reaction to finding out that she was being referred to a psychologist:

Maggie: I figured, I didn't really know what the day hospital was about either, but I agreed to go and, and then I guess the one and only time I saw the doctor at the day hospital, I said to her, how much longer am I going to be coming here? And she said, well there's, you know, I don't know. There's no rush but you'll probably be seeing [a psychologist]. You'll be finished at the day hospital but you'll still be seeing [a psychologist], and I kinda left and thought oh, what exactly? She was kinda rushed that day so I didn't, you know, you just don't, she had an appointment somewhere at the university or something so I just didn't ask a lot of questions.

Interviewer: Ok.

Maggie: And so I went there for I'm not sure how long and I saw the social worker, and well I saw the physiotherapist and the dietician and the whole bunch, and then they asked me if I would see a psychologist. I think we had a meeting together and I really cried. I cried and cried. But I said well, I guess there's something wrong me so I guess, yeah, I wouldn't refuse to go and so they made the appointment.

Awareness of stigma. Another key narrative in the storyline of impressions of psychological treatment was that of stigma. Many older adults expressed reluctance to pursue psychological treatment, which they connected to their awareness of the strong social stigma of having a mental health problem.

Participants discussed a reluctance to confide in friends and family members about their mental health problems and treatment. Ima, a 70 year-old widowed woman, noted, “Sometimes it’s even hard for me to talk to my sister . . . It’s gotten a little bit better, but I don’t know if people that don’t have these kinds of problems can really understand.”

Maggie elaborated on this reluctance to confide in others regarding her mental health problems and treatment due to concerns about stigma:

I mean my family knows. I’m sure my next-door neighbours know, but other than that, I’ve kept it very quiet because I just feel, I don’t know what people think. I remember saying this to the nurse, I said, you know, people talk and she said, that’s nobody’s business and she said, you just need some help right now and it’s nothing to be ashamed of. But I know that people talk.

Bonnie described that her niece works as a health care professional at the hospital where she seeks treatment, and she voiced her corresponding fear of her niece finding out that she was pursuing psychological treatment: “And then I have a niece that works in [position in hospital], and I think, oh what if she sees me walking over there, you know.”

Brian described that although he held an initial attitude of stigma toward seeking psychological treatment, his need to pursue treatment and obtain the help that he needed forced this stigmatizing attitude to the background.

Brian: Well, there might have been a little bit of discomfort thinking about this, you know, when you go into the place there at St. Boniface and you see people that are staying there, you know, for periods of time, so yeah, there was a bit of a different feeling about it. But I feel they're there to help you and, you know, you read the statistics and stuff, you know, there are so many people that do have these issues, and it's not something that's a rare thing. So yeah after that, I figured, hey I'm here to get help. I don't care what anybody thinks, and if it works, it works.

Although Brian initially felt uncomfortable seeking psychological treatment due to inpatient treatment provided within the hospital building, he makes sense of his experience by logically rationalizing his decision to seek help. In this process he draws on the elevated statistics of mental health problems as well as his acknowledgement that he needs help, which appears to decrease the dissonance between his stigmatized perception of mental health treatment and his desire to seek treatment.

In a similar manner to Brian, Bonnie voiced an initial attitude of stigma pertaining to her referral to 'geriatric psychology' more specifically, as well as psychological treatment more broadly, and discussed the importance of receiving help over holding a stigmatizing attitude.

Bonnie: Well actually, until I Googled [psychologist name] and I didn't know they were into the geriatric stuff, and then I thought, well I guess I qualify because I'm 65, you know, even though you don't think of yourself as older, but I don't know. I wasn't quite sure if they only dealt with geriatrics or if that's the main specialty, I guess, or if I got referred to [psychologist name] because my mom was geriatric. Like I wasn't ever sure about that and I never really asked [psychologist] because I didn't really care, you know, like it was ... So I thought, well, you know, it's ok. And then I thought, oh god, maybe

I'm crazy. Maybe I've gone nuts, but I kinda knew I hadn't. . . . I got over that quickly. I just thought, you know what, I need help. I don't care what they [psychologists] call themselves. I need some help, so you know, that's what I did.

Bonnie elaborated on important questions tied to her identity such as 'does geriatric treatment mean that I'm old?' and 'have I gone crazy?' She negotiates the meaning of these questions using a similar logical process to that employed by Brian – elevating the need of treatment over and above possible stigma of mental health problems and treatment.

Fear and mistrust. Bill portrayed a differing attitude of stigma, one of fear and mistrust of psychologists and psychological treatment:

Bill: When you think of, uh, [hospital], you think of a place where they may make decisions regarding what you talk about that could actually end you up in [inpatient facility]. If the word suicide comes up, they probably have the right to send you to [inpatient facility] . . . I feel that a psychologist is a very powerful person and his weight carries a lot with the government I'm sure.

Bill's lack of understanding of psychological treatment has led to strong beliefs surrounding fear of psychologists and correspondingly, having to self-sensor to not end up in other treatment facilities against his free will. This misconception could likely interfere with Bill's ability to be honest and forthcoming in psychological treatment.

At the point in the treatment seeking process when participants were considering psychological treatment, they reported varying levels of understanding and interpretations about pursuing this treatment, as well as an awareness of stigma toward having a mental health problem and seeking treatment, and perceptions of fear and mistrust surrounding seeking psychological treatment. Although only one participant described fear and mistrust in his

interpretation of psychological treatment, it is important to highlight that these are possible experiences of older adults seeking psychological treatment. Further, fear and mistrust may serve as barriers to reaching the point of pursuing psychological treatment, and could be greatly reduced through the provision of accurate information concerning what it is like to pursue psychological treatment.

Story Endings

Older adults' narratives ended with a continued search for meaning, self-understanding, and recovery, evident by anti-ending statements. These statements centered upon the continued search for meaning, self-understanding, recovery, and peace of mind. George ended his interview by saying "I'm still fighting the battle." Similarly, Bonnie ended her interview by voicing, "I don't know what the answer is (pause) there is no answer." Barbara described her continued search for self-understanding:

I need to have an explanation of who me is . . . Like I'm thinking I'd like to have some answers before I'm dead, that's all. Or do I die and get put together in heaven, I don't know.

Brian voiced his continued search for recovery, "So I just keep going, and if psychology doesn't work, then I will just have to keep waiting to see if something else comes up." Katherine, an 81 year-old divorced woman noted her desire for recovery when noting, "You know what? I just want to feel some peace. That's what I'm aspiring for. You know, to feel some happiness."

Discussion

The objective of this study was to explore the experiences and meaning making of older adults with mental health problems who came to utilize psychological treatment. Older adults were actively engaged in meaning construction throughout interviews, attempting to make sense

of their mental health problem and treatment seeking experience. The stories that older adults told about their mental health problems and pathways to psychological treatment primarily exemplified a chaos narrative (Frank, 1995). The structure of their stories was missing an identifiable and sequenced beginning, middle, and end; instead, the structure of their stories consisted of the merging of disjointed storylines, divergent in temporal sequence and topic. Participants portrayed chaos through the lack of structure in their stories, the environmental context in which their stories were told, as well as through their affect and bodily dispositions. It is important to highlight that the experience of having a mental health problems is often associated with the telling of chaotic narratives, which in turn, may render the treatment seeking process more arduous and complex to navigate.

The main storylines in participants' narratives included resistance to being labeled with mental health problems; muddling through the treatment seeking process; and interpretations of psychological treatment. In line with Frank's work in the area of illness narratives (1995), participants' experiences of illness appeared to lead them to question and explore past and present identities. By telling stories of illness and stories of health, stories of weakness and stories of strength, and stories small (problem-focused) and big (life-focused), participants may have been attempting to understand and create a new definition of who they were after the chaos of a mental health problem came into their lives. In line with Goffman's concept of the spoiled identity (1963), it is also possible that by telling big stories, and stories of health, older adults were attempting to preserve their established, destigmatized identities, as an active way to cope with their stigmatized label. Missine (2003) proposed that when faced with challenges in late life, older adults must navigate through questions of, "Who am I and what is my story now that I am no longer employed or needed or able" (p. 113). Identity-related questions appear to become

even more broad and unclear when one is faced with a mental health problem in late life. Findings of the current research suggest that a possible line of questioning that older adults with late life mental health problems must navigate through might include, ‘Who am I and what is my story now that I have been diagnosed with a mental health problem? What do my symptoms mean? Are they indicative of a mental health problem? Do they mean that I’m weak? Do they mean that I’m crazy? What things am I no longer able to do now that I have this problem? What is my role now? Can I be both a person and a patient?’ In line with this process of negotiation of mental health problem into identity, one of the key themes in research investigating the experiences of older adults with life-long schizophrenia was “my life has value” (Ogden, 2014). This theme was shared among participants in the current study, through the telling of big stories of life as strong, successful, and whole; as well as the telling of small stories, concerning the importance of being treated like more like a person and less like a patient in the health care system.

The ways in which older adults defined their mental health problems reflected their process of understanding their mental health problem and integrating their experience into their identity. Participants’ narratives portrayed difficulty defining mental health problems, with older adults describing mental health problems as mysterious, uncontrollable, dualistic, and somatic. Older adults also used terms that minimized mental health problems and distanced problems from themselves. Although this area of research is novel and has not previously been examined with older adults, the challenge of defining mental health problems has been identified in the narratives of adults with mental health problems (Kokanovic et al., 2013; Mallinson & Popay, 2007). Furthermore, quantitative research in the area of mental health literacy supports the difficulty that older adults experience when defining and recognizing mental health problems, as

well as their tendency to describe mental health problems in somatic terms (e.g., Gum, Iser, & Petkus, 2010; Farrer, Leach, Griffiths, Christensen, & Jorm, 2008; Fisher & Goldney, 2003; Jang, Gum, & Chiriboga, 2011; Lee, Lytle, Yang, & Lum, 2010; Tieu, Konnert, & Wang, 2010; Wetherell et al., 2009). The ways in which older adults defined their mental health problems may have reflected their resistance to the label of having a mental health problem (e.g., Goffman, 1963). This, in turn, may have led to increased complexity throughout their treatment seeking experiences, including uncertainty regarding diagnosis and referrals, leading to a longer duration of the treatment-seeking process.

Many older adults described their pathways to mental health treatment as muddling through to multiple referral sources, to disparate silos of care, without clear direction. Older adults' descriptions of their experiences reflected a type of system-induced passivity, one grounded in paternalistic approaches to health care treatment decision-making, in which medical diagnoses and decisions are made by medical professionals, and followed by passive recipients of care. This experience is in line with Pescosolido's (1999) definition of muddling through treatment – neither actively pursuing nor resisting psychological treatment, and not having made active decisions about referrals to treatment. Interestingly, according to Pescosolido's work, only one third of participants fit into the category of muddling through; whereas in the current research, every participant told a narrative that contained features of muddling through to psychological treatment. Findings of the current research also share several similarities to theoretical models of mental health service use put forward by Andersen (2005 & 2008), Goldberg & Huxley, (1980), Henshaw & Freedman-Doan, 2009, and Vogel and colleagues (2006). These similarities include older adults' description of the important role of the physician in the treatment seeking process – defining mental health problems for older adults and/or acting

as a gatekeeper to specialized referrals. The importance of recognizing mental health problems was also evident in older adults' narratives, and is shared across theoretical models of mental health service use. The difficulty that older adults experienced recognizing and naming their problem may have led to added difficulty seeking psychological treatment, and recognizing this treatment as appropriate in addressing their symptoms. This further relates to the identified theoretical models of mental health service use, which stress the importance of recognition as an important early step in the process of seeking treatment for mental health problems. In contrast to Parsons' Illness Career Model (1951), findings indicated that older adults did not appear to make rational and scientific decisions to enter 'sick role' and 'patient role,' rather; these decisions appeared to be based on information from health care professionals.

After having followed along a meandering route to treatment, once older adults received a referral to see a psychologist, they reported varying interpretations about this impending treatment prior to receiving it. A lack of knowledge and understanding about the nature of psychological treatment was dominant across narratives, with variability in attitudes toward beginning treatment. Many older adults expressed awareness of stigma concerning being diagnosed with a mental health problem and seeking psychological treatment. This is in line with narrative research exploring the ways in which older adults talk about traumatic events and depression, characterized by the dominant narratives of secrecy, shame, and stigma (Hiskey & McPherson, 2013; Holm & Severinsson, 2014). Some older adults voiced a positive attitude toward beginning psychological treatment, noting their excitement and hope; while others portrayed a negative attitude and corresponding negative affect concerning psychological treatment.

Implications

Findings of this study are novel, and make an important contribution to the literature in the areas of narrative gerontology and mental health service use among older adults. First, this research identifies important implications for identity construction and ‘successful aging’ among older adults. In Erikson’s Developmental Theory, the last developmental stage that is navigated through in late life is that of resolving the psychosocial crisis between ego integrity versus despair (Erikson & Erikson, 1997). In order to achieve ego integrity, older adults must reflect on their lives and view themselves as having accomplished the goals that they set out to accomplish. According to Erikson, this is the psychologically healthy resolution of the ego integrity vs despair crisis and ultimately leads to wisdom. Achieving ego integrity is complicated by the experience of mental health problems in late life, which may affect the ways in which older adults are able to reflect on their lives and view themselves as having accomplished their goals. In order to help older adults to age with integrity as opposed to despair, an important task of health care professionals working with older adults may be to help them to navigate the integration of the small story of their mental health problem into their bigger life stories and broader sense of self. Listening to the narratives of older adults and helping them to make meaning of their mental health problem might help to negotiate tension between small and big stories and help older adults feel they are aging with integrity.

These findings have important implications for the use of reminiscence therapy, an intervention that promotes the recollection and understanding of positive and negative memories of one’s past (Westerhof, Bohlmeijer, & Webster, 2010). Reminiscence therapy was first developed by Butler (1963), who described the process of reminiscence as reviewing the memories of one’s life and coming to accept life as it has been lived. Research has shown that

reminiscence therapy is effective in treating late life depression and increasing happiness in later life (Chin, 2007; Hsieh & Wang, 2003; Karimi et al., 2010; Pinguart, Duberstein, & Lyness, 2007). Research points to three main functions of reminiscence: self-positive functions (identity consolidation/creation, problem solving, and death preparation); self-negative functions (boredom reduction, bitterness revival, and intimacy maintenance); and prosocial functions (conversation and to teach-inform others) (Cappeliez & O'Rourke, 2006). Both self-positive and self-negative functions of reminiscence have direct and significant associations with the health and psychological well-being of older adults (positively and negatively respectively), while prosocial functions are not significantly associated with these outcomes. Of direct application to the current research is the importance of reminiscence for identity, increasing self-understanding or creating new self-awareness through review of autobiographical memories, which is linked to positive well-being (Cappeliez & O'Rourke, 2006).

Furthermore, successful aging theories, such as Continuity Theory (Atchley, 1989) and Activity Theory (Havighurst, 1961), state that stability in activities and roles from middle age to old age is a primary adaptive strategy to cope with age-related change. Helping older adults with mental health problems to maintain their connection to activities and roles that they have held throughout their lives is important in the continued construction of coherent identity.

Findings of this research also have important implications for the diagnosis, treatment seeking experience, and treatment of older adults with mental health problems. This research highlighted the difficulty that older adults experience in defining mental health problems. This difficulty may have impacted the degree to which older adults were able to understand their mental health problem, as well as the pathway to treatment that they followed. Findings support increased efforts to promote mental health literacy among older adults in helping them to

recognize, describe, and seek appropriate treatment for their mental health problems. This call for improvement in the provision of mental health information to older adults is echoed throughout the literature in the area of aging and mental health (e.g., Segal, 2000; Segal, Coolidge, Mincic, & O'Riley, 2005). Increased ability to recognize and describe mental health problems might help patients and health care professionals to arrive at diagnoses and treatment recommendations earlier on in their treatment seeking process, perhaps decreasing the chaotic nature of this experience. Furthermore, for health care professionals, understanding the prominent ways in which older adults express their experience of mental health problems (e.g., through use of somatic terms), might prompt the asking of additional questions focused on mental health.

In view of older adults' meandering routes to psychological treatment, emphasized by muddling through the treatment seeking processes, findings of this research promote the inclusion of additional supports to help older adults and their family members navigate through the disparate silos of care in our health care system. In light of findings that highlighted the presence of system-induced passivity in older adults' pathways to care, extra efforts should be made to increase the involvement of older adults in their health care decision-making, providing older adults with more autonomy to choose which treatment options (if any) may best suit their needs and wishes at that particular time. Previous research has shown that older adults report a strong preference to be involved in their health care treatment decision-making (Chiu et al., 2016; O'Neal et al., 2008). Research has also shown that providing information to patients prior to treatment decision-making leads to increased understanding and recall of information, as well as patient satisfaction and compliance with treatment (Deyo & Diehl, 1986; Faden, Becker, Lewis, Freeman, & Faden, 1981; Hall, Roter, & Katz, 1988). Further, research demonstrates that

pathways to treatment that do not emphasize choice can lead to negative attitudes toward treatment, poorer relationships with treatment providers, and worse treatment outcomes (Kaltiala-Heino et al., 1997). Given the system-induced passivity described in the current study, efforts could be made by health care professionals, and at broader health care policy levels, to encourage and support older adults in their treatment decision-making.

Finally, findings have important implications for the promotion of person-focused care as well as the field of narrative medicine, in their application to the treatment of older adults. Person-focused care promotes attention on the whole person receiving treatment, and integrates knowledge about the person, health problem, and needs of the person. Similarly, narrative medicine promotes increased empathy and reflection in health care (Brown, 2010; Charon, 2006; Starfield, 2011). Practicing such approaches may result in increased understanding and treatment satisfaction among older adults. Providing person-focused care and narrative medicine approaches may be particularly difficult within the context of a 10-15 minute routine medical appointment with a primary care physician (Canadian Medical Association, 2012), especially for older adults with complex comorbid mental and physical health problems and stress associated with caregiving (El-Gabalawy et al., in press). Although findings of the current research suggest the need for a radical shift in the ways in which healthcare is delivered to older adults, it is an important shift worthy of future examination, and is imminently important in light of population aging (Statistics Canada, 2015). Collaborative care/shared care models that integrate primary care services and specialty mental health services have important implications regarding their utility to meet the complex and unique needs of older adults (Bartels et al., 2004; Patel et al., 2013; Speer & Schnieder, 2003; Unützer, 2002).

The primary strength of the current research is its novelty, contributing to a limited amount of research exploring older adults' experiences with mental health problems and seeking psychological treatment. Using a narrative approach, findings improve our understanding of the voices and subjective experiences of older adults with mental health problems and their pathways to psychological treatment. One limitation of the current research is the homogeneous nature of the sample, with the majority of participants endorsing relatively high educational attainment and White ethnicity. Research with greater diversity in these areas might add further understanding into the mental health treatment seeking experiences of older adults. Another drawback of the current research is the focus of recruitment from geropsychology. In order to gain a more comprehensive understanding of the treatment seeking experience of older adults, future research should consider recruiting older adults from community-based, primary care, and geropsychiatry settings. A subsequent and related drawback of the current research is that although their routes to psychological treatment were meandering, participants arrived at the stage of seeking psychological treatment for mental health problems. As such, this study does not address the experiences of older adults who are not referred for psychological treatment, or who are referred for psychological treatment and do not proceed with this referral. Future research is needed to examine these experiences.

Notwithstanding these limitations, this research has established a platform and impetus for increased research in the area of narrative gerontology focusing on the experiences and meaning making of older adults with mental health problems who came to seek psychological treatment. This research also identifies important implications for the improvement of geriatric health care. Future research is needed to deepen our understanding of older adults' experiences seeking and receiving mental health treatment. As the current research has incorporated the

views and voices of older adults with mental health problems, future research is needed to incorporate the views, voices, and experiences of family members of older adults with mental health problems as well as treatment providers, with the aim of providing a more holistic view of the complex issues identified in the current research. Perhaps by increasing our understanding of the ways in which older adults experience a mental health problem, travel through the health care system to seek treatment, and arrive at psychological treatment, in conjunction with our understanding of the experiences of family members and health care professionals, we can strive to bring more clarity to the complex process of treatment seeking for older adults, and enhance their ability to return to health.

References

- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*, 36(1), 1-10.
- Andersen, R. M. (2008). National health surveys and the behavioral model of health services use. *Medical Care*, 46(7), 647-653.
- Andreescu, C., & Reynolds, C. F. (2011). Late-life depression: Evidence-based treatment and promising new directions for research and clinical practice. *Psychiatric Clinics of North America*, 34, 335-355.
- Andrews, M., Squire, C., & Tamboukou, M. (2013). *Doing narrative research* (2nd ed.). Sage Publications: London.
- Areán, P. A., Alvidrez, J., Barrera, A., Robinson, G. S., & Hicks, S. (2002). Would older patients use psychological services? *Gerontologist*, 52, 392-398.
- Atchley, R. C. (1989). A Continuity Theory of Normal Aging. *The Gerontologist*, 29(2), 183-190.
- Ayers, C. R., Sorrell, J. T., Thorp, S. R., & Wetherell, J. L. (2007). Evidence-based psychological treatments for late-life anxiety. *Psychology and Aging*, 22(1), 8-17.
- Baldwin, C. (2005). Narrative, ethics and people with severe mental illness. *Australian and New Zealand Journal of Psychiatry*, 39, 1022-1029.
- Bamberg, M. G. W. (2007). Stories: Big or small. Why do we care? In M. G. W. Bamberg (Eds.), *Narrative – State of the Art* (pages 165-174). Philadelphia : John Benjamins North America.
- Bartels, S. J., Coakley, E. H., Zubritsky, C., Ware, J. H., Miles, K. M., Arian, P. A., ... Levkoff, S. E. (2004). Improving access to geriatric mental health services: A randomized trial

- comparing treatment engagement with integrated versus enhanced referral care for depression, anxiety, and at-risk alcohol use. *The American Journal of Psychiatry*, 161(8), 1455-1462.
- Blank, S., Lenze, E. J., Mulsant, B. H., Dew, M. A., Karp, J. F., Shear, M. K., . . . Reynolds, C. F. (2006). Outcome of late-life anxiety disorders during 32 weeks of citalopram treatment. *Journal of Clinical Psychiatry*, 67(3), 468-472.
- Bogner, H. R., De Vries, H. F., Maulik, P. K., & Unützer, J. (2009). Mental health services use: Baltimore epidemiologic catchment area follow-up. *American Journal of Geriatric Psychiatry*, 17(8), 706-715.
- Cairney, Streiner, & Sareen, 2012;
- Bookwala, J., Zdaniuk, B., Burton, L., Lind, B., Jackson, S., & Schulz, R. (2004). Concurrent and long-term predictors of older adults' use of community-based long-term care services: The caregiver health effects study. *Journal of Aging and Health*, 16, 88-115.
- Boschma, G. (2007). Accommodation and resistance to the dominant cultural discourse on psychiatric mental health: Oral history accounts of family members. *Nursing Inquiry*, 14(4), 266-278.
- Brockmeier, J. (2000) Autobiographical time. *Narrative Inquiry*, 10(1), 51-73.
- Brown, S. J. (2010). Health care reform should emphasize person-focused care. *Family Practice Management*, 17(1), 10.
- Butler, R. N. (1963). The life-review: An interpretation of reminiscence in the aged. *Psychiatry*, 26(1) 65-76.
- Byers, A. L., Arean, P. A., & Yaffe, K. (2012). Low use of mental health services among older Americans with mood and anxiety disorders. *Psychiatric Services*, 63(1), 66-72.

- Cairney, J., Corna, L. M., & Streiner, D. L. (2010). Mental health care use in later life: Results from a national survey of Canadians. *Canadian Journal of Psychiatry*, 55(3), 157-164.
- Canadian Medical Association, (2012). *Starting your practice on the right foot*. MD Physician Services.
- Cappeliez, P., & O'Rourke, N. (2006). Empirical validation of a model of reminiscence and health in later life. *Journal of Gerontology: Psychological Sciences*, 6(4), P237-P244.
- Cardano, M. (2010). Mental distress: Strategies of sense-making. *Health*, 14(3), 253-271.
- Casey, B., & Long, A. (2002). Reconciling voices. *Journal of Psychiatric and Mental Health Nursing*, 9, 603-610.
- Casey, B., & Long, A. (2003). Meanings of madness: A literature review. *Journal of Psychiatric and Mental Health Nursing*, 10, 89-99.
- Charon, R. (2006). *Narrative medicine*. New York: Oxford University Press.
- Chin, A. M. H. (2007). Clinical effects of reminiscence therapy in older adults: A meta-analysis of controlled trials. *Hong Kong Journal of Occupational Therapy*, 17(1), 10-22.
- Chiu, C., Feuz, M. A., McMahan, R. D., Miao, Y., & Sudore, R. L. (2016). "Doctor, make my decisions": Decision control preferences, advance care planning, and satisfaction with communication among diverse older adults. *Journal of Pain and Symptom Management*, 51(1), 33-40.
- Clandinin, D. J. (2013). *Engaging in narrative inquiry*. Left Coast Press: California.
- Cohen, G. (2005). *The mature mind: The positive power of the aging brain*. New York: Basic Books.
- Coleman, P. (1999). Creating a life story: The task of reconciliation. *The Gerontologist*, 39(2), 133-139.

- Connelly, F. M., & Clandinin, D. J. (2006). Narrative inquiry. In J. Green, G. Camilli, & P. Elmore (Eds.). *Handbook of complementary methods in educational research* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Conner, K. O., Copeland, V. C., Grote, N. K., Rosen, D., Albert, S., McMurray, M. L., . . . Koeske, G. (2010). Barriers to treatment and culturally endorsed coping strategies among depressed African-American older adults. *Aging and Mental Health*, 14(8), 971-983.
- Conrad, P. (2007). *The medicalization of society: On the transformation of human conditions into treatable disorders*. The Johns Hopkins University Press: Baltimore.
- Corbin, J., & Morse, J. M. (2003). The unstructured interactive interview: Issues of reciprocity and risks when dealing with sensitive topics. *Qualitative Inquiry*, 9, 335-354.
- Crabb, R., & Hunsley, J. (2006). Utilization of mental health care services among older adults with depression. *Journal of Clinical Psychology*, 62, 299-312.
- Crossley, M. (2000). Introducing narrative psychology: Self, trauma and the construction of meaning. *Open University Press*.
- Davies, K. (2001). Silent and censored travellers? Patients' narratives and patients' voices: Perspectives on the history of mental illness since 1948. *Social History of Medicine*, 14(2), 267-292.
- Deyo, R. A., & Diehl, A. K. (1986). Patient satisfaction with medical care for low back pain. *Spine*, 11(1), 28-30.
- El-Gabalawy, R., Mackenzie, C., & Sareen, J. (in press). Mental health service use among anxious and physically unwell older Canadians. *Aging and Mental Health*.
- Erikson, E. H., & Erikson, J. M. (1997). *The life cycle completed*. Extended edition. New York, NY: W. W. Norton.

- Faden, R. R., Becker, C., Lewis, C., Freeman, J., & Faden, A. I. (1981). Disclosure of information to patients in medical care. *Medical Care*, 19, 718-733.
- Farrer, L., Leach, L., Griffiths, K. M., Christensen, H., & Jorm, A. F. (2008). Age differences in mental health literacy. *BMC Public Health*, 8.
- Finlay, L. (2002). Negotiating the swamp: The opportunity and challenge of reflexivity in research practice. *Qualitative Research*, 2(2), 209-230.
- Fisher, L., & Goldney, R. (2003). Differences in community mental health literacy in older and younger Australians. *International Journal of Geriatric Psychiatry*, 18, 33-40.
- Frank, A. W. (1995). *The Wounded Storyteller*. Chicago, IL: University of Chicago Press.
- Fraser, H. (2004). Doing narrative research: Analysing personal stories line by line. *Qualitative Social Work*, 3(2), 179-201.
- Freeman, M. (1994). *Rewriting the self: History, memory, narrative*. London: Routledge.
- Freeman, M. (2007). Life “on holiday”? In defense of big stories. In M. G. W. Bamberg (Eds.), *Narrative – State of the Art* (pp. 155-164). Philadelphia : John Benjamins North America.
- Funk, L., & Stajduhar, K. I., (2009). Interviewing family caregivers: Implications of the caregiving context for the research interview. *Qualitative Health Research*, 19(6), 859-867.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall, Inc. Englewood Cliffs, N. J.
- Goldberg, D., & Huxley, P. (1980). *Mental Illness in the Community: The Pathway to Psychiatric Care*. London: Tavistock Publications.
- Gonçalves, D. C., & Byrne, G. J. (2012). Interventions for generalized anxiety disorder in older adults: Systematic review and meta-analysis. *Journal of Anxiety Disorders*, 26, 1-11.

- Gould, R. L., Coulson, M. C., & Howard, R. J. (2012). Efficacy of cognitive behavioral therapy for anxiety disorders in older people: A meta-analysis and meta-regression of randomized controlled trials. *Journal of the American Geriatrics Society*, 60(2), 218-229.
- Gum, A. M., Iser, L., & Petkus, A. (2010). Behavioral health service utilization and preferences of older adults receiving home-based aging services. *American Journal of Geriatric Psychiatry*, 18(6), 491-501.
- Gum, A. M., King-Kallimanis, B., & Kohn, R. (2009). Prevalence of mood, anxiety, and substance-abuse disorders for older Americans in the National Comorbidity Survey – Replication. *American Journal of Geriatric Psychiatry*, 17, 769-81.
- Hack, T. F., Degner, L. F., Watson, P., & Sinha, L. (2006). Do patients benefit from participating in medical decision making? Longitudinal follow-up of women with breast cancer. *Psycho-Oncology*, 15, 9-19.
- Hall, J. A., Roter, D. L., & Katz, N. R. (1988). Meta-analysis of correlates of provider behavior in medical encounters. *Medical Care*, 26(7), 657-775.
- Han, B., Gfroerer, J. C., Colpe, L. J., Barker, P. R., & Colliver, J. D. (2011). Serious psychological distress and mental health service use among community-dwelling older U.S. adults. *Psychiatric Services*, 62(3), 291-298.
- Havighurst, R. J. (1961). Successful aging. *The Gerontologist*, 1, 8-13.
- Hennink, M., Hutter, I., & Bailey, A. (2011). *Qualitative research methods*. London: Sage.
- Henshaw, E. J., & Freedman-Doan, C. R. (2009). Conceptualizing mental health care utilization using the health belief model. *Clinical Psychology: Science and Practice*, 16, 420-439.

- Hiskey, S., & McPherson, S. (2013). That's just life: Older adult constructs of trauma. *Aging & Mental Health, 17*(6), 689-696.
- Holm, A. L., & Severinsson, E. (2014). Surviving depressive ill-health: A qualitative systematic review of older persons' narratives. *Nursing & Health Sciences, 16*, 131-140.
- Holstein, J. A., & Gubrium, J. F. (2012). *Varieties of narrative analysis*. Sage Publications: Los Angeles.
- Hsieh, H. F., & Wang, J.J. (2003). Effect of reminiscence therapy on depression in older adults: A systematic review. *International Journal of Nursing Studies, 40*, 335-345.
- Hunsley, J., Elliott, K., & Therrien, Z. (2014). The efficacy and effectiveness of psychological treatments for mood, anxiety, and related disorders. *Canadian Psychology, 55*(3), 161-176.
- Jang, Y., Gum, A. M., & Chiriboga, D. A. (2011). Knowledge of depression among Korean American older adults. *Journal of Applied Gerontology, 30*(5), 655-665.
- Jeste, D. V., Alexopoulos, G. S., Bartels, S. J., Cummings, J. L., Gallo, J. J., Gottlieb, G. L., . . . Lebowitz, B. D. (1999). Consensus statement on the upcoming crisis in geriatric mental health: research agenda for the next 2 decades. *Archives of General Psychiatry, 56*(9), 848-853.
- Jimenez, D. E., Bartels, S. J., Cardenas, V., & Alegria, M. (2013). Stigmatizing attitudes toward mental illness among racial/ethnic older adults in primary care. *International Journal of Geriatric Psychiatry, 28*, 1061-1068.
- Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist, 67*(3), 231-243.

- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166, 182-186.
- Kaltiala-Heino, R., Laippala, P., & Salokangas, R. K. (1997). Impact of coercion on treatment outcome. *International Journal of Law Psychiatry*, 20(3), 311-322.
- Karimi, H., Dolatshahee, B., Momeni, K., Khodabkhshi, A., Rezaei, M., & Kamrani, A. A. (2010). Effectiveness of integrative and instrumental reminiscence therapies on depression symptoms reduction in institutionalized older adults: An empirical study. *Aging & Mental Health*, 14(7), 881-887.
- Karlin, B. E., & Fuller, J. D. (2007). Meeting the mental health needs of older adults: Implications for primary care practice. *Geriatrics*, 62(1), 26-35.
- Kenyon, G., Bohlmeijer, E., & Randall, W. (2011). *Storying later life: Issues, investigations, and interventions in narrative gerontology*. New York: Oxford University Press.
- Kenyon, G., & Randall, W. (1997). *Restorying our lives: Personal growth through autobiographical reflection*. Westport, CT: Praeger.
- Kenyon, G. M., & Randall, W. L. (1999). Introduction: Narrative gerontology. *Journal of Aging Studies*, 13(1), 1-5.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, 62, 593-602.
- Kessler, R. C., Foster, C., Webster, P. S., & House, J. S. (1992). The relationship between age and depressive symptoms in two national surveys. *Psychology and aging*, 7(1), 119-126.

- Kokanovic, R., Butler, E., Halilovich, H., Palmer, V., Griffiths, F., Dowrick, C., & Gunn, J. (2013). Maps, models, and narratives: The ways people talk about depression. *Qualitative Health Research, 23*(1), 114-125.
- Kon, A. A. (2010). The shared decision-making continuum. *Journal of the American Medical Association, 304*(8), 903-904.
- Kon, A. A., Davidson, J. E., Morrison, W., Danis, M., & White, D. B. (2016). Shared decision making in ICUs: An American College of Critical Care Medicine and American Thoracic Society Policy Statement. *Critical Care Medicine, 44*(1), 188-201.
- Landreville, P., Landry, J., Baillargeon, L., Guérette, A., & Matteau, E. (2001). Older adults' acceptance of psychological and pharmacological treatments for depression. *Journals of Gerontology: Psychological Sciences, 56B*, P285-P291.
- Lawrence, V., Banerjee, S., Bhugra, D., Sangha, K., Turner, S., & Murray, J. (2006). Coping with depression in later life: A qualitative study of help-seeking in three ethnic groups. *Psychological Medicine, 36*, 1375-1383.
- Lee, H., Lytle, K., Yang, P., & Lum, T. (2010). Mental health literacy in Hmong and Cambodian elderly refugees: A barrier to understanding, recognizing, and responding to depression. *International Journal of Aging and Human Development, 71*(4), 323-344.
- Lim, J., Goh, J., Chionh, H. L., & Yap, P. (2012). Why do patients and their families not use services for dementia? Perspectives from a developed Asian country. *International Psychogeriatrics, 24*(10), 1571-1580.
- Lowes, L., & Gill, P. (2006). Participants' experiences of being interviewed about an emotive topic. *Journal of Advanced Nursing, 55*, 587-595.

- Lundervold, D., & Lewin, L. M. (1990). Older adults' acceptability of pharmacotherapy and behavior therapy for depression: Initial results. *Journal of Applied Gerontology*, 9, 211-215.
- Lupton, D. (1997). Foucault and the medicalization critique. In G. Scambler (Eds.). *Medical Sociology: Major themes in health and Social Welfare*. London: Routledge.
- Luttrell, W. (2000). "Good Enough" methods for ethnographic research. *Harvard Educational Review*, 70(4), 499-523.
- Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging & Mental Health*, 10(6), 574-582.
- MacKenzie, C. S., Pagura, J., & Sareen, J. (2010). Correlates of perceived need for and use of mental health services by older adults in the collaborative psychiatric epidemiology surveys. *American Journal of Geriatric Psychiatry*, 18(12), 1103-1115.
- Mackenzie, C. S., Reynolds, K., Cairney, J., Streiner, D. L., & Sareen, J. (2012). Disorder-specific mental health service use for mood and anxiety disorders: Associations with age, sex, and psychiatric comorbidity. *Depression and Anxiety*, 29(3), 234-242.
- Mackenzie, C. S., Scott, T., Mather, A. & Sareen, J. (2008). Older adults' help-seeking attitudes and treatment beliefs concerning mental health problems. *American Journal of Geriatric Psychiatry*, 16(12), 1010-1019.
- Mallinson, S., & Popay, J. (2007). Describing depression: Ethnicity and the use of somatic imagery in accounts of mental distress. *Sociology of Health & Illness*, 29(6), 857-871.
- Missine, L. (2003). The search for meaning of life in old age. In A. Jewel (Ed.), *Ageing, spirituality and well-being* (pp. 113-123). London: Jessica Kingsley.

- Mohlman, J. (2004). Psychosocial treatment of late-life generalized anxiety disorder: Current status and future directions. *Clinical Psychology Review*, 24(2), 149-169.
- Mohlman, J., Gorenstein, E. E., Kleber, M., De Jesus, M., Gorman, J. M., & Papp, L. A. (2003). Standard and enhanced cognitive-behavior therapy for late-life generalized anxiety disorder: Two pilot investigations. *American Journal of Geriatric Psychiatry*, 11(1), 24-32.
- Mosier, K. E., Vasiliadis, H. M., Lepnurm, M., Puchala, C., Pekrul, C., & Tempier, R. (2010). Prevalence of mental disorders and service utilization in seniors: Results from the Canadian Community Health survey cycle 1.2. *International Journal of Geriatric Psychiatry*, 25(10), 960-967.
- Nyunt, M. S., Chiam, P. C., Kua, E. H., & Ng, T. P. (2009). Determinants of mental health service use in the national mental health survey of the elderly in Singapore. *Clinical Practice and Epidemiology in Mental Health*, 5.
- Ogden, L. P. (2014). My life as it has value: Narrating schizophrenia in later years. *Qualitative Health Research*, 24(10), 1342-1355.
- O'Neal, E. L., Adams, J. R., McHugo, G. J., Van Citters, A. D., Drake, R. E., & Bartels, S. J. (2008). Preferences of older and younger adults with serious mental illness for involvement in decision-making in medical and psychiatric settings. *American Journal of Geriatric Psychiatry*, 16(10), 826-833.
- Park, M., & Unützer, J. (2011). Geriatric Depression in Primary Care. *Psychiatric Clinics of North America*, 34(2), 469-487.
- Parsons, T. (1951). *The social system*. Glencoe, IL: Free Press.

- Patel, V., Belkin, G. S., Chockalingam, A., Cooper, J., Saxena, S., & Unützer, J. (2013). Grand challenges: Integrating mental health services into priority health care platforms. *PLoS Medicine* 10(5), e1001448.
- Payman, V. (2011). Psychotherapeutic treatments in late life. *Current Opinion in Psychiatry*, 24(6), 484-488.
- Perry, T. E., Ruggiano, N., Shtompel, N., & Hassevoort, L. (2015). Applying Erikson's wisdom to self-management practices of older adults: Findings from two field studies. *Research on Aging*, 37(3), 253-274.
- Pescosolido, B. A. (1991). Illness careers and network ties: A conceptual model of utilization and compliance. In G. L. Albrecht & J. Levy (Eds.), *Advances in medical sociology* (Vol. 2, pp. 164-181). Greenwich, CT: JAI Press.
- Pescosolido, B. A. (2013). Theories and the rise and fall of the medical profession. In W. C. Cockerham (Ed.), *Medical Sociology on the Move* (pp. 173-194). New York: Springer Science.
- Pescosolido, B. A., Boyer, C. A., & Medina, T. R. (2013). The social dynamics of responding to mental health problems. In C.S. Aneshensel (Ed.), *Handbook of the sociology of mental health* (2nd ed., pp. 505-523). New York: Springer Science.
- Pescosolido, B. A., Gardener, C. B., & Lubell, K. M. (1998). How people get into mental health services: Stories of choice, coercion, and "muddling through" from "first timers". *Social Science & Medicine*, 46(2), 275-286.
- Pescosolido, B. A., & Olafsdottir, S. (2013). Beyond dichotomies: Confronting the complexity of how and why individuals come or do not come to mental health care. *World Psychiatry*, 12(3), 269-271.

- Pinquart, M., Duberstein, P. R., & Lyness, J. M. (2007). Effects of psychotherapy and other behavioral interventions on clinically depressed older adults: A meta-analysis. *Aging and Mental Health, 11*(6), 645-657.
- Pinquart, M., & Sörensen, S. (2003). Differences between caregivers and non-caregivers in psychological health and physical health: A meta-analysis. *Psychology and Aging, 18*, 250-267.
- Préville, M., Vasiliadis, H. M., Boyer, R., Goldfarb, M., Demers, K., Brassard, J., & Béland, S. G. (2009). Use of health services for psychological distress symptoms among community-dwelling older adults. *Canadian Journal on Aging, 28*(1), 51-61.
- Randall, W. L. (2011). Memory, metaphor, and meaning: Reading for wisdom in the stories of our lives. In G. Kenyon, E. Bohlmeijer, & W. L. Randall (Eds.), *Storying Later Life: Issues, Investigations, and Interventions in Narrative Gerontology* (pp. 20-38). New York: Oxford University Press.
- Randall, W. L., & Kenyon, G. M. (2004). Time, story, and wisdom: Emerging themes in narrative gerontology. *The Canadian Journal on Aging, 23*(4), 333-346.
- Riessman, C. (2008). *Narrative Methods for the Human Sciences*. California: Sage Publications.
- Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in U.S. older adults: Findings from a nationally representative survey. *World Psychiatry, 14*(1), 74-81.
- Rokke, P. D., & Scogin, F. (1995). Depression treatment preferences in younger and older adults. *Journal of Clinical Geropsychology, 1*, 243-257.
- Rosenstock, I. M. (1966). Why people use health services. *Milbank Quarterly, 44*, 94-106.

- Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education Monograph, 2*, 328–335.
- Schtompel, N., Whiteman, K., & Ruggiano, N. (2014). Negative feelings and help seeking among older adults with chronic conditions. *Journal of Gerontological Social Work, 57*, 810-824.
- Scott, T., MacKenzie, C. S., Chipperfield, J. G., & Sareen, J. (2010). Mental health service use among Canadian older adults with anxiety disorders and clinically significant anxiety symptoms. *Aging and Mental Health, 14*(7), 790-800.
- Segal, D. L. (2000). Levels of knowledge about suicide facts and myths among younger and older adults. *Clinical Gerontologist, 22*, 71-80.
- Segal, D. L., Coolidge, F. L., Mincic, M. S., & O’Riley, A. (2005). Beliefs about mental illness and willingness to seek help: A cross-sectional study. *Aging & Mental Health, 9*(4), 363-367.
- Sirey, J., Franklin, A. J., McKenzie, S. E., Ghosh, S., & Raue, P. J. (2014). Race, stigma, and mental health referrals among clients of aging services who screened positive for depression. *Psychiatric Services, 65*(4), 537-540.
- Speer, D. C., & Schneider, M. G. (2003). Mental health needs of older adults and primary care: Opportunity for interdisciplinary geriatric team practice. *Clinical Psychology: Science and Practice, 10*, 85-101.
- Splevins, K., Smith, A., & Simpson, J. (2009). Do improvements in emotional distress correlate with becoming more mindful? A study of older adults. *Aging and Mental Health, 13*(3), 328-335.
- Stanley, M. A., & Beck, J. G. (2000). Anxiety disorders. *Clinical Psychology Review, 20*(6),

731-754.

Stanley, M. A., Wilson, N. L., Novy, D. M., Rhoades, H. M., Wagener, P. D., Greisinger, A.

J., . . . Kunik, M. E. (2009). Cognitive behavior therapy for generalized anxiety disorder among older adults in primary care: A randomized clinical trial. *Journal of the American Medical Association*, 301(14), 1460-1466.

Starfield, B. (2011). Is patient centered care the same as person-focused care? *The Permanente Journal*, 15(2), 63-69.

Statistics Canada. (2012). Portrait of Caregivers, 2012. Available at:

<http://www.statcan.gc.ca/pub/89-652-x/89-652-x2013001-eng.pdf>

Statistics Canada. (2015). Canada's Population Estimates: Age and Sex, July 1, 2015. Retrieved from <http://www.statcan.gc.ca/daily-quotidien/150929/dq150929b-eng.htm>

Tieu, Y., Konnert, C., & Wang, J. (2010). Depression literacy among older Chinese immigrants in Canada: A comparison with a population-based survey. *International Psychogeriatrics*, 22(8), 1318-1326.

Toseland, R. W., McCallion, P., Gerber, T., & Banks, S. (2002). Predictors of health and human services use by persons with dementia and their family caregivers. *Social Science & Medicine*, 55(7), 1255-1266.

Treanor, C., & Donnelly, M. (2012). An international review of the patterns and determinants of health service utilisation by adult cancer survivors. *BMC Health Services Research*, 12(1).

Unützer, J. (2002). Diagnosis and treatment of older adults with depression in primary care. *Biological Psychiatry*, 52, 285-292.

- Vitaliano, P. P., Zhang, J., & Scanlon, J. M. (2003). Is caregiving hazardous to one's physical health? *Psychological Bulletin*, 129, 946-972.
- Vogel, D. L., Wester, S. R., Larson, L. M., & Wade, N. G. (2006). An information-processing model of the decision to seek professional help. *Professional psychology: Research and practice*, 37(4), 398-406.
- Waitzkin, H. (1984). The micropolitics of medicine: A contextual analysis. *International Journal of Health Services*, 14(3), 339-378.
- Westerhof, G. J., Bohlmeijer, E., & Webster, J. D. (2010). Reminiscence and mental health: A review of recent progress in theory, research and interventions. *Ageing & Society*, 30(4), 697-721.
- Wetherell, J. L., Afari, N., Ayers, C. R., Stoddard, J. A., Ruberg, J., Sorrell, J. T., . . . Patterson, T. L. (2011). Acceptance and commitment therapy for generalized anxiety disorder in older adults: A preliminary report. *Behavior Therapy*, 42, 127-134.
- Wetherell, J. L., Kaplan, R. M., Kallenberg, G., Dresselhaus, T. R., Sieber, W. J., & Lang, A. (2004). Mental health treatment preferences of older and younger primary care patients. *International Journal of Psychiatry in Medicine*, 34(3), 219-233.
- Wetherell, J. L., Lenze, E. J., & Stanley, M. A. (2005). Evidence-based treatment of geriatric anxiety disorders. *Psychiatric Clinics of North America*, 28(4), 871-896.
- Wetherell, J. L., Petkus, A. J., McChesney, K., Stein, M. B., Judd, P. H., Rockwell, E., . . . Patterson, T. L. (2009). Older adults are less accurate than younger adults at identifying symptoms of anxiety and depression. *Journal of Nervous and Mental Disease*, 197(8), 623-626.

Wolitzky-Taylor, K. B., Castriotta, N., Lenze, E., Stanley, M. A., & Craske, M. G. (2010).

Anxiety disorders in older adults: A comprehensive review. *Depression and Anxiety*, 27, 190-211.

Chapter 3, Study 2: Older Adults' Mental Health Information Preferences

Despite the prevalent mental health problems that older adults experience (e.g., Reynolds, Pietrzak, El-Gabalawy, Mackenzie, & Sareen, 2015), they are particularly unlikely to seek professional help (Kessler, Demler, Frank, et al., 2005; Klap, Unroe, & Unutzer, 2003; Mackenzie, Reynolds, Cairney, Streiner, & Sareen, 2012; Sareen, Cox, Afifi, Yu, & Stein, 2005; Wang, Lane, Olfson, Pincus, Wells, & Kessler, 2005). Although many barriers to accessing mental health services have been explored in the literature, one barrier that is receiving growing attention is older adults' inadequate mental health literacy, leading to less proficiency in recognizing, managing, and preventing mental health problems compared to younger age groups (Farrer, Leach, Griffiths, Christensen, & Jorm, 2008; Fisher & Goldney, 2003; Wetherell et al., 2009; Jorm et al., 1997; Jorm, 2012). Although this literature suggests that older adults have less knowledge about mental health, what remains unknown is the type of information that older adults would want if they (or a close friend, family member, or spouse) were experiencing a mental health problem, how much information they would want, from whom they would like to access this information from, and in what format they would like to receive this information. This gap in knowledge is especially problematic given research indicating older adults' preference for involvement in their health care decision-making (Chiu, Feuz, McMahan, Miao, & Sudore, 2016; O'Neal et al., 2008).

The objective of this study is to examine, for the first time, the mental health information preferences of older adults, as well as the predictors of these information preferences. Increased knowledge in these areas will be helpful in enhancing older adults' mental health treatment decision-making. Findings will ultimately contribute to the development of health care strategies to increase the mental health literacy, treatment decision-making, and pathways to mental health

treatment among older adults. I begin by reviewing relevant research in the area of mental health problems and service use among older adults, followed by literature investigating mental health literacy as an important barrier to service use, mental health treatment decision-making, and mental health information preferences. I then turn to a description of the current research methodology and findings, and discuss important conclusions and implications.

Mental Health Problems and Mental Health Service Use Among Older Adults

Anxiety and mood disorders are among the most prevalent psychiatric disorders faced by adults ages 55 years and older, with population health data from Canada and the United States indicating that between 3.0-6.8% of older adults meet diagnostic criteria for any past-year mood disorder, and between 2.5-11.4% of older adults meet criteria for any past-year anxiety disorder (Reynolds et al., 2015; Scott, Mackenzie, Chipperfield, & Sareen, 2010). Although the consensus derived from this body of research is that prevalence estimates of psychiatric disorders decrease across the late-lifespan, recent research has identified a slight upturn in prevalence estimates among the oldest-old age group (age 85+) (Reynolds et al., 2015). In addition to examining prevalence estimates of older adults who meet diagnostic criteria for psychiatric disorders, it is important to look at subthreshold symptoms of these disorders, which are clinically significant. Termed subsyndromal depression, subthreshold depression, and minor depression, prevalence estimates of symptoms of mental health problems have been shown to be approximately two to three times higher than diagnoses of major depressive disorder among older adults (Meeks, Vahia, Lavretsky, Kulkarni, & Jeste, 2011). Of concern, 8-10% of older adults with these more minor cases of depression develop major depression within a year (Meeks et al., 2011).

Research also indicates elevated rates of emotional distress, anxiety, depression, and physical illness among older adults who identify as caregivers (Anderson, Linto, & Stewart-

Wynne, 1995; Cannuscio et al., 2002; Schulz & Martire, 2004; Vitaliano, Zhang, & Scanlan, 2003). Caregivers are at an increased likelihood of experiencing negative physical, mental, and cognitive outcomes if they report caregiver strain, difficulty with caregiving, burden associated with caregiving, caregiving for someone with chronic illness, and providing extensive and frequent care (Chappell & Funk, 2011). Of further concern, emotional distress, subsyndromal mental health problems, and psychiatric disorders often co-occur with physical health problems, which are prevalent among older adults (El-Gabalawy, Mackenzie, & Sareen (in press); El-Gabalawy, Mackenzie, Shooshtari, & Sareen, 2011; Gunn et al., 2012).

Although effective treatment options for late-life distress, anxiety, and mood disorders exist (e.g., Andreescu & Reynolds, 2011; Ayers, Sorrell, Thorp, & Wetherell, 2007; Hunsley, Elliott, & Therrien, 2014; Karlin & Fuller, 2007; Payman, 2011; Wetherell, Lenze, & Stanley, 2005), older adults are particularly unlikely to utilize mental health services (Byers, Arean, & Yaffe, 2012; Cairney, Corna, & Streiner, 2010; Crabb & Hunsley, 2006; Lippens & Mackenzie, 2011; Mackenzie et al., 2012). For example, findings from a nationally representative survey of community-dwelling American adults indicated that approximately 70% of older adults with mood and anxiety disorders do not utilize services (Byers et al., 2012). When comparing prevalence estimates of mental health service use across the adult lifespan, the most prominent pattern of service use is a hill-shaped distribution, with middle-aged adults ages 35-54 having the greatest propensity to use services compared to young and older adults (Mackenzie et al., 2012).

Poor Mental Health Literacy and Limited Mental Health Information as Barriers to Service Use

There is growing support in the literature that mental health literacy, defined as “knowledge and beliefs about mental disorders, their recognition, management, or prevention,”

can be a barrier to service use among older adults (Jorm et al., 1997, p.182; Jorm, 2012). Gum and colleagues found that after reading a vignette describing an older adult with depression, only 41.0% of community-dwelling older adults correctly identified the older adult as depressed (Gum, Iser, & Petkus, 2010). Knowledge of depression has also been found to be limited among older adults in racial/ethnic minority groups, with 42.6% of Korean American older adults and 11.3% of Chinese Canadian older adults providing correct diagnoses (Jang, Gum, & Chiriboga, 2011; Tieu, Konnert, & Wang, 2010).

Older adults' performance on measures of mental health literacy is significantly lower when compared to younger adults. Specifically, older adults make more errors in recognizing mental health problems including anxiety, depression, and schizophrenia. Furthermore, older adults are also less likely to recommend that individuals with mental health problems seek professional help through a general practitioner, counsellor, psychologist, or psychiatrist (Farrer, Leach, Griffiths, Christensen, & Jorm, 2008; Fisher & Goldney, 2003; Wetherell et al., 2009). This literature underscores the significance of mental health literacy as a barrier to older adults' use of mental health services. At the same time, these findings highlight a vital opportunity and challenge for researchers, health care providers, and policy makers, to explore older adults' mental health information preferences, and to find ways to improve the mental health literacy of this growing demographic.

Mental Health Treatment Decision-Making

When older adults seek help for mental health problems, they may have a variety of questions regarding treatment options and the advantages and disadvantages of each treatment option. Recently, there has been an increasing emphasis on shared decision-making and patient involvement in health care. However, research in the medical field demonstrates that patients

often receive less information than they desire, and the information that they do receive is inadequate for addressing their needs (Boberg et al., 2003; Boreham & Gibson, 1978; Jenkins, Fallowfield, & Saul, 2001; Rogers, Kennedy, Nelson, & Robinson, 2005). This finding is especially problematic for older adults, who report a stronger preference to be involved in health care treatment decision-making (Chiu et al., 2016; O'Neal et al., 2008). Providing information to patients prior to treatment decision-making has been shown to lead to increased understanding and recall of information, as well as patient satisfaction and compliance with treatment (Deyo & Diehl, 1986; Faden, Becker, Lewis, Freeman, & Faden, 1981; Hall, Roter, & Katz, 1988).

In comparison to the plethora of research investigating information preferences as they pertain to physical health problems, much less has been done regarding mental health problems (Buckland, 1994; Dey, 2004; Price, Pak, Müller, & Stronge, 2012; Voelker, 2005; Zhang & Fu, 2011). Findings in this limited area of research indicate that adults with mental health problems and their families have many information needs that remain unaddressed (Cleary, Freeman, Hunt, & Walter, 2005; Drapalski et al., 2008; Fossey, Harvey, Mokhtari, & Meadows, 2012). Findings from a quantitative needs assessment survey examining the information needs of family members of adults accessing mental health treatment indicated that despite receipt of information prior to treatment, they had a number of information needs that were not addressed (Drapalski et al., 2008). These unmet needs included information on treatment progress, as well as information concerning future treatment options in the community. Findings of this research also highlighted the importance of tailoring mental health information to patients and families, by providing information in ways that promotes increased accessibility and understanding. Recent qualitative research exploring the information preferences of adults seeking mental health services indicated that older adults expressed the desire for a wide variety of information, including: information

about their mental health problem; what to expect about the course of the problem; the various treatment options; and how they would find out about their progress throughout treatment (Fossey et al., 2012). Research investigating the mental health information preferences of adult inpatients and outpatients with mental health problems and their caregivers (e.g., spouses/partners, parents, other relatives) echoed this desire for enhanced information, highlighting preferences for knowledge regarding: steps to take if feeling unwell; information about medication treatment; knowledge about the ways in which others cope with similar mental health problems; and information about mental health services in the community (Cleary et al., 2005). This research has targeted young and middle-aged adults who have experienced mental health problems and sought mental health treatment, as well as those who are close to them – either acting as formal or informal caregivers. Therefore, a gap remains in the literature regarding the information preferences of community-based older adults, a gap that the current research seeks to address. Older adults are a distinct demographic group who may have different mental health information preferences compared to younger age groups. It is important to examine the mental health information preferences of community-based older adults with and without diagnosable mental health problems due to prevalence rates of mental health problems such as anxiety and depression in this age group; prevalence rates of subsyndromal mental health problems and symptomatology of distress (e.g., related to caregiving or physical health problems), anxiety, and depression; as well as the possibility that they or someone close to them will experience a mental health problem in the future. Furthermore, although a limited body of research has examined preferred content areas of mental health information, there is an absence of research examining preferences for the amount, format, and source of mental health information.

Predictors of Health Information Preferences

In addition to the dearth of research investigating mental health information preferences, there is a scarcity of research examining predictors of mental health information preferences. Although this topic has not been explored within the mental health field, it has been explored at great length within the physical health field, largely focusing on cancer patients and survivors. Preferences for greater amounts of health information are associated with younger age (Galarce et al., 2011), higher educational attainment (Galarce et al., 2011), non-White race (Beckjord et al., 2008), female sex (Neame, Hammond, & Deighton, 2005), comorbid health problems (Beckjord et al., 2008), decreased perception of physical and mental health status (Beckjord et al., 2008), higher psychological distress (Stewart et al., 2000), and higher levels of social support (lower levels of social isolation) (Askelson, Campo, & Carter, 2011).

Researchers recommend that information be tailored to suit patients' varying needs and preferences (Leydon et al., 2000; Meredith et al., 1996). However, older adults' mental health information preferences have only been minimally explored in the literature, hindering the ability of researchers, geriatric health care providers, and policy makers to tailor mental health information to suit their needs. A recent manuscript published by Erickson and colleagues (2015) was the first paper to examine the effects of tailoring mental health information for older adults, applying the tenets of Socioemotional Selectivity Theory (Carstensen et al., 1999). One of the key findings of this manuscript indicated that present-focused individuals (predominantly older adults) endorsed liking the present-focused informational pamphlet more than individuals with a neutral time perspective (Erickson, Mackenzie, Menec, & Bailis, 2015). Knowing older adults' mental health information preferences will help to tailor mental health information to older

adults, with ultimate aims of improving their ability to recognize mental health problems and make informed treatment decisions.

The objectives of this study were: a) to describe the mental health information preferences of older adults (i.e., amount, content, format, and source); and b) to determine the sociodemographic and psychosocial predictors of older adults' mental health information preferences. As there has not been any previous research examining the predictors of mental health information preferences, my hypotheses are based on research investigating predictors of physical health information preferences described above. Given previous research in this area, I expected that sociodemographic and psychosocial characteristics would be associated with older adults' mental health information preferences. Specifically, I hypothesized that information preferences (i.e., amount, content, format, and source) would be associated with younger age, higher educational attainment, non-White race, female sex, comorbid health problems, decreased perception of physical and mental health status, higher psychological distress, more favourable attitudes toward treatment, and higher levels of social support.

Method

Participants and Recruitment

After obtaining ethics approval for this study, I recruited adults ages 50 years and older through senior centres and medical clinics across Winnipeg, with the goal of collecting data from approximately 200 older adults in order to provide adequate statistical power. My rationale for including the age limit of 50 years was based on the age distribution of adults presenting to and recruited from senior centres and medical clinics. Data collection and recruitment at senior centers continued from September 2013 until February 2014. Medical clinic data collection took place from October 2013 until April 2014 in two medical clinics in different areas of Winnipeg,

the first, a walk-in clinic, and the second, a multi-physician multi-focused general and specialty referral based clinic.

A thorough cleaning of the data and elimination of surveys with a large number of missing pages of response options (defined as two or more missing pages) resulted in a total of 229 completed questionnaires. Providing an accurate response rate for data collected at senior centres was complicated by the procedure of data collection, whereby executive directors posted a flyer about our study in their centre and participants called their director to register. The response rate for participants recruited from medical clinics was 74%, with participants declining to participate due to various reasons, including not feeling well, perceived insufficient English-language proficiency, print too small to see without glasses, and insufficient time to participate.

Measures

Mental health information questionnaire. The mental health information questionnaire was comprised of questions from a variety of sources: questions that were identified in previous research conducted by the Mobilizing Minds Research Group (e.g., Stewart et al., 2014); questions identified in the literature on health-related information preferences (e.g., Askelson et al., 2011; Beckjord et al., 2008; Stewart et al., 2000); questions that were suggested by Ms. Connie Newman (Executive Director of the Manitoba Association of Senior Centres); questions suggested by health care providers working as part of the Seniors Healthy Aging Resource Teams; and questions that were suggested by clinical geropsychologists, in light of the most frequently asked questions they receive about mental health treatment from older adults and their family members. In order to ensure the reliability and validity of participant ratings on the mental health information questionnaire, I constructed items with five-point response options, which are accompanied by a numerical and verbal label (Krosnick & Presser, 2010). Advantages of this

approach include enhancing correct interpretation of response options, decreasing likelihood for acquiescence, and increasing the accuracy of measurement. Further, respondents endorse greater satisfaction with survey completion when scales have a midpoint and where each rating option is verbally labeled (Krosnick & Presser, 2010).

The mental health information questionnaire consisted of a battery of questions investigating sociodemographic, psychosocial, and health-related characteristics and mental health information preferences (Appendix H). The sociodemographic information in the questionnaire included: age, sex, race/ethnicity, marital status, education, current occupation, and annual household income. Measurement of psychosocial characteristics consisted of the 6-item Kessler Psychological Distress measure (K6) (Kessler et al., 2002), the 6-item version of the Lubben Social Network Scale (LSNS-6) (Lubben et al., 2006), and the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF) (Fischer & Farina, 1995). Health-related characteristics included questions pertaining to self-rated mental and physical health and personal experience with mental health problems and treatment, and were based on questions from the Canadian Community Health Survey (CCHS 1.2 Mental Health and Well-being, 2002) as well as research conducted by the Mobilizing Minds Research Group (Stewart et al., 2014).

Kessler psychological distress measure (K6). The K6 is a 6-item self-report scale that measures feelings of distress over the past 30 days on a 5-point rating scale with response options ranging from 0 (*none of the time*) to 4 (*all of the time*) (Kessler et al., 2002). Scores range from 0-24, with higher scores indicating greater distress, and a cut point of ≥ 5 on the K6 to identify those with moderate mental distress (Prochaska, Sung, Max, Shi, & Ong, 2012). According to psychometric criteria outlined by Hunsley and Mash (2008), adequate internal

consistency ranges from α values of .70-.79, good internal consistency ranges from α values of .80-.89, and excellent internal consistency ranges from α values $\geq .90$. Hunsley and Mash (2008) also identify criteria for test-retest reliability, with adequate test-retest correlations of .70 over several days, good test-retest correlations of at least .70 over several months, and excellent test-retest correlations of at least .70 over a year or longer. Previous research has demonstrated that the K6 has good internal consistency (Kessler et al., 2002; $\alpha = 0.89$), which was also shown with the current sample ($\alpha = 0.85$).

Lubben social network scale (LSNS-6). Participants completed the LSNS-6, which measures social isolation and social support/connectedness on a 5-point rating scale. Questions on the LSNS-6 address how many relatives/friends one is in contact with approximately once a month, how many relatives/friends one feels close to, and how many relatives/friends one feels at ease with to talk about private matters. Response options range from 1 to 9+, with total scores ranging from 6 to 30. Higher scores represent greater social connectivity, and a cut point of < 12.0 represents social isolation/loneliness (Lubben et al., 2006). This scale has good internal consistency ($\alpha = 0.83$) and adequate test-retest reliability ($\kappa = 0.64$), according to criteria by Hunsley and Mash (2008) (Lubben et al., 2006). Good internal consistency of the LSNS-6 was also demonstrated with the current sample ($\alpha = 0.83$).

Attitudes toward seeking professional psychological help (ATSPPHS-SF). Participants completed the 10-item ATSPPHS-SF as a measure of attitudes toward seeking mental health care (Fischer & Farina, 1995). When completing the ATSPPHS-SF, participants responded to items on a 4-point rating scale, with response options ranging from 0 (disagree) to 3 (agree). Total scores range from 0 to 30, with higher scores representing more favourable attitudes toward mental health treatment. The ATSPPHS -SF has adequate internal consistency ($\alpha = 0.77$ -0.78)

and good test-retest reliability ($r = 0.80$) (Constantine, 2002; Elhai, Schweinle, & Anderson, 2008; Fischer & Farina, 1995; Hunsley & Mash, 2008; Komiya et al., 2000; Vogel et al., 2005).

Adequate internal consistency was also demonstrated with the current sample ($\alpha = 0.77$).

Mental health information preferences. Following their completion of questions in the aforementioned areas and prior to answering questions examining mental health information preferences (i.e., amount, content, format, and source), older adults read a vignette (see Appendix H) included in the questionnaire, tailored to their respective sex, which described the experience of an older adult with major depression. The purpose of the vignette was to place older adults in an appropriate frame of mind to respond to questions about their mental health information preferences, by providing them with information about what it would be like to experience depression. Research in the area of mental health literacy has shown that older adults are more likely to recognize the symptoms of depression, as compared to the symptoms of anxiety (Wetherell et al., 2009). Therefore, participants read a vignette in the questionnaire that focused on an older adult's experience with depression, in order to promote their ability to recognize that the older adult had a problem, and understand the problem as depression. Furthermore, research has shown that older adults are more likely to correctly identify depression when there is information pertaining to sadness in addition to somatic symptoms such as loss of appetite and disruptions in sleep (Gum, McDougal, McIlvane, & Mingo, 2010; Wetherell et al., 2009). In light of this finding, the vignette included these symptoms.

Older adults' endorsed their preferences for mental health information (content, amount, format, and source) on 5-point rating scales. Within the content section of the questionnaire (D.1.), participants began by indicating their level of familiarity with the types of professional help available for mental health problems (e.g., stress, anxiety, depression). After completing this

question, participants responded to questions concerning their perceptions of the importance of a variety of mental health information content on a 5-point rating scale with response options ranging from *not at all important* to *critical*. This section of the mental health questionnaire also contained a question asking participants to identify other information that they would like to know prior to making a decision about finding help for a mental health problem. When answering questions pertaining to their preferred amount of information (D.2.), participants indicated the quantity of information that they would prefer concerning medication treatment, counselling or psychological treatment, combined medication and psychological treatment, and self-help approaches. Participants responded on a 5-point rating scale with response options ranging from *none* (0 pages of information) to *a great deal* (3-6 pages of detailed information). With regard to the format of information (D.3.), participants responded to questions concerning their preferences of written information, information received through discussion with a health care provider, information provided in the form of a DVD, or information on a recommended Internet website. In this section, participants responded on a 5-point rating scale with response options ranging from *not preferred* to *extremely preferred*. This section of the mental health questionnaire also contained a question asking participants to identify other information formats that they would find helpful if they were experiencing a mental health problem and looking for help. At the end of the questionnaire, participants responded to questions examining the sources that they would be likely to contact should they experience a mental health problem (D.4.). Sources of information presented in the questionnaire included: spouse or romantic partner, child/children, sibling(s), close friend(s), family doctor, mental health professional, pharmacist, community newspaper, recommended self-help book, or an Internet discussion group or website. Participants responded to these questions on a 5-point rating scale with response options ranging

from *not at all likely* to *extremely likely*. Participants also had a *not applicable* response option on this particular set of items. This section of the mental health questionnaire also contained a question asking participants to identify other sources that they would consult if they were experiencing a mental health problem and were looking for help.

Data Collection Procedure

Participants began by completing the consent form (Appendix E, F, and G), followed by the mental health information questionnaire (Appendix H). On average, participants completed the questionnaire in 27.5 minutes, with completion times ranging from 15-40 minutes.

Participants recruited from medical clinics received a \$5 gift card to a local coffee shop, and participants recruited from senior centres received a complimentary lunch for participating in this research.

Analyses

I analyzed results of the mental health information questionnaire ($n = 229$) using the Statistical Package for the Social Sciences (SPSS) version 21.0 for Mac. Results of a missing values analysis indicated 98% complete values in the dataset, with an absence of clear patterns to the missing data (Little's MCAR chi-square = 1413.0, $p > .05$). In a missing value analysis, I used expectation maximization with 25 iterations. Multiple imputation method (with five imputations) on missing data resulted in imputed values for age, education, household income, and marital status. All other variables were not imputed due to no or too few missing values. When comparing regression coefficients (R^2 and ΔR^2) of the imputed and original datasets, there were similar values and identical patterns in the data. As such, all analyses are presented using the original dataset.

Mental health information preferences. I analyzed findings with the total sample of older adults, keeping age as a continuous variable. In addressing the first, exploratory, objective of this study— to describe the mental health information preferences of older adults – I conducted descriptive analyses to quantify older adults’ ratings of information preferences (i.e., amount, content, format, and source), according to three levels, recoded from the initial five-level scale responses. My decision to collapse response options was based on the large volume of data and desire to present information in a way that enhances readability and interpretability. I also calculated the mean rating and 95% confidence interval for each information preference item. Confidence intervals are commonly used in survey research and allow for mean comparisons in Tables 2-5. Confidence interval lengths indicate a higher degree of precision in mean estimates by specifying lower and upper bounds, and have been increasingly recommended in comparison to pairwise significance tests, particularly for exploratory and descriptive research questions (Cumming, 2014; Cumming & Finch, 2005; Cummings & Koepsell, 2010; Finch & Cumming, 2009). Benefits of confidence intervals include decreased reliance on the unstable measurement of p as employed in traditional null hypothesis significance testing, decreased possibility of type 1 error with multiple pairwise comparisons, and appropriateness in their application to exploratory and descriptive research questions such as the first objective of the current research. When examining differences in means, if confidence intervals do not overlap, this provides evidence for mean difference (Cumming & Finch, 2005).

I conducted principal components analyses (PCA) on the information preference variables, in order to condense items for descriptive tables as well as reduce the number of variables to use in subsequent regression analyses. Decisions concerning number of factors to

retain centered upon visual inspection of the scree plot, retaining factors in the steep curve before the line trends downward or levels off (Courtney, 2013).

Predictors of mental health information preferences. To address the second objective of this study – to determine the sociodemographic and psychosocial predictors of older adults’ mental health information preferences – I conducted hierarchical linear regression analyses with sociodemographic and psychosocial characteristics as independent variables predicting the dependent variables (information preferences). For each regression analysis, I entered sociodemographic variables in step one (i.e., sex, race/ethnicity, age, education, income, and marital status), and psychosocial variables in step two (i.e., K6 score, self-rated mental health, self-rated physical health, LSNS-6 score, ATSPPHS-SF score, previous experience with mental health problems, and previous experience with mental health treatment).

According to my first set of hypotheses examining the predictors of preferred amount of information, I hypothesized that the previously outlined sociodemographic and psychosocial independent variables would be related to the dependent variables listed in section D.2. of the mental health questionnaire. A PCA of the four questions concerning preferred amount of information resulted in a one-factor solution. As a result, I computed a composite dependent variable, which served as the dependent variable in the hierarchical linear regression analysis.

In my second set of hypotheses related to older adults’ preferred content of information, I hypothesized that the previously outlined sociodemographic and psychosocial independent variables would be related to the dependent variables listed in section D. 1. of the mental health questionnaire. In light of a three-factor solution that resulted from a PCA of 17 content of information variables, I computed three composite dependent variables: pharmacotherapy content (i.e., side effects of medication treatment, possible addiction to medication, interaction

effects of medication, medication management, length of time medications need to produce results, and training of treatment provider); psychotherapy content (i.e., where psychological treatment will take place, what you do during psychological treatment, amount of psychological treatment required, length of treatment sessions, side effects of psychological treatment, and combination treatment); and content regarding treatment options and decision-making (i.e., when to seek treatment, how to recognize symptoms, treatment options, advantages and disadvantages of treatment options, and medication treatment options).

In my third set of hypotheses concerning older adults' preferred formats of information, I included the same sociodemographic and psychosocial independent variables used to test previous hypotheses. A PCA of the four format variables (section D.3. of the mental health questionnaire) resulted in a four-factor solution. As such, I did not use the PCA, and dependent variables remained consistent with variables in the questionnaire, namely, information in written form, information received through discussion with a health care provider, information provided in the form of a DVD, and information on a recommended Internet website.

Finally, according to my fourth set of hypotheses related to older adults' preferred sources of information, I hypothesized that the previously outlined sociodemographic and psychosocial independent variables would be related to the dependent variables listed in section D.4. of the mental health questionnaire. Results of a PCA on the 10 source variables failed to reveal a statistically and theoretically clear factor solution. I therefore created three composite dependent variables based on theoretical and applied knowledge: independent learning (i.e., community newspaper, self-help book, and Internet,); health care professionals (i.e., primary care physician, mental health professional, and pharmacist); and family and friends (i.e., spouse or romantic partner, child/children, close friend(s), and sibling(s)).

Results

Sample Description

Table 1 shows the demographic, health-related, and psychosocial characteristics of the $n = 229$ older adults who completed the mental health information questionnaire. I recruited a total of $n = 127$ participants (55.5%) from medical clinics, and $n = 102$ participants (44.5%) from senior centres. Results of independent samples t -tests indicated that these samples differed significantly on the following demographic characteristics: age, education, household income, and racial background. The two samples did not differ significantly on other variables. Given that these sociodemographic characteristics were not strong or consistent significant predictors of information preferences in subsequent regression analyses, analyses focused on the total sample of older adults. Analyzing results with the total sample of older adults provided adequate statistical power for analyses. Respondents scored within the normative range for social connectedness on the LSNS-6 and within the normal range for distress on the K6, and mean scores on the ATSPPHS-SF indicated relatively favourable attitudes toward seeking mental health treatment.

Table 1

Older Adult Sample Characteristics

	Total Sample (n = 229)	Medical Clinic Sample (n = 127)	Senior Centre Sample (n = 102)
Age M (SD; range)	69.4 (10.0; 50-100)	65.0 (8.4; 50-89)	74.8 (9.3; 52-100)
Sex n (%)			
Female	157 (68.6)	85 (66.9)	72 (70.6)
Male	72 (31.4)	42 (33.1)	30 (29.4)
Ethnicity n (%)			
White	204 (89.1)	107 (85.6)	97 (95.1)
All Other Racial Ethnic Groups	23 (10.0)	18 (14.4)	5 (4.9)
Highest Level of Education M (SD; range)	12.8 (2.4; 7-22)	13.3 (2.3; 7-22)	12.2 (2.4; 8-22)
Occupational Status n (%)			
Retired	162 (70.7)	71 (56.3)	91 (90.1)
Full-time employment	42 (18.3)	36 (28.6)	6 (5.9)
Part-time employment	20 (8.7)	18 (14.3)	2 (2.0)
Unemployed	3 (1.3)	1 (0.8)	2 (2.0)
Marital Status n (%)			
Single, Widowed, Separated, Divorced	99 (44.8)	43 (35.2)	56 (56.6)
Married or Living as Married	122 (55.2)	79 (64.8)	43 (43.4)
Household Income n (%)			
\$0-\$34,999	79 (42.2)	33 (29.7)	46 (60.5)
\$35,000-\$60,000+	108 (57.8)	78 (70.3)	30 (39.5)
Self-Rated Mental Health M (SD; range) ^a	3.5 (1.0; 1-5)	3.6 (1.0; 1-5)	3.4 (1.0; 1-5)
Self-Rated Physical Health M (SD; range) ^a	3.1 (1.0; 1-5)	3.1 (0.9; 1-5)	3.1 (1.0; 1-5)
Previous Stress, Anxiety, or Depression n (%)	133 (58.1)	72 (57.1)	61 (60.4)
Previous Treatment for Stress, Anxiety, or Depression n (%)	84 (36.7)	47 (37.0)	37 (37.0)
LSNS-6 M (SD; range) ^b	17.9 (5.1; 2-30)	18.2 (5.0; 8-29)	17.5 (5.4; 2-30)
K6 Total M (SD; range) ^c	4.0 (4.2; 0-19)	3.8 (4.1; 0-19)	4.2 (4.3; 0-17)
ATSPPHS-SF M (SD; range) ^d	20.3 (5.9; 0-30)	21.3 (5.5; 5-30)	19.1 (6.3; 0-30)

Note. ^a Self-rated mental and physical health mean rating /5, ranging from 1 (poor), 2 (fair), 3 (good), 4 (very good), and 5 (excellent). ^b LSNS-6 = Lubben Social Network Scale. ^c K6 = Kessler 6-Item Distress Scale. ^d ATSPPHS = Attitudes Toward Seeking Professional Psychological Help Scale-Short Form.

Older Adults' Mental Health Information Preferences

When initially asked to rate their level of familiarity with the types of help for mental health problems (e.g., stress, anxiety, and depression), the majority of respondents (57.2%) reported being unfamiliar, compared to 19.2% who reported being moderately familiar, and 21.4% who reported being very familiar with the types of help for mental health problems.

Amount. Respondents rated their preferred amount of mental health information, ranging from no information at all, to moderate information (brief pamphlet or 1-page fact sheet), to detailed information (2-6 pages). As shown in Table 2, nearly two thirds of respondents preferred detailed information on psychological, pharmacological, and combined treatment options; whereas roughly half of respondents preferred detailed information on self-help approaches. These differences were not statistically significant based on overlapping confidence intervals.

Table 2

Older Adults' Preferences Regarding Amount of Information (n = 229)

Information Topic	Amount of Information Preferred n (%)			Mean rating (95% CI)
	Detailed Information	Moderate Information	No Information	
Combination Treatment	151 (65.9)	66 (28.8)	5 (2.2)	2.7 (2.6-2.7)
Pharmacological Treatment	142 (62.0)	77 (33.6)	3 (1.3)	2.6 (2.6-2.7)
Psychological Treatment	146 (63.8)	70 (30.6)	6 (2.6)	2.6 (2.6-2.7)
Self-Help Approaches	119 (52.0)	91 (39.7)	11 (4.8)	2.5 (2.4-2.6)

Note. Mean rating /3, ranging from 1 (no information preferred), 2 (moderate information preferred – brief pamphlet or 1-page fact sheet), 3 (detailed information preferred – 2-6 pages). 95% CI = 95% confidence interval.

Content. Table 3 shows that overall; a large proportion of older adults rated a wide variety of mental health information content items as very important. When looking at the three composite scores, namely, the pharmacotherapy factor, treatment options and decision-making

factor, and psychotherapy factor, it is evident that the confidence intervals for psychotherapy and treatment options and decision-making do not overlap with the pharmacotherapy confidence interval, suggesting that overall, this content area may be more preferred by older adult respondents. When responding to the question concerning other information that they would like to know prior to making a decision about finding help for a mental health problem, participants identified the following content areas: How to recognize the seriousness of a mental health problem (distinguishing mild, moderate, and severe symptoms), first steps to take in seeking treatment, confidentiality of treatment, length of waiting time to meet with a treatment provider, number of psychological treatment sessions that might be covered through insurance plans, and information on alternative treatment options.

Table 3

Older Adults' Preferences Regarding Content of Information (n = 229)

Information Topic	Rating of Importance n (%)			Mean rating (95% CI)
	Very Important	Moderately Important	Not Important	
Pharmacotherapy				2.8 (2.8-2.9)
Training of treatment provider	206 (90.0)	13 (5.7)	9 (3.9)	2.9 (2.8-2.9)
Medication management	205 (89.5)	13 (5.7)	10 (4.4)	2.9 (2.8-2.9)
Side effects	203 (88.6)	10 (4.4)	15 (6.6)	2.8 (2.8-2.9)
Interaction effects	202 (88.2)	17 (7.4)	9 (3.9)	2.8 (2.8-2.9)
Addiction	193 (84.3)	22 (9.6)	13 (5.7)	2.8 (2.7-2.9)
Length of time to take effect	189 (82.5)	25 (10.9)	14 (6.1)	2.8 (2.7-2.8)
Treatment Options & Decision-Making				2.6 (2.6-2.7)
Advantages & disadvantages	170 (74.2)	40 (17.5)	18 (7.9)	2.7 (2.6-2.8)
How to recognize symptoms	166 (72.5)	35 (15.3)	27 (11.8)	2.6 (2.5-2.7)
Medication treatment	166 (72.5)	40 (17.5)	21 (9.2)	2.6 (2.6-2.7)

options				
When to seek treatment	165 (72.1)	43 (18.8)	19 (8.3)	2.6 (2.5-2.7)
Treatment options	165 (72.1)	38 (16.6)	24 (10.5)	2.6 (2.5-2.7)
Psychotherapy				2.5 (2.5-2.6)
Combination treatment	184 (80.3)	26 (11.4)	17 (7.4)	2.7 (2.7-2.8)
What you do during treatment	179 (78.2)	31 (13.5)	18 (7.9)	2.7 (2.6-2.8)
Side effects	164 (71.6)	42 (18.3)	22 (9.6)	2.6 (2.6-2.7)
Amount of treatment	155 (67.7)	48 (21.0)	25 (10.9)	2.6 (2.5-2.7)
Length of treatment sessions	140 (61.1)	60 (26.2)	28 (12.2)	2.5 (2.4-2.6)
Location of treatment	112 (48.9)	66 (28.8)	50 (21.8)	2.3 (2.2-2.4)

Note. Mean rating /3 ranging from 1 (not important), 2 (moderately important), 3 (very important). 95% CI = 95% confidence interval.

Format. As shown in Table 4, over half of respondents rated information obtained through a discussion with their health care provider or in written format as very preferred; whereas one quarter to one third rated information in DVD format and information on the Internet as very preferred. Older adults' preference for discussion with health care provider and written information, over DVDs and Internet was significant, as indicated by non-overlapping confidence intervals. When responding to the question concerning other information formats that they would find helpful if they were experiencing a mental health problem and looking for help, participants identified the following: Information received by telephone (i.e., Health Links), information received by text-messaging and email, and information received through home visits (i.e., Home Care).

Table 4

Older Adults' Preferences Regarding Format of Information (n = 229)

Format of Information	Rating of Preference n (%)			Mean rating (95% CI)
	Very Preferred	Moderately Preferred	Not Preferred	
Discussion with Health Care Provider	135 (59.9)	57 (24.9)	32 (14.0)	2.5 (2.4-2.6)
Written Format	135 (59.0)	46 (20.1)	40 (17.5)	2.4 (2.3-2.5)
DVD Format	74 (32.3)	53 (23.1)	97 (42.4)	1.9 (1.8-2.0)
Recommended Internet Website	62 (27.1)	56 (24.5)	106 (46.3)	1.8 (1.7-1.9)

Note. Mean rating /3, ranging from 1 (not preferred), 2 (moderately preferred), 3 (very preferred). 95% CI = 95% confidence interval.

Source. As indicated in Table 5, respondents indicated that they would be very likely to contact a variety of sources for mental health information. Over three quarters of respondents reported that they would be very likely to contact their family doctor as a source of mental health information. Over half of respondents reported that they would be very likely to contact their spouse/romantic partner, or a mental health professional. Slightly less than half of respondents reported that they would be very likely to contact their child/children as a source of mental health information. Independent learning sources, including a community newspaper, a recommended self-help book, and the Internet, were less favourably rated by respondents. Older adults' preference to consult family and friends and health care professionals, over independent learning sources was significant, as indicated by non-overlapping confidence intervals. Further, older adults' significantly preferred their family doctor as a source of mental health information, in comparison to all other source variables, with the exception of mental health professionals. When responding to the question concerning other sources that they would consult if they were experiencing a mental health problem and were looking for help, participants identified the

following: Support groups, Health Links, community organizations, and religious/spiritual advisors.

Table 5

Older Adults' Preferences Regarding Source of Information (n = 229)

Source of Information	Rating of Likelihood n (%)			Mean rating (95% CI)
	Very Likely	Moderately Likely	Not Likely	
Family and Friends				2.1 (2.0-2.2)
Spouse/ Partner	115 (61.8)	22 (11.8)	49 (26.3)	2.3 (2.1-2.4)
Child/Children	98 (48.3)	33 (16.3)	72 (35.5)	2.1 (2.0-2.3)
Sibling(s)	81 (39.1)	36 (17.4)	90 (43.5)	2.0 (1.9-2.2)
Close Friend(s)	86 (39.4)	36 (16.5)	96 (44.0)	2.0 (1.8-2.1)
Health Care Professionals				2.2 (2.2-2.3)
Family Doctor	173 (80.8)	24 (11.2)	17 (7.9)	2.7 (2.6-2.8)
Mental Health Professional	142 (66.0)	28 (13.0)	45 (20.9)	2.5 (2.3-2.6)
Pharmacist	44 (20.7)	32 (15.0)	137 (64.3)	1.6 (1.4-1.7)
Independent Learning				1.5 (1.4-1.6)
Community Newspaper	8 (3.9)	8 (3.9)	187 (92.1)	1.1 (1.0-1.2)
Recommended Self-Help Book	71 (32.6)	49 (22.5)	98 (45.0)	2.0 (1.8-2.1)
Internet Website	25 (11.9)	29 (13.8)	156 (74.3)	1.4 (1.3-1.5)

Note. Mean rating /3, ranging from 1 (not preferred), 2 (moderately preferred), 3 (very preferred). 95% CI = 95% confidence interval.

Predictors of Mental Health Information Preferences

Amount. Together, sociodemographic and psychosocial variables accounted for 14% of the variance in participants' preference for amount of information, $F(13,148) = 1.86, p < 0.05$. Social isolation/support was a unique significant predictor of amount of information, with older adults who reported lower self-rated social isolation, and conversely, greater social support/connection, demonstrating a greater preference for a larger amount of information concerning mental health treatment.

Content. Three regression analyses predicted older adults' preference for pharmacotherapy, psychotherapy, and treatment option and decision-making content of mental health information (see Table 6). For the preference for information on pharmacotherapy analysis, sociodemographic variables accounted for 12% of the variance in step one, $F(6,160) = 3.74, p < 0.01$. A greater preference to seek out pharmacotherapy-related information was associated with higher educational attainment and being married or in a common-law relationship.

The sociodemographic predictors were no longer significant when the psychosocial variables were added in step two, which accounted for an additional 17% of the variance, $F(7,153) = 5.05, p < 0.001$. Participants who reported lower self-rated social isolation (greater social support), more favourable attitudes toward seeking professional psychological help, and previous experience with stress, anxiety, or depression, demonstrated a greater preference to receive information focused on pharmacotherapy. The experience of greater psychological distress was associated with a decreased preference to receive information concerning pharmacological treatment. Together, sociodemographic and psychosocial variables accounted for 29% of the variance in participants' preferences for pharmacotherapy content of information, $F(13,153) = 4.75, p < 0.001$.

A second regression analysis examined sociodemographic and psychosocial characteristics associated with participants' preference for information on psychotherapy. Neither sociodemographic variables entered in step 1 of this analysis, nor psychosocial variables entered in step 2 of this analysis, significantly predicted participants' preference for information on psychotherapy.

A third regression analysis examined predictors of participants' preference for information on mental health treatment options and decision-making. The sociodemographic variables in step 1 of the model did not predict participants' information preferences, whereas the psychosocial variables in step 2 accounted for an additional 21% of the variance in participants' preference for information on treatment options and decision-making $F(7,153) = 6.11, p < 0.001$. Participants who reported more favourable attitudes toward seeking professional psychological help and previous experience with stress, anxiety, and depression, demonstrated a greater preference for information related to treatment options and decision-making. Together, sociodemographic and psychosocial variables accounted for 27% of the variance in participants' preference for this type of content of information, $F(13,153) = 4.26, p < 0.001$.

Table 6

Regressions of Sociodemographic and Psychosocial Characteristics on Content of Information (n = 229)

	Pharmacotherapy		Psychotherapy		Treatment Options & Decision-Making	
Variable	<i>b</i>	<i>SEb</i>	<i>b</i>	<i>SEb</i>	<i>b</i>	<i>SEb</i>
Step 1						
Sex (0=female, 1=male)	-0.10	0.06	-0.15	0.09	-0.11	0.08
Race (0=White, 1=Non-White)	0.06	0.09	0.14	0.13	0.07	0.12
Age	-0.00	0.00	-0.00	0.00	-0.00	0.00
Education	0.02*	0.01	0.01	0.02	0.03*	0.02
Income (0=\$0-\$34,999, 1=\$35,000-\$60,000+)	0.04	0.06	-0.05	0.10	0.04	0.09
Marital status (0=single/previously married, 1= married/common law)	0.14*	.06	0.04	0.09	0.05	0.08
<i>R</i> ²	0.12**		0.04		0.06	
Step 2						
Sex (0=female, 1=male)	-0.08	0.05	-0.14	0.09	-0.07	0.07
Race (0=White, 1=Non-White)	0.10	0.09	0.19	0.14	0.16	0.12
Age	-0.00	0.00	-0.01	0.00	-0.00	0.00
Education	0.01	0.01	0.00	0.02	0.02	0.02
Income (0=\$0-\$34,999, 1=\$35,000-\$60,000+)	-0.01	0.06	-0.07	0.10	-0.01	0.08
Marital status (0=single/previously married, 1=married/common law)	0.10	0.06	0.00	0.09	0.00	0.08
K6 ^a	-0.02*	0.01	-0.02	0.01	-0.01	0.01
Self-rated mental health	0.02	0.04	-0.01	0.06	0.02	0.05
Self-rated physical health	-0.03	0.03	-0.07	0.06	-0.03	0.05
LSNS-6 ^b	0.01*	0.00	0.01	0.01	0.01	0.01
ATSPPHS-10 ^c	0.01**	0.00	0.02*	0.01	0.03***	0.01
Previous mental health problems	0.14*	0.07	0.08	0.11	0.23*	0.10
Previous help-seeking for mental health problems	-0.02	0.07	-0.11	0.10	-0.06	0.10
ΔR^2	0.17***		0.08		0.21***	
<i>R</i> ²	0.29***		0.12		0.27***	

Note. ^a K6 = Kessler 6-Item Distress Scale. ^b LSNS-6 = Lubben Social Network Scale. ^c ATSPPHS = Attitudes Toward Seeking Professional Psychological Help Scale-Short Form.

p* < .05, *p* < .01, ****p* < .001

Format. As shown in Table 7, four regression analyses examined sociodemographic and psychosocial characteristics associated with older adults' preferred formats of mental health-

related information (i.e., information presented via written format, discussion with a health care provider, in DVD format, and on the Internet). The first two regression models examining sociodemographic and psychosocial variables associated with information presented in written format and through discussion with a health care provider were non-significant.

The third regression analysis examined sociodemographic and psychosocial variables associated with participants' preference for information presented in DVD format. Sociodemographic variables accounted for 9% of the variance in step one of this analysis, $F(6,156) = 2.63, p < 0.05$. Older age was a significant demographic predictor of preference of information presented in DVD format. Together, sociodemographic and psychosocial variables accounted for 16% of the variance in participants' preference to receive information in DVD format, $F(13,149) = 2.13, p < 0.05$. Age remained a significant predictor of information format preference in step 2, and psychological distress emerged as a significant unique psychosocial predictor of preference for mental health information in DVD format, whereby greater distress led to a decreased preference for this format of information.

The fourth regression analysis examined sociodemographic and psychosocial characteristics associated with participants' preference for information presented on the Internet. Sociodemographic characteristics accounted for 15% of the variance in step one of this analysis, $F(6,156) = 4.56, p < 0.001$. Higher educational attainment was a significant demographic predictor of this preferred format of information. Together, sociodemographic and psychosocial variables accounted for 19% of the variance in participants' preference to receive information on the Internet, $F(13,149) = 2.74, p < 0.01$. Educational attainment remained a significant predictor of preference of web-based information in step 2 of the analysis.

Table 7

Regressions of Sociodemographic and Psychosocial Characteristics on Format of Information (n = 229)

Variable	Written		Discussion with Health Care Provider		DVD Format		Internet	
	<i>b</i>	<i>SEb</i>	<i>b</i>	<i>SEb</i>	<i>b</i>	<i>SEb</i>	<i>b</i>	<i>SEb</i>
Step 1								
Sex (0=female, 1=male)	-0.09	0.13	-0.08	0.12	0.03	0.15	0.08	0.14
Race (0=White, 1=Non-White)	-0.00	0.19	-0.18	0.18	-0.13	0.22	-0.11	0.21
Age	0.01	0.01	0.00	0.01	0.03**	0.01	-0.01	0.01
Education	-0.01	0.03	0.04	0.02	0.02	0.03	0.09**	0.03
Income (0=\$0-\$34,999, 1=\$35,000-\$60,000+)	0.08	0.14	-0.17	0.13	0.05	0.16	0.24	0.15
Marital status (0=single/previously married, 1=married/common law)	-0.00	0.13	0.11	0.12	0.17	0.15	0.14	0.14
<i>R</i> ²	0.01		0.03		0.09*		0.15***	
Step 2								
Sex (0=female, 1=male)	-0.08	0.13	-0.06	0.12	0.07	0.15	0.12	0.14
Race (0=White, 1=Non-White)	0.10	0.20	-0.11	0.19	0.01	0.23	-0.10	0.22
Age	0.01	0.01	-0.00	0.01	0.03**	0.01	-0.01	0.01
Education	-0.02	0.03	0.04	0.02	0.01	0.03	0.07*	0.03
Income (0=\$0-\$34,999, 1=\$35,000-\$60,000+)	0.07	0.14	-0.18	0.13	0.03	0.16	0.17	0.16
Marital status (0=single/previously married, 1=married/common law)	-0.06	0.13	0.07	0.12	0.12	0.15	0.09	0.15
K6 ^a	-0.04	0.02	-0.00	0.02	-0.05*	0.02	-0.03	0.02
Self-rated mental health	-0.05	0.09	-0.07	0.08	-0.16	0.10	0.03	0.09
Self-rated physical health	-0.09	0.08	-0.05	0.08	-0.02	0.10	-0.03	0.09
Social Isolation/Support	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02

LSNS-6 ^b								
ATSPPHS-10 ^c	0.01	0.01	0.03**	0.01	0.02	0.01	0.02	0.01
Previous mental health problems	0.18	0.17	0.04	0.15	0.09	0.19	0.07	0.18
Previous help-seeking for mental health problems	-0.12	0.17	-0.13	0.15	0.10	0.19	-0.04	0.18
ΔR^2	0.06			0.08		0.06		0.04
R^2	0.07			0.12		0.16*		0.19**

Note. ^a K6 = Kessler 6-Item Distress Scale. ^b LSNS-6 = Lubben Social Network Scale. ^c ATSPPHS = Attitudes Toward Seeking Professional Psychological Help Scale-Short Form. * $p < .05$, ** $p < .01$, *** $p < .001$

Source. Three regression analyses examined sociodemographic and psychosocial characteristics associated with older adults' preference for source of mental health information (i.e., family and friends, health care professionals, and independent learning) (see Table 8). In the first regression analysis examining variables associated with preference to seek information from family and friends, sociodemographic variables accounted for 9% of the variance, $F(6,156) = 2.48, p < 0.05$. Sex emerged as a unique significant predictor, with men being less likely to seek information from this source. Psychosocial variables added in step 2 of the model accounted for an additional 13% of the variance, $F(7,149) = 3.66, p < 0.01$. Together, sociodemographic and psychosocial variables accounted for 22% of the variance in participants' preference to receive information from family and friends, $F(13,149) = 3.25, p < 0.001$. Sex remained a unique significant predictor in step 2, and lower self-reported social isolation (greater social support) emerged as an additional significant predictor of participants' preference to receive information from family and friends.

The second regression analysis predicted participants' preference to consult health care professionals as a source of mental health information. Although sociodemographic variables entered in step 1 were not significant predictors, psychosocial variables added in step 2 accounted for an additional 21% of the variance in participants' preference to consult these sources, $F(7,148) = 6.01, p < 0.001$. Older age, lower self-rated physical health, lower self-reported social isolation (greater social support), and more favourable attitudes toward seeking professional psychological help were associated with a greater likelihood of consulting this source of information. Together, sociodemographic and psychosocial variables accounted for 27% of the variance in participants' preference to consult this source of information, $F(13,148) = 4.12, p < 0.001$.

The third regression analysis predicted participants' preference to consult independent learning sources for mental health information. Neither sociodemographic variables nor psychosocial variables significantly predicted participants' preference for this informational source.

Table 8

Regressions of Sociodemographic and Psychosocial Characteristics on Source of Information (n = 229)

	Family and Friends		Health Care Professionals		Independent Learning	
Variable	<i>b</i>	<i>SEb</i>	<i>b</i>	<i>SEb</i>	<i>b</i>	<i>SEb</i>
Step 1						
Sex (0=female, 1=male)	-0.24*	0.11	-0.09	0.09	0.00	0.09
Race (0=White, 1=Non-White)	0.10	0.17	0.16	0.14	-0.08	0.14
Age	0.00	0.00	0.01*	0.00	0.00	0.00
Education	0.00	0.02	0.01	0.02	0.03	0.02
Income (0=\$0-\$34,999, 1=\$35,000-\$60,000+)	0.13	0.12	-0.07	0.10	0.06	0.10
Marital status (0=single/previously married, 1=married/common law)	0.20	0.11	-0.03	0.10	-0.08	0.10
<i>R</i> ²	0.09*		0.06		0.05	
Step 2						
Sex (0=female, 1=male)	-0.22*	0.10	-0.07	0.09	0.00	0.09
Race (0=White, 1=Non-White)	0.09	0.17	0.23	0.14	-0.03	0.15
Age	-0.01	0.00	0.01*	0.00	0.01*	0.00
Education	-0.02	0.02	0.00	0.02	0.04	0.02
Income (0=\$0-\$34,999, 1=\$35,000-\$60,000+)	0.02	0.12	-0.10	0.10	0.08	0.10
Marital status (0=single/previously married, 1=married/common law)	0.15	0.11	-0.10	0.09	-0.10	0.10
K6 ^a	0.00	0.01	0.00	0.01	0.02	0.01
Self rated mental health	0.00	0.07	-0.03	0.06	0.04	0.06

Self rated physical health	0.00	0.07	-0.11*	0.06	-0.03	0.06
LSNS-6 ^b	0.04***	0.01	0.02**	0.00	0.02	0.01
ATSPPHS-10 ^c	0.01	0.00	0.03***	0.00	0.00	0.00
Previous mental health problems	0.03	0.14	0.06	0.11	0.22	0.12
Previous help-seeking for mental health problems	-0.07	0.14	-0.18	0.11	-0.15	0.12
ΔR^2	0.13**		0.21***			0.05
R^2	0.22***		0.27***			0.10

Note. ^aK6 = Kessler 6-Item Distress Scale. ^bLSNS-6 = Lubben Social Network Scale. ^cATSPPHS = Attitudes Toward Seeking Professional Psychological Help Scale-Short Form.

* $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

The primary aims of this study were to examine, for the first time, the mental health information preferences of community-dwelling older adults, as well as the sociodemographic and psychosocial predictors of mental health information preferences. Findings of this research contribute to an underdeveloped and increasingly important line of research in the area of geriatric mental health. In addition to implications for research, findings also present important implications for geriatric health care policies, strategies, and practices.

Mental Health Information Preferences

When asked to rate their level of familiarity with the types of help available for mental health problems, a slight majority of participants (57.2%) reported being unfamiliar with treatment options. Though not a direct measure of mental health literacy, this finding is consistent with literature in the area of mental health literacy, suggesting that many older adults have limited knowledge concerning the recognition, management, and prevention of mental health problems (Farrer, Leach, Griffiths, Christensen, & Jorm, 2008; Fisher & Goldney, 2003; Wetherell et al., 2009). Furthermore, this finding provides geriatric researchers, health care professionals, and policy makers with additional evidence supporting the importance of

designing strategies to improve older adults' knowledge concerning treatment options for mental health problems.

This low level of familiarity with treatment options for mental health problems did not appear to detract from older adults' desire to obtain information on a wide variety of topics related to mental health problems and treatment. Older adults rated a variety of mental health information content items in the areas of pharmacotherapy, psychotherapy, and treatment options and decision-making as very important. These highly rated content items may suggest that most older adults are interested in learning about various treatment options when making decisions about which treatment option to pursue for mental health problems.

Although participants in this study rated many content areas as very important to them, overall, they rated information on pharmacotherapy as more important when compared to information about treatment options and decision-making and information about psychotherapy. It is possible that this reflects older adults' experiences with the health care system, being more commonly prescribed medication to treat physical and mental health problems versus psychological or other holistic treatment options. Specifically, research has shown that older adults who seek treatment for mental health problems are most likely to visit their primary care physician, and correspondingly, are more likely to pursue pharmacotherapy than other treatment options (Bogner et al., 2009; Cairney et al., 2010; Han et al., 2011; Lippens & Mackenzie, 2011; Nyunt et al., 2009; Prévile et al., 2009). This is concerning in light of research supporting older adults' preference for psychological treatment in comparison to pharmacological treatment (e.g., Areán, Alvidrez, Barrera, Robinson, & Hicks, 2002; Landreville, Landry, Baillargeon, Guérette, & Matteau, 2001; Lundervold & Lewin, 1990; Rokke & Scogin, 1995; Wetherell et al., 2004). In the current study, older adults' preference for information about pharmacotherapy could also be a

reflection of areas of potential concern about this treatment option, including side effects, interaction effects, and possible addiction to medication, as these content items were highly rated by respondents. Research indicates that polypharmacy, defined as taking five or more medications, has tripled in American adults ages 65 years and older from 1988 to 2010 (Charlesworth, Smit, Lee, Alramadhan, & Odden, 2015). Polypharmacy is associated with significant risks for older adults, particularly concerning overdose, inappropriate dosing, and drug-drug and drug-disease interaction effects (Thompson, Shi, & Kiraly, 2016). Though information on pharmacotherapy was rated as statistically more important, it is important to stress that many older adults rated a variety of information topics as very important to them; and therefore, examining which types of information are statistically more important may not be clinically or practically meaningful. Future research is needed to further examine this topic.

In addition to reporting a desire for a wide variety of informational topics related to mental health problems and treatment, nearly two thirds of respondents preferred detailed information on psychological, pharmacological, and combined treatment options, and half of respondents preferred detailed information on self-help approaches.

This desire for detailed information may be problematic in practice, as many older adults will not likely have access to readily available, detailed, and balanced information about mental health treatment options. Older adults who are experiencing a mental health problem and in the process of searching for treatment options might not be interested in detailed information, and may benefit more from concise information in certain areas. As such, future research is needed to examine preferred amounts of information among older adults who are experiencing mental health problems and in the process of seeking treatment. Further, in light of older adults'

preference for detailed information on self-help approaches, future research is needed to examine the effectiveness of self-help mental health treatment options among older adults.

Findings examining preferred information formats indicated that overall, older adults preferred to obtain information through discussion with health care providers as well as information in written format, in comparison to information in DVD format and web-based information. Given the degree to which health care organizations are posting information online, and the overall trend toward decreased availability and accessibility of paper-based information, at least the current generation of older adults' low-rated preference for web-based information may be problematic (Selwyn, Gorard, Furlong, & Madden, 2003). Further, research has indicated that older adults have more difficulty finding and understanding online health information, in comparison to younger age groups (Agree, King, Castro, Wiley, & Borzekowski, 2015). These findings underscore the importance of having information available in a variety of formats, in order to meet the needs of older adults. Aging is associated with increased intra-individual variability in both cognitive and motor skills, such that diversity among people is the greatest in later life (Manini, Hong, & Clark, 2012; Nesselroade & Salthouse, 2004). This adds further support to the importance of having information available in a variety of formats and through a variety of sources, to meet the diverse needs of older adults. Research has also demonstrated that information should be available in both old (e.g., books) and new (e.g., Internet) media formats to maximize uptake of mental health information (Cunningham et al., 2013). Although this cohort of older adults rated the Internet as their least preferred source of information, given current statistics concerning Internet use for health-related information worldwide, it is reasonable to expect that future cohorts of older adults would increasingly look to this option for health-related information (e.g., Atkinson, Saperstein, & Pleis, 2009; Bujnowska-Fedak, 2015;

Dumitru et al., 2007; Fox & Duggan, 2013). Older adults' preference to obtain information in discussion with a health care provider is also important to highlight, particularly in relation to their desire for detailed information, as this may be challenging in the context of the multiple demands and scheduling constraints faced by health care providers.

Finally, findings examining preferred information sources indicate that older adults may be most likely to contact their family, friends, family doctors and mental health professionals if they were to experience a mental health problem. These informational sources were more preferred in comparison to pharmacists and independent learning sources (i.e., community newspaper, self-help book, and Internet website). In line with findings in the area of preferred information formats, it is important to highlight that older adults preferred external sources of information over self-directed sources. Although family and friends were a highly preferred source of information, these individuals may have limited knowledge about mental health treatment options, either prolonging the search for information and treatment or resulting in misinformation. This finding highlights the importance of creating balanced and evidence-based information on mental health problems and treatment options for older adults, to empower both those experiencing mental health problems and their close others in making important treatment-related decisions.

Given that older adults reported health care professionals as another highly rated source of mental health information, it is important to consider how effective knowledge exchange could be expedited within health care systems. Primary care physicians, as the most commonly visited health professional among older adults, do not often have sufficient time in a typical appointment to discuss treatment options and characteristics associated with options with older patients, who may also be experiencing a range of physical health problems (El-Gabalawy et al.,

in press; Scott et al., 2010). The Canadian Medical Association general practitioner guideline of 10-15 minutes for a routine patient appointment makes it particularly difficult for older adults with complex, comorbid health problems to have their information and health-related needs met (Canadian Medical Association, 2012; El-Gabalawy et al., in press). As a result, geriatric depression and anxiety can be undetected, undiagnosed, and undertreated in primary care settings, leaving many older adults without appropriate help (Park & Unützer, 2011; Unützer, 2002). Further, although older adults rated mental health professionals as a highly preferred source of mental health information, there is a dearth of specialty mental health resources in Canada, as well as other countries such as the United States. This can result in long wait times when seeking psychological treatment in the public health care system, and elevated costs when seeking psychological treatment through the private sector (Olson, 2006).

Taken together, these findings have important implications for the utility of collaborative care/shared care models that integrate primary care services and specialty mental health services. Research examining the effectiveness of these models emphasizes that greater collaboration between primary care physicians and professionals working in the specialty mental health sector (e.g., psychologists, psychiatrists, social workers, counselors, psychotherapists) is particularly beneficial in meeting the needs of older adults and improving their mental and physical health outcomes (Bartels, 2004; Patel et al., 2013; Speer & Schnieder, 2003; Unützer, 2002).

Predictors of Mental Health Information Preferences

Confirming the outlined hypotheses of the current study, findings in the area of predictors of mental health information indicated that overall, sociodemographic and psychosocial characteristics accounted for some of the variance in predicting older adults' preferences for amount, content, format, and source of mental health information. The independent variables that

had the strongest, most consistent effects across dependent variables were attitudes toward seeking professional psychological help, social connectedness, previous mental health problems, and current distress.

Consistent with literature in the area of mental health treatment seeking, attitudes are important predictors of treatment-seeking preferences (Cramer, 1999; Mackenzie et al., 2006; Mackenzie et al., 2008; ten Have, de Graaf, Ormel, Vilagut, Kovess, & Alonso, 2010). Findings of the current research indicated that more favourable attitudes toward treatment seeking were associated with a greater preference for information concerning pharmacological treatment options and information related to treatment options and decision-making. Favourable attitudes toward treatment seeking also predicted a greater preference for seeking mental health treatment-related information from health care professionals.

A strong, consistent finding in this study was that increased social support/connectedness predicted a preference for more information, as well as an increased likelihood of consulting health care professionals and family and friends as sources for mental health information. This finding is consistent with literature in the area of aging and help-seeking, suggesting that increased social support and increased informational support are associated with more positive attitudes toward seeking mental health services (e.g., Guruge, Thomson, George, & Chaze, 2015; Kessler, Agines, & Bowen, 2015; Park, Jang, Lee, Schonfeld, & Molinari, 2012). In contrast, more socially isolated older adults without close others (with whom to discuss information and treatment options) may prefer briefer information.

I had initially hypothesized that those with greater levels of distress would have higher ratings of mental health information and informational formats as compared to older adults with lower levels of distress. However, findings highlighted that greater distress predicted lower

preference for information on pharmacotherapy. Consistent with research in the area of cognitive psychology, emotional distress often leads to decrements in attention, short-term memory, and information processing (e.g., Ellenbogen, Carson, & Pishva, 2010; Ellenbogen, Schwartzman, Stewart, & Walker, 2002; Vitaliano et al., 2003; Vitaliano, Echeverria, Yi, Phillips, Young, & Siegler, 2005). Therefore, mental health information is most likely to be understood, processed, and recalled when distress is mild (often at the early stage of a mental health problem).

Interestingly, previous mental health treatment did not emerge as a significant predictor of information preferences. It is possible that there were two groups of older adults in the current study: those who had problems with stress, anxiety, or depression who sought treatment that was effective in reducing/managing symptoms; and those who experienced ineffective treatment. Perhaps those who experienced ineffective treatment may have rated a preference for more detailed information, and those who experienced effective treatment, less detailed information, eliminating the effect previous mental health treatment.

Although psychosocial characteristics demonstrated the strongest, most consistent effects across dependent variables, several noteworthy findings emerged regarding age, education, and sex. First, it is interesting to note that although the current sample ranged in age from 50 to 100 years of age, age only emerged as a unique significant predictor of information in DVD format, with older age being associated with increased preference for this format of information. Similarly, education emerged as a unique significant predictor of preference for web-based format of information, with higher educational attainment associated with a greater preference for this format of information. In line with previously described research suggesting increased use of the Internet for health-related information over time, it will be important for future research to examine ways to decrease the potential barrier of educational attainment to increase

accessibility of information. Sex emerged as a unique predictor of preferred information source, with males being less likely to prefer seeking information from family and friends. This finding is consistent with research in the area of treatment seeking for mental health problems (e.g., Byers et al., 2012; Mackenzie et al., 2012).

Finally, although sociodemographic and psychosocial characteristics accounted for some of the variance in older adults' preferences for amount, content, format, and source of mental health information, the range of variance accounted for by these significant predictors ranged from 16% to 29%. This suggests that additional variables are contributing to a large portion of the variance unexplained by the variables included in the current study. Additional variables that may be associated with older adults' information preferences could include mental health literacy, perceived need for mental health information and treatment, self-efficacy/confidence in one's ability to read and understand informational materials, quality of relationships with health care providers, and stigma concerning mental health problems and treatment. Future research is needed to explore these and other variables that may be contributing to older adults' mental health information preferences.

Limitations

The current study is not without limitations. Overall, the demographic and health-related characteristics in the present sample are similar to those of older adults from Statistics Canada datasets (Statistics Canada, 2006, 2015). However, future research would benefit from obtaining increased heterogeneity in sampling, to recruit persons from a variety of racial and ethnic groups, recent immigrants, and persons with lower levels of educational attainment and income. This would aid in expanding our growing understanding of the mental health information preferences of older adults.

The correlational, cross-sectional design of the current research imposes a limitation in the interpretation of findings regarding predictors of mental health information preferences. Although the nature and design of this research was appropriate given the absence of research in this particular area, future experimental research on this topic, examining predictors of mental health information preferences over time and following mental health literacy interventions, would be of particular value and interest. Finally, although information about participants' history of physical and mental health problems was gathered by self-report, prior research has found adequate to good reliability between self-reported physical health problems and those diagnosed by health professionals (Kriegsman, Penninx, van Eijk, Boeke, & Deeg, 1996).

Conclusions

In continuing this important line of research, future areas of research should explore actual physical and mental health-related decision-making practices of older adults, paying particular attention to decisions about the amount, content, format, and source of information. Experimental research comparing preference for, and perceived helpfulness of, health-related information, as well as research examining the behavioral outcomes of health-related information (e.g., utilization, treatment decision-making) will also be important, as this area of patient-oriented research continues to grow and develop. Older adults are incredibly valuable members of our communities. It is important for researchers, health care professionals, and policy makers in the area of geriatric health to seek to improve the mental health knowledge and mental health treatment decision-making of older adults. The current study represents an important step in this growing area of research and practice. Untreated mental health problems are related to increased rates of physical illness, disability, and higher mortality rates, in addition to elevated costs to health care systems (e.g., World Health Organization, 2015). Increasing the mental health

literacy of older adults by providing them with important information pertaining to mental health treatment options, in the formats and sources that they prefer, may contribute to improving mental health treatment decision-making and pathways to mental health treatment, with the ultimate aim of improving the lives of our expanding population of older adults.

References

- Agree, E. M., King, A. C., Castro, C. M., Wiley, A., & Borzekowski, D. LG. (2015). "It's got to be on this page": Age and cognitive style in a study of online health information seeking. *Journal of Medical Internet Research*, 17(3), 1-10.
- Anderson, C. A., Linto, J., & Stewart-Wynne, E. G. (1995). A population-based assessment of the impact and burden of caregiving for long-term stroke survivors. *Stroke*, 26(5), 843-849.
- Andreescu, C., & Reynolds, C. F. (2011). Late-life depression: Evidence-based treatment and promising new directions for research and clinical practice. *Psychiatric Clinics of North America*, 34, 335-355.
- Areán, P. A., Alvidrez, J., Barrera, A., Robinson, G. S., & Hicks, S. (2002). Would older patients use psychological services? *Gerontologist*, 52, 392-398.
- Askelson, N. M., Campo, S., & Carter, K. D. (2011). Completely isolated? Health information seeking among social isolates. *Health Education and Behavior*, 38(2), 116-122.
- Atkinson, N. L., Saperstein, S. L., & Pleis, J. (2009). Using the internet for health-related activities: Findings from a national probability sample. *Journal of Medical Internet Research*, 11(1):e4.
- Ayers, C. R., Sorrell, J. T., Thorp, S. R., & Wetherell, J. L. (2007). Evidence-based psychological treatments for late-life anxiety. *Psychology and Aging*, 22(1), 1-7.
- Balka, E., Krueger, G., Holmes, B. J., & Stephen, J. E. (2010). Situating Internet Use: Information-Seeking Among Young Women with Breast Cancer. *Journal of Computer-Mediated Communication*, 15(3), 389-411.
- Bartels, S. J., Coakley, E. H., Zubritsky, C., Ware, J. H., Miles, K. M., Arean, P. A., ... Levkoff,

- S. E. (2004). Improving access to geriatric mental health services: A randomized trial comparing treatment engagement with integrated versus enhanced referral care for depression, anxiety, and at-risk alcohol use. *The American Journal of Psychiatry*, 161(8), 1455-1462.
- Beckjord, E. B., Arora, N. K., McLaughlin, W., Oakley-Girvan, I., Hamilton, A. S., & Hesse, B. W. (2008). Health-related information needs in a large and diverse sample of adult cancer survivors: Implications for cancer care. *Journal of Cancer Survivorship*, 2(3), 179-189.
- Boberg, E. W., Gustafson, D. H., Hawkins, R. P., Offord, K. P., Koch, C., Wen, K. Y., . . . Salner, A. (2003). Assessing the unmet information, support and care delivery needs of men with prostate cancer. *Patient Education and Counseling*, 49(3), 233-242.
- Bogner, H. R., De Vries, H. F., Maulik, P. K., & Unützer, J. (2009). Mental health services use: Baltimore epidemiologic catchment area follow-up. *American Journal of Geriatric Psychiatry*, 17(8), 706-715.
- Boreham, P., & Gibson, D. (1978). The informative process in private medical consultations: A preliminary investigation. *Social Science & Medicine*, 12(5A), 409-416.
- Brock, D. W., & Wartman, S. A. (1990). When competent patients make irrational choices. *The New England Journal of Medicine*, 322, 1595-1599.
- Buckland, S. (1994). Unmet needs for health information: a literature review. *Health libraries review*, 11(2), 82-95.
- Bujnowska-Fedak, M. M. (2015). Trends in the use of the Internet for health purposes in Poland. *BMC Public Health*, 15(194).
- Byers, A. L., Arean, P. A., & Yaffe, K. (2012). Low use of mental health services among older Americans with mood and anxiety disorders. *Psychiatric Services*, 63(1), 66-72.

- Byers, A. L., Yaffe, K., Covinsky, K. E., Friedman, M. B., & Bruce, M. L. (2010). High occurrence of mood and anxiety disorders among older adults. *Archives of General Psychiatry*, 67(5), 489-496.
- Cairney, J., Corna, L. M., & Streiner, D. L. (2010). Mental health care use in later life: Results from a national survey of Canadians. *The Canadian Journal of Psychiatry*, 55(3), 157-164.
- Cairney, J., McCabe, L., Veldhuizen, S., Corna, L. M., Streiner, D., & Herrmann, N. (2007). Epidemiology of social phobia in later life. *American Journal of Geriatric Psychiatry*, 15, 224-233.
- Canadian Community Health Survey – Mental Health and Well-being. (2002). Available at: <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=5285>
- Canadian Medical Association, (2012). *Starting your practice on the right foot*. MD Physician Services.
- Cannuscio, C. C., Jones, C., Kawachi, I., Colditz, G. A., Berkman, L., & Rimm, E. (2002). Reverberations of family illness: A longitudinal assessment of informal caregiving and mental health status in the nurses' health study. *American Journal of Public Health*, 92(8), 1305-1311.
- Chappell, N. L., & Funk, L. M. (2011). Social support, caregiving, and aging. *Canadian Journal on Aging*, 30(3), 355-370.
- Charlesworth, C. J., Smit, E., Lee, D. S., Alramadhan, F., & Odden, M. C. (2015). Polypharmacy among adults aged 65 years and older in the United States: 1988-2010. *Journals of Gerontology Series A: Biological Sciences*, 70(8), 989-995.
- Chiu, C., Feuz, M. A., McMahan, R. D., Miao, Y., & Sudore, R. L. (2016). "Doctor, make my

- decisions”: Decision control preferences, advance care planning, and satisfaction with communication among diverse older adults. *Journal of Pain and Symptom Management*, 51(1), 33-40.
- Cleary, M., Freeman, A., Hunt, G. E., & Walter, G. (2005). What patients and carers want to know: An exploration of information and resource needs in adult mental health services. *Australian and New Zealand Journal of Psychiatry*, 39(6), 507-513.
- Conner, K. O., Copeland, V. C., Grote, N. K., Koeske, G., Rosen, D., Reynolds, C. F., . . . Brown, C. (2010). Mental health treatment seeking among older adults with depression: The impact of stigma and race. *American Journal of Geriatric Psychiatry*, 18(6), 531-543.
- Corna, L. M., Cairney, J., & Streiner, D. L. (2010). Suicide ideation in older adults: Relationship to mental health problems and service use. *Gerontologist*, 50(6), 785-797.
- Courtney, M. G. R. (2013). Determining the number of factors to retain in EFA: Using the SPSS R-Menu v2.0 to make more judicious estimations. *Practical Assessment, Research & Evaluation*, 18(8), 1-14.
- Cumming, G. (2014). The new statistics: Why and how. *Psychological Science*, 25(1), 7-29.
- Cumming, G., & Finch, S. (2005). Inference by eye: Confidence intervals and how to read pictures of data. *American Psychologist*, 60(2), 170-180.
- Cummings, P., & Koepsell, T. D. (2010). P values vs estimates of association with confidence intervals. *Archives of Pediatrics and Adolescent Medicine*, 164(2), 193-196.
- Crabb, R., & Hunsley, J. (2006). Utilization of mental health care services among older adults with depression. *Journal of Clinical Psychology*, 62, 299-312.
- Cramer, K. M. (1999). Psychological antecedents to help-seeking behavior: A reanalysis using path modeling structures. *Journal of Counseling Psychology*, 46, 381-387.

- Cunningham, C. E., Walker, J. R., Eastwood, J. D., Westra, H., Rimas, H., Chen, Y., . . . The Mobilizing Minds Research Group. (2013). Modeling mental health information preference during early adult years: A discrete choice conjoint experiment. *Journal of Health Communication, 18*(1), 1-28.
- Dey, A. (2004). Consumer health informatics: an overview of patient perspectives on health information needs. *The HIM journal, 33*(4), 121-126.
- Deyo, R. A., & Diehl, A. K. (1986). Patient satisfaction with medical care for low back pain. *Spine, 11*(1), 28-30.
- Drapalski, A. L., Marshall, T., Seybolt, D., Medoff, D., Peer, J., Leith, J., & Dixon, L. B. (2008). Unmet needs of families of adults with mental illness and preferences regarding family services. *Psychiatric Services, 59*(6), 655-662.
- Dumitru, R. C., Bürkle, T., Potapov, S., Lausen, B., Wiese, B., & Prokosch, H. U. (2007). Use and perception of internet for health related purposes in Germany: Results of a national survey. *International Journal of Public Health, 52*(5), 275-278.
- El-Gabalawy, R., Mackenzie, C., & Sareen, J (in press). Mental health service use among anxious and physically unwell older Canadians. *Aging and Mental Health*.
- El-Gabalawy, R., Mackenzie, C. S., Shooshtari, S., & Sareen, J. (2011). Comorbid physical health conditions and anxiety disorders: A population-based exploration of prevalence and health outcomes among older adults. *General Hospital Psychiatry, 33*(6), 556-564.
- Ellenbogen, M. A., Carson, R. J., & Pishva, R. (2010). Automatic emotional information processing and the cortisol response to acute psychosocial stress. *Cognitive, Affective, & Behavioral Neuroscience, 10*(1), 71-82.
- Ellenbogen, M. A., Schwartzman, A. E., Stewart, J., & Walker, C. D. (2002). *Psychophysiology*,

39(6), 723-732.

- Erickson, J., Mackenzie, C.S., Menec, V., & Bailis, D. (2015). The effect of time perspectives on mental health information processing and help-seeking attitudes and intentions in younger versus older adults. Accepted pending revisions at *Aging and Mental Health*.
- Estes, C. L. (1995). Mental Health Services for the Elderly: Key Policy Elements. In Gatz, M. (Eds.), *Emerging Issues in Mental Health and Aging*. Washington, DC: American Psychological Association.
- Faden, R. R., Becker, C., Lewis, C., Freeman, J., & Faden, A. I. (1981). Disclosure of information to patients in medical care. *Medical Care*, 19, 718-733.
- Farrer, L., Leach, L., Griffiths, K. M., Christensen, H., & Jorm, A. F. (2008). Age differences in mental health literacy. *BMC Public Health*, 8.
- Finch, S., & Cumming, G. (2009). Putting research in context: Understanding confidence intervals from one or more studies. *Journal of Pediatric Psychology*, 34(9), 903-916.
- Fisher, L. J., & Goldney, R. D. (2003). Differences in community mental health literacy in older and younger Australians. *International Journal of Geriatric Psychiatry*, 18, 33-40.
- Fossey, E., Harvey, C., Mokhtari, M. R., & Meadows, G. N. (2012). Self-Rated Assessment of Needs for Mental Health Care: A Qualitative Analysis. *Community Mental Health Journal*, 48(4), 407-419.
- Fox, S., & Duggan, M. (2013). Health Online 2013. Retrieved from <http://www.pewinternet.org/2013/01/15/health-online-2013>
- Freese, J., Rivas, S., & Hargittai, E. (2006). Cognitive ability and internet use among older adults. *Poetics*, 34(4-5), 236-249.
- Galarce, E. M., Ramanadhan, S., Weeks, J., Schneider, E. C., Gray, S. W., & Viswanath, K.

- (2011). Class, race, ethnicity and information needs in post-treatment cancer patients. *Patient Education and Counseling*, 85(3), 432-439.
- Gum, A. M., King-Kallimanis, B., & Kohn, R. (2009). Prevalence of mood, anxiety, and substance-abuse disorders for older Americans in the national comorbidity survey replication. *American Journal of Geriatric Psychiatry*, 17(9), 769-781.
- Gum, A. M., Iser, L., & Petkus, A. (2010). Behavioral health service utilization and preferences of older adults receiving home-based aging services. *American Journal of Geriatric Psychiatry*, 18(6), 491-501.
- Gum, A. M., McDougal, S. J., McIlvane, J. M., & Mingo, C. A. (2010). Older adults are less likely to identify depression without sadness. *Journal of Applied Gerontology*, 29(5), 603-621.
- Gunn, J. M., Ayton, D. R., Densley, K., Pallant, J. F., Chondros, P., Herrman, H. E., & Dowrick, C. F. (2012). The association between chronic illness, multimorbidity and depressive symptoms in an Australian primary care cohort. *Social Psychiatry and Psychiatric Epidemiology*, 47(2), 175-184.
- Guruge, S., Thomson, M. S., George, U., & Chaze, F. (2015). Social support, social conflict, and immigrant women's mental health in a Canadian context: A scoping review. *Journal of Psychiatric and Mental Health Nursing*, 1-13.
- Hall, J. A., Roter, D. L., & Katz, N. R. (1988). Meta-analysis of correlates of provider behavior in medical encounters. *Medical Care*, 26(7), 657-775.
- Han, B., Gfroerer, J. C., Colpe, L. J., Barker, P. R., & Colliver, J. D. (2011). Serious psychological distress and mental health service use among community-dwelling older U.S. adults. *Psychiatric Services*, 62(3), 291-298.

- Hunsley, J., Elliott, K., & Therrien, Z. (2014). The efficacy and effectiveness of psychological treatments for mood, anxiety, and related disorders. *Canadian Psychology*, 55(3), 161-176.
- Hunsley, J., & Mash, E. J. (2008). *A guide to assessments that work*. New York: Oxford University Press.
- Hybels, C. F., & Blazer, D. G. (2003). Epidemiology of late-life mental disorders. *Clinics in Geriatric Medicine*, 19(4), 663-696.
- Jang, Y., Gum, A. M., & Chiriboga, D. A. (2011). Knowledge of depression among Korean American older adults. *Journal of Applied Gerontology*, 30(5), 655-665.
- Jenkins, V., Fallowfield, L., & Saul, J. (2001). Information needs of patients with cancer: Results from a large study in UK cancer centres. *British Journal of Cancer*, 84(1), 48-51.
- Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist*, 67(3), 231-243.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166, 182-186.
- Karlin, B. E., & Fuller, J. D. (2007). Meeting the mental health needs of older adults: Implications for primary care practice. *Geriatrics*, 62(1), 26-35.
- Kessler, E-M., Agines, S., & Bowen, C. E. (2015). Attitudes towards seeking mental health services among older adults: Personal and contextual correlates. *Aging and Mental Health*, 19(2), 182-191.
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., . . .

- Zaslavsky, A. M. (2002) Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32, 959-976.
- Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., . . .
- Zaslavsky, A. M. (2005). US prevalence and treatment of mental disorders 1990-2003. *New England Journal of Medicine*, 352(24), 2515-2523.
- Kessler, R. C., Foster, C., Webster, P. S., & House, J. S. (1992). The relationship between age and depressive symptoms in two national surveys. *Psychology and aging*, 7(1), 119-126.
- Klap, R., Unroe, K. T., & Unutzer, J. (2003). Caring for mental illness in the United States: A focus on older adults. *American Journal of Geriatric Psychiatry*, 11(5), 517-524.
- Kriegsman, D. M., Penninx, B. W., van Eijk, J. T., Boeke, A. J., & Deeg, D. J. (1996). Self-reports and general practitioner information on the presence of chronic diseases in community dwelling elderly. A study on the accuracy of patients' self-reports and on determinants of inaccuracy. *Journal of Clinical Epidemiology*, 49(12), 1407-1417.
- Landreville, P., Landry, J., Baillargeon, L., Guérette, A., & Matteau, E. (2001). Older adults' acceptance of psychological and pharmacological treatments for depression. *Journals of Gerontology: Psychological Sciences*, 56B, P285-P291.
- Leydon, G. M., Boulton, M., Moynihan, C., Jones, A., Mossman, J., Boudioni, M., . . .
- McPherson, K. (2000). Cancer patients' information needs and information seeking behaviour: In depth interview study. *British Medical Journal*, 320, 909-913.
- Lippens, T., & Mackenzie, C. S. (2011). Treatment satisfaction, perceived treatment effectiveness, and dropout among older users of mental health services. *Journal of Clinical Psychology*, 67(12), 1197-1209.
- Lubben, J., Blozik, E., Gillmann, G., Iliffe, S., von Renteln Kruse, W., Beck, J. C., . . . Stuck, A.

- E. (2006). Performance of an abbreviated version of the Lubben Social Network Scale among three European community-dwelling older adult populations. *Gerontologist*, 46(4), 503-513.
- Lundervold, D., & Lewin, L. M. (1990). Older adults' acceptability of pharmacotherapy and behavior therapy for depression: Initial results. *Journal of Applied Gerontology*, 9, 211-215.
- Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging & Mental Health*, 10(6), 574-582.
- MacKenzie, C. S., Pagura, J., & Sareen, J. (2010). Correlates of perceived need for and use of mental health services by older adults in the collaborative psychiatric epidemiology surveys. *American Journal of Geriatric Psychiatry*, 18(12), 1103-1115.
- Mackenzie, C. S., Reynolds, K., Cairney, J., Streiner, D. L., & Sareen, J. (2012). Disorder-specific mental health service use for mood and anxiety disorders: Associations with age, sex, and psychiatric comorbidity. *Depression and Anxiety*, 29(3), 234-242.
- Mackenzie, C. S., Reynolds, K., Chou, K. L., Pagura, J., & Sareen, J. (2011). Prevalence and correlates of generalized anxiety disorder in a national sample of older adults. *American Journal of Geriatric Psychiatry*, 19(4), 305-315.
- Mackenzie, C. S., Scott, T., Mather, A. & Sareen, J. (2008). Older adults' help-seeking attitudes and treatment beliefs concerning mental health problems. *American Journal of Geriatric Psychiatry*, 16(12), 1010-1019.
- Manini, T. M., Hong, S. L., & Clark, B. C. (2003). Aging and muscle: A neuron's perspective. *Current Opinion in Clinical Nutrition and Metabolic Care*, 16(1), 21-26.

- Meeks, T. W., Vahia, I. V., Lavretsky, H., Kulkarni, G., & Jeste, D. V. (2011). A tune in “a minor” can “b major”: A review of epidemiology, illness course, and public health implications of subthreshold depression in older adults. *Journal of Affective Disorders*, 129(1-3), 126-142.
- Meredith, C., Symonds, P., Webster, L., Lamont, D., Pyper, E., & Gillis, C. R., & Fallowfield, L. (1996). Information needs of cancer patients in west Scotland: Cross sectional survey of patients' views. *British Medical Journal*, 313(7059), 724-726.
- Mickus, M., Colenda, C. C., & Hogan, A. J. (2000). Knowledge of mental health benefits and preferences for type of mental health providers among the general public. *Psychiatric Services*, 51, 199-203.
- Neame, R., Hammond, A., & Deighton, C. (2005). Need for information and for involvement in decision making among patients with rheumatoid arthritis: A questionnaire survey. *Arthritis Care and Research*, 53(2), 249-255.
- Nesselroade, J. R., & Salthouse, T. A. (2004). Methodological and theoretical implications of intraindividual variability in perceptual-motor performance. *Gerontology: Psychological Sciences*, 59B(2), 49-55.
- Nyunt, M. S., Chiam, P. C., Kua, E. H., & Ng, T. P. (2009). Determinants of mental health service use in the national mental health survey of the elderly in Singapore. *Clinical Practice and Epidemiology in Mental Health*, 5.
- Olson, R. P. (2006). *Mental Health Systems Compared: Great Britain, Norway, Canada, and the United States*. Springfield: Charles C. Thomas.
- O'Neal, E. L., Adams, J. R., McHugo, G. J., Van Citters, A. D., Drake, R. E., & Bartels, S.

- J.(2008). Preferences of older and younger adults with serious mental illness for involvement in decision-making in medical and psychiatric settings. *American Journal of Geriatric Psychiatry*, 16(10), 826-833.
- Park, N. S., Jang, Y., Lee, B. S., Schonfeld, L., & Molinari, V. (2012). Willingness to use mental health services among older residents in assisted living. *Journal of Applied Gerontology*, 31(4), 562-579.
- Park, M., & Unützer, J. (2011). Geriatric Depression in Primary Care. *Psychiatric Clinics of North America*, 34(2), 469-487.
- Pasek, J., & Krosnick, J. (2010). Optimizing survey questionnaire design in political science: Insights from psychology. In J. E. Leighley (Eds.), *The Oxford handbook of American elections and political behavior* (pp. 27-50). Oxford University Press.
- Patel, V., Belkin, G. S., Chockalingam, A., Cooper, J., Saxena, S., & Unützer, J. (2013). Grand challenges: Integrating mental health services into priority health care platforms. *PLoS Medicine* 10(5), e1001448.
- Payman, V. (2011). Psychotherapeutic treatments in late life. *Current Opinion in Psychiatry*, 24(6), 484-488.
- Préville, M., Vasiliadis, H. M., Boyer, R., Goldfarb, M., Demers, K., Brassard, J., & Béland, S. G. (2009). Use of health services for psychological distress symptoms among community-dwelling older adults. *Canadian Journal on Aging*, 28(1), 51-61.
- Price, M. M., Pak, R., Müller, H., & Stronge, A. (2012). Older adults' perceptions of usefulness of personal health records. *Universal Access in the Information Society*, 1-14.
- Prochaska, J. J., Sung, H., Max, W., Shi, Y., & Ong, M. (2012). Validity study of the K6 scale

- as a measure of moderate mental distress based on mental health treatment need and utilization. *International Journal of Methods in Psychiatric Research*, 21(2), 88-97.
- Rauch, S. A. M., Morales, K. H., Zubritsky, C., Knott, K., & Oslin, D. (2006). Posttraumatic stress, depression, and health among older adults in primary care. *American Journal of Geriatric Psychiatry*, 14(4), 316-324.
- Reynolds, K., Pietrzak, R. H., El-Gabalawy, R., Mackenzie, C. S., & Sareen, J. (2015). Prevalence of psychiatric disorders in older adults: Findings from a nationally representative survey. *World Psychiatry*, 14, 74-81.
- Rogers, A., Kennedy, A., Nelson, E., & Robinson, A. (2005). Uncovering the limits of patient-centeredness: Implementing a self management trial for chronic illness. *Qualitative Health Research*, 15, 224-239.
- Rokke, P. D., & Scogin, F. (1995). Depression treatment preferences in younger and older adults. *Journal of Clinical Geropsychology*, 1, 243-257.
- Sareen, J., Cox, B. J., Afifi, T. O., Yu, N., & Stein, M. B. (2005). Mental health service use in a nationally representative Canadian survey. *Canadian Journal of Psychiatry*, 50, 753-761.
- Scott, T., MacKenzie, C. S., Chipperfield, J. G., & Sareen, J. (2010). Mental health service use among Canadian older adults with anxiety disorders and clinically significant anxiety symptoms. *Aging and Mental Health*, 14(7), 790-800.
- Schulz, R., & Martire, L. M. (2004). Family caregiving of persons with dementia: Prevalence, health effects, and support strategies. *American Journal of Geriatric Psychiatry*, 12(3), 240-249.
- Selwyn, N., Gorard, S., Furlong, J., & Madden, L. (2003). Older adults' use of information and communications technology in everyday life. *Ageing and Society*, 23(5), 561-582.

- Speer, D. C., & Schneider, M. G. (2003). Mental health needs of older adults and primary care: Opportunity for interdisciplinary geriatric team practice. *Clinical Psychology: Science and Practice, 10*, 85-101.
- Statistics Canada. (2006). A Portrait of Seniors in Canada. Available at:
<http://www.statcan.gc.ca/pub/89-519-x/89-519-x2006001-eng.pdf>
- Statistics Canada. (2015). Canada's Population Estimates: Age and Sex, July 1, 2015. Retrieved from <http://www.statcan.gc.ca/daily-quotidien/150929/dq150929b-eng.htm>
- Stewart, D. E., Wong, F., Cheung, A. M., Dancy, J., Meana, M., Cameron, J. I., . . . Rosen, B. (2000). Information needs and decisional preferences among women with ovarian cancer. *Gynecologic Oncology, 77*(3), 357-361.
- Stewart, D. W., Walker, J. R., Beattie, B., Reynolds, K. A., Hahlweg, K., Leonhart, M., . . . Mobilizing Minds Research Group. (2014). Postsecondary students' information needs and pathways for help with stress, anxiety, and depression. *Canadian Journal of Counseling and Psychotherapy, 48*(3), 356-374.
- Streiner, D. L., Cairney, J., & Veldhuizen, S. (2006). The epidemiology of psychological problems in the elderly. *Canadian Journal of Psychiatry, 51*(3), 185-191.
- ten Have, M., de Graaf, R., Ormel, J., Vilagut, G., Kovess, V., & Alonso, J. (2010). Are attitudes towards mental health help-seeking associated with service use? Results from the European study of epidemiology of mental disorders. *Social Psychiatry and Psychiatric Epidemiology, 45*, 153-163.
- Thompson, K., Shi, S., & Kiraly, C. (in press). Primary care for the older adult patient: Common geriatric issues and syndromes. *Obstetrics and Gynecology Clinics of North America*.
- Tieu, Y., Konnert, C., & Wang, J. (2010). Depression literacy among older Chinese immigrants

- in Canada: A comparison with a population-based survey. *International Psychogeriatrics*, 22(8), 1318-1326.
- Unützer, J. (2002). Diagnosis and treatment of older adults with depression in primary care. *Biological Psychiatry*, 52, 285-292.
- van Zelst, W. H., de Beurs, E., Beekman, A. T. F., Deeg, D. J. H., & van Dyck, R. (2003). Prevalence and risk factors of posttraumatic stress disorder in older adults. *Psychotherapy and Psychosomatics*, 72(6), 333-342.
- Vitaliano, P. P., Echeverria, D., Yi, J., Phillips, P. E. M., Young, H., & Siegler, I. C. (2005). Psychophysiological mediators of caregiver stress and differential cognitive decline. *Psychology and Aging*, 20(3), 402-411.
- Vitaliano, P. P., Zhang, J., & Scanlan, J. M. (2003). Is caregiving hazardous to one's physical health? A meta-analysis. *Psychological Bulletin*, 129(6), 946-972.
- Voelker, R. (2005). Seniors seeking health information need help crossing "digital divide." *Journal of the American Medical Association*, 293(11), 1310-1312.
- Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the national comorbidity survey replication. *Archives of General Psychiatry*, 62(6), 629-640.
- Wetherell, J. L., Kaplan, R. M., Kallenberg, G., Dresselhaus, T. R., Sieber, W. J., & Lang, A. (2004). Mental health treatment preferences of older and younger primary care patients. *International Journal of Psychiatry in Medicine*, 34(3), 219-233.
- Wetherell, J. L., Lenze, E. J., & Stanley, M. A. (2005). Evidence-based treatment of geriatric anxiety disorders. *Psychiatric Clinics of North America*, 28(4), 871-896.
- Wetherell, J. L., Petkus, A. J., McChesney, K., Stein, M. B., Judd, P. H., Rockwell, E., . . .

- Patterson, T. L. (2009). Older adults are less accurate than younger adults at identifying symptoms of anxiety and depression. *Journal of Nervous and Mental Disease*, 197(8), 623-626.
- World Health Organization (2015). Mental health and older adults. Retrieved from <http://www.who.int/mediacentre/factsheets/fs381/en/>
- Zhang, Y., & Fu, W-T. (2011). Designing consumer health information systems: What do user-generated questions tell us? *Lecture Notes in computer Science*, 6780 LNAI, 536-545.

Chapter 4: General Discussion

Research Summary

The objective of the present work was to examine older adults' pathways to mental health information and treatment, with the ultimate goal of determining ways to increase access to information and enhance clarity in the treatment seeking process. Correspondingly, the overarching goal of this research was to decrease gaps in geriatric mental health knowledge translation. Using a qualitative approach informed by narrative analysis, the objective of Study 1 was to explore the experiences of older adults who came to seek psychological treatment for mental health problems, as well as the meaning they attributed to this process. In this study, 15 older adults ages 60 years and older who were pursuing outpatient psychological treatment at a tertiary care setting were interviewed in their home, at their local hospital, or at a university research lab, and asked semi-structured questions concerning their pathways to psychological treatment. Older adults who participated in this study reported a range of mental health problems, including anxiety and depressive disorders and caregiver stress, in addition to co-occurring physical health problems, grief, and traumatic life experiences. The main narrative threads in participants' stories of how they came to seek psychological treatment included resistance to being labeled with mental health problems, muddling through the treatment seeking process, and having varying interpretations of psychological treatment.

In telling stories of resistance to being labeled with mental health problems, participants actively negotiated how and where their mental health problems fit within their identities. They narrated this resistance through the telling of interwoven stories of illness and health, weakness and strength, and small stories of mental health problems/treatment, and big stories of important life events. Participants also narrated a form of resistance through their difficulty defining mental

health problems, using mysterious, minimizing, or physical terms, as if to distance themselves from the mental health problem. Resistance was further depicted by stories that exemplified internal role conflicts, and older adults' desire to be seen as people rather than patients, in the health care system. Participants' narratives highlighted their experiences muddling through the treatment seeking process, from one distinct silo of care to the next, often without knowledge, or apparent rational choice. This system-induced passivity was also manifested in the depiction of chaos not only evident in the content of stories, but in the ways that stories were told, through the context in which interviews occurred, and through participants' expression of affect. The treatment-seeking process was also described as being influenced by system-level barriers that lead to complex, unclear, and passive routes to treatment for participants. Finally, participants' stories depicted their lack of knowledge about what psychological treatment would be like prior to commencing treatment, and voiced varying degrees of stigma toward mental health problems and psychological treatment in late life, including whether seeking professional help would mean that they were "old," "nuts," or "crazy."

Study 2 examined the mental health information preferences and predictors of mental health information preferences of community-dwelling older adults, recruited from urban medical clinics and senior centres. There were several important and novel findings of this research. The first key finding highlighted that the majority of the sample reported being unfamiliar with mental health treatment options. A strong majority of older adults endorsed their desire for detailed information on a range of treatment-related content items in the areas of pharmacotherapy, psychotherapy, combination treatment, and self-help treatment. Preferred sources of information included family, friends, and health care providers; and preferred formats of information included discussion with a health care provider and written format. Though

sociodemographic and psychosocial characteristics accounted for some of the variance in predicting older adults' information preferences, the variables that had the most consistent effects across dependent variables were attitudes toward seeking professional psychological help and social connectedness.

These two novel studies are separate and distinct, yet unified under the overarching topic of pathways to mental health support. Although the current research does not involve a mixed methods design, it is important to give thought to the integration of the two studies, and in particular, to reflect on the ways in which Study 2 questions may have changed based on Study 1 findings, and similarly, the ways in which Study 1 questions may have changes based on Study 2 findings. Qualitative methodology, and narrative analysis in particular, was the most appropriate method to gain an in-depth and holistic understanding of the treatment seeking experiences of older adults with mental health problems. In contrast, quantitative methodology was the most appropriate method to identify information preferences and predictors of information preferences with a larger, more generalizable sample of older adults. Given the narrative storylines that emerged in Study 1, it would have been interesting to have included questions on the recognition of mental health problems as well as questions directly pertaining to mental health literacy in the mental health questionnaire administered in Study 2. Further, though Study 2 was not completed with a clinical sample, it would have been interesting to pose an unstructured question asking community-based older adults to reflect on and write about what their course of action might be if they were to experience symptoms such as those described in the quantitative survey vignette. Though the current research is not of mixed methods design, including these questions may have allowed for an interesting comparison between hypothesized pathways to treatment (Study 2) and experienced pathways to treatment (Study 1). Furthermore, in light of Study 2 findings

demonstrating that most older adults reported a desire for detailed information concerning mental health treatment options, questions concerning desired amount of information pertaining to mental health problems and treatment could have been interesting to include in the Study 1 interview protocol. Again, though not a mixed methods study, a comparison between hypothesized information preferences (Study 2) and actual/in vivo information preferences (Study 1) may have allowed for an interesting comparison investigating what might be ideal, and what may be more realistic considering the complex experience of mental health problems and treatment seeking.

Taken together, findings of the present work provide us with important information on the treatment seeking experiences, behaviours, and preferences of older adults. Findings emphasize important implications for research, health care policy, and practice, by highlighting the vital need to improve access to balanced and evidence-based mental health information, and increase the clarity and efficiency of the mental health treatment seeking process for older adults. In the sections that follow, I focus on four key areas that have great potential to address the aforementioned challenges in mental health treatment seeking for older adults; namely, knowledge translation (KT), narrative medicine, collaborative/shared care, and community collaborations.

Implications for Knowledge Translation (KT)

The current findings add to an existing body of research suggesting that older adults experience gaps in health-related KT (e.g., Böstrom, Slaughter, Chojecki, & Estabrooks, 2012; Rahman, Applebaum, Schnelle, & Simmons, 2012). In study 1, older adults muddled through the treatment seeking process; receiving insufficient information at the time they needed it, rendering them to be passive recipients of care, in a medical model grounded in paternalistic

approaches to health care treatment decision-making. In study 2, older adults expressed an interest in receiving detailed information about mental health treatment options. Providing older adults with this information, available in a variety of formats and from a variety of sources, may allow older adults to be more involved in their treatment decision-making. This, in turn, may have the potential to assist in breaking down the barrier of system-induced passivity that led older adults to muddle through their treatment seeking experience. Our governing body of health care research, The Canadian Institutes of Health Research (CIHR), defines KT as “a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of Canadians” (Graham & Tetroe, 2009, p. 46). Not surprisingly, KT efforts have been shown to lead to important benefits to health care delivery and health outcomes (Lomas, 2000; Graham & Tetroe, 2009). Knowing and applying KT practices according to the CIHR definition in mental health care would allow for the potential to make much needed revisions to current practices concerning geriatric mental health service delivery. Therefore, as a community of geriatric mental health researchers and health care providers, we must consider how we can improve our efforts to increase the effective transfer of mental health information to older adults.

A recent narrative review in the area of KT and mental health identified several main themes in the extant literature (Goldner, Jenkins, & Fischer, 2014). Directly related to the present work is their identified theme of examining effective KT strategies for influencing health care providers, patients and the general public, and decision makers. Effective KT strategies for influencing health care providers indicated in this review included: educational outreach (dissemination of up-to-date information), audit and feedback (evaluation of health care practices and delivery of feedback to health care providers), use of opinion leaders (dissemination of

information to influential members of the health care community), use of reminders (provision of prompts to help clinicians optimize evidence-based treatment practices), and interactive educational meetings (implementation of courses and workshops).

Effective KT strategies for influencing patients and the general public included: mass media campaigns, social marketing targeting intervention to specific population groups, community collaboration and mobilization, provision of governmental laws and regulations, financial incentives and disincentives (e.g., bonuses and taxes), and self-help/supported self-help strategies. Finally Goldner and colleagues highlighted four effective KT strategies for influencing decision-makers, which included: dissemination of research knowledge to decision makers, creation of sustained linkages between researchers and decision makers, creation of programs to increase ease of knowledge exchange and uptake between researchers and decision makers, and the promotion of a culture of evidence-based decision making in health care and broader governmental policies. According to findings of the present work, it would be ideal to use a three-pronged KT approach targeting health care providers, patients and the general public, and decision-makers, in order to ensure that balanced and evidence-based information on a wide variety of mental health treatment options is available when it is needed by older adults, in ways that they want to access the information. KT is most effective when addressing topics that are important, relevant, and can be easily understood by knowledge users; as well as when knowledge tools (e.g., decision aids) are in place to assist with increased uptake of knowledge (Goldner et al., 2014). This further supports the use of the integrated knowledge translation (IKT) approach, a collaborative framework that engages researchers and knowledge users throughout the research process. The IKT approach has been shown to expedite effective transfer of knowledge and movement from research into action (Bullock, Watson, & Goering, 2010).

KT strategies may be used to increase the mental health literacy of older adults by meeting their informational needs and enhancing the clarity of the mental health treatment seeking process. Although there is a lack of research in this area, a recent study outlined peer education as an effective KT/mental health literacy strategy for older adults (Conner, McKinnon, Ward, Reynolds, & Brown, 2015). In this study, each participant was matched with an older adult with a history of depression, and peer education was employed as a strategy to reduce the stigma of late-life depression. Overall, findings indicated that the peer education strategy effectively reduced stigma, and also led to gains in mental health literacy. Future research would benefit from application of an IKT framework that involves researchers and knowledge users, as well as KT dissemination efforts that target patients and the general public, health care providers, and decision-makers. Further, in light of the tremendous gap in the area of geriatric mental health KT, future research is needed to evaluate KT strategies and efforts with this growing population. Ideally, these efforts will help to provide balanced, evidence-based information to older adults and their loved ones at the times they need it most, in order to help with decision-making concerning treatment options for mental health problems.

Findings of this research have been disseminated to community organizations, community members, and clinical psychologists through presentations in hospital and community settings. With the goal of extending the findings of the current research, future research will employ an IKT framework and effective KT strategies identified above, in the development and evaluation of mental health decision-aids for older adults.

Implications for Narrative Medicine

Findings of the present work indicated that older adults engaged in the treatment seeking process expressed a desire to be understood as a person, and not just a patient in the health care

system. This finding has important implications for the field of narrative medicine. Charon, a pioneering and influential figure in narrative medicine, defines the central components of this work as the ability to “recognize, absorb, interpret, critically understand, and be moved by a patient’s story of illness” (Charon, 2008, p. 4). She notes that increased awareness of patients’ stories of illness has helped health care providers in a variety of domains, including professionalism, medical interviewing, provision of patient-centered care, enhancing therapeutic relationships, increased self-awareness, and overall effectiveness of clinical care (Charon, 2012). Charon describes that illness and health care are told, understood, and acted upon by stories told by patients. “From the beginning of symptoms to the completion of treatment, illness has to be told—first, through symptoms, by the body of the patient to the patient himself or herself, then to family or friends, and then to professionals, who repeat it among themselves” (Charon, 2012, p. 343). This emphasizes the important role of health care providers in listening to the stories told by older adults throughout their treatment seeking process, not only to allow older adults to feel heard, understood, and personalized in a patient-focused world, but also to increase diagnostic accuracy and effectiveness of clinical care. Though the implications for the provision of a narrative medicine approach are vast, this approach may be particularly difficult within the context of a brief medical appointment within primary health care settings, particularly for older adults with multiple comorbid health conditions (El-Gabalawy et al., in press). This leads to the important implications of collaborative care/shared models, which integrate primary care services and specialty mental health services, and hold important implications for both knowledge translation and narrative medicine approaches with a geriatric patient population.

Implications for Collaborative/Shared Care

Research examining the effectiveness of collaborative care/shared care models emphasizes that greater collaboration between primary care physicians and professionals working in the specialty mental health sector (e.g., psychologists, psychiatrists, social workers, counselors, psychotherapists) is particularly beneficial in meeting the needs of older adults and improving their health outcomes (Bartels et al., 2004; Patel et al., 2013; Speer & Schnieder, 2003; Unützer, 2002). For example, several randomized controlled trials have demonstrated that specialty mental health providers that are co-located with primary care services can improve both depression and medical outcomes, as well as enhance quality of life among older adults (Bruce, Ten Have, Reynolds, Katz, Schilberg, Muslant et al., 2004; Unützer et al., 2002). Related to findings from the present work, collaborative care models have the potential to provide older adults with more information about mental health problems and treatment options, to increase opportunities for older adults to tell their stories of illness and strength, and to potentially reduce older adults' experiences of muddling through the treatment seeking process. Prior research has noted the particular importance of collaborative care and multidisciplinary treatment for older adults' health, in promoting continuity of care, reducing silos of care, and providing accurate diagnosis and effective treatment for the complex physical and mental health problems that older adults experience (Karel, Gatz, Smyer, 2012). In addition to effective collaborations between multidisciplinary health care providers working together in one location, research has begun to demonstrate the effectiveness of collaborations between health care providers and community organizations.

Implications for Community Collaborations

The final implication relating to findings of the present work is the potential importance of community collaborations in increasing older adults' access to mental health information and mental health treatment options. Research suggests that collaboration between researchers, health care providers, and community organizations (e.g., religious institutions, senior centres, and public service agencies), may promote increased opportunities for the treatment of late-life depression (Unutzer, 2002). This view is similarly noted by Cohen-Mansfield and Frank (2008), who highlight the importance of community programs in serving the unmet psychological, social, medical, and functional needs of community-dwelling older adults. Community programs may provide older adults with unique, accessible, comfortable, and less-stigmatized venues to share and discuss physical and mental health problems and treatment options. As such, linkages between researchers, health care providers, and community organizations, have the potential to make a powerful impact on the transfer of balanced and evidence-based mental health information to older adults in community-based settings. Though this area largely remains in its infancy, several literature reviews have examined the effectiveness of community-based interventions targeting social isolation and loneliness (e.g., Cattan and White 1998; Cattan, White, Bond, & Learmouth, 2005; Dickens, Richards, Greaves, & Campbell, 2011; Findlay, 2003; Masi, Chen, Hawkley, & Cacioppo, 2011). Findings in this area demonstrate that effective interventions target specific groups of individuals, allow participants control in program development and implementation, and promote opportunities for education, social contact, activity, and social support.

Future Directions

In light of the novelty and scarcity of research in the area of geriatric mental health knowledge translation, as well as the important implications for positive change in health care policy and practice, timely future research in this area is vital. Future research employing IKT frameworks, with collaborations between researchers, knowledge users, and relevant stakeholders, is particularly important. The Mental Health Commission of Canada (MHCC) has outlined several important steps to follow to achieve successful KT in health care settings. These include: 1) state purpose, 2) select innovation, 3) specify actors and actions, 4), identify agents of change, 5) design strategy, 6) implement, and 7) evaluate (MHCC, 2012). Rigorous mixed-methods evaluation of KT strategies and interventions will be particularly important as this area continues to develop.

Concluding Remarks

Prominent researchers in the fields of medicine, psychiatry, nursing, social work, and psychology, have projected an increase in the number of adults living with chronic illness, mental health problems, and co-occurring disorders, and warned of the negative impact that this might have on the health care system (Bartels, 2006; Bartels & Smyer, 2002; Draper & Anderson, 2010; Hammerschlag, 2008; Jeste et al., 1999). Though population aging may present unique challenges to the health care system; it also provides unique opportunities for researchers, health care providers, policy makers, and the public, to work together in attempting to improve current systems and models of health care delivery. Population aging and corresponding urgency to make positive changes to health care policies and practices may enhance the formation of partnerships that are thoughtful, collaborative, goal-oriented, strategic, and innovative. Without collaborative partnerships and knowledge translation models, we may be unable to decrease gaps

in geriatric mental health knowledge translation. Further, in the absence of such collaborations we may be unable to break down barriers such as system-induced passivity and silos of care, and promote access to mental health treatment options that exist in homes, communities, collaborative/shared care clinics, and hospitals. Older adults are valued members of our families, workplaces, and communities. In their many roles, they have shaped our development and the development of our society. Let us use this novel and important opportunity to work together in making meaningful contributions and changes to processes centered upon the mental health treatment seeking experiences of older adults.

References

- Bartels, S. J. (2006). The aging tsunami and geriatric mental health and substance use disorders. *Journal of Dual Diagnosis*, 2(3), 5-7.
- Bartels, S. J., Coakley, E. H., Zubritsky, C., Ware, J. H., Miles, K. M., Arian, P. A., ... Levkoff, S. E. (2004). Improving access to geriatric mental health services: A randomized trial comparing treatment engagement with integrated versus enhanced referral care for depression, anxiety, and at-risk alcohol use. *The American Journal of Psychiatry*, 161(8), 1455-1462.
- Bartels, S. J., & Smyer, M. A. (2002). Mental disorders of aging: An emerging public health crisis? *Generations*, 26(1), 14-20.
- Böstrom, A-N., Slaughter, S. E., Chojecki, D., & Estabrooks, C. A. (2012). What do we know about knowledge translation in the care of older adults? A scoping review. *Journal of Post-Acute and Long-Term Care Medicine*, 13(3), 210-219.
- Bruce, M. L., Ten Have, T. R., Reynolds, C. F., Katz, I. I., Schulberg, H. C., Mulsant, B. H., . . . Alexopoulos, G. S. (2004). Reducing suicidal ideation and depressive symptoms in depressed older primary care patients: A randomized clinical trial. *Journal of the American Medical Association*, 291 (9), 1081-1091.
- Bullock, H., Watson, A., & Goering, P. (2010). Building for success: Mental health research with an integrated knowledge translation approach. *Canadian Journal of Community Mental Health*, 29.
- Cattan, M., & White, M. (1998). Developing evidence based health promotion for older people: A systematic review and survey of health promotion interventions targeting social isolation and loneliness among older people. *Internet Journal of Health Promotion*, 13, 1-9.

- Cattan, M., White, M., Bond, J., & Learmouth, A. (2005). Preventing social isolation and loneliness among older people: A systematic review of health promotion interventions. *Ageing & Society*, 25, 41-67.
- Charon R. Narrative medicine: honoring the stories of illness. Oxford, United Kingdom: Oxford University Press; 2008.
- Charon, R. (2012). At the membranes of care: Stories in narrative medicine. *Academic Medicine*, 87, 342-347.
- Cohen-Mansfield, J., & Frank, J. (2008). Relationship between perceived needs and assessed needs for services in community-dwelling older persons. *The Gerontologist*, 48(4), 505-516.
- Conner, K. O., McKinnon, S. A., Ward, C. J., Reynolds, C. F., & Brown, C. (2015). Peer education as a strategy for reducing internalized stigma among depressed older adults. *Psychiatric Rehabilitation Journal*, 38(2), 186-193.
- Dickens, A. P., Richards, S. H., Greaves, C. J., & Campbell, J. L. (2011). Interventions targeting social isolation in older people: A systematic review. *BMC Public Health*, 11.
- Draper, B., & Anderson, D. (2010). The baby boomers are nearly here - But do we have sufficient workforce in old age psychiatry? *International Psychogeriatrics*, 22(6), 947-949.
- El-Gabalawy, R., Mackenzie, C., & Sareen, J (in press). Mental health service use among anxious and physically unwell older Canadians. *Aging and Mental Health*.
- Findlay, R. A. (2003). Interventions to reduce social isolation amongst older people: Where is the evidence? *Ageing & Society*, 23(5), 647-658.

- Goldner, E. M., Jenkins, E. K., & Fischer, B. (2014). A narrative review of recent developments in knowledge translation and implications for mental health care providers. *Canadian Journal of Psychiatry*, 59(3), 160-169.
- Graham, I. D., & Tetroe, J. M. (2009). Getting evidence into policy and practice: Perspective of a health research funder. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 18(1), 46-50.
- Hammerschlag, C. A. (2008). Geriatric health care: Managing the “crisis.” *Caring: National Association for Home Care magazine*, 27(12), 60-63.
- Jeste, D. V., Alexopoulos, G. S., Bartels, S. J., Cummings, J. L., Gallo, J. J., Gottlieb, G. L., . . . Lebowitz, B. D. (1999). Consensus statement on the upcoming crisis in geriatric mental health: research agenda for the next 2 decades. *Archives of General Psychiatry*, 56(9), 848-853.
- Karel, M. J., Gatz, M., & Smyer, M. A. (2012). Aging and mental health in the decade ahead: what psychologists need to know. *American Psychologist*, 67(3), 184-198.
- Lomas, J. (2000). Using ‘linkage and exchange’ to move research into policy at a Canadian foundation. *Health Affairs*, 19(3), 236-240.
- Masi, C. M., Chen, H. Y., Hawkey, L. C., & Cacioppo, J. T. (2011). A meta-analysis of interventions to reduce loneliness. *Personality and Social Psychology Review*, 15(3), 219-266.
- Mental Health Commission of Canada (MHCC). Innovation to implementation (121): A practical guide to knowledge translation in healthcare. 2012. Available at: <http://www.sfu.ca/carmha/projects/i2i.html>.

- Patel, V., Belkin, G. S., Chockalingam, A., Cooper, J., Saxena, S., & Unützer, J. (2013). Grand challenges: Integrating mental health services into priority health care platforms. *PLoS Medicine* 10(5), e1001448.
- Rahman, A., Applebaum, R. A., Schnelle, J. F., & Simmons, S.F. (2012). Translating research into practice in nursing homes: can we close the gap? *Gerontologist* 52, 597-606.
- Speer, D. C., & Schneider, M. G. (2003). Mental health needs of older adults and primary care: Opportunity for interdisciplinary geriatric team practice. *Clinical Psychology: Science and Practice*, 10, 85-101.
- Unützer, J. (2002). Diagnosis and treatment of older adults with depression in primary care. *Biological Psychiatry*, 52, 285-292.
- Unützer, J., Katon, W., Callahan, C. M., Williams, J. M., Hunkeler, E., Harpole, L., . . . Langston, C. (2002). Collaborative care management of late-life depression in the primary care setting: A randomized controlled trial. *Journal of the American Medical Association*, 288, 2836-2845.

Appendix A: Study 1 Recruitment Script

Description of script: Clinical geropsychologists will read the following description of the research study to their clients who are ages 60 years and older and do not demonstrate noticeable cognitive impairment.

Hello [client name],

Kristin Reynolds, a Ph.D. student in clinical psychology at the University of Manitoba is conducting a research study looking at peoples' experiences seeking treatment for mental health problems. You are eligible to participate in this research study. Participation in this study involves sitting down with Ms. Reynolds for a semi-structured individual interview. The interview will be audio-recorded, and can be completed at the University of Manitoba, at the hospital, or in your home. The interview will take approximately 1 hour. During the interview, Ms. Reynolds will ask you questions about your experiences seeking help for your difficulties with X [mental health problem that clients are in treatment for]. The audio-recorded interview will be typed out, and saved in password-protected files on a password-protected computer in Ms. Reynolds' research laboratory. This information will be kept for approximately 3 years, at which point it will be destroyed. Ms. Reynolds will give you a \$10 gift card for Tim Horton's for your participation in this research study. Your participation in this research study is in no way linked to the treatment that you are receiving. Whether you decide to participate or not participate in this research study, your treatment will not be affected. Does this seem like something that you are interested in? [If no, psychologists will thank their clients for the time they took to listen to this information].

[If yes]

Since you are interested in participating, can I give Ms. Reynolds your name and telephone number so that she can contact you to arrange an individual interview? [If participants do not want to give their name and telephone number, psychologists will give clients Ms. Reynolds' telephone number if they are interested in participating].

[If yes]

Thank you very much. Ms. Reynolds will be in touch with you shortly.

[Psychologists will leave potential participants' names and phone numbers in a file folder that will be kept in a locked filing cabinet].

Appendix B: Study 1 Informed Consent Form



Hôpital St-Boniface Hospital

UNIVERSITY
OF MANITOBA

Title of Research: Older Adults' Pathways to Mental Health Information and Treatment: Bridging the Gap in Knowledge Translation to Increase Mental Health Service Utilization

Student Researcher: Kristin Reynolds, M.A., Ph.D. Candidate

Department of Psychology, University of Manitoba

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Telephone: (204) 474-9196

Email: reynoldk@cc.umanitoba.ca

Research Supervisor: Maria Medved Ph.D., C.Psych

Department of Psychology, University of Manitoba

Telephone: (204) 480-1465

Email: Maria.Medved@ad.umanitoba.ca

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask the student researcher or her supervisor.

Purpose of the Study:

The purpose of this study, which is being conducted under the supervision of Dr. Maria Medved, is to understand peoples' experiences seeking treatment for mental health problems. Information obtained in this study will be used to enhance our understanding of peoples' experiences seeking mental health treatment.

Study Procedures:

As a participant in this study you will complete a semi-structured individual interview of approximately 60 minutes. The interview will be audio-recorded and typed out. You will have the option of completing the interview at St. Boniface Hospital in the McEwen Building, at the Language, Health, and Illness Research Laboratory at the University of Manitoba Fort Garry Campus, or at your home, during a time that is convenient for you. Questions covered in the interview will address your pathway into treatment for mental health problems. You will also complete a background questionnaire concerning personal characteristics (i.e., age, education, occupation, income, marital status, and race/ethnicity). In addition, I will contact you following the interview if there is content from the individual interview that I would like to clarify.

Potential Costs and Benefits of the Research:

The interview will take approximately 1 hour of your time. It will also require you to arrange for transportation to the University of Manitoba Fort Garry Campus or St. Boniface Hospital if you chose to complete the interview at either of these locations. In both of these locations, you will be required to pay for parking. Benefits of this study include enhancing our understanding of peoples' experiences seeking treatment for mental health problems. Results of this study may contribute to decreasing barriers that people face when accessing mental health treatment.

Potential Risks of the Research:

During the individual interview, you may be discussing sensitive issues pertaining to your mental health. If you notice any feelings of low mood or anxiety after the individual interview, please consult one of the attached resources for assistance. If you are currently in outpatient psychological treatment at St. Boniface Hospital, consult with your psychologist.

Participant Payment:

If you chose to participate in this study, you will receive a \$10 gift card to Tim Horton's.

Voluntary Participation:

Participation in this research is voluntary and your decision to participate or not participate will not influence your treatment at St. Boniface Hospital.

Freedom to Withdraw:

It is your choice whether or not to participate in this study. Participation is voluntary and you may withdraw at any time with no penalty. If you decide to withdraw from participation in this research, the information in your research file will be destroyed.

Confidentiality:

Information gathered in this research study may be published or presented in public forums; however your name and other identifying information will not be used or revealed. Despite efforts to keep your personal information confidential, absolute confidentiality cannot be guaranteed. Your personal information may be disclosed if required by law. A master list containing your name, phone number, and/or email address will be created, as well as an ID number that will replace your name on the background information questionnaire and the typed audio recording of the interview. This master list will be password-protected, and will be stored on a password-protected computer in Dr. Medved's locked Language, Health, and Illness laboratory. The typed audio recording of the interview will also be password-protected and stored on this computer. The hard-copy background questionnaire data, audio recordings of interviews, and our copy of the informed consent form will be kept in a locked cabinet in Dr. Medved's locked laboratory. All of this material will be kept until I have successfully defended my dissertation, and this research has been published (approximately 3 years). Dr. Medved and I will have access to the master list of participants and the informed consent forms. Dr. Medved, our psychology honours student research assistant (Ms. Rebecca Earley), and I will have access to the questionnaire data, the audio recordings, and the typed audio recordings of the interview. Medical records that contain your identity will be treated as confidential in accordance with the Personal Health Information Act of Manitoba. The University of Manitoba Health Research Ethics Board and St. Boniface Hospital may review records related to the study for quality assurance purposes.

Questions or Concerns:

If you have any questions about this study, please do not hesitate to contact Ms. Kristin Reynolds at (204) 474-9196 or reynoldk@cc.umanitoba.ca, or her research supervisor, Dr. Maria Medved at (204) 480-1465 or maria.Medved@ad.umanitoba.ca.

For questions about your rights as a research participant, you may contact The University of Manitoba Bannatyne Campus Health Research Ethics Board Office at (204) 789-3389.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

Statement of Consent:

I have read this consent form. I have had the opportunity to contact one of the researchers if I had any questions, and had my questions answered in language that I understand. The risks and benefits of this research have been explained to me. I understand that a copy of this consent form will be provided to me. I understand that my participation in this study is voluntary and that I may choose to withdraw at any time. I freely agree to participate in this research study. I understand that information regarding my personal identity will be kept confidential, but that confidentiality is not guaranteed. By signing this consent form, I have not waived any of the legal rights that I have as a participant in a research study.

I, _____ (print name), have read the above information and hereby consent to participate in this study.

Participant's Signature

Date (day/month/year)

Permission for future contact: I agree to be contacted by Ms. Kristin Reynolds by telephone, mail, or email for future follow-up in relation to this study, if any of the content from the individual interview is unclear to her.

Yes ___ No ___ Participant Initials _____ Telephone: _____

Email: _____

Summary of results: I wish to receive a summary of the results at the conclusion of the study as indicated below:

Email: Yes ___ No ___ If yes provide your email address:

Mail: Yes ___ No ___ If yes provide your mailing address:

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has knowingly given their consent

Printed Name: _____

Date: _____

Signature: _____

Role in the study: _____

Appendix C: Study 1 Background Information Questionnaire

Today's Date: _____**Age:** _____**Gender:** _____**Highest level of education:** _____**Current occupational status:**☐ Full-time ☐ Part-time ☐ Retired, from what: _____**If you are currently retired, how long have you been retired?** _____**Current Household income:**☐ \$0 - \$19,999 ☐ \$20,000 - \$34,999 ☐ \$35,000 - \$59,999 ☐ \$60,000+**Marital status:** ☐ Single ☐ Common law ☐ Married ☐ Widowed ☐ Separated☐ Divorced**Race/Ethnicity:**

_____ White

_____ Black

_____ Indian/Pakistani/Sri Lankan

_____ Japanese/Korean/Chinese

Other: _____

_____ Aboriginal/First Nations

_____ Middle Eastern

_____ Hispanic/Latino

_____ Filipino/Malaysian/Indonesian

Appendix D: Study 1 Interview Protocol

1. What brings you in for treatment at St. Boniface Hospital?
 - a. How did you decide to see a psychologist for help with X (problem identified in question 1)?
2. Tell me about the time when you first noticed that you were experiencing X
 - a. Tell me about how you recognized that this was something that you needed help with.
 - b. Was there anyone who helped you to recognize that you needed help and helped you to find help? (Probe for personal, familial, and systemic factors)
 - c. Was there anyone who was unhelpful in this process? (Probe for personal, familial, and systemic obstacles/challenges)
 - d. Was there anything that helped you to recognize that you needed help and helped you to find help?
 - e. Was there anything that was unhelpful in this process?
3. Is this your first time seeing a psychologist?
 - a. Is this the first time that you noticed that you were having a hard time coping with X (problem identified in question 1)?
 - b. If you have had difficulty coping before, what stopped you from getting help at that time? What was different about this time?
4. What did you know about therapy before coming to St. Boniface Hospital?
 - a. What would you have liked to know?
 - b. What are you hoping to gain from therapy?
5. Is there anything else that you would like to say before we end the interview?

Appendix E: Study 2 Informed Consent Form for Senior Centre Participants



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Title of Research: Older Adults' Pathways to Mental Health Information and Treatment: Bridging the Gap in Knowledge Translation to Increase Mental Health Service Utilization

Student Researcher: Kristin Reynolds, M.A., Ph.D. Candidate

Department of Psychology, University of Manitoba

Telephone: (204) 474-9196

Email: reynoldk@cc.umanitoba.ca

Research Supervisor: Maria Medved Ph.D., C.Psych

Department of Psychology, University of Manitoba

Telephone: (204) 480-1465

Email: Maria.Medved@ad.umanitoba.ca

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask the student researcher or her supervisor.

Purpose of the Study:

The purpose of this study, which is being conducted under the supervision of Dr. Maria Medved, is to understand peoples' preferences pertaining to mental health information. Information obtained in this study will be used to enhance our understanding of mental health information preferences, and the predictors of these information preferences.

Study Procedures:

As a participant in this study you will complete a questionnaire that will take approximately 30 minutes to complete. You will complete the questionnaire at your local senior centre. Questions covered in the questionnaire include: background information (i.e., age, gender, education, occupation, income, marital status, and race/ethnicity); questions pertaining to mental and physical health and mental health treatment; and questions pertaining to mental health information preferences (content, amount, format, and source of information).

Potential Costs and Benefits of the Research:

It will take you approximately 30 minutes to complete the questionnaire. In order to complete the questionnaire, you will have to arrange transportation to your local senior centre. Benefits of this study include enhancing our understanding of peoples' preferences regarding mental health

information, and the predictors of information preferences. Results of this study may contribute to the enhanced access of mental health information.

Potential Risks of the Research:

While you are completing the questionnaire, you may be answering questions of a sensitive nature pertaining to your mental health. If you notice any feelings of low mood or anxiety after completing the questionnaire, please consult one of the attached resources for assistance.

Participant Payment:

If you chose to participate in this study, you will receive a complimentary lunch catered by your local senior centre (approximate value of \$5.00-\$7.00).

Voluntary Participation:

Participation in this research is voluntary and your decision to participate or not participate will not influence your involvement with your local senior centre.

Freedom to Withdraw:

It is your choice whether or not to participate in this study. Participation is voluntary and you may withdraw at any time with no penalty. If you decide to withdraw from participation in this research, the information in your research file will be destroyed.

Confidentiality:

Information gathered in this research study may be published or presented in public forums; however your name and other identifying information will not be used or revealed. Despite efforts to keep your personal information confidential, absolute confidentiality cannot be guaranteed. Your personal information may be disclosed if required by law. A master list containing your name, phone number, and/or email address will be created, as well as an ID number that will replace your name on the questionnaire. This master list will be password-protected, and will be stored on a password-protected computer in Dr. Medved's locked Language, Health, and Illness laboratory. The questionnaire data will be stored on this password-protected computer. The hard-copy questionnaire data and our copy of the informed consent forms will be kept in a locked cabinet in Dr. Medved's locked laboratory. All of this material will be kept until the principal investigator has successfully defended her dissertation, and this research has been published (approximately 3 years). Dr. Medved and I will have access to the master list of participants and the informed consent forms. Dr. Medved, our psychology honours student research assistant (Ms. Rebecca Earley), and I will have access to the questionnaire data. Medical records that contain your identity will be treated as confidential in accordance with the Personal Health Information Act of Manitoba. The University of Manitoba Health Research Ethics Board and St. Boniface Hospital may review records related to the study for quality assurance purposes.

Questions or Concerns:

If you have any questions about this study, please do not hesitate to contact Ms. Kristin Reynolds at (204) 474-9196 or reynoldk@cc.umanitoba.ca, or her research supervisor, Dr. Maria Medved at (204) 480-1465 or maria.Medved@ad.umanitoba.ca.

For questions about your rights as a research participant, you may contact The University of Manitoba Bannatyne Campus Health Research Ethics Board Office at (204) 789-3389.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

Statement of Consent:

I have read this consent form. I have had the opportunity to contact one of the researchers if I had any questions, and had my questions answered in language that I understand. The risks and benefits of this research have been explained to me. I understand that a copy of this consent form will be provided to me. I understand that my participation in this study is voluntary and that I may choose to withdraw at any time. I freely agree to participate in this research study.

I understand that information regarding my personal identity will be kept confidential, but that confidentiality is not guaranteed. By signing this consent form, I have not waived any of the legal rights that I have as a participant in a research study.

I, _____ (print name), have read the above information and hereby consent to participate in this study.

Participant's Signature

Date (day/month/year)

Summary of results: I wish to receive a summary of the results at the conclusion of the study as indicated below:

Email: Yes ___ No ___ If yes provide your email address:

Mail: Yes ___ No ___ If yes provide your mailing address:

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has knowingly given their consent

Printed Name: _____

Date: _____

Signature: _____

Role in the study: _____

Appendix F: Study 2 Informed Consent Form for Walk-In Medical Clinic Participants



Kristin Reynolds, M.A., Ph.D. Candidate
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Title of Research: Older Adults' Pathways to Mental Health Information and Treatment:
Bridging the Gap in Knowledge Translation to Increase Mental Health Service Utilization

Student Researcher: Kristin Reynolds, M.A., Ph.D. Candidate

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Research Supervisor: Maria Medved Ph.D., C.Psych

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This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask the student researcher or her supervisor.

Purpose of the Study:

The purpose of this study, which is being conducted under the supervision of Dr. Maria Medved, is to understand peoples' preferences pertaining to mental health information. Information obtained in this study will be used to enhance our understanding of mental health information preferences, and the predictors of these information preferences.

Study Procedures:

As a participant in this study you will complete a questionnaire that will take approximately 30 minutes to complete. You will complete the questionnaire at the St. James Medical Clinic while you wait for your appointment. If you do not complete the questionnaire prior to your appointment you can complete the questionnaire afterwards. Questions covered in the questionnaire include: background information (i.e., age, gender, education, occupation, income, marital status, and race/ethnicity); questions pertaining to mental and physical health and mental health treatment; and questions pertaining to mental health information preferences (content, amount, format, and source of information).

Potential Costs and Benefits of the Research:

It will take you approximately 30 minutes to complete the questionnaire. Benefits of this study include enhancing our understanding of peoples' preferences regarding mental health information, and the predictors of information preferences. Results of this study may contribute to the enhanced access of mental health information.

Potential Risks of the Research:

While you are completing the questionnaire, you may be answering questions of a sensitive nature pertaining to your mental health. If you notice any feelings of low mood or anxiety after completing the questionnaire, please consult one of the attached resources for assistance, or discuss these feelings with your family doctor.

Participant Payment:

If you chose to participate in this study, you will receive a \$5 gift card to Tim Horton's.

Voluntary Participation:

Participation in this research is voluntary and your decision to participate or not participate will not influence your treatment at the St. James Medical Clinic.

Freedom to Withdraw:

It is your choice whether or not to participate in this study. Participation is voluntary and you may withdraw at any time with no penalty. If you decide to withdraw from participation in this research, the information in your research file will be destroyed.

Confidentiality:

Information gathered in this research study may be published or presented in public forums; however your name and other identifying information will not be used or revealed. Despite efforts to keep your personal information confidential, absolute confidentiality cannot be guaranteed. Your personal information may be disclosed if required by law. A master list containing your name, phone number, and/or email address will be created, as well as an ID number that will replace your name on the questionnaire. This master list will be password-protected, and will be stored on a password-protected computer in Dr. Medved's locked Language, Health, and Illness laboratory. The questionnaire data will be stored on this password-protected computer. The hard-copy questionnaire data and our copy of the informed consent forms will be kept in a locked cabinet in Dr. Medved's locked laboratory. All of this material will be kept until the principal investigator has successfully defended her dissertation, and this research has been published (approximately 3 years). Dr. Medved and I will have access to the master list of participants and the informed consent forms. Dr. Medved, our psychology honours student research assistant (Ms. Rebecca Earley), and I will have access to the questionnaire data. Medical records that contain your identity will be treated as confidential in accordance with the Personal Health Information Act of Manitoba. The University of Manitoba Health Research Ethics Board and St. Boniface Hospital may review records related to the study for quality assurance purposes.

Questions or Concerns:

If you have any questions about this study, please do not hesitate to contact Ms. Kristin Reynolds at (204) 474-9196 or reynoldk@cc.umanitoba.ca, or her research supervisor, Dr. Maria Medved at (204) 480-1465 or maria.Medved@ad.umanitoba.ca.

For questions about your rights as a research participant, you may contact The University of Manitoba Bannatyne Campus Health Research Ethics Board Office at (204) 789-3389.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

Statement of Consent:

I have read this consent form. I have had the opportunity to contact one of the researchers if I had any questions, and had my questions answered in language that I understand. The risks and benefits of this research have been explained to me. I understand that a copy of this consent form will be provided to me. I understand that my participation in this study is voluntary and that I may choose to withdraw at any time. I freely agree to participate in this research study. I understand that information regarding my personal identity will be kept confidential, but that confidentiality is not guaranteed. By signing this consent form, I have not waived any of the legal rights that I have as a participant in a research study.

I, _____ (print name), have read the above information and hereby consent to participate in this study.

Participant's Signature

Date (day/month/year)

Summary of results: I wish to receive a summary of the results at the conclusion of the study as indicated below:

Email: Yes ___ No ___ If yes provide your email address:

Mail: Yes ___ No ___ If yes provide your mailing address:

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has knowingly given their consent

Printed Name: _____

Date: _____

Signature: _____

Role in the study: _____

Appendix G: Study 2 Informed Consent Form for Multi-Physician, Multi-Focused Medical
Clinic Participants



Kristin Reynolds, M.A., Ph.D. Candidate
University of Manitoba Department of Psychology
P404 Duff Roblin Building, 190 Dysart Road, Wpg, MB, R3T 2N2
Phone: (204) 474-9196
Email: reynoldk@cc.umanitoba.ca

Title of Research: Older Adults' Pathways to Mental Health Information and Treatment:
Bridging the Gap in Knowledge Translation to Increase Mental Health Service Utilization

Student Researcher: Kristin Reynolds, M.A., Ph.D. Candidate

Department of Psychology, University of Manitoba

Telephone: (204) 474-9196

Email: reynoldk@cc.umanitoba.ca

Research Supervisor: Maria Medved Ph.D., C.Psych

Department of Psychology, University of Manitoba

Telephone: (204) 480-1465

Email: Maria.Medved@ad.umanitoba.ca

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask the student researcher or her supervisor.

Purpose of the Study:

The purpose of this study, which is being conducted under the supervision of Dr. Maria Medved, is to understand peoples' preferences pertaining to mental health information. Information obtained in this study will be used to enhance our understanding of mental health information preferences, and the predictors of these information preferences.

Study Procedures:

As a participant in this study you will complete a questionnaire that will take approximately 30 minutes to complete. You will complete the questionnaire at the St. Boniface Clinic while you wait for your appointment. If you do not complete the questionnaire prior to your appointment you can complete the questionnaire afterwards. Questions covered in the questionnaire include: background information (i.e., age, gender, education, occupation, income, marital status, and race/ethnicity); questions pertaining to mental and physical health and mental health treatment; and questions pertaining to mental health information preferences (content, amount, format, and source of information).

Potential Costs and Benefits of the Research:

It will take you approximately 30 minutes to complete the questionnaire. Benefits of this study include enhancing our understanding of peoples' preferences regarding mental health information, and the predictors of information preferences. Results of this study may contribute to the enhanced access of mental health information.

Potential Risks of the Research:

While you are completing the questionnaire, you may be answering questions of a sensitive nature pertaining to your mental health. If you notice any feelings of low mood or anxiety after completing the questionnaire, please consult one of the attached resources for assistance, or discuss these feelings with your family doctor.

Participant Payment:

If you chose to participate in this study, you will receive a \$5 gift card to Tim Horton's.

Voluntary Participation:

Participation in this research is voluntary and your decision to participate or not participate will not influence your treatment at the St. Boniface Clinic.

Freedom to Withdraw:

It is your choice whether or not to participate in this study. Participation is voluntary and you may withdraw at any time with no penalty. If you decide to withdraw from participation in this research, the information in your research file will be destroyed.

Confidentiality:

Information gathered in this research study may be published or presented in public forums; however your name and other identifying information will not be used or revealed. Despite efforts to keep your personal information confidential, absolute confidentiality cannot be guaranteed. Your personal information may be disclosed if required by law. A master list containing your name, phone number, and/or email address will be created, as well as an ID number that will replace your name on the questionnaire. This master list will be password-protected, and will be stored on a password-protected computer in Dr. Medved's locked Language, Health, and Illness laboratory. The questionnaire data will be stored on this password-protected computer. The hard-copy questionnaire data and our copy of the informed consent forms will be kept in a locked cabinet in Dr. Medved's locked laboratory. All of this material will be kept until the principal investigator has successfully defended her dissertation, and this research has been published (approximately 3 years). Dr. Medved and I will have access to the master list of participants and the informed consent forms. Dr. Medved, our psychology honours student research assistant, and I will have access to the questionnaire data. Medical records that contain your identity will be treated as confidential in accordance with the Personal Health Information Act of Manitoba. The University of Manitoba Health Research Ethics Board and St. Boniface Hospital may review records related to the study for quality assurance purposes.

Questions or Concerns:

If you have any questions about this study, please do not hesitate to contact Ms. Kristin Reynolds at (204) 474-9196 or reynoldk@cc.umanitoba.ca, or her research supervisor, Dr. Maria Medved at (204) 480-1465 or maria.Medved@ad.umanitoba.ca.

For questions about your rights as a research participant, you may contact The University of Manitoba Bannatyne Campus Health Research Ethics Board Office at (204) 789-3389.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

Statement of Consent:

I have read this consent form. I have had the opportunity to contact one of the researchers if I had any questions, and had my questions answered in language that I understand. The risks and benefits of this research have been explained to me. I understand that a copy of this consent form will be provided to me. I understand that my participation in this study is voluntary and that I may choose to withdraw at any time. I freely agree to participate in this research study.

I understand that information regarding my personal identity will be kept confidential, but that confidentiality is not guaranteed. By signing this consent form, I have not waived any of the legal rights that I have as a participant in a research study.

I, _____ (print name), have read the above information and hereby consent to participate in this study.

Participant's Signature

Date (day/month/year)

Summary of results: I wish to receive a summary of the results at the conclusion of the study as indicated below:

Email: Yes ___ No ___ If yes provide your email address:

Mail: Yes ___ No ___ If yes provide your mailing address:

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has knowingly given their consent

Printed Name: _____

Date: _____

Signature: _____

Role in the study: _____

Appendix H: Study 2 Mental Health Information Questionnaire

MENTAL HEALTH INFORMATION QUESTIONNAIRE**A. BACKGROUND INFORMATION**

Today's Date: _____

Age: _____

Gender: _____

Highest level of education: _____

Current occupational status:

() Full-time () Part-time () Retired, from what: _____

If you are currently retired, how long have you been retired?

Current household income:

() \$0 - \$19,999 () \$20,000 - \$34,999 () \$35,000 - \$59,999 () \$60,000+

Marital status: () Single () Common law () Married
() Widowed () Separated () Divorced**Race/Ethnicity:**

_____ White	_____ Aboriginal/First Nations
_____ Black	_____ Middle Eastern
_____ Indian/Pakistani/Sri Lankan	_____ Hispanic/Latino
_____ Japanese/Korean/Chinese	_____ Filipino/Malaysian/Indonesian
Other: _____	

B. INFORMATION ABOUT YOU AND YOUR HEALTH**1. In general, how would you say your mental health is (how are you feeling emotionally)?**

1() poor 2() fair 3() good 4() very good 5() excellent

2. In general, how would you say your physical health is (how are you feeling physically)?

1() poor 2() fair 3() good 4() very good 5() excellent

3. Have you previously experienced a problem with stress, anxiety, or depression?

() Yes () No

4. Have you previously sought help for a problem with stress, anxiety, or depression?

() Yes () No

C. INFORMATION ABOUT YOU AND YOUR RELATIONSHIPS

FAMILY: Considering the people to whom you are related either by birth or marriage,

1. How many relatives do you see or hear from at least once a month?

() 1 () 2 () 3-4 () 5-8 () 9+

2. How many relatives do you feel close to such that you could call on them for help?

() 1 () 2 () 3-4 () 5-8 () 9+

3. How many relatives do you feel at ease with that you can talk about private matters?

() 1 () 2 () 3-4 () 5-8 () 9+

FRIENDSHIPS: Considering all of your friends,

1. How many of your friends do you see or hear from at least once a month?

() 1 () 2 () 3-4 () 5-8 () 9+

2. How many friends do you feel close to such that you could call on them for help?

() 1 () 2 () 3-4 () 5-8 () 9+

3. How many friends do you feel at ease with that you can talk about private matters?

() 1 () 2 () 3-4 () 5-8 () 9+

The following questions ask about how you have been feeling during the **past 30 days**. For each question, please circle the number that best describes how often you had this feeling.

During the past 30 days, about how often did you feel ...	All of the time	Most of the time	Some of the time	A little of the time	None of the time
1. ...nervous?	1	2	3	4	5
2. ...hopeless?	1	2	3	4	5
3. ...restless or fidgety?	1	2	3	4	5
4. ...so depressed that nothing could cheer you up?	1	2	3	4	5
5. ...that everything was an effort?	1	2	3	4	5
6. ...worthless?	1	2	3	4	5

Attitudes Toward Seeking Professional Psychological Help

Instructions

Read each statement carefully and indicate your degree of agreement using the scale below. In responding, please be completely candid.

0 = Disagree 1 = Partly disagree 2 = Partly agree 3 = Agree

- _____ 1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.
- _____ 2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.
- _____ 3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.
- _____ 4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.
- _____ 5. I would want to get psychological help if I were worried or upset for a long period of time.
- _____ 6. I might want to have psychological counseling in the future.
- _____ 7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.
- _____ 8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.
- _____ 9. A person should work out his or her own problems; getting psychological counseling would be a last resort.
- _____ 10. Personal and emotional troubles, like many things, tend to work out by themselves.

For females:**Please read the following description of a woman named Jane:**

Jane is a 65-year old married woman who recently retired from her 30-year career in finance. She is finding the transition to retirement difficult, and is experiencing low self-esteem due to thinking that she has lost a sense of purpose and productivity in her life. Jane described feelings of sadness, noting that she has been crying more often than usual. She had previously been active socializing with work colleagues, exercising at her local fitness centre, and enjoying cooking and baking for her husband. Jane described that for the past few weeks she has not had the desire to engage in these activities, and that cooking has become a chore for her. In spite of her lack of physical activity, Jane has lost weight, and reports that she does not feel hungry or experience food cravings like she used to. Jane is also having difficulty sleeping at night, leading to feelings of fatigue and a lack of energy. Jane recognizes that there is something different about her, but is unsure what to do.

For males:**Please read the following description of a man named Bill:**

Bill is a 65-year old married man who recently retired from his 30-year career in finance. He is finding the transition to retirement difficult, and is experiencing low self-esteem due to thinking that he has lost a sense of purpose and productivity in his life. Bill described feelings of sadness, noting that he has been crying more often than usual. He had previously been active socializing with work colleagues, exercising at his local fitness centre, and enjoying woodworking. Bill described that for the past few weeks he has not had the desire to engage in these activities, and that woodworking has become

a chore for him. In spite of his lack of physical activity, Bill has lost weight, and reports that he does not feel hungry or experience food cravings like he used to. Bill is also having difficulty sleeping at night, leading to feelings of fatigue and a lack of energy. Bill recognizes that there is something different about him, but is unsure what to do.

D. INFORMATION PREFERENCES

D.1. CONTENT OF INFORMATION

1. How familiar are you with the types of professional help available for mental health problems (e.g., stress, anxiety, and depression)?

- 1(☐) not at all familiar 2(☐) somewhat familiar 3(☐) moderately familiar
4(☐) very familiar 5(☐) extremely familiar

When answering the following questions, please think about the experience of the person described in the story above. Please imagine that you were suffering from significant depression, like the depression that Jane was experiencing. If you were feeling that way, what information would be important to you?

Information regarding....

2. How to recognize the symptoms of a mental health problem

- 1(☐) not at all important 2(☐) somewhat important 3(☐) moderately important
4(☐) very important 5(☐) critical

Information regarding....

3. When to seek treatment for a mental health problem

- 1(☐) not at all important 2(☐) somewhat important 3(☐) moderately important
4(☐) very important 5(☐) critical

4. The different treatment options available

- 1(☐) not at all important 2(☐) somewhat important 3(☐) moderately important
4(☐) very important 5(☐) critical

5. The training and profession of the person providing the treatment

- 1(☐) not at all important 2(☐) somewhat important 3(☐) moderately important
4(☐) very important 5(☐) critical

6. The cost of available treatment options

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

7. The effectiveness of the available treatment options

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

8. The advantages and disadvantages of the available treatment options

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

9. The medication treatment options available

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

10. The side effects of medication treatment

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

11. The interaction effects of medication treatment

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

Information regarding....**12. Possible addiction to medication in medication treatment**

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

13. How medication treatment will be managed

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

14. The length of time that it will take for medications to begin to produce desired results

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

15. The counselling or psychological treatment options available

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

16. What you do during counselling or psychological treatment

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

17. The length of counselling or psychological treatment sessions

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

18. The amount of counselling or psychological treatment sessions that it will take to produce desired results

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

19. The side effects of counselling or psychological treatment

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

Information regarding....**20. Where counselling or psychological treatment will take place**

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

21. The combination of counselling or psychological treatment and medication treatment

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

22. Self-help treatment approaches

- 1() not at all important 2() somewhat important 3() moderately important
4() very important 5() critical

23. Is there any other information that you would like to know prior to making a decision about finding help for a mental health problem?

D.2. AMOUNT OF INFORMATION: When answering the following questions, please think about the experience of the person described in the story that you read earlier. Please consider how much information you would like if you were experiencing a mental health problem similar to that described in the story that you read earlier.

Please indicate the amount of information you would prefer regarding the following forms of treatment:

1. Information about medication treatment

- 1() None 2() Minimal (a brief pamphlet) 3() Moderate (1-page fact sheet)
4() A lot (2 pages of detailed information)
5() A great deal (3-6 pages of detailed information)

2. Information about counselling or psychological treatment

- 1() None 2() Minimal (a brief pamphlet) 3() Moderate (1-page fact sheet)
4() A lot (2 pages of detailed information)
5() A great deal (3-6 pages of detailed information)

3. Information about the combination of medication treatment and counselling or psychological treatment

- 1() None 2() Minimal (a brief pamphlet) 3() Moderate (1-page fact sheet)
4() A lot (2 pages of detailed information)
5() A great deal (3-6 pages of detailed information)

4. Information about self-help approaches (such as self-help books or internet-based self-help programs)

- 1() None 2() Minimal (a brief pamphlet) 3() Moderate (1-page fact sheet)
4() A lot (2 pages of detailed information)
5() A great deal (3-6 pages of detailed information)

D.3. FORMAT OF INFORMATION: Information about help for mental health problems (e.g., stress, anxiety, depression) can be provided in a number of ways. Please indicate how you would prefer to receive information.

1. Information in written form (information sheet or booklet that you could take with you)

- | | | |
|--|---|--|
| 1(<input type="checkbox"/>) not preferred | 2(<input type="checkbox"/>) somewhat preferred | 3(<input type="checkbox"/>) moderately preferred |
| 4(<input type="checkbox"/>) very preferred | 5(<input type="checkbox"/>) extremely preferred | |

2. Information received through discussion with a health-care provider

- | | | |
|--|---|--|
| 1(<input type="checkbox"/>) not preferred | 2(<input type="checkbox"/>) somewhat preferred | 3(<input type="checkbox"/>) moderately preferred |
| 4(<input type="checkbox"/>) very preferred | 5(<input type="checkbox"/>) extremely preferred | |

3. Information provided in the form of a DVD (which you could take with you)

- | | | |
|--|---|--|
| 1(<input type="checkbox"/>) not preferred | 2(<input type="checkbox"/>) somewhat preferred | 3(<input type="checkbox"/>) moderately preferred |
| 4(<input type="checkbox"/>) very preferred | 5(<input type="checkbox"/>) extremely preferred | |

4. Information on a recommended Internet website which could be accessed and printed from home

- | | | |
|--|---|--|
| 1(<input type="checkbox"/>) not preferred | 2(<input type="checkbox"/>) somewhat preferred | 3(<input type="checkbox"/>) moderately preferred |
| 4(<input type="checkbox"/>) very preferred | 5(<input type="checkbox"/>) extremely preferred | |

5. Are there any other information formats that you would find helpful if you were experiencing a mental health problem and were looking for help?

D.4. SOURCE OF INFORMATION: When answering the following questions, please indicate how likely you would be to talk to one of the following people, or consult one of the following sources for help if you were experiencing a mental health problem (e.g., stress, anxiety, depression).

1. Your spouse or romantic partner

- | | | |
|---|--|---|
| 1(<input type="checkbox"/>) not at all likely | 2(<input type="checkbox"/>) somewhat likely | 3(<input type="checkbox"/>) moderately likely |
| 4(<input type="checkbox"/>) very likely | 5(<input type="checkbox"/>) extremely likely | 6(<input type="checkbox"/>) not applicable |

2. Your child/children

- | | | |
|------------------------|-----------------------|------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

3. Your sibling(s)

- | | | |
|------------------------|-----------------------|------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

4. Your close friend(s)

- | | | |
|------------------------|-----------------------|------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

5. Your family doctor

- | | | |
|------------------------|-----------------------|------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

6. A mental health professional (e.g., counsellor or psychologist)

- | | | |
|------------------------|-----------------------|------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

7. Your pharmacist

- | | | |
|------------------------|-----------------------|------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

8. Your community newspaper

- | | | |
|------------------------|-----------------------|------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

When answering the following questions, please indicate how likely you would be to talk to one of the following people, or consult one of the following sources for help if you were experiencing a mental health problem (e.g., stress, anxiety, depression).

9. A recommended self-help book providing education and coping strategies to deal with the problem

- | | | |
|------------------------|-----------------------|------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

10. An Internet discussion group or website

- | | | |
|---------------------------|--------------------------|---------------------------|
| 1() not at all likely | 2() somewhat likely | 3() moderately likely |
| 4() very likely | 5() extremely likely | 6() not applicable |

11. Are there any other sources that you would consult if you were experiencing a mental health problem and were looking for help?

THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE!