## "IT'S NOT THAT I CAN'T WALK": OLDER ADULTS' EXPERIENCES OF USING CANES AND WALKERS

by

#### Alexandra Korotchenko

B.H.K., The University of British Columbia, 2007

M.A., The University of British Columbia, 2010

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#### **Abstract**

Despite the high prevalence of walking difficulties and widespread use of walking aids in later life, to date, there has been minimal scholarly interest in the study of canes and walkers. Building on the existing literatures in rehabilitation, social gerontology, and geographies of disability, the present study aimed to gain a fuller understanding of older men's and women's perceptions and embodied experiences of having walking difficulties and using a cane or a walker. The study was informed by an interpretive approach grounded in feminist disability theory, and was guided by the following research questions:

- 1. How do older men and women perceive and experience having walking restrictions in later life?
- 2. How do older men and women perceive and experience the use of a cane or a walker in their everyday lives?
- 3. How does the social and environmental context of mobility shape individuals' use of canes and walkers in later life?

Using a qualitative descriptive method, I conducted a combination of sit-down and walk-along interviews with six male and 18 female cane and walker users aged 67 to 98. The men and women each took part in two sit-down interviews, during which I asked them to discuss what it was like to have walking limitations and to regularly use a walking aid. In addition, participants completed one walk-along interview, during which I accompanied them on an outing to a location of their choosing. In the findings, I discuss the men's and women's embodied experiences of having walking limitations and utilizing canes and walkers in the context of the ableist, ageist, and gendered organization of everyday life. In particular, the findings examine the social and spatial practices that organize older adults' use of their canes and walkers; the cultural meanings attributed to canes and walkers in later life; how these meanings are shaped by the embodied experience of aging and impairment; and how in turn, the use of walking aids may inform older adults' views of their bodies and identities.

### Preface

This research was approved by the UBC Behavioural Research Ethics Board: Certificate Number H12-03193 (Principal Investigator: Dr. Laura Hurd Clarke). I was responsible for designing the research project, conducted all data collection, and analyzed the data collected over the course of this research project.

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#### Glossary

Ableism: A form of discrimination against people with physical, mental, or developmental disabilities (Barnes, 1991; Oliver, 1990, 1996). Campbell (2001) notes that ableism is predicated upon practices and beliefs that assign inferior value to disabled bodies while accepting the able body "as the perfect, species-typical and therefore essential and fully human [body]" (p. 44).

Activities of Daily Living (ADLs): An umbrella term used in rehabilitation to describe activities related to self-care that are performed routinely in everyday life. These activities can be subdivided into Basic Activities of Daily Living (BADLs), or daily personal care tasks such as bathing, dressing, and toileting, and Instrumental Activities of Daily Living (IADLs), or the complex skills required to support independent living, including food preparation, housekeeping, and the ability to handle finances (James, 2008).

**Ageism:** A term coined by Butler (1969) to describe the "stereotyping of and discrimination against people because they are old" (p. 243). Ageist discrimination limits older adults' access to resources such as health care, employment opportunities, and social supports (Calasanti & King, 2005; Gilleard & Higgs, 2010).

**Biographical disruption:** Bury's (1982) conceptualization of illness as a disruptive event that threatens an individual's life trajectory by undermining the taken-for-granted features and structures of their everyday life.

**Body image:** Defined as a multidimensional self-attitude towards one's body that encompasses a person's perceptions, thoughts, and feelings about their bodies. Body image is influenced by an individual's personal history, cultural norms, and bio-psychological factors, and may impact how

individuals think of themselves, as well as their abilities to perform various activities (Grogan, 2007).

Cane: A standard support cane for persons with mobility and gait problems that consists of a handgrip, shaft, and base. Handle styles vary, with the most common and least expensive variety being the crooked handle. Cane bases normally consist of a single tip or a four-tip quad cane design. Canes can support up to 25% of an individual's weight, while walkers and crutches are typically recommended when additional support for body weight is required (Bateni & Maki, 2005; Mann et al., 1995).

**Disability:** The term disability has long been the subject of contentious debate, and as such, defies simple definition. Within this dissertation, I use the term to denote the social exclusion and material marginalization experienced by individuals with bodily impairments as a result of disabling social and physical environments (Barnes, 1991; Oliver, 1990; WHO, 2002).

**Embodiment:** Refers to the lived experiences of bodies in the world. The philosophical roots of the concept can be traced to the work of Merleau-Ponty (1962, 1963). The concept of embodiment identifies the body as a site of meaning, experience, and expression. That is, the body has a causal role in the shaping of society, while also being a product of society and a means of reproducing the social relations of which it is part (Gabe, Bury, & Ellston, 2004; Waskul & van der Riet, 2002).

**Fourth age:** Defined by Laslett (1989) as deep old age (normally comprised of those aged 75+), the fourth age stands in opposition to the third age, or young old age (typically comprising of individuals aged 55-74). Laslett (1989) described the third age as the period following retirement in which older adults are able to seek self-fulfilment, an active lifestyle, and pleasure beyond the confines of work and childrearing. In contrast, the fourth age, or the final stage of life, is marked

by dependence and decline. In their critique of the concept, Gilleard and Higgs (2013) have posited that membership in the fourth age is dependent not on chronological age, but rather on one's ability to continually pursue the lifestyle of consumption and leisure that is associated with the third age.

**Impairment:** Throughout this dissertation, I use the term impairment to refer to the loss of a body part or its' physiological function (WHO, 2002), in contrast with disability, which is used to denote the economic marginalization and social exclusion experienced by individuals with impairments (Abberley, 1987; Barnes, 1991; Oliver, 1990, 1996).

**Intersectionality:** A term coined by American critical race scholar Kimberlé Crenshaw (1989) to describe the ways in which our lives are shaped by the interaction of different social locations (such as age, dis/ability, gender, geography, race, sexuality, and social class).

**Mobility limitations:** Mobility limitations include walking difficulties, as well as restrictions experienced while moving around, changing or maintaining body position, moving or handling objects, and utilizing transportation (WHO, 2002).

**Stigma:** Erving Goffman (1963) defined stigma as the negative social reactions that individuals experience when they possess "an attribute that is deeply discrediting" (p. 3), signalling their deviation from social norms (such as bodily impairment). Stigma results not only from discriminatory social reactions (enacted stigma), but also from individuals' internalized perceptions of having a devalued identity (felt stigma).

**Successful aging:** According to Rowe and Kahn (1997), successful aging can be defined as aging that is characterized by three criteria, namely, "low probability of disease and disease-

related disability, high cognitive and physical functional capacity, and active engagement with life" (p. 433).

Walker: The standard walker, or walking frame, consists of four posts and one handgrip for each hand. Walkers can be grouped into four types: rigid, folding, two-wheeled, and three- or four-wheeled. Rigid walkers include a frame that must be lifted up and moved with each step. Folding walkers are used in the same manner as rigid walkers, but have the capability of folding into a flat object. Two-wheeled walkers allow users to push the walker forward without lifting the frame and automatic brakes that are activated as users push down on the walker. Three- and four-wheeled walkers often have hand brakes, and may additionally include baskets, seats, or trays that are incorporated into the walker's frame (Bateni & Maki, 2005; Mann, Hurren, Tomita, & Charvat, 1995).

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#### 1: Introduction

There is mounting evidence that older adults' autonomous mobility strongly correlates with well-being, social participation, and the ability to continue to live independently in the community (Groessl et al., 2007; Hirvensalo, Rantanen, & Hekkinnen, 2000; Metz, 2000; Webber, Porter, & Menec, 2010; Yeom, Fleury, & Keller, 2008). Conversely, mobility limitations have been linked to a number of adverse outcomes in later life, including reduced autonomy, social isolation, and emotional distress (Groessl et al., 2007; Hirvensalo et al., 2000; Iezzoni, McCarthy, Davis, & Siebens, 2001; Metz, 2000; Rubenstein, Powers, & MacLean, 2001; Yeom et al., 2008). Mobility limitations include difficulties with walking and moving around, changing or maintaining body position, moving or handling objects, and utilizing transportation (WHO, 2002). Difficulties with walking and moving around are particularly likely to increase with age, with current estimates suggesting that one third of Canadians over the age of 65 and two-thirds of Canadians over the age of 85 experience difficulties related to ambulating over short distances and climbing stairs (Statistics Canada, 2013).

At the same time, the use of mobility devices such as manual and power wheelchairs, canes, walkers, and crutches increases in later life (Gell, Wallace, LaCroix, Mroz, & Patel, 2015; Hartke, Prohaska, & Furner, 1998; Kaye, Kang, & LaPlante, 2000; Kraskowsky & Finlayson, 2001; Shields, 2004). Canes and walkers comprise the most commonly used walking aids by older adults (Gell et al., 2015; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Statistics Canada, 2015). American studies show that cane and walker users outnumber wheelchair and scooter users three to one among individuals aged 65+, with 10-16% of the older adult

population reporting cane use and 5-12% indicating that they utilize a walker (Gell et al. 2015; Kaye et al., 2000). Similarly, 27-32% of older adults over the age of 85 report using a cane and 15-29% indicate that they utilize a walker (Gell et al. 2015; Kaye et al., 2000). While there are no current statistics concerning older Canadians' use of canes and walkers alone, estimates suggest that 10% of Canadians aged 65 and older and 32% of those over the age of 85 utilize a mobility support device (defined as canes, walkers, crutches, or braces) (Shields, 2004).

Despite the widespread use of canes and walkers in later life, the existing research has tended to focus on middle-aged and older adults' attitudes towards and experiences of adopting novel, high technology devices such as power wheelchairs and motorized scooters (Auger et al., 2010; Brandt, Iwarsson, & Stahle, 2004; Edwards & McCluskey, 2010; Korotchenko & Hurd Clarke, 2014; May et al., 2010; Mortenson et al., 2005; Papadimitriou, 2008; Petterson, Tornquist, & Ahlstrom, 2006; Smith, Sakakibara, & Miller, 2014; Thoreau, 2015). The use of canes and walkers in later life has been considered in the context of larger studies in rehabilitation that have examined a wide variety of walking aids (including crutches, canes, walkers, and manual and power wheelchairs) (Bateni & Maki, 2005; Copolillo, Collins, Randall, & Cash, 2002; Copolillo & Prohaska, 2001; Cornman & Freedman, 2008; Gell et al., 2015; Gooberman-Hill & Ebrahim, 2007; Hartke et al., 1998; Hedberg-Kristensson, Dahlin Ivanoff, & Iwarsson, 2007; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Lofqvist, Nygren, Brandt, & Iwarsson, 2009; Resnik, Allen, Isenstadt, Wasserman, & Iezzoni, 2009; Roelands, van Oost, Buysse, & Depoorter, 2002). This research has explored the prevalence of cane, walker, and wheeled mobility device utilization in later life (Cornman & Freedman, 2008; Gell et al., 2015; Kaye et al., 2000). Studies in rehabilitation have examined older adults' motivations for acquiring various walking aids (Aminzadeh & Edwards, 1998; Copolillo et al., 2002;

Gooberman-Hill & Ebrahim, 2007; Haggblom-Kronlof & Sonn, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Kraskowsky & Finlayson, 2001; Lofqvist et al., 2009; Resnik et al., 2009; Roelands et al., 2002) as well as the problems related to walking aid use in later life, including falls, injuries, and device abandonment (Bateni & Maki, 2005; Van Riel et al., 2014). Although some of this research has suggested that older adults may adopt canes, walkers, and wheeled mobility devices at different rates (Gell et al., 2015; Resnik et al., 2009), it is unknown how often and to what extent factors such as cost, device size, and ease of use influence older adults' acceptance and acquisition of canes and walkers compared to other walking aids. In the majority of existing studies, canes and walkers have not been distinguished from other categories of walking aids (such as wheelchairs, scooters, and crutches) (Copolillo et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Kraskowsky & Finlayson, 2001; Roelands et al., 2002) or from one another (Bateni & Maki, 2005; Lofqvist et al., 2009).

A relatively small number of studies have exclusively looked at cane and walker use in later life (Aminzadeh & Edwards, 2000; Kylberg, Lofqvist, Phillips, & Iwarsson, 2013; Porter, Benson, & Matsuda, 2011; Thomas, Connelly, & Laliberte-Rudman, 2008). This research, which has stemmed primarily from rehabilitation, has explored older adults' attitudes towards canes and walkers (Aminzadeh & Edwards, 2000), the impact of walkers on older adults' functional performance (Thomas et al., 2008), and older adults' experiences of using a cane or a walker (Kylberg et al., 2013; Porter et al., 2011; Thomas et al., 2008). While this emergent body of work has provided important insights into the use of canes and walkers in later life, it has examined select populations such as female walking aid users (Porter et al., 2011), male walking aid users (Kylberg et al., 2013), cane users only (Aminzadeh & Edwards, 2000), and walker users only

(Thomas et al., 2008). To date, no studies have compared older male and female cane and walker users, and only one study has considered the differing experiences associated with utilizing a cane versus a walker (Porter et al., 2011). Moreover, these studies have been grounded in a biomedical orientation towards illness and impairment, which emphasizes the identification of functional limitations and the development of therapeutic and rehabilitative techniques (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Porter, Benson, & Matsuda, 2011; Thomas et al., 2008). That is, this research has tended to focus on improving functional mobility among older adults, decreasing the risk of falls, and promoting safe and appropriate walking aid use (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Porter et al., 2011; Thomas et al., 2008). Few studies have addressed the social and environmental factors that might underlie cane and walker use in later life.

Research in social gerontology has found that the lives of older adults with chronic illness are profoundly impacted by the negative social meanings associated with aging and impairment (Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; 2011; Higgs & Jones, 2009; Katz, 2000). This literature has considered how older adults' experiences of their aging, impaired bodies are shaped by ageism, or the "stereotyping of and discrimination against people because they are old" (Butler, 1969, p. 243). In particular, research and theorizing in social gerontology has examined the stigmatizing conceptualization of old age as a time of inevitable dependency and decline (Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; 2011; Higgs & Jones, 2009; Katz, 2000), and alternatively, the emergence of the successful aging paradigm within a larger movement in gerontology and geriatrics to affirm the possibility of health and social engagement in later life (Gilleard & Higgs, 2011; Higgs et al., 2009; Holstein & Minkler, 2003; Hughes, 2002). The

social gerontology literature has also explored the ways in which chronic conditions and bodily impairments may affect older adults' awareness of their bodies (Finlayson & van Denend, 2003; Kvigne & Kirkevold, 2003; Lorenz, 2009), alter their biographical trajectories (Bury, 1982; Hurd Clarke & Bennett, 2013; Lorenz, 2009; Pound, Gompertz, & Ebrahim, 1998; Sanders, Donovan, & Dieppe, 2002; Torres & Hammarstrom, 2006; Wilkins, 2001), and influence their body images (Finlayson & van Denend, 2003; Hurd Clarke, Griffin, & the PACC Team, 2008). While mobility impairments have been alluded to in this research, to date, little of this work has specifically considered how older adults' walking difficulties or the use of a walking aid may mediate the experience of age-related discrimination.

The geographies of disability literature has focused on the inaccessibility, discrimination, and inequality that have resulted from the privileging of able, youthful, and autonomously functioning bodies within the built environment (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). This work has demonstrated the various ways in which the organization of public space often (re)produces disability by restricting disabled individuals' opportunities for access and independent mobility (Gleeson, 1999; Imrie, 2000; Imrie & Kumar, 1998). Geographies of disability scholars have implicated the inaccessible configuration of the built environment in the socio-institutional exclusion of disabled people from public domains such as education and employment (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). While this literature has helped to recontextualize disability as a structural rather than an individual problem, no studies in the field have focused specifically on the intersection of assistive technologies (such as mobility aids) and the built environment. Given the ubiquity of walking aid

use among disabled older adults, the study of canes and walkers may be important to extending current understandings of the socio-material construction of disability.

#### 1.1 Study Objectives and Research Questions

Building on and addressing the gaps in the existing literatures in rehabilitation (Aminzadeh & Edwards, 2000; Kraskowsky & Finlayson, 2001; Kylberg et al., 2013; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al., 2009; Thomas et al., 2008), social gerontology (Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; Higgs & Jones, 2009; Katz, 2000) and geographies of disability (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998), the purpose of the study was to gain a fuller understanding of older men's and women's perceptions and experiences of having walking difficulties and using a cane or a walker. The study was informed by an interpretive approach grounded in feminist disability theory, and was guided by the following research questions:

- 1. How do older men and women perceive and experience having walking restrictions in later life?
- 2. How do older men and women perceive and experience the use of a cane or a walker in their everyday lives?
- 3. How does the social and environmental context of mobility shape individuals' use of canes and walkers in later life?

Using a qualitative descriptive method, I conducted a combination of sit-down and walk-along interviews with six male and 18 female cane and walker users aged 67 to 98. Participants took part in two sit-down interviews, during which I asked them to discuss what it was like to have walking limitations and to regularly use a walking aid. In addition, participants completed one walk-along interview, during which I accompanied them on an outing to a location of their

choosing. In the findings, I discuss the men's and women's embodied experiences of having walking limitations and utilizing canes and walkers in the context of the ableist, ageist, and gendered organization of everyday life. In particular, I examine the social and spatial practices that organize older adults' use of their canes and walkers; the cultural meanings attributed to canes and walkers in later life; how these meanings are shaped by the embodied experience of aging and impairment; and how in turn, the use of walking aids may inform older adults' views of their bodies and identities.

#### 1.2 A Note on Language

The language used to denote disability and old age has been subject to numerous debates. For instance, in both disability studies and rehabilitation, it is common to utilize the term impairment to refer to the loss of a body part or its physiological function, and disability to mean the economic marginalization and social exclusion experienced by individuals with impairments (Abberley, 1987; Barnes, 1991; Oliver, 1990, 1996; WHO, 2002). At the same time, the extent to which disability and impairment are socially constructed continues to be contested (Hughes & Paterson, 2006; Oliver 1990, 1996; Wendell, 1996). Disability scholars have long critiqued the medical model of disability for its use of the term disability to denote bodily abnormality, deviance, and inferiority (Campbell, 2001; Zitzelsberger, 2005). In contrast, disability activists and critical disability scholars have advanced a view of disability as a socially constructed phenomenon, re-conceptualizing disability to describe the ways in which the activity restrictions and disadvantages experienced by people with disabilities were consequences of the inequitable relations between able-bodied and disabled individuals (Abberley, 1987; Barnes, 1991; Oliver, 1990, 1996). According to this social model of disability, disability signifies a form of

oppression, created by contemporary social practices and institutions to isolate and exclude disabled people from full societal participation (Abberley, 1987; Barnes, 1991; Oliver, 1990, 1996). More recently, the International Classification of Functioning, Disability, and Health (ICF) sought to provide an explanatory model of disability that took into account both the physical and social contexts of disability. This biopsychosocial model of disability views disability as a product of the interaction between an individual's health condition(s) and the context in which they live, utilizing disability as an umbrella term for impairments, activity limitations, and participation restrictions (World Health Organization (WHO), 2002). According to the ICF, the term disability encompasses both the environmental factors (such as social attitudes, architectural characteristics, and climate) and personal factors (such as age, gender, and education) that shape individuals' experiences of their impairments. Throughout this dissertation, I have drawn on the ICF definition of disability, employing the term (mobility) impairment to denote the experience having difficulties relating to walking and moving around. I have reserved the term disability for describing the interaction between bodily impairment and the disabling environment in the participants' lives.

The use of person-first versus identity-first language has constituted another significant debate within and outside disability scholarship. It is not unusual to hear the expression 'see the person, not the disability' among advocates of person-first language, who champion the use of the phrase person with a disability in place of disabled person in an effort to diminish the dehumanization and stigmatization of people with disabilities (Titchkosky, 2001). However, critics of person-first vernacular have challenged the need to emphasize disabled individuals' personhood and humanity, questioning the assumption that having a disability renders one less human (Titchkosky, 2001). Proponents of identity-first language, or terminology that includes

terms such as disabled people, have also underscored how disability is intrinsically entwined in many disabled individuals' identities. For instance, Oliver (1990) writes:

It is sometimes argued, often by able-bodied professionals and some disabled people, that 'people with disabilities' is the preferred term, for it asserts the value of the person first and the disability then becomes merely an appendage. This liberal and humanist view flies in the face of reality as it is experienced by disabled people themselves who argue that far from being an appendage, disability is an essential part of the self. In this view, it is nonsensical to talk about the person and the disability separately, and consequently disabled people are demanding acceptance as they are, as disabled people (p. xiii).

None of the participants in the current study described themselves using the expression "differently abled" or as people with disabilities. Instead, the participants referred to themselves as "handicapped", "crippled", and "disabled" individuals. In an effort to recognize the participants' choice of language and acknowledge the ways in which disability informed the men's and women's lived realities, I have chosen to use the terms disabled person or disabled people throughout the dissertation, except in instances that call for a variety of language.

Calasanti and Slevin (2001) have similarly argued that the language typically used to describe older adults reflects ageist ideas concerning later life. Calasanti and Slevin (2001) have contended that rather than normalizing old age, the use of the term older in place of old maintains the stigma associated with later life by continuing to treat old age as an inherently negative stage of life. As such, Calasanti and Slevin (2001) employ the term old rather than older adult in an attempt to "naturalize and neutralize [the word old]... and to bring positive connotations back into the word" (p. 10). In contrast, participants in the study overwhelmingly preferred older to old, electing to use the terms older adults and seniors to describe themselves. In order to reflect the men's and women's preferences, I have utilized the term older adults in my descriptions of the study participants throughout this document.

#### 2: Literature Review

In the following chapter, I outline the theoretical framework that informed the current study, as well as the three key literatures I drew on, namely, research and theorizing in rehabilitation sciences, social gerontology, and geographies of disability.

#### 2.1 Theoretical Framework

This study was informed by an interpretive approach grounded in feminist disability theory (Campbell, 2001; Corker, 1999; Garland-Thompson, 2005; Hall, 2011; Thomas, 1999; Wendell, 1996). The interpretive turn in social research developed as a critique of positivism, or the study of human action using the scientific method (Schwandt, 2001). An interpretive approach to studying social life aims to gain a deeper understanding of the meanings that constitute social action (Schwandt, 2001). Within disability studies, the interpretive approach emphasizes the primacy of individuals' experiences, while acknowledging the social context of disability (Gabel & Peters, 2004; Goodley, 2010). Interpretivist disability research assumes that a disability, while real, is best understood by studying the contexts in which it occurs and the sense that people make of it (Gabel & Peters, 2004; Goodley, 2010).

Historically, disability has been viewed through a positivist, biomedical lens, which posits that disablement is caused by bodily deficits that require medical intervention (Edwards & Imrie, 2003; Hughes & Paterson, 2006; Oliver, 1990, 1996; Wendell, 1996; Zitzelsberger, 2005). In contrast, proponents of the social model of disability reject the biomedical assumption that disability is a property of the impaired individual (Barnes, 1991; Edwards & Imrie, 2003; Hughes & Paterson, 2006; Oliver, 1990, 1996; Zitzelsberger, 2005). Instead, disability activists

and scholars assert that disability is a form of oppression that is the product of "society's failure to provide appropriate services and adequately ensure the needs of disabled people are fully taken into account in its social organization" (Oliver, 1996, p. 32). This perspective distinguishes between individuals' impairments and the oppression they experience by situating impairment within the body and disability within society (Barnes, 1991; Oliver, 1990, 1996; Shakespeare & Watson, 2001). While advocates of the social model acknowledge disabled people's physical limitations as well as the important role medical and rehabilitation professionals may play in treating people with disabilities when they are ill, they also contend that disability is not a medically-treatable or curable condition. The solution to the intolerance, segregation, exclusion, institutionalization, and violence that are experienced by people with disabilities in their everyday lives lies not in compensatory medical interventions, but rather in engendering social change and advancing the emancipation of disabled people (Abberley, 1987; Barnes, 1991; Oliver, 1996).

While recognizing the significance of its contributions to disability scholarship and advocacy, feminist disability scholars have critiqued the social model for its inattention to intersectionality, the individual experience of disability, and the impaired body (Campbell, 2001; Corker, 1999; Garland-Thompson, 2005; Hall, 2011; Hughes & Paterson, 2006; Paterson & Hughes, 1999; Shakespeare & Watson, 2001; Thomas, 1999; Wendell, 1996). Feminist disability scholars have argued that the emergence of the social model within a group of mostly white, heterosexual men with spinal cord injury has undoubtedly shaped the model's somewhat narrow understanding of disability (Humphrey, 2000; Shakespeare & Watson, 2010). In response, an emergent disability feminist scholarship has attempted to bring attention the ways in which individuals' experiences of bodily impairment, ableist discrimination, and societal exclusion are

often shaped by their embodiment of various intersecting social locations (including gender, as well as age, class, ethnicity, and sexuality) (Corker, 1999; Driedger & Owen, 2008; Garland-Thompson, 2005; Hall, 2011; Morris, 1991, 1993; Owen & Troschuk, 2004; Shakespeare & Watson, 2001; Thomas, 1999; Wendell, 1996). For instance, feminist disability research has shown that women are disproportionately affected by chronic illness and disability, tend to have greater lifestyle risk factors for chronic illness and impairment (such as high levels of stress), and are more likely to experience disability-related social and economic setbacks, including low incomes, unsafe housing, and a greater risk of violence and abuse (Driedger & Owen, 2008; Owen & Troschuk, 2004). Disability feminists have also explored the ways in which disabled women, even more so than women in general, have been cast in the collective cultural imagination as inferior, lacking, and incapable (Garland-Thompson, 2005). Relative to ablebodied women, women with disabilities and particularly disabled women who are aged, fat, queer, and of colour, are perceived as unfeminine and asexual (Garland-Thompson, 2005; Hall, 2011; Malacrida, 2009). Consequently, disabled women are often removed from the sphere of true womanhood and feminine beauty, even as they are expected to aspire to ideals of femininity such as motherhood, caregiving, and heterosexual appeal (Garland-Thompson, 2005; Malacrida, 2009). In contrast, disabled men are frequently stereotyped as helpless, childlike, and dependent, an image that is fundamentally at odds with the autonomous, independent virility of hegemonic masculinity (Garland-Thompson, 2005; Shuttleworth, Wedgwood, & Wilson, 2012). Disability feminists have examined how such cultural representations of disabled bodies as transgressive and expendable have influenced ableist and gendered social practices such as selective abortion, sterilization programs, normalizing surgical procedures, and sexual violence (Garland-Thompson, 2005; Driedger & Owen, 2008; Owen & Troschuk, 2004; Wendell, 1996).

Some feminist disability scholars have also voiced critiques of the social model's disregard for the diverse physical manifestations of impairment (Corker, 1999; Garland-Thompson, 2005; Hall, 2011; Humphrey, 2000; Shakespeare & Watson, 2001). For instance, Humphrey (2000) has contended that the social model's restrictive definition of disability and tendency to homogenize the experiences of people with disabilities has effectively marginalized individuals with non-visible, non-physical, and non-permanent impairments from disability politics and scholarship. Others have commented on the absence of the material, organic body and embodied experiences within the social model of disability (French, 1993; Garland-Thompson, 2005; Hall, 2011; Hughes & Paterson, 2006; Shakespeare & Watson, 2001; Thomas, 1999). A number of feminist disability theorists have maintained that the embodied experience of impairment comprises an important aspect of many disabled people's lives, and as such, cannot be cast off as irrelevant to disability theory and politics (Corker, 1999; French, 1993; Garland-Thompson, 2005; Hall, 2011; Morris, 1991; Titchkosky, 2007; Wendell, 1996). Feminist writers have argued that by bracketing impairment and rejecting the causal role of the body in explaining oppression, the social model has denied disabled people's embodied experiences of pain, discomfort, and poor health (Corker, 1999; French, 1993; Morris, 1991; Thomas, 1999; Wendell, 1996).

The concept of embodiment refers to the lived experiences of bodies in the world, or the body as a site of meaning, experience, and expression. Embodiment can be conceptualized in relation to the social fact that we both 'have' and 'are' bodies (Turner, 1984), and moreover, that "as part of our daily practices, we also do (our) bodies. In practice, we enact them" (Mol & Law, 2004, p. 45). Embodiment brings attention to the body as the "source, location, and means" (Shilling, 2005, p. 45) of society, or the ways in which the body has a causal role in the shaping

of society, while also being a product of society and a means of reproducing the social relations of which it is part (Gabe et al., 2004; Shilling, 2005; Titchosky, 2007; Waskul & van der Riet, 2002). The concept of embodiment provides a useful tool for examining the irreducible materiality of the flesh-and-blood body, while acknowledging the mechanisms through which disabled bodies constitute and are constituted by society (Titchkosky, 2007). For instance, feminist disability scholars have employed the concept to challenge the premise that unusual embodiment is inherently inferior (Garland-Thompson, 2005; Titchkosky, 2007). Garland-Thompson (2005) has argued that disability, like femaleness, is not a natural state of corporeal inadequacy, but rather, is a pervasive cultural system that produces able and disabled subjects by differentiating and devaluing certain bodies in relation to others. Even though this comparison of bodies is ideological rather than biological, it nevertheless shapes cultural understandings of disability and legitimates the unequal distribution of resources, status, and power within a biased social and environmental context (Garland-Thompson, 2005).

In this study, I took a feminist interpretative approach to disability research in order to gain a deeper understanding of individuals' embodied experiences of mobility disability and cane and walker use, as well as the social spaces and practices that contextualized these experiences. In the sections below, I outline the three key literatures I drew on, namely, research and theorizing in rehabilitation sciences, social gerontology, and geographies of disability. To date, these three fields of study have formed a complementary, yet incomplete picture of older adults' experiences of disability and use of walking aids. For instance, while a wealth of rehabilitation research has explored the impact of mobility technologies on older adults' lives, few studies have focused specifically on the embodied, everyday realities of cane and walker use. On the other hand, research in social gerontology has examined the embodiment of chronic illness and

impairment in later life, although little of this research has centred specifically on mobility and walking aid use. Finally, while work in the geographies of disabilities has helped to draw attention to the social construction of mobility disabilities within the built environment, it has largely ignored the material body and individuals' embodied experience of the corporeality of their impairments. As such, much of this work has left unexplored the impact of the built environment on individual experiences of disability, as well as the ways in which various social locations (such as gender, class, and age) intersect in and with public space to (re)produce disability in later life. Building on and addressing the gaps in these three literatures, this study undertook to examine older cane and walker users' embodied experiences of having walking difficulties and using their walking aids.

#### 2.2 Cane and Walker Use in Later Life: Research in Rehabilitation

Research in rehabilitation has primarily considered the use of canes and walkers in later life in the context of larger studies concerning various categories of walking aids, including crutches, canes, walkers, and wheeled mobility devices (Bateni & Maki, 2005; Copolillo, Collins, Randall, & Cash, 2002; Cornman & Freedman, 2008; Gell et al., 2015; Gooberman-Hill & Ebrahim, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Lofqvist et al., 2009; Resnik et al., 2009; Roelands et al., 2002). This research has examined the prevalence of cane and walker use in later life, and has identified a range of demographic characteristics associated with older adults' utilization of walking aids. For instance, studies have shown that mobility limitations tend to increase with age, a trend that is reflected in the higher rates of walking aid use among older adults (Gell et al., 2015; Hartke, et al., 1998; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Shields, 2004; Statistics Canada,

2015). In Canada, statistics show that the use of a walking aid (classified as a cane, a walker, or a pair of crutches) to carry out activities of daily living rises from only 0.3% among non-institutionalized Canadians aged 12-44, to 5% of those aged 65+, and 32% of older adults over the age of 85 (Shields, 2004).

The use of a walking aid is strongly linked to greater disease burden (Gell et al., 2015; Hartke et al., 1998; Jezzoni et al., 2001; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Shields, 2004). On average, older cane and walker users tend to be in poorer health than individuals who do not use a walking aid, with 34% of walker users and 23% of cane users reporting fair or poor health, compared to 6% of non-users (Kaye et al., 2000). Cane and walker use is associated with a number of medical conditions and impairments that tend to diminish balance, coordination and/or cognition, including rheumatoid and osteoarthritis, stroke, dementia, vision impairment, diabetes mellitus, cerebrovascular disease, and orthopaedic impairments such as hip and back problems (Gell et al., 2015; Iezzoni et al., 2001; Kaye et al., 2000; Obembe & Eng, 2015). Older walking aid users are also more likely to experience difficulties with activities of daily living (ADL) such as bathing, dressing, and getting around the home, as well as instrumental activities of daily living (IADL) such as shopping, meal preparation, and housework compared to non-device users (Hartke et al., 1998; Kaye et al., 2000; Shields, 2004, Statistics Canada, 2015). This is consistent with findings that indicate that mobility is the strongest predictor of ADL and IADL problems, fall risk, institutionalization, and risk of mortality in later life (Guralnick et al., 1994; Guralnick et al., 1995; Iezzoni et al., 2001; Statistics Canada, 2015).

Rates of walking aid use (including canes, walkers, and wheeled mobility devices) are higher among older women as compared to older men (Gell et al., 2015; Kaye et al., 2000;

Kraskowsky & Finlayson, 2001; Shields, 2004; Statistics Canada, 2015). Older women make up more than half (57.6%) of all cane users and more than two-thirds (72.1%) of all walker users (Kaye et al., 2000), a difference that has been attributed to women's greater longevity (Iezzoni et al., 2001; Murtagh & Hubert, 2004; Shumway-Cook, Ciol, Yorkston, & Hoffman, 2005; Statistics Canada, 2015). Greater rates of walking aid use among older women may also be related to the high prevalence of musculoskeletal conditions (e.g. osteoarthritis, osteoporosis, and chronic back problems), neurodegenerative diseases (e.g. Parkinson's disease and multiple sclerosis), and psychological illnesses (e.g. depression) among older women (Iezzoni et al., 2001; Murtagh & Hubert, 2004; Warner & Brown, 2011). These conditions have been shown to correlate with greater and more severe mobility limitations in later life (Iezzoni et al., 2001; Murtagh & Hubert, 2004).

Higher levels of walking aid use have also been observed in older Black, Hispanic, and Indigenous individuals (Cornman & Freedman, 2008; Gell et al., 2015; Kaye et al., 2000), older adults with lower socioeconomic status and lower education levels (Gell et al., 2015; Kaye et al., 2000; Shields, 2004), and older men and women who are single and/or are living alone (Hartke et al., 1998). This corresponds with research that shows that Black, Hispanic, and Indigenous older adults, those who have less than a high school education, and older individuals who have household incomes below the poverty line are more likely to experience mobility limitations compared to other population groups (Iezzoni et al., 2001; Kaye et al., 2000). Racial/ethnic disparities in health in later life are well documented (Angel & Whitfield, 2007; Moen & Spencer, 2006; Mullings & Schultz, 2006; Warner & Brown, 2011). On average, older Black, Hispanic, and Indigenous adults have a higher prevalence of chronic diseases and functional impairments, and experience greater mortality rates than their White counterparts (Mullings &

Schultz, 2006; Warner & Brown, 2011). Older racial/ethnic minority women in particular tend to experience disproportionately high rates of functional limitations compared to White women and men of all ethnicities (Warner & Brown, 2011). In addition, research has shown that older racial/ethnic minority women undergo an accelerated impairment trajectory, accumulating functional limitations much earlier in life than men or White women (Warner & Brown, 2011). Similarly, an extensive body of research has examined the health consequences of various markers of socioeconomic status, including educational attainment (Dupre, 2007; Hayward, Warner, & Crimmins, 2007) and income (Rogers, Hummer, & Nam, 2000; Smith, 1999). This research has demonstrated how individuals' health trajectories are shaped over the life course by the accumulation of opportunities, resources, and risks associated with social class (including access to health care, health education, secure housing and employment, and nutritious food) (Mullings & Schultz, 2006). Cumulatively, this research indicates that the persistent inequalities and health risks experienced by women, racial/ethnic minority older adults, and individuals of lower socioeconomic status over the life course undermine health and mobility in later life (Warner & Brown, 2011).

In addition to examining the prevalence of walking aid use among older adults, research in rehabilitation has also considered the factors that motivate or discourage the adoption of crutches, canes, walkers, manual wheelchairs, and power mobility devices in later life (Aminzadeh & Edwards, 1998; Bateni & Maki, 2005; Copolillo et al., 2002; Copolillo & Prohaska, 2001; Gell et al., 2015; Gooberman-Hill & Ebrahim, 2007; Hartke et al., 1998; Haggblom-Kronlof & Sonn, 2007; Hedberg-Kristensson et al., 2007; Kraskowsky & Finlayson, 2001; Roelands et al., 2002). This research indicates that the majority of older adults who obtain a walking aid do so to address functional limitations, facilitate daily activities, minimize pain,

reduce the risk of falling, and enhance mobility (Copolillo & Prohaska, 2001; Gell et al., 2015; Gooberman-Hill & Ebrahim, 2007; Haggblom-Kronlof & Sonn, 2007; Hartke et al., 1998).

Following the acquisition of a walking aid, older adults often report feeling more secure and confident in their ambulatory capacities (Bateni & Maki, 2005; Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Haggblom-Kronlof & Sonn, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Resnik et al., 2009; Roelands et al., 2002). It is thus unsurprising that older adults tend to hold positive opinions of their walking aids, viewing these devices as invaluable to their ability to engage in various activities of daily living and maintaining a good quality of life (Bateni & Maki, 2005; Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Resnik et al., 2009).

At the same time, older adults report a number of deterrents to walking aid acquisition and use (Bateni & Maki, 2005; Gell et al., 2015; Hedberg-Kristensson et al., 2007; Kraskowsky & Finlayson, 2001; Resnik et al., 2009). Cost is a frequently cited reason for unmet needs for assistive devices (Statistics Canada, 2008). Results from the 2006 Participation and Activity Limitation Survey (PALS), which included assistive devices for mobility, hearing, breathing, and incontinence, indicate that most Canadians with disabilities (or their immediate families) pay for their assistive aids themselves (Statistics Canada, 2008). In particular, British Columbia has the lowest level of public sector funding for assistive devices in Canada, as well as the largest percentage of residents (79.5%) who pay for their own assistive devices. While the wide variety of assistive aids included in the PALS (2008) ranged in cost from tens to thousands of dollars, the survey's results are nonetheless indicative of the barriers to walking aid acquisition experienced by older disabled adults living on a fixed income. Surveys additionally indicate that the risks and difficulties associated with walking aid use may preclude some older adults from

acquiring or continuing to utilize their devices (Bateni & Maki, 2005; Gell et al., 2015; Van Riel et al., 2014).

There is some evidence that incorrect cane and walker use may interfere with balance, exacerbate fall risk, and increase the probability of injuries in the occurrence of a fall (Bateni & Maki, 2005; Van Riel et al., 2014). Inappropriate device prescription, inadequate user training, and the use of non-prescribed devices may compound these issues (Bateni & Maki, 2005; Van Riel et al., 2014). Other problems reported in the rehabilitation literature include discomfort, pain, and repetitive stress injuries as a result of chronic device use, leading to conditions such as tendonitis, osteoarthritis, and carpal tunnel syndrome (Bateni & Maki, 2005). Another factor affecting older adults' walking aid use is their symbolic value (Haggblom-Kronlof & Sonn, 2007; McNeill & Coventry, 2015). While walking aids may signify independence to some older adults (Copolillo, 2001; Haggblom-Kronlof & Sonn, 2007; Roelands et al., 2002), studies show that older mobility device users tend to also associate canes, walkers, crutches, and wheelchairs with aging and physical decline (Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hedberg-Kristensson, et al., 2007; McNeill & Coventry, 2015). As a result, some researchers have speculated that the stigma related to aging and age-related bodily losses may constitute a deterrent to walking aid use in later life (Gooberman-Hill & Ebrahim, 2007; Hedberg-Kristensson, et al., 2007; McNeill & Coventry, 2015).

Finally, a small body of work in rehabilitation has focused specifically on the use of canes and walkers in later life (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al., 2009; Thomas et al., 2008). This research has shown that older cane and walker users are generally satisfied with their walking aids (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al.,

2009; Thomas et al., 2008). Acceptance of and satisfaction with canes and walkers is typically associated with the perceived benefits of walking aid use, which include enhanced physical safety, the ability to maintain control over one's life, increased opportunities to engage in social and physical activities, decreased risk of falling, and reduced reliance on the help of others (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al., 2009; Thomas et al., 2008). For instance, the three women interviewed in Lofqvist et al.'s (2009) longitudinal case studies of octogenarian cane and walker users considered their walking aids to be indispensable to their ability to manage their everyday activities and remain engaged in their communities. The participants described how their canes and walkers provided them with support, thus facilitating walking, the use of transportation, and daily activities such as grocery shopping and attending medical appointments (Lofqvist et al., 2009). Similarly, in their pilot study of four community-living walker users aged 78-86, Thomas et al. (2008) found that the use of a walker augmented the participants' balance and enhanced their feelings of safety, thereby enabling mobility outside the home and reducing dependence on caregivers.

At the same time, this research has underscored the practical issues that restrict the safe and effective use of canes and walkers in later life (Kylberg et al., 2013; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al., 2009; Thomas et al., 2008). Two of the three women interviewed by Lofqvist et al. (2009) noted that their poor balance and decreasing strength had made the use of their canes and walkers more demanding over time, thus limiting their ability to ambulate despite the help of their walking aids. Kylberg et al.'s (2013) case study of three older men revealed that the use of a cane or a walker was often time-consuming and/or inconvenient. For instance, one participant discussed the difficulties he experienced utilizing his walker on public transportation, in bad weather, and in crowded spaces (Kylberg et al., 2013). Likewise,

cane users in Resnik et al.'s (2009) focus groups with cane, walker, and wheelchair users as well as device non-users described the inconvenience posed by finding a place to rest their devices, forgetting their canes, and being limited to only using one hand while handling their canes. The walker users in the study noted that their devices made it awkward for them to perform ordinary tasks like carrying objects (Resnik et al., 2009). Some Black and Hispanic study participants also reported that as a result of their low incomes, they made do with broken or inappropriate second-hand equipment that was difficult to use (Resnik et al., 2009).

The research has also examined the ways in which older adults' use of their canes and walkers may be impacted by the stigma associated with old age, illness and disability in later life (Aminzadeh & Edwards, 2000; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al., 2009). For instance, Aminzadeh and Edwards' (2000) survey of older cane users and individuals who had mobility impairments but were non-users revealed the negative social attitudes towards health and functional declines in later life that often accompany cane use. Both cane users and nonusers employed expressions such as "feeling embarrassed", "hurt pride", and "feeling old" (Aminzadeh & Edwards, 2000, p. 477) to describe some of the negative consequences of utilizing a cane. However, a much higher proportion of non-users (56% compared to 29% of cane users) anticipated negative outcomes to cane use, indicating that negative perceptions of walking aids may impact their utilization in later life (Aminzadeh & Edwards, 2000). Likewise, some of the women interviewed by Porter et al. (2011) in their study of female cane and walker users aged 85-98 contended that their canes and walkers were a constant reminder of their bodily limitations. The women perceived that their canes and walkers made them appear older, frailer, and more impaired, even as the devices enabled many of their everyday activities. Some of the women additionally commented on how their transition to walker use signified ongoing mobility

declines and greater reliance on their walking aids for ambulation. Lastly, some of the participants interviewed by Resnik et al. (2009) indicated that they experienced unwanted attention, infantilization, and discriminatory behaviour when they utilized their canes and walkers in public spaces. However, these sentiments were not universal, as a number of participants denied feeling self-conscious or embarrassed about utilizing a walking aid, focusing instead on the positive aspects of device use.

While these studies have provided important insights into the use of canes and walkers in later life, this body of work is not without its limitations. Of the studies cited above, only Porter et al. (2011) has compared the experiences of cane versus walker users. Other studies have considered cane users only (Aminzadeh & Edwards, 2000), walker users only (Thomas et al., 2008), or have not differentiated between cane and walker users (Kylberg et al., 2013; Lofqvist et al., 2009). Moreover, to date, no studies have conducted a gender analysis of cane and walker use in later life, tending to focus instead on select populations such as female walking aid users (Porter et al., 2011) or male walking aid users (Kylberg et al., 2013). While higher rates of walking aid use have been observed among women, Black, Hispanic, and Indigenous individuals, older adults with lower socioeconomic status and lower education levels, and individuals living alone (Cornman & Freedman, 2008; Gell et al., 2015; Hartke, et al., 1998; Kaye et al., 2000; Shields, 2004), only Resnick et al.'s (2009) work has considered the impact of socioeconomic status and racial/ethnic health disparities on cane and walker use. As such, it is currently unknown how demographic characteristics (such as gender, age, ability, and socioeconomic status) or device characteristics (such as size, cost, and ease of use) may influence older adults' acceptance and utilization of their canes and walkers in later life.

# 2.3 The Social Meanings of Illness and Impairment in Later Life: Research in Social Gerontology

While few studies in social gerontology have focused specifically on cane and walker use, examples of the ways in which mobility limitations impact older men's and women's everyday lives are abundant within this research (Charmaz & Rosenfeld, 2006; Finlayson & van Denend, 2003; Rosenfeld & Faircloth, 2004; Waskul & van der Riet, 2002). To begin, research in social gerontology has examined the ways in which the lives of older adults who experience chronic illness and mobility limitations are affected by the undesirable social meanings associated with aging and impairment (Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; Higgs & Jones, 2009; Katz, 2000). Visible signs of aging, such as illness and immobility, are often viewed negatively in light of deficit conceptualizations that cast later life as a period of inevitable decline, vulnerability, and disengagement (Estes, 2001; Estes & Binney, 1989; Gilleard & Higgs, 2010; Higgs & Jones, 2009; Higgs, Leontowitsch, Stevenson, & Jones, 2009; Twigg, 2004). Older women are additionally disadvantaged by the "double standard of aging" (Sontag, 1997, p. 20), whereby women are perceived to be old, frail, and incompetent sooner than men (Calasanti & King, 2005).

A central project within the field of social gerontology has been to challenge the taken-for-granted equation of the aging process with illness and pathology (Estes & Binney, 1989; Higgs & Jones, 2009; Joyce & Mamo, 2006; Lupton, 1994), and to problematize the foreclosing of later life as "a terminal place from which there is no escape, nowhere to go other than death" (Gilleard & Higgs, 2011, p. 138). Indeed, Gullette (1998) has noted that discourses of decline have become "the truth about aging" (p. 7), such that even middle-aged individuals are exhorted to defer their transition into old age by fighting, reversing, and preventing signs of aging. Attempts

by gerontologists to counter decline discourses have led to their engagement with concepts such as the third and fourth ages (Laslett, 1989) and successful aging (Rowe & Kahn, 1987, 1997). In an effort to reduce the popular tendency to associate all post-retirement years with indolence and decrepitude, demographic historian Peter Laslett (1989) partitioned later life into a third age, or young old age (typically comprising of individuals aged 55-74), and a fourth age, or old old age (normally comprised of those aged 75+). Laslett (1989) conceptualized the third age as a period following retirement in which older adults are able to seek self-fulfilment, personal achievement, and pleasure beyond the confines of work and childrearing. Laslett (1989) predicated older adults' membership in the third age on their maintenance of physical and mental health, an active lifestyle, and a positive attitude towards life. Affiliation with the third age ended only when older individuals transitioned into a final fourth age of decline and dependence, leading up to their eventual death (Laslett, 1989). Similarly, with the introduction of the successful aging paradigm, Rowe and Kahn (1987) endeavoured to affirm "the potential for and indeed the likelihood of a healthy and engaged old age" (Holstein & Minkler, 2003, p. 787). Differentiating between usual and successful aging, Rowe and Kahn (1987, 1997) equated aging well with low probability of disease, lack of functional limitations, and continued active engagement with society. More specifically, Rowe and Kahn (1987; 1997) have advanced the idea that although older adults face many age-related factors that may predispose them to illness and disability in later life, the majority of these risk factors can be substantially modified, if not avoided altogether, through lifestyle changes. In this way, the successful aging perspective maintains that good health and an active lifestyle are possible at any age, provided that older adults readily engage in preventative health care measures to forestall physiological and mental deterioration and social disengagement (Kahana et al., 2003; Rowe & Kahn, 1997).

While the successful aging paradigm (Rowe & Kahn, 1987; 1997) and Laslett's (1989) distinction between the third and fourth ages have gained popularity in policy-making and grey activism, social gerontologists have levelled a number of critiques against discourses of positive aging (Angus & Reeve, 2006; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2011, 2013; Higgs et al., 2009; Holstein & Minkler, 2003; Katz & Calasanti, 2015; Katz & Marshall, 2003; Martinson & Berridge, 2015). For instance, rather than treating the third and fourth ages as consecutive chronological periods, Gilleard and Higgs (2013) have critically reappraised the third age as a set of everyday practices that emphasize the pursuit of individuality, leisure, and engagement with technologies of self-care. Gilleard and Higgs (2011) have argued that the emergence of positive aging discourses (such as the third age) has paralleled the expansion of opportunities for older adults to sustain valued activities and lifestyles through consumption and the concomitant avoidance of many, if not most, attributes associated with agedness. As a result, the fourth age has come to represent the most feared assumptions concerning "the dependencies and indignities of 'real' old age" (Gilleard & Higgs, 2013, p. 369). Higgs et al. (2009) have contended that underlying the idea of the third age is a rejection of old age and an espousal of the "will to health" (Higgs et al., 2009, p. 686), or individual responsibility to prevent the corporeal decline, inactivity, economic unproductivity, and dependency that are associated with the fourth age. As a result, older adults have become relegated to "a position where their health might determine their social status, either as active 'third agers' or as dependent 'fourth agers'" (Higgs et al., 2009, p. 690).

Several scholars have asserted that rather than providing an alternative, affirmative view of later life, the successful aging paradigm further perpetuates myths that portray older adults as dependent, unproductive, and a drain on economic and health care resources (Angus & Reeve,

2006; Calasanti, 2007; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Katz & Calasanti, 2015; Martinson & Berridge, 2015). Calasanti and King (2005) have suggested that the successful aging paradigm constitutes a more refined form of ageism that attempts to re-frame old age in a positive way at the same time as it utilizes middle age as the standard of health and well-being in later life. According to Calasanti and King (2005), aging successfully requires "well-funded resistance to culturally designated markers of old age" (p. 6), such as declining health, decreased mobility, or a loss of income. Calasanti and King (2005) further contend that aging successfully "means not aging and not being old because our constructions of old age contain no positive content" (p. 7). While some signs of aging, such as grey hair and even wrinkles, have become acceptable for successful agers (and particularly men) who are yet able to partake in activities popular among moneyed middle-agers (Calasanti, 2007), age-related bodily losses remain thoroughly stigmatized (Calasanti, 2007; Calasanti & Slevin, 2001; Katz & Calasanti, 2015). Calasanti (2007) maintains that instead of eradicating ageism, the successful aging paradigm's push to prolong middle life "simply forestalls the point at which individuals" bodies become marked as old and hence deserving of exclusion" (p. 357). As individuals age, they are extolled to expend increasing amounts of time, money, and effort into the futile venture of being 'not old', increasing both the burden of activity for older adults and their guilt for possessing bodies that deviate more and more from the youthful, able, and successful norm (Calasanti, 2007).

Social gerontologists have also questioned the successful aging paradigm's exclusion and marginalization of individuals who are unable to achieve the ideal of the healthy, able-bodied, and socially active elder (Angus & Reeve, 2006; Calasanti & King, 2005; Calasanti & Slevin, 2001; Dillaway & Byrnes, 2009; Holstein & Minkler, 2003; Katz & Calasanti, 2015; Martinson

& Berridge, 2015). Dillaway and Byrnes (2009) have contended that the successful aging approach is underpinned by the assumption that older adults are invariably capable of controlling their health, social engagement, and physical abilities, and as such, that all individuals should be able to "overcome personal barriers and work toward successful aging at all times; indeed, this is their responsibility" (p. 705). At the same time, the lifestyles and activities prescribed by the successful aging paradigm are typically accessible only to a select group of individuals, namely well-to-do and relatively healthy white men (Calasanti & King, 2005). Consequently, older women's, disabled individuals', and poor and racialized elders' inability to age in a recognizably successful manner is tinged with the stigma of moral failure, as older adults may be censured not merely for their inability to age well, but also for their complicity in failing to prevent agerelated physical, mental, and social losses (Angus & Reeve, 2006; Calasanti & King, 2005; Dillaway & Byrnes, 2009). In this way, the individualistic view of the successful aging paradigm ignores the ways in which intersecting social locations such as age, dis/ability, gender, race, sexuality, and social class play a powerful determinative role in individuals' experiences of aging and health inequalities (Dillaway & Byrnes, 2009; Holstein & Minkler, 2003). The representation of age-related bodily losses as being within the control of individuals through lifestyle choices belies the complex social, economic, and cultural contexts of older adults' lives (Dillaway & Byrnes, 2009; Martinson & Berridge, 2015).

In addition to exploring discourses of decline in later life, research in social gerontology has drawn on the notion of "biographical disruption" (Bury, 1982, p. 167) to explore how the experience of chronic conditions such as arthritis, osteoporosis, multiple sclerosis, and stroke may threaten an individual's sense of identity (Hurd Clarke & Bennett, 2013; Lorenz, 2009; Pound, et al., 1998; Sanders, et al., 2002; Torres & Hammarstrom, 2006; Wilkins, 2001).

Describing the experiences of individuals living with rheumatoid arthritis, Bury (1982) conceived of the onset of chronic illness as a critical event that interrupts a person's life trajectory and undermines "the structures of everyday life and the forms of knowledge which underpin them" (p. 169). The experience of pain, suffering, and physical limitation compels individuals to re-evaluate their everyday lives, identities, and preconceived notions of the body, particularly in light of the privileging of "achievement, action, and success in contemporary society" (Bury, 1988, p. 90). Bury (1988) later also distinguished between "meaning as consequence" (p. 91), or the effects of illness and impairment on everyday life, and "meaning as significance" (p. 91), or the symbolic, and at times stigmatizing, cultural connotations of illness.

The concept of biographical disruption has been the subject of on-going debate. For instance, some scholars have explored the possibility that older adults may experience disabling health conditions as "normal illness" (Williams, 2000, p. 49) or as an expected aspect of growing older. Williams (2000) and Faircloth et al. (2004) have also proposed that illness and impairment may not be disruptive for older adults who had previously experienced trauma and adversity and who may regard chronic illness and impairment as "biographical continuity" (Williams, 2000, p. 52) or "biographical flow" (Faircloth et al., 2004, p. 242). For instance, the normalization of illness may be informed by gendered social roles, as older women's experiences of marginalized social roles and poor health throughout the lifespan may lead them to perceive chronic illness and impairment in later life as biographically continuous (Sinding & Wiernikowski, 2008). Others have contended that older adults' experiences of chronic conditions may be both disruptive and expected (Hurd Clarke & Bennett, 2013; Lorenz, 2009; Pound, et al., 1998; Sanders, et al., 2002; Torres & Hammarstrom, 2006; Wilkins, 2001). For instance, even as they reported that their lives had been disrupted by the symptoms of their illnesses, the participants in

Sanders et al.'s (2002) study of older men and women with osteoarthritis-related joint pain viewed their physical limitations as anticipated outcomes of their difficult life histories and as a natural aspect of growing older (Sanders, et al., 2002). Tagizadeh Larsson and Jeppsson Grassman (2012) have suggested that older adults may foresee but still fear the physical changes associated with having chronic illnesses in later life. In their interviews with older adults with life-long chronic illnesses, Tagizadeh Larsson and Jeppsson Grassman (2012) found little evidence that old age, living with a chronic condition for a prolonged period of time, or facing recurring bodily changes mediated and normalized the experience of bodily losses. Rather, confronting further health complications in later life often "became a kind of straw that broke the camel's back... that forced [participants] to finally give up a job, valued activities or a social identity that they had been striving to keep up for many years" (Tagizadeh Larsson & Jeppsson Grassman, 2012, p. 1166).

Finally, an emergent body of work has drawn attention to the ways in which illness and impairment may shape older adults' body images (Calasanti, 2004; Finlayson & van Denend, 2003; Hurd Clarke & Bennett, 2013; Hurd Clarke et al., 2008; Waskul & van der Riet, 2002; Williams, 1996). Some of this work has focused on the finding that the body "remains largely unproblematic and taken for granted" (Williams, 1996, p. 24) until individuals are confronted with changes to their health or functional abilities. While everyday life is characterized by the absence of the body from an individual's awareness, the body 'dys-appears', or becomes increasingly present in one's experiences of pain, illness, and disability, albeit in an alien and dysfunctional manner (Leder, 1990). The vulnerability, uncertainty, and conspicuous loss of bodily control that frequently accompany mobility impairment heighten older adults' sensitivity to and awareness of their "corporeality... literally being in one's body" (Plach, Stevens, & Moss,

2004, p. 142). For instance, Waskul and van der Riet (2002) contend that as a result, older adults who are ill or impaired must remain constantly vigilant of their bodies so as to guard themselves against any "corporeal mishap... in an otherwise seamless presentation of the self" (p. 488), such as a stumble or an awkward movement. The intrusion of illness and impairment upon one's perceptions of the world and interactions with others often leads individuals to experience incongruence between the body and self (Charmaz, 1995). Charmaz (1995) describes this "radical disruption of the body and self" as follows:

The body once viewed as a taken for granted possession to control and master has spun out of control. At best, the body is now a failed machine, an obstacle to be repaired, overcome, or mastered. At worst, it has become a deadly enemy or oppressor (p. 662).

This sense of corporeal estrangement has been reported in a number of studies, in which participants identified the mind-body dichotomy, or the philosophical separation of the body from the mind, to be a component of the experience of having mobility impairment (Finlayson & van Denend, 2003; Kvigne & Kirkevold, 2003; Lorenz, 2009; Plach et al., 2004). For instance, participants in Finlayson and van Denend's (2003) study of older adults with multiple sclerosis reported feeling frustrated and discouraged by the ways in which their uncooperative, unpredictable bodies prevented them from doing the things they wished to do.

Research has additionally examined how age and illness-related changes in appearance may negatively impact body image in later life (Calasanti, 2004; Finlayson & van Denend, 2003; Hurd Clarke & Bennett, 2013; Hurd Clarke et al., 2008). For instance, participants in Hurd Clarke et al.'s (2008) study of older adults with multiple chronic conditions were dissatisfied with the weight gain they had experienced as a result of their physical impairments. Some of the participants additionally spoke of how the disfiguring effects of chronic conditions such as

osteoporosis and osteoarthritis affected their physical appearances, and as a result, diminished their self-esteem and confidence (Hurd Clarke et al., 2008). This research has also explored the ways in which the body images of older men and women with chronic illnesses are shaped by feminine and masculine gender norms (Calasanti, 2004; Finlayson & van Denend, 2003; Hurd Clarke & Bennett, 2013; Hurd Clarke et al., 2008). Studies have indicated that hegemonic masculine gender norms that emphasize physical strength, self-reliance, youthful prowess and stoicism in the face of hardship often inform older men's health behaviours (Calasanti, 2004; Connell & Messerschmidt, 2005). Illness-related fatigue, pain, and loss of strength can undermine older men's abilities to adhere to hegemonic masculinity and compel them to downplay physical symptoms of illness, suppress outward expressions of pain, and refrain from engaging in self-care and help-seeking behaviours (Courtenay, 2000; Hurd Clarke & Bennett, 2013; O'Brien, Hart, & Hunt, 2007; Oliffe, 2009). While older men are typically apprehensive about the physical vulnerability that can result from illness-related bodily changes, research has shown that older women also express concern about their diminishing abilities to achieve idealized feminine beauty (Finlayson & van Denend, 2003; Hurd Clarke & Bennett, 2013; Hurd Clarke et al., 2008). For example, while the male participants in Hurd Clarke and Bennett's (2013) study of older adults with multiple chronic conditions discussed their frustrations over the loss of autonomy and physical prowess, the women tended to instead articulate their embarrassment over their bodies' altered and aged appearances. Older women's experiences of illness and impairment are also influenced by feminine gender roles expectations that women should be warm, cheerful, family-oriented, nurturing, and sensitive to the needs of others (Hurd Clarke & Bennett, 2013). Studies have shown that older women often downplay their own suffering relative to the experiences of friends and family, and stress the importance of keeping

busy and maintaining a positive attitude (Hurd Clarke & Bennett, 2013; Sanders et al., 2002). The female participants in Hurd Clarke and Bennett's (2013) study also expressed their dismay and sadness over their compromised abilities to perform traditional female domestic duties and care work, as they themselves became increasingly dependent on family and friends.

### 2.4 The Socio-Material Context of Mobility: Research in the Geographies of Disability

Older adults' experiences of canes and walkers can also be contextualized within research in the geographies of disability that has examined the inextricability of disability from sociomaterial space, or the medium in which people act, move, and locate themselves (Freund, 2001). Drawing on the social model of disability and its emphasis on the social construction of disability, the geographies of disability literature has identified the built environment as an important site for the (re)production of disability (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). This work has theorized the ways in which the social construction of the built environment perpetuates the "hegemony of the corporeality of non-impaired bodies" (Imrie, 2000, p. 1649), or the prioritization of able and autonomously functioning bodies in the organization of public space (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). As such, the barriers to mobility experienced by disabled older adults (e.g. uneven and crowded sidewalks, narrow doorways, steep slopes and stairwells, timed walk crossings, or the absence of ramps) are rarely natural, but rather are reflective of societal norms that favour youthful, mobile, and independent bodies (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998).

Geographies of disabilities scholars have sought to demonstrate the ways in which disabled people rarely "recognize themselves in the way in which space and time are organized, precisely because they have played little or no part in [the] constitution [of the built environment]" (Hughes, 2002, p. 71). Imrie and Kumar's (1998) research has shown how disabled individuals are often estranged from influencing the form and content of the built environment by virtue of their absence from community planning. Imrie and Kumar (1998) point out that access issues are seldom incorporated into community planning because disabled people make up a small percentage of practicing architects, building designers, and developers. Hansen and Philo (2007) argue that as a result, the provision of reasonable accommodations for disabled individuals remains an afterthought, rather than an inherent and automatic aspect of community and building design process. The resulting modifications to the built environment tend to be superficial, tokenistic, or based on broad assumptions concerning the access needs of disabled individuals, rather than consultation with disabled individuals. For example, access policies are often biased towards the needs of wheelchair users (who are presumed to represent disabled people, but make up only a small percentage of individuals with mobility limitations), thus overlooking the complex needs of mobility-impaired individuals (Imrie & Kumar, 1998).

In addition to constituting a physical barrier to everyday activities, the ableist organization of the built environment may also diminish older disabled adults' sense of belonging in their communities (Crooks & Choiunard, 2006; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). While many public spaces are visibly inaccessible, disabled individuals may also be "made homeless" in spaces inscribed with meanings that "exclude [disabled bodies as they] construct a social order of the normative, abled body" (Hughes, 2002, p. 604). That is, individuals whose bodies fall outside the range of 'normal'

varieties of embodiment may feel unsafe and unwelcome in spaces that may be physically accessible, but which nonetheless codify disabled bodies as abnormal, different, and as such, "out of place" (Kitchin, 1998, p. 345). For instance, Imrie and Kumar's (1998) interviews with individuals with a wide variety of physical impairments revealed how thoughtless design such as public spaces with stairs but no ramps, cash machines placed too high, and theatres with segregated seating often drew unwanted attention to individuals' bodily impairment. Similarly, the 40 middle-aged disabled women interviewed by Hansen and Philo (2007) described their movement through the built environment as "passing through other people's spaces" (p. 495). The women felt that their bodies were unacceptable in many settings and spoke of the pressure they felt to pass as able-bodied in order to inhabit these "distinctly provisional [places]... in which disabled people are 'provisionally' allowed so long as they seek to inhabit, utilize and conduct themselves in these spaces as would a non-disabled person" (Hansen & Philo, 2007, p. 500).

While the geographies of disability literature has helped to recontextualize disability as an environmentally derived problem, no studies have focused specifically on the intersection of assistive mobility technologies and the built environment, nor has research in this field explored the unique environmental barriers experienced by older disabled adults. There is evidence in the rehabilitation literature that environmental inaccessibility poses a considerable challenge to independent mobility in later life (Kylberg et al., 2013; Resnik et al., 2009; Thomas et al., 2008). Moreover, research on the use of canes, walkers, and wheeled mobility devices has identified a number of environmental obstacles that are frequently encountered by older mobility device users (Brandt et al., 2004; Edwards & McCluskey, 2010; May et al., 2010; Mortenson et al., 2005; Resnik et al., 2009). Given the ubiquity of walking aid use among disabled older adults,

the study of canes and walkers may be important to extending current understandings of the socio-material construction of disability.

## 2.5 Summary of the Literature

There has been minimal scholarly interest in the study of canes and walkers, despite the high prevalence of cane and walker use among older adults. While some of the benefits and challenges of cane and walker use in later life have been examined in the rehabilitation literature (Aminzadeh & Edwards, 2000; Lofqvist et al., 2009; Kylberg et al., 2013; Porter et al., 2011; Resnik et al., 2009; Thomas et al., 2008), little is known about the embodied experiences of older cane and walker users. Much of the existing research in rehabilitation refers to canes and walkers interchangeably, despite the devices' differing purposes, designs, and price points. Even as evidence has shown that older women are more likely to possess walking aids compared to their male counterparts, few studies have compared the experiences of men and women who use canes and walkers.

Research in social gerontology and the geographies of disabilities has examined the ways in which the everyday lives of older adults with chronic illness and disabilities are impacted by ageism and ableism (Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; 2011; Higgs & Jones, 2009; Katz, 2000). Specifically, social gerontologists have considered how older adults' experiences of their aging and impaired bodies have been shaped by discourses of decline and successful aging. This literature has also looked at the ways in which chronic conditions may affect older individuals' bodily awareness, biographies, and body images (Bury, 1982; Hurd Clarke & Bennett, 2013; Finlayson & van Denend, 2003; Kvigne & Kirkevold, 2003; Lorenz, 2009; Plach et al., 2004; Pound et al., 1998;

Sanders et al., 2002; Wilkins, 2001). Studies in the geographies of disability have examined how inaccessibility and the marginalization of disabled bodies in public spaces negative impact older adults with disabilities (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). While mobility impairments have been alluded to in these literatures, to date, few studies have focused specifically on how older cane and walker users experience their walking difficulties and walking aid use within the built environment. In light of the widespread use of canes and walkers among older adults, a more in-depth exploration of the social and spatial contexts that frame walking aid use in later life is needed.

#### 3: Methods

In the sections that follow, I provide information about the study's recruitment procedures, the format of the sit-down and walk-along interviews, the analysis of the data, the ethical considerations that guided the research process, and the sample's socio-demographic characteristics. The study utilized a qualitative descriptive method, which uses low-inference interpretation to elicit a comprehensive summary of a phenomenon in everyday language (Sandelowski, 2000). By analytically staying close to the surface of words and events, the qualitative descriptive method enables researchers to collect detailed accounts of individuals' experiences of social phenomena and the meanings they attribute to them (Sandelowski, 2000). In addition, the study was theoretically informed by an interpretive approach grounded in feminist disability theory. Employing this approach, I aimed to gain an in-depth understanding of older adults' embodied experiences of their walking difficulties and cane and walker use. I endeavoured to emphasize the primacy of the participants' experiences and understandings of their everyday lives, while also taking into account the social context of their mobility difficulties and cane and/or walker use (Gabel & Peters, 2004; Goodley, 2010).

#### 3.1 Recruitment

Ethical approval for the study was received from the Behavioural Research Ethics Board at the University of British Columbia in January 2013. In January 2013, I began distributing study posters (please see Appendix A: Recruitment Poster Version 1) and making recruitment presentations at two seniors' centres, five community centres, two neighbourhood houses (small-

scale community centres), and four community events targeting older adults (including a mobility clinic and three wellness fairs). In addition, I advertised the study at a rehabilitation hospital, three long-term care facilities, eight assisted living residences, and two government-subsidized residences for low-income older adults. I sought to recruit participants who were diverse with respect to their ages, cultural and socioeconomic backgrounds, living arrangements, health statuses, and functional abilities. Participants were eligible for the study if they (a) were over the age of 65, and (b) regularly utilized a cane or a walker for mobility. Potential participants were invited to join the study regardless of their ability to take part in the walk-along interview. By the end of June 2013, two men and 18 women were enrolled in the study (with two men and 11 women having been recruited by word of mouth, four women recruited through recruitment presentations, and three women recruited through poster advertisements).

In order to redress the unequal number of male and female participants in the study, I conducted a second round of recruitment that specifically targeted older men. Between June and September of 2013, I distributed advertisement posters aimed at male participants (please see Appendix B: Recruitment Poster Version 2) at one seniors' centre, three community centres, one neighbourhood house, one assisted living residence, and one long-term care facility. This resulted in the recruitment of three additional male participants. I then used an existing database of participants to conduct a mail-out recruitment campaign targeting men aged 65 and older who had previously participated in research at the G.F. Strong Rehabilitation Centre and who had consented to be contacted for future studies. Ethical approval to access the Vancouver Coastal Health participant database was sought from the Vancouver Coastal Health Research Institute and was received in July 2013. Eighty-six male participants who fit the criteria of the study were identified through the database and were mailed a package containing a letter of information

about the study, a consent form, and a means of contacting the researcher for further information. The mail-out campaign resulted in only one additional male participant being recruited to the study. At this point, the decision was made to cease recruitment efforts.

My difficulty in recruiting male participants to the study warrants further comment. Older men's reluctance to participate in qualitative studies that explore sensitive topics has been noted by other researchers (Kylberg et al., 2013; Resnik et al., 2009; van den Hoonaard, 2009, 2010). For instance, van den Hoonaard (2009) has posited that older men's masculine identities may be threatened during the interview process, "because [they] inevitably give up some control by agreeing to... talk about a significant life event in which [they were] powerless and about which [they] might become emotional" (p. 259). Like van den Hoonaard (2009, 2010), I found that while the female participants readily agreed to be interviewed, were enthusiastic about the subject of the research, and often offered to pass information about the project along to friends and acquaintances, potential male recruits were more hesitant to take part in the research. That said, the low number of men in the study is also reflective of general population trends concerning the use of walking aids in later life (Kaye et al., 2000; Murtagh & Hubert, 2004). As previously noted, research indicates that older women comprise more than half of all cane users and more than two-thirds of all walker users (Iezzoni et al., 2001; Murtagh & Hubert, 2004; Shumway-Cook et al., 2005; Statistics Canada, 2015).

#### 3.2 Sit-Down Interviews

Sit-down, person-to-person interviews were chosen as the primary method of inquiry for the project. The interview is a well-established qualitative descriptive technique that lets researchers access both the "mental world of the individual... [or] the categories and logic by

which he or she sees the world" as well as "the lifeworld of the individual... [or] the content and pattern of daily experience" (McCracken, 1988, p. 9). The interview method permits researchers to glimpse "those things we cannot directly observe... [such as] feelings, thoughts, and intentions... [allowing] us to enter into another person's perspective" (Patton, 2002, p. 340-341). There is a rich tradition of using person-to-person interviews to explore various aspects of aging and embodiment, including the experience of chronic illness (Hurd Clarke & Bennett, 2013; Lorenz, 2009; Rosenfeld & Faircloth, 2004; Sanders, et al., 2002; Torres & Hammarstrom, 2006; Wilkins, 2001), body image and beauty work (Hurd Clarke, 2010; Hurd Clarke & Griffin, 2008), sexuality (Hinchliff & Gott, 2008; Potts, Grace, Vares, & Gavey, 2006), and leisure and physical activity (Biggs, Bernard, Kingston, & Nettleton, 2000; Dionigi, 2002).

However, some researchers have noted that the interactional and collaborative nature of the interview may result in data of varying quality depending on the interviewer's skill and the rapport established during the interview process (DeMarrais, 2004). For instance, divergent frames of reference may complicate the interview process, particularly when there is a large discrepancy between the participants' and the researchers' socio-demographic characteristics and contextual understandings of the world (Warren & Williams, 2008). Others have questioned the generalizability of the information gathered during interviews, which may be representative only of one individual's perception of a particular phenomenon occurring at a specific point in time (Merriam, 2009). A number of scholars have, therefore, argued that qualitative data collection should be multi-faceted in order to capture the complexities of participants' realities (DeMarrais, 2004; Seidman, 2006; Warren & Williams, 2008). In particular, collecting life histories, conducting multiple interviews to allow participants to revisit and clarify their responses, and gathering other forms of data (such as survey data or participant observation) may be important

to eliciting fuller descriptions of participants' embodied experiences (Hurd Clarke, 2003; Patton, 2002; Seidman, 2006; Warren & Williams, 2008).

All of the participants took part in one or more sit-down interviews that were conducted with the aim of gathering detailed, richly textured, person-centered information about the participants' health, mobility, and walking aid use histories. Six men and fourteen women took part in two sit-down interviews, which were scheduled one to six weeks apart (primarily depending on the participants' schedules and preferences). Walk-along interviews normally took place in between the first and second sit-down interviews. One woman declined to take part in a second sit-down interview due to her deteriorating health, while two women opted to participate in three sit-down interviews to accommodate their fatigue and inability to concentrate for prolonged periods of time. Two participants were interviewed together at their request. The interviews took place at a location of the participants' choosing, with 13 participants preferring to be interviewed at community centres and 11 electing to be interviewed in their own homes. In total, I conducted 47 sit-down interviews that ranged in length from approximately 30 minutes to two hours (average length of one hour and 15 minutes) and yielded a total of 76.5 interview hours.

During the first sit-down interview, participants were informed of the study procedures and the voluntary nature of all interviews. They were then asked to sign a copy of the consent form (please see Appendix C: Consent Form) and complete a biographical information form (please see Appendix D: Biographical Data Form). This short, self-administered survey contained questions about the participants' ages, gender, ethnicities, incomes, education levels, work histories, marital status, living arrangements, and the walking aids they utilized. Drawing on the biographical data form, participants were invited to tell me the story of their lives as well

as the story of how they came to use a walking aid. Using an open-ended, conversational format, I asked the participants a series of exploratory questions concerning their experiences of having walking difficulties and using a walking aid (please see Appendix E: First Interview Schedule). While a topic guide was constructed prior to the interviews, the participants were also offered the opportunity to elaborate on and deviate from the interview questions and examine those subjects they thought to be most central to their experiences as cane and walker users. In addition, I continually encouraged the participants to explore, clarify, and provide more details about the themes that emerged during the interviews.

The second sit-down interview contained open-ended questions concerning how the use of a walking aid shaped the participants' perceptions of their bodies and experiences of growing older (please see Appendix F: Second Interview Schedule), as well as follow-up questions that enabled participants to revisit, elucidate, and expand on the comments they had made during the first sit-down and walk-along interviews. Follow-up questions varied from participant to participant, and consisted mostly of queries of clarification and probes for detail. I aimed to maintain a flexible approach in my questions, open to the possibility that the concepts I identified as important at the outset of the study might differ from the ones that were brought up by the participants. With the participants' consent, all interviews were digitally recorded, de-identified, and transcribed verbatim. I made detailed field notes following each interview that included descriptions of the interview settings, information about the participants' walking aids, and observations concerning the participants' appearance and demeanour during the interviews. I additionally noted my own reflections about the interview process, including questions that worked and ones that did not, successful and unsuccessful attempts to build rapport, responses that surprised me, and emergent interview topics that warranted further consideration. On two

occasions, during which the digital recorder failed to record the first half of one interview and yielded poor sound quality on another, detailed recall notes were made and added to the interview transcripts.

## 3.3 Walk-Along Interviews

Walk-along interviews were chosen as a complement to the sit-down interviews with the goal of exploring more fully the participants' mobility practices in the social and spatial contexts in which they occurred (Anderson, 2004; Carpiano, 2009; Garcia, Eisenberg, Frerich, Lechner, & Lust, 2012; Hitchings & Jones, 2004). Variously termed the go-along (Carpiano, 2009; Kusenbach, 2003), the walking and talking method (Anderson, 2004), and the walking interview (Evans & Jones, 2011; Hein, Evans, & Jones, 2008; Jones, et al., 2008), walk-along interviews take the form of participant-led, in-depth qualitative interviews that are conducted by a researcher while accompanying participants on outings in familiar environments. The nature of these types of interviews varies from unstructured wanderings through various places (Anderson, 2004; Kusenbach, 2003) to highly planned tours designed to elicit participants' responses to particular landscapes (Butler, 2007; Matthews, Beale, Picton & Briggs, 2003). Through observations and interview questions, the walk-along interview technique helps researchers to collect descriptive information about the meanings, sensations, and memories attributed to particular places (Kusenbach, 2003) and observe the spatial practices of participants as they engage with the surrounding environment (Evans & Jones, 2011).

A number of studies have utilized the walk-along interview method to examine individuals' engagement with, knowledge of, and attitudes towards their surroundings (Anderson, 2004; Carpiano, 2009; Kusenbach, 2003; Wylie, 2005). However, to date, relatively

little research has employed the method with older participants, with some researchers suggesting that walk-along interviews may marginalize and exclude older adults (Evans & Jones, 2011; Gardner, 2011; Van Cauwenberg et al., 2012). For instance, some scholars have contended that walk-along interviews may unavoidably expose physical and sensory limitations that some older adults, particularly those with mobility impairments, might wish to keep hidden (Carpiano, 2009; Evans & Jones, 2011). This may create an asymmetrical and uncomfortable power dynamic between the participants and the researchers, particularly if the researchers are young and able-bodied (Evans & Jones, 2011). Other research has shown that walking while talking may endanger older adults, whose gait, balance, walking speed, and ability to visually process their surroundings may be negatively affected by the dual task of walking and talking (Beurskens & Bock, 2012). Despite these challenges, researchers who have carried out walk-along interviews with older adults have maintained that this novel method can provide a unique means of gathering rich, detailed information about the environmental factors that influence older adults' mobility practices (Gardner, 2011; Van Cauwenberg et al., 2012).

Walk-along interviews were conducted with 22 of the 24 participants with the aim of witnessing and describing the participants' embodied experiences of using a cane or a walker in their usual surroundings. During the walk-along interviews, I accompanied the men and women on an outdoor or indoor walk that ranged from 12 minutes to three hours in length (average of one hour and 40 minutes). Walk-along interviews followed the first sit-down interview, except in the case of three women and one man, who asked to perform all sit-down interviews prior to the walk-along interviews in order to accommodate their schedules. The walk-along interviews were open-ended and participant-directed in format, as the participants determined the location, length, pacing, and topics of conversation that we covered. Prior to the start of the walk-along

interviews, I reminded the participants that their participation was voluntary and that they were free to terminate the walk-along interview at any point. For those participants who had more severe walking limitations, the walk-along interview was typically comprised of a short walk in or around their residences. Other participants, who were more mobile, suggested that I accompany them on social outings, help them run errands, or join them on their regular daily walks. Two participants (one man and one woman) attempted to perform the walk-along interview, but stated that they would be unable to continue less than 10 minutes after the start of the interview. Because these two participants indicated that their inability to complete the walk-along interview was reflective of situations that frequently arose in their daily lives, rather than reschedule, I asked them to discuss why they had been unable to carry out the walk-along interview and how they typically managed similar occurrences. Similar to the sit-down interviews, each of the walk-along interviews was recorded with a digital recorder, de-identified, and transcribed verbatim with the participants' consent.

The walk-along interviews proved useful as a means of directly observing some of the participants' daily routines and social interactions, the resources available to them in their homes and communities, and the accessibility of their neighbourhoods. For instance, the walk-along interviews often revealed some of the barriers to mobility that the participants confronted in their everyday lives, but which were invisible (or were forgotten) when the participants were stationary. Similar to previous research that has suggested that the informal, relaxed, and participatory format of walk-along interviews may be an effective means of engendering greater rapport with participants and facilitating the discussion of sensitive or uncomfortable issues (Carpiano, 2009; Garcia, et al., 2012; Hitchings & Jones, 2004), I observed that the participants

in my study often became more candid and emotionally expressive about their health issues and walking limitations during the walk-along interviews.

At the same time as the walk-along interviews provided me with a fuller picture of the participants' daily lives, they also presented some challenges. To begin, it was sometimes difficult to obtain good sound quality in the digital recordings of the interviews. Ambient noise and the sound of traffic often made the MP3 files difficult to decipher, and as such, each recording was supplemented with detailed field notes that were made following the interviews. Secondly, I was also aware of the risks inherent in the conducting of walk-along interviews with a population of mobility-impaired individuals, including older adults' increased vulnerability to falls when talking while walking due to divided attention (Verghese et al., 2007). I attempted to minimize risks to participants by allowing the men and women to lead the walk-along interviews. The participants were able to set the route and establish the pace and duration of the interviews. Some of the participants chose to take my arm when they grew tired, and others periodically stopped the walk-along interview to rest or have a seated conversation. The men and women were additionally able to talk as little or as much as they wished during the walk-along interview, with the rhythms of walking allowing for natural pauses in the conversation and enabling participants to stop and resume conversation as they chose. To my knowledge, all of the participants terminated the walk-along interviews when they wished to do so and no injuries or falls occurred during the interviews.

### 3.4 Interview Transcription

Each of the digital recordings was transcribed verbatim following the conclusion of the interviews. In the interview excerpts presented in the three findings chapters that follow, I have

omitted word repetitions and speech delays (such as 'um' and 'uh'), indicating pauses and hesitations only when these had a bearing on the meaning of the participants' accounts (such as reluctance to speak of a certain subject or answer a question). The presence of three consecutive dots (...) indicates a portion of speech that has been cut for brevity. Where possible, I have added descriptions of the participants' demeanour and affect from the field notes into the transcription. When all interviews had been transcribed, participants were provided with a summary report outlining the key findings and invited to comment on the report (please see Appendix H: Participant Report). Although none of the participants provided feedback that contradicted the findings, three women subsequently contacted me to remark on the similarities they saw between their own experiences and those of others in the study.

# 3.5 Data Analysis

Following the transcription of the interviews, each transcript was entered into a computerized qualitative analysis program (NVivo for Mac) used to store and manage qualitative data. I examined the data using Marshall and Rossman's (2006) seven analytic steps, which include "(a) organizing the data; (b) immersion in the data; (c) generating categories and themes; (d) coding the data; (e) offering interpretations through analytic memos; (f) searching for alternative understandings; and (g) writing the report or presentation" (p. 156). The organization of and immersion in the data began during the transcription process, as I made analytic memos concerning the emergent themes and unique cases I observed in the interviews. When time allowed, I transcribed or listened to each participant's first interview prior to the walk-along and second sit-down interviews in order to generate further questions and identify points that required clarification. For instance, after several participants spontaneously remarked on their

fear of falling and voiced safety concerns regarding their use of their canes and walkers outdoors, I added a question about safety to the interview schedule. Similarly, after a number of participants compared their mobility and health to those of their peers, I included a question on the topic in the interview guide. Simultaneously interviewing, transcribing, and analyzing the data enabled me to stay close to the data throughout the research process and helped to focus my analysis of the interviews.

Once all interviews were transcribed, I conducted a thorough line-by-line reading of the transcripts in their entirety, which led me to identify six broad thematic categories in the data, namely: (a) experiences of cane and walker use; (b) attitudes towards canes and walkers; (c) experiences of illness and impairment; (d) meanings of walking; (e) in/dependence; and (f) in/activity. These thematic categories were informed by the existing literature on cane and walker use in later life as well as my initial impressions of the themes that emerged throughout the sit-down and walk-along interviews. The preliminary categories were amended as I read and re-read the interviews, and were eventually expanded and collapsed into the following 11 thematic codes: (a) agency and independence; (b) experiences of aging; (c) perceptions of the body; (d) health and physical abilities; (e) onset of impairment; (f) assistive devices; (g) barriers to mobility; (h) mobility enablers; (i) meanings of walking; and (j) activities and social roles. The transcripts were then coded by assigning labels to segments of text within interviews and aggregating similar textual segments (please see Appendix G: Codebook, for a detailed description of the textual segments that were assigned to each code). Each code was compiled into a separate file using NVivo for Mac, and the coded segments were then further analyzed in relation to each participant's socio-demographic information.

In addition to coding the textual elements of the data, I analyzed and classified segments of the walk-along interviews and my field notes using the 11 broad codes previously discussed. For instance, when coding for participants' health statuses and physical abilities, I included not only the participants' self-reported health statuses, but also my own impressions of their mobility during the walk-along interviews and the observations I recorded in my field notes. In my analysis, I also attempted to pay close attention to the participants' speech and expression during the interviews, noting significant pauses, emotional affect, and instances in which the participants redirected certain queries to different conversational territory or refused to answer particular interview questions.

#### 3.6 Ethical Considerations

The individual biography of the researcher has been recognized to have a major impact on the research process (Broom, Hand & Tovey, 2009). Doing research involves the enactment of various social categories, and reflexivity, or the process of making transparent one's "relationship to the field, the act of research, writing and the production of knowledge" (Haggerty, 2003, p. 158), is critical to parsing out the interpersonal dynamics that shape the research process. Reflexivity can be utilized to analyze researcher effects and address concerns around the "disembodied researcher" (Ellingson, 2006, p. 300). In the 1970s and 1980s, an interpretive or reflexive turn emerged in the social sciences in response to repeated calls to do away with the notion of the researcher as an all-knowing expert (Mauthner & Doucet, 2003; Wasserfall, 1993). The turn towards reflexive research came primarily as a result of growing consciousness within feminist scholarship that knowledge is situated and co-constructed by researchers and research participants (Haraway, 1988; Lather, 1997; Mauther & Doucet, 2003;

Reinharz, 1992). Since this time, reflexivity has come to be regarded as a fundamental element of good qualitative research, encouraging researchers to pay increased attention to their social positions, values, assumptions, experiences, and relationships with the participants (Barry, 1999; Lather, 1997). In its most basic sense, reflexivity emphasizes researchers' awareness of their own presence in the research process and urges scholars to critically reflect on their roles in the production of knowledge, often with a focus on acknowledging and unpacking power differentials (Barry, 1999).

Feminist researchers have perhaps been the most influential in emphasizing the importance of biography and the role of gender performance in mediating qualitative data collection (Oakley, 1981; Reinharz, 1992). Early feminist writing tended to support the notion that female interviewers are better able to establish rapport and access the authentic experiences of other women in an interview setting (Bowles & Duelli-Klein, 1983; Hesse-Biber et al., 1999; Roberts 1981; Stanley & Wise, 1983), a contention that has since been challenged (Oakley, 1999). More recent work has explored how gender congruence between male and female researchers and participants may shape the production of qualitative data (Arendell, 1997; Broom, 2004; Oakley, 1999; Oliffe & Mroz, 2005; Schwalbe & Wolkomir, 2001). For instance, men's health researchers have considered the ways in which men may limit or avoid discussions of topics such as sexuality, violence, and illness in the presence of a female interviewer (Broom, 2004; Oliffe & Mroz, 2005). At the same time, some literature has drawn attention to the advantages of gender incongruence. A number of scholars have pointed out that male participants may be more comfortable expressing emotions to female interviewers and speaking to women about 'feminine' subjects such as family life (Hand & Lewis, 2002; Lohan, 2000). In the context of the current research study, the sensitive nature of discussing one's disability in

combination with my female gender likely negatively affected my ability to recruit male participants to the study (as detailed in Section 3.2) and establish rapport with the men I interviewed. I found it more difficult to establish rapport with the male participants and keep the interviews focused on the topic hand, as the men tended to take the lead and dominate our conversations. I also noticed that while the older women in the study eagerly shared details of their lives before, during, and after the interviews (with some women continuing to keep in touch and providing me with updates long after the conclusion of the interviews), the male participants tended to be more ambivalent about discussing their day-to-day lives, health, and mobility statuses. A number of researchers have similarly commented on older men's tendency towards stoicism and reluctance to openly discuss ill health, disability, and dysfunction (Courtenay, 2000; Oliffe & Bottorff, 2007; van den Hoonaard, 2009; 2010).

The need for reflexivity and an awareness of power differentials in research has also been highlighted within disability scholarship. Disability scholars have been particularly critical of studies lacking the voices and unique perspectives of people with disabilities (Barnes & Mercer, 2004; Mercer, 2002; Oliver, 1990, 1996; Stone & Priestly, 1996; Titchkosky, 2007; Wendell, 1996). While some scholars have argued that it is necessary to have a disability in order to carry out meaningful disability research (Barnes & Mercer, 2004; Oliver, 1996), Hansen and Philo (2007) have asserted that empowering disability research stems from in-depth exploration of the embodied realities of disability in everyday life. Hansen and Philo (2007) have maintained that it is crucial that researchers inquire about "how [disabled] people 'notice' their impaired bodies when seeking to go about their daily business... Their embodied 'art' of managing the time, space and speed realities of 'doing' daily living" (p. 497). Moreover, disability researchers must develop a comfort level with the fatigue, pain, and limitations that often accompany impairment

so as to fully attend to "suffering' in the lives of disabled people, but without the story being solely about 'tragedy'... [Leaving a] space for seeing... what it is that disabled people actually get on with doing" (Hansen & Philo, 2007, p. 498).

In light of these critiques, my research project sought to redress, at least in part, the sidelining of older disabled adults' voices by centring their embodied experiences of aging and impairment. At the same time, as a young, able-bodied researcher, I was highly aware of the bodily differences that separated me from the participants in my study. My able-bodiedness and relative youth made the participants' homes and communities accessible to me in the same way that they were not to the men and women I interviewed. While some of the participants struggled to walk even short distances, navigate their homes, and utilize public transportation, I had no trouble accessing the men's and women's places of residence, travelling to various locations for the interviews, or accompanying the participants on the walk-along interviews. Although I had some past experience with interviewing wheeled mobility device users with severe mobility limitations, I was nonetheless surprised by some of the barriers to mobility the study participants pointed out. A slight slope to the road or the changing texture of a sidewalk that was nearly imperceptible to me both constituted serious obstacles to everyday tasks for the men and women in the study. Conversely, I often underestimated the participants' resilience and resourcefulness in the face of debilitating bodily losses and environmental barriers.

While my age and able-bodiedness were limiting in some ways, my social location as a younger, heterosexual, white woman, an immigrant with a lower class upbringing, and a student also afforded me some advantages. Like me, many of the study participants were white women who were heterosexual and lower/middle class. Our shared experiences of these social locations often helped me find connections and build rapport and trust with the participants. My young age

and student status additionally offered me some (but not absolute) reprieve from the researcher as an all-knowing expert position (Mauthner & Doucet, 2003; Wasserfall, 1993) in the participants' eyes, further contributing to my ability to establish good rapport with the men and women I interviewed. In the summer during which I conducted the bulk of my data collection, I also collected interview data in the capacity of a research assistant for a project that focused on older men and masculinity. Interestingly, I found that I was able to build much stronger rapport with the participants in my study, possibly due to their assumptions that I too would one day experience the challenges associated with age-related bodily declines. As a result, despite our bodily differences, the majority of the men and women I interviewed were keen to show me the realities of their daily lives, inform me of the challenges that lay ahead for me, and educate me on ways in which I could mitigate some of the difficulties that accompanied the experience of walking limitations. As such, my power as a researcher was in some ways moderated by my position as a younger, less experienced person that the participants could mentor (Hurd Clarke, 2003).

At the same time as my participants viewed me as youthful and inexperienced, many also assumed that I was knowledgeable about all matters pertaining to aging, health care, and seniors' services because of my university affiliation. For instance, a number of the participants assumed that as a student of gerontology, I might have knowledge of community programs, federal and provincial seniors' benefits, and support programs available for older adults with disabilities (of which I was mostly ignorant at the start of the project). Perhaps it is because of the strong rapport I shared with many of my participants that I found myself struggling with my inability to tangibly improve the lives of the men and women I interviewed. Although it is undoubtedly true that disability research that does not directly transform the lives of research participants may yet

make important broader social impact or intellectual contributions to disability scholarship (Mercer, 2002; Shakespeare, 1996; Stone & Priestly, 1996), my dissatisfaction with my inability to help my participants eventually led me to seek a volunteer position helping to connect older adults to community services, and later, to full-time employment as a seniors' service provider.

Throughout the research process, I utilized a number of strategies to preserve the anonymity and privacy of the participants. Following the first interview with each participant, I assigned each participant a pseudonym under which the data from their respective sit-down and walk-along interviews were stored. Pseudonyms were selected randomly from a list of the 100 most popular names in a participant's country of birth at the time of their birth. When quoting the participants, I attempted to remove as much identifying information as possible without losing contextual details. For instance, most place names were omitted from quotes or changed to the general geographic location referred to by the participants. In the dissertation, demographic data are presented in aggregates, so that identifiers (such as age, gender, and specific health conditions) are not linked, making individuals recognizable.

### 3.7 Demographic Information

### 3.7.1 Socio-Demographic Characteristics

While I attempted to recruit individuals of varying ages, genders, racial/ethnic backgrounds, and sexual identities, the study sample was largely comprised of white, Canadian-born, middle to low income, retired, heterosexual women. Of the 24 individuals interviewed, 18 self-identified as women and six self-identified as men. All 24 participants identified as heterosexual. While the participants varied with respect to their places of birth, the majority of the sample was North American and white. The majority of the participants lived on a fixed, low

to mid-range household income, and there were no appreciable differences between the men's and women's incomes. All 24 of the participants were retired, although two women and one man did occasional paid work. At the same time, the sample was diverse with respect to the participants' ages, marital statuses, educational attainments, and place of residence. The median age of the participants was 79.5 years, with a range of 67 to 98 years. The median age of female participants did not differ substantially from that of the male participants. The men in the sample were more likely to be partnered or widowed and to live in assisted living or long-term care facilities compared to the women. The male participants also had higher levels of education compared to the women. For a summary of the socio-demographic characteristics of the participants, please see Table 1: Socio-Demographic Characteristics.

**Table 1: Socio-Demographic Characteristics (n = 24)** 

Place of birth	Total (n=24)	Women (n=18)	Men (n=6)
North America	15	12	3
Europe	5	3	2
Asia	3	2	1
South America	1	1	0
Marital status	Total (n=24)	Women (n=18)	Men (n=6)
Widowed	13	10	3
Married	6	3	2
Divorced	3	3	1

Marital status	Total (n=24)	Women (n=18)	Men (n=6)
Never married	2	2	0
Education	Total (n=24)	Women (n=18)	Men (n=6)
Less than high school	6	5	1
High school	4	3	1
Technical school	3	2	1
College/university	11	8	3
Household income	Total (n=24)	Women (n=18)	Men (n=6)
Less than \$15,000	7	5	2
\$15,000-24,999	3	3	0
\$25,000-34,999	3	3	0
Household income	Total (n=24)	Women (n=18)	Men (n=6)
\$35,000-44,999	3	2	1
\$45,000-54,999	2	0	2
\$55,000 - 64,999	0	0	0
\$65,000+	2	1	1
Undisclosed	4	4	0
Place of residence	Total (n=24)	Women (n=18)	Men (n=6)
Own home	13	11	2
Assisted living facility	4	3	1

Place of residence	Total (n=24)	Women (n=18)	Men (n=6)
Family member's home	3	3	0
Long-term care facility	2	0	2
Subsidized seniors' housing	2	2	0

## 3.7.2 Descriptive Characteristics Related to Walking Aid Use

The participants also differed with respect to the walking aids they utilized, their reasons for using a cane or a walker, as well as the length of time and frequency with which they had utilized their walking aids. While studies have shown that walking aid use tends to increase with age (Gell et al., 2015; Hartke, et al., 1998; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Shields, 2004; Statistics Canada, 2015), there were no age related trends in the number of devices used among the current study's participants. The most commonly used walking aids were a combination of a cane and a walker, or a cane alone. The women in the sample were more likely to use a combination of walking aids, such as a cane and a walker, or a cane, walker, and scooter. Only one man and three women utilized a wheeled mobility device in addition to a cane and/or a walker. Three of these four participants had been diagnosed with a neurological condition that had severely impaired their balance and/or stamina. The majority of the men and women had multiple chronic conditions, and as such, often cited balance, coordination, and cognition deficits that negatively affected their mobility. The participants also described a variety of reasons for their decisions to begin utilizing a cane or a walker, including orthopaedic impairments such as back, hip, and knee problems (one man and six women), diminished balance (two men and seven women), osteoarthritis (one man and three women), neurological

conditions (one man and two women), and stroke (one man). While some of the participants had definitive diagnoses that were linked to their impaired balance and orthopaedic impairments, others were unsure of the causes of their physical limitations and simply described their ailments as "back pain" or "poor balance". A summary of the participants' reasons for utilizing a walking aid and the (combinations of) walking aids they used is provided in Table 2: Descriptive Characteristics Related to Walking Aid Use.

**Table 2: Descriptive Characteristics Related to Walking Aid Use (n = 24)** 

Pseudonym	Age	Gender	Walking aids used	Primary reason for using a cane/walker
Adeline	71	F	Multiple canes and walkers, scooter	Neurological condition (Multiple sclerosis)
Alice	85	F	Cane	Osteoarthritis
Alma	68	F	Cane and walker	Orthopaedic impairment (Knee problems)
Charles	69	М	Walker	Orthopaedic impairment (Pain related to back operation)
Diane	72	F	Cane and walker	Diminished balance (Related to polychondritis)
Doreen	71	F	Cane and walker	Neurological condition (Chronic inflammatory demyelinating polyneuropathy)
Dorothea	92	F	Cane and Nordic poles	Diminished balance (Vertigo)

Pseudonym	Age	Gender	Walking aids used	Primary reason for using a cane/walker
Edith	89	F	Cane and walker	Orthopaedic impairment
				(Back pain)
Edward	92	M	Cane	Diminished balance (Surgery-related peripheral neuropathy)
Grace	88	F	Walker	Osteoarthritis
Helen	78	F	Cane	Diminished Balance
				(Related to neuropathy)
Henry	81	M	Cane	Osteoarthritis
Isabella	75	F	Walking frame, crutches, cane, walker	Orthopaedic impairment (Related to a severe fall)
Jackie	67	F	Multiple canes, walker, scooter	Neurological condition (Multiple sclerosis)
Joan	78	F	Walker	Diminished balance
Joy	82	F	Cane and walker	Osteoarthritis
Ki-Young	85	M	Cane and Nordic poles	Stroke
Leslie	69	F	Cane, walker, and power wheelchair	Diminished balance
Louise	75	F	Cane and walker	Rheumatoid arthritis
Marieke	89	F	Cane	Knee pain
Nora	98	F	Cane and walker	Diminished balance
Regina	81	F	Cane	Diminished balance (Related to seizures)
Robert	84	M	Cane and walker	Diminished balance

# 4: Perceptions and Experiences of Mobility Impairment in Later Life

In the first findings section, I examine how the men and women perceived and experienced having walking restrictions in later life. I begin by presenting the participants' accounts of how pain, fatigue, and loss of balance impacted their mobility, contrasting these stories of illness and impairment with the men's and women's perceptions of themselves as healthy, normally aging older adults. I go on to consider how the participants' walking difficulties affected their everyday lives, and discuss their attempts to position themselves as active and productive individuals in the face of diminishing social and physical activities. Lastly, I look at the ways in which the men's and women's body images were shaped by their experiences of having walking difficulties.

# 4.1 "I'm Not Good on My Feet": Experiences of Mobility Loss

It is worth noting that many of the participants (four men and 12 women) were initially hesitant to discuss their poor health and walking difficulties. Seeking encouragement, and even permission, to talk about their experiences of having walking difficulties, some of the participants coupled their stories with phrases such as "Does this help you?" "Is that what you mean?" "I don't know how much good it's going to do you", and "There's not too much to tell". For instance, Isabella began our exchange in this way:

Isabella: I haven't been doing too much this year, because I just haven't been, well, the last year's [been] kind of just a write off, I guess you would say.

Interviewer: Could you tell me about that? What has that been like for you?

Isabella: Uh yeah, I *could* do that. I don't know if you want to hear it [emphasis added].

Others used expressions like "Anyway", "Anything else?" "Okay? Next", "Any other questions?" "So what else would you like to know? "Anything else, dear?" and "Is there anything else you need?" to tersely conclude their accounts of the painful, embarrassing, or distressing symptoms and consequences of illness and impairment. Edward's story of acquiring a cane, which concluded abruptly with an expression meant to redirect the conversation, was an example of such an exchange:

It was about three years ago, that's when it really started... We were living in the condo... one block north of here.... And I left the condo to go shopping at the mall, and on the way I met a girl who lived below us... and I stopped to talk with her. And as I stood, I got dizzy and I had to grab [the] fence... So she said, "Well, come, I'll take you back home, but you've got to buy a cane". And I was aware of that. And then I bought the cane. That was the first one [I bought], because I knew that if I stood still for any length of time, I got dizzy. So anyway, now you've got my story. Okay? Next [emphasis added].

In this way, the participants were often ambivalent about disclosing their impairments at the outset, using conversational closers to move on from sensitive topics or seeking reassurance prior to telling their stories.

Despite their initial reluctance to discuss their health and walking difficulties, all 24 participants spoke at length about their experiences of the pain, fatigue, and loss of balance underlying their mobility restrictions. Because many of the men and women had numerous chronic illnesses, some reported more than one reason for their walking difficulties. One man and 10 women discussed how pain, numbness, and stiffness had contributed to their walking difficulties. Of these, one man and eight women reported arthritis-related pain symptoms. While the man, Ki-Young, referred to his symptoms merely as "stiffness", the women tended to be

more expressive in their language. For instance, Alma noted: "I started having difficulty to walk because of this knee... My bone is cracking... when I walk [and] I cannot walk straight anymore... because when I bend my knee, it's painful inside". Alice had this to say:

It's the arthritis in [my] back that's really bothering me now... It's because of my back that I'm always sitting. The pain is absolutely terrible... You lose the cartilage so you've got bone on bone... So I don't walk too far... As soon as I get up and start to do something, I have to go and sit down for a while... because it gets quite painful.

Two women (Jackie and Louise) attributed the pain and numbness they experienced to chronic neurological illnesses. Louise reported the following:

On a fibromyalgia day... my legs seem to be really bad...they're so weak... If I move I get cramps... [But] without moving, [my feet are] stiff and sore... They radiate pain out of them. It's very bad... and so that affects the walking.

In addition, five women discussed how fatigue had affected their ability to mobilize independently. For instance, Marieke, who began to feel weakness in her legs following a knee replacement, remarked that she was no longer able to walk to the community centre near her home: "I have to take the car, which is silly because it's just a few blocks, but somehow, I don't have [the] strength [to walk that distance] anymore". Joy noted that her osteoarthritis had made her feel too weak to stand upright:

I used to walk very straight and I exercised... and did all those things and all of a sudden, things started getting harder and it was... like I couldn't hold my back up... My knees are bad, but it's my back that seems to wear me out... It's not really pain, it just makes me feel tired and as if I can't hold myself up.

Three men and 11 women reported experiencing problems with their balance that stemmed from both chronic conditions and acute injuries. For instance, Diane spoke of how her balance problems were the result of both a degenerative chronic condition and a foot injury:

The main reason [I have walking difficulties] is my balance. I have a rare problem called polychondritis, which is a deterioration of the cartilage... There's no cure for it... My balance is off... and it started off with foot drop. [My foot] gets quite sore... and then it drops... and you catch your toes on the sidewalk as you go... and I need something to lean on.

Charles, who attributed his balance issues to the effects of surgery and diabetes, had this to say:

I'm not good on my feet... I have bulging discs, and I actually have some damage to my back from my operation... Sometimes I go to the right, sometimes to the left... And then with diabetes, my legs swell... and my feet go numb... and I can't get up, because if I get up, I'll fall... I try to take a step and I just... go down.

One man and five women spoke of the ways in which incontinence further complicated their ability to walk. For instance, Charles stated:

I'm having spasms in the bladder... and everything just comes away from the catheter. It's in but still the stuff is coming out, and it's so embarrassing, because you're having lunch and all of a sudden this is all happening, a big flurry of water... They kept changing catheters to see if that would work... They even gave me a longer catheter... [But] if you step on the tubing there, it comes out. Or if I sit in a deep chair, and I have to get up, it comes out. If it happened in [my room], it's okay, but when your shorts are wet, it's kind of embarrassing.

# Louise had this to say:

It's a chronic condition. My bladder just, well, they don't know exactly why. I have a lot of urine infections...and so the muscles just don't work... There's nothing you can do... I'm incontinent, totally... without incontinence equipment, I couldn't move or go anywhere because I'm soaking wet all the time.

Although incontinence did not cause the participants' walking difficulties, it often interfered with their ability to ambulate and engage in various activities.

# 4.2 "I've Really Slowed Down Considerably": Mobility Impairment and Everyday Life

All 24 participants spoke of the ways in which the experience of walking difficulties had negatively impacted their everyday lives, constraining their ability to work, perform activities of daily living, and engage in exercise and leisure pursuits. The men and women used words such as "devastating", "disheartening", "sad", and "discouraging" to describe their reactions to their increasingly limited activity choices. While they had previously thought of themselves as capable of "doing everything", "always on the go", and "very active", the men and women discussed how in the wake of experiencing walking difficulties, they had become "frustrated" as "everything [became] a little more difficult". For instance, Adeline remarked:

[It's] getting harder and harder to walk and stuff like this, and I've really slowed down considerably. The fatigue takes over... I've got so many little things that I wanted to do today, but as I'm sitting here talking [to you], all I want to do is go home and sit and not do anything. I find it very difficult... I can hardly walk... And I'm really, really tired... I used to be able to do eight, 10 things a day. [Now] if I can do two or three things a day, that's great. I'm trying to do all this stuff and I'm just getting so fatigued and I can't do it, you know, I can't.

Likewise, Isabella voiced her frustration with her declining activity level in this way:

This is something that is hard for me now. I was a walker, and now I can't do as much as I did before... I mean you've been doing all these things all your life and all of a sudden the rug is pulled out from underneath you, and it's hard... There's some days that, with my knee the way it is now... you just kind of have to take it easy and stay off it... And that's hard for somebody like myself that's always been so very active... You feel you should be doing this and that and the next thing, and it doesn't work out that way. It's hard to readjust your whole life.

One man and four women discussed how their poor health and walking difficulties had necessitated their retirement from paid work. Ranging in age from 67 to 72, these five participants were the youngest in the study. While Charles considered his mobility impairment to be a natural result of the "physical jobs" he had performed throughout his life, the four women, who had all been employed in the caring professions (teaching and nursing), had difficulty coming to terms with their involuntary retirement. Jackie spoke of her reluctance to cease teaching in this way:

For 11 years, I was the head of [my department] at [a local elementary school] and in the meantime I got MS... I didn't have any devices that showed I had any disability... until the day came when the doctors said, "You've got so much pain because you need to be using a cane. You don't realize you're not walking properly". It got to a point where I couldn't work full-time anymore... and I was so, so sad... There used to be a joke at the school that they'd carry me out in a box, you know? Because I've always been the type of person who's been busy every day.

Similarly, Doreen explained how she had found it difficult to retire from nursing following her diagnosis with chronic inflammatory demyelinating polyneuropathy (CIDP):

I had to retire because I had ill health... It was getting too ridiculous, because I didn't have the strength to turn on the key of the car... If I walked [to] have my breakfast, I had to sit down and rest after that. Everything was a tremendous effort... [There was] a lot of grieving because I had missed out on what I used to do. As a nurse, you're used to giving to people. You're used to being a caregiver. And then having to accept [other] people's care... was the opposite of what I'd normally been doing. I think it's harder to accept care... when you're a caregiver kind of person.

Three men and nine women discussed how their diminished mobility interfered with their abilities to accomplish activities of daily living, including housework and shopping. Six of the women talked about how the physical changes they had experienced had made it difficult for

them to perform housework. For instance, Adeline described how she had altered her housekeeping routine to accommodate the MS-related fatigue she experienced:

This is my routine... In the morning... I go and I make sure that all the dishes are in the sink... I make darn sure that I've got clean clothes, take a shower, my hair is washed... everything is done and I get all dressed and then I head out the door. Because usually when I come home, I'm too fatigued to do anything... By [that] time, it's pretty hard for me to stand and make a meal for myself... When I get home, I can hardly walk. I'm really, really tired.

Four of the six male participants resided in assisted living or long-term care facilities, and two employed care aides that helped them with cooking and cleaning. As such, it is perhaps unsurprising that the men did not speak of housework when discussing their activities of daily living. At the same time, three men and five women described the challenges they experienced when shopping for groceries and clothing. Charles, who did the grocery shopping while his wife was undergoing chemotherapy treatments, contended:

I don't go shopping every day, only when the wife needs something... I'll do it... [But] oh boy, it's tough getting around! ... [On the way to the store] I have to lift the buggy up [onto the sidewalk] and it's pretty steep, you know... and if you're shaky on your legs, it's bad... So that's what I find difficult. Real difficult.

I additionally observed some of these challenges firsthand on my walk-along interviews with Louise and Leslie, who asked that I accompany them on outings to the grocery store. During our walk-along interview, Louise was visibly tired and in pain as she slowly navigated the long aisles of her neighbourhood grocery store with her walker. I also noticed that Louise found it difficult to open heavy cooler doors, reach for products on particularly high or low shelves, and lift items out of produce bins. She noted that these tasks were often made even more difficult by her debilitating and near-constant back pain.

Four men and 11 women reported that their impaired mobility had impacted their ability to exercise and be physically active. These participants described having been involved in a wide range of sports and physical activities prior to the start of their walking difficulties, including walking, dancing, lawn-bowling, ice skating, skiing, swimming, weight lifting, biking, tennis, hiking, and playing racquet ball. For Joy, who "had a whole gym in [her] basement" and used to "exercise four hours a day", a diagnosis of osteoarthritis meant that she now could only engage in activities that "wouldn't jar [her] knees". Joy also discussed how her limited mobility affected her ability to attend exercise classes at a nearby community centre:

You wouldn't get your exercise with me, I'm afraid... I keep saying I'm going to go walk more, but it's most likely not [a] reality... I'm afraid I'm very lazy these days... I thought of going to the [community] center [across the street] but I can't walk that far... I can walk uphill, but downhill is very hard...When you're going down steep hills, you know, it puts a real jar on your knees.

### Ki-Young similarly spoke of his deteriorating abilities:

In general, I'm not as active as I was. I want to be more active, but I'm not able to do that... because of [my balance] problem, I'm really careful [about doing activities that might make me] fall down... I don't want to walk too much... I don't do bike riding any more, and I just gave away my ski set. I don't do golf anymore. I stopped so many things... My activity has been shrunk quite a bit. I was a really active person when I was healthy, but now it's going downhill and my activities [are] almost all gone... It's discouraging.

In addition to feelings of loss, some participants described how the changes to their physical abilities had been biographically disruptive (Bury, 1982) by threatening their sense of identity. For instance, Diane had this to say: "I [used to go] a gym, I [used to go to] the pool... [After being diagnosed with polychondritis] I could see myself just getting a little bit more curtailed,

and it wasn't me, you know, what I was left with wasn't really me". Similarly, Adeline, who had been a fitness leader in the past and now instructed seniors' exercise classes part-time, stated:

I feel like that was taken away from me, my exercise... I was so active and so I can't believe that this would be the end of my life, with this disease. I feel like I should be either going into the gym after my class, or I should be taking the walker out for a walk. And [my friend] said to me, "Now, why the heck would you do that when you can't even hardly walk after your class? ... You're so tired and exhausted, what do you think you are? You are not that person anymore". And I thought, "He's so right... I've got to face facts".

Three men and seven women spoke of how their walking limitations had impacted their leisure activities, which included volunteering, taking part in cultural events, and travelling. For instance, Grace had such difficulty walking that her leisure activities were now limited to "mainly whatever we are having here in [her assisted living residence]", saying: "I really am losing a lot… because I did enjoy going to plays and opera and all sorts of concerts". Edward noted that his restricted mobility had forced him to give up his favourite hobby:

My main hobby actually was hiking and hill walking. I went and climbed [the highest mountain in the British Isles] and various mountains in Australia and Canada. That was my hobby, walking every weekend. I was a member of [a hiking group] and every Saturday or Sunday we would be hiking... so I was in constant motion, you might say... I pretty well stopped... because I just can't keep up and to do 10 kilometres, it's out of the question.

Others, like Diane, voiced their disappointment with the loss of the ability to travel:

It has curtailed what I might do in the future by way of travel. You know, as far as say, going on a tour where there's a lot of walking involved, especially if you're looking at walking over cobblestones, like in New York for example, I would say off the bat I wouldn't even attempt to do that. It's not that I couldn't walk over cobblestone, but to do that for a length of time... I don't think it would be a smart idea. And so I find that kind of discouraging.

Moreover, one man and seven women noted that the curtailment of their leisure activities had negatively impacted their relationships with their families, their friends, and other individuals in their communities. Doreen had this to say:

I used to be in a walking club when I was well, before I got this disease, and we would walk twice a week, about 10 kilometers we did, each time... When I got this disease... I found it so difficult to walk from here to that tree even. I was absolutely wiped... And then I realized I can't go walking. I have to give that up... And because I wasn't in the walking club anymore, I didn't see my friends... I was going to the seniors' center and playing scrabble, and then my knee got too sore to sit for any length of time... So I had to give that up too.

# Ki-Young similarly noted:

I used to belong to the walking club at the seniors' center, but I'm not able to walk anymore, so... I'm not qualified to walk with them anymore... So that way, I'm slowly losing friends, yeah? Actually, I was the leader of the group, but now I'm not qualified to belong to the group anymore!

In addition to expressing dismay over their diminishing abilities, two men and eight women were concerned about how potential mobility losses might further compromise their self-sufficiency in the future. One man and five women, who currently resided in their own homes, were fearful of experiencing additional mobility limitations that might make them unable to live independently. For example, Robert recounted how his walking difficulties had worsened concurrently with his late wife's declining health, prompting his doctor to suggest that they move into an assisted living facility. Although his mobility continued to deteriorate following his wife's passing, Robert was adamant that he would "never go into a seniors' home", saying:

I resist the idea of going and living in an old persons' home or anything like that. I hate the idea of it... I've gone and visited people in some of these seniors' homes... and seen all these people sitting around. I wouldn't like to think of myself like that... A lot of the

people there, they are so far gone that they just sit all day long, not moving a muscle. That would upset me.

Leslie, who continued to live on her own despite having complex mobility limitations that required her to use a power wheelchair, was apprehensive about the consequences of possible changes to her health:

I already qualify... for assisted living. I think it's dreadful... Some people just all of a sudden, bang! They have something that happens to them and the next thing they know they're in care. You know, whereas a few days earlier, they were living alone. That's a bit scary, that it can happen that easy.

One man and six women indicated that as a result of their walking limitations, they had become dependent on others for their activities of daily living, expressing anxiety about the possibility of becoming a burden to their families and friends in the future. Edith, who was unable to walk long distances or take the bus with her walker, explained how she felt about no longer being able to attend social activities or go grocery shopping without help from her daughters or friends:

[When I'm] going places and doing things... I have to ask somebody [to give me a ride or go with me] and I don't like that. The fact that I have to ask for help... annoys me badly... I don't like being beholden to people. Like the kids say, 'You've got friends, mom, ask them!' but I don't want to ask them... Depending on other people is difficult.

Nora, who had recently sold her home and moved into an assisted living facility to be closer to her children, was concerned about asking her family for help with activities she could no longer manage to do on her own, including shopping, gardening, and home repairs:

I was afraid when I came out here that I would be imposing on them, which I am [emphasis in original]. I'm imposing on them. I know it... That was the only thing I had against coming out here – that they would all automatically think they had to take care of me, and that's not the way it should be. Like [my daughter]... babysits

me. She walks with me, plants my garden, tells me what I need... It's taking up too much of their time. You know, they're my kids, but they've got a life of their own.

Perceiving themselves to be already overly dependent on their loved ones, these participants echoed the sentiments of Ki-Young, who contended that he "[did not] want to live too long" if he became "too much of a burden to other people". Louise, who spent her teenage years caring for her mother following a stroke, maintained that she would "never want to put someone else in that position":

I can see possibly down the road that I'm going to reach a point where my mobility is going to get less and less... I can see there might come a time when I can't walk at all... [Right now] I can enjoy life, I can get up, I can go about, I can be independent to a certain extent.... [But] I don't want to live if I'm a drag on everybody. I'm quite willing to die. I just don't want to be ill... I have 10 years. [This] is what I'm allowing myself, till I'm 85... I want to die in 10 years please.

# 4.3 "It Really Has Got a Mind of Its Own": Effects of Mobility Loss on Perceptions of the Body

In addition to impacting their health and daily activities, the participants' diminished mobility had also altered their body images. Three men and 10 women discussed how they had become increasingly aware of their bodies as a result of their walking difficulties, a phenomenon that Leder (1990) has described as the dys-appearance of the body. Some of the participants made comments similar to those of Dorothea, who explained how she had become more conscious of her body after she began experiencing difficulties walking: "I am certainly more aware [now]... I've had to learn to lift my feet. I walk differently now than I did before... because I can trip on a pebble. And I have tripped over the years and fallen and broken bones". Alice asserted:

You know, there is a tendency to... kind of waddle a bit... so you have to be conscious of walking... Every once in a while, you do find yourself kind of [leaning forward], and you shouldn't be, you want to walk straight... So I'm conscious of it, I have to make sure I'm walking straight and keeping my weight balanced properly for walking. I've caught myself doing that a few times now.

Others, like Edward, became aware of their bodies when seemingly simple activities they had previously taken for granted now presented a challenge:

[Walking to my assisted living residence] from the bus stop... there is a slight slope, where even going up that very slight gradient... I'm very conscious that it's an effort, believe it or not. That very flat gradient, one degree, two degrees maybe? It's an effort. Before, I mean, you'd never notice it even.

Edith similarly contended: "I never thought about doing anything before, I just did it. And now I do think about it... I have to be conscious of what I do".

Similar to the findings of Plach et al. (2004) and Waskul and van der Riet (2002), three men and 10 women spoke of the ways in which they had become more attentive to their bodies as a result of the unpredictability of their impairments. Thomas asserted that having Parkinson's disease made him feel as if his body was "suddenly out of control", while Jackie commented on how unreliable her body had become following her diagnosis with multiple sclerosis, saying, "You don't know what it's going to do at any given point". Louise had this to say:

I'm not sure what my feet are going to do. And then when I'm driving, don't tell the police, but I'm never sure if my foot's going to stay on the right pedal or what I'm going to do. I mean, I concentrate on it, but you know how you [normally] don't even think about it. Well, I have to focus on it, right?

Some of the participants spoke specifically about the variability of the symptoms of their illness. For instance, Henry noted:

The arthritis comes and goes. It used to be when it was damp, you know, I could tell you a day before... if you're going to have rain, you know? ... Now sometimes on a hot day I get it and the dampness doesn't seem to affect it much... It really has got a mind of its own.

One man and four women were like Grace, who stated that she "[didn't] trust herself walking", and who were especially concerned that the unpredictability of their bodies might result in a fall. Ki-Young's voiced his fears about experiencing a fall in this way: "You never know what can happen... I don't know when I'm going to have unbalancing or fall down... and if I lose the balance [and] fall down, I'm finished, you know?" Isabella similarly asserted:

You're afraid to take a step for fear of what's going to happen... I have an artificial knee [cap] on this side... And the knee will give out and it's a very scary thing. After having [a serious] fall [last year], I don't want to ever fall again. Please no!

The experience of a dys-appearance of the body (Leder, 1990) was also evident in three men's and six women's accounts of the ways in which the deliberate and conscious thought they now put into their actions led them to view their impaired bodies as unfamiliar objects. For instance, some of the participants spoke of their impaired body parts as separate from themselves. Edward characterized his legs as "dead weights", while Alice contended that her fear of falling was amplified by the way "the knees and hips don't move when I walk". Likewise, Nora stated that she would like "newer legs [and] newer hands [because] the hands are going, they give out". Doreen asserted that her disconnectedness from her feet had contributed to the fall she had experienced:

I have fallen before and... it's the strangest thing... I stumble and I can't get my feet underneath me, so I'm ahead of my feet, if you understand... It's like one of these adverts for the rabbit you know, running like this [referencing a commercial for Duracell batteries]. And I can't stop it. I can't stop my feet from going like this.

Still others referred to their conditions as "the Parkinson's disease", "the multiple sclerosis", or "the arthritis" [emphasis added]. For instance, Marieke described the arthritis she experienced in her hands and knees in this way:

See *the* [emphasis added] arthritis goes through your whole body... It doesn't stop... It stretches through your whole arm... Sometimes your hands go to sleep because.... the pressure... It just goes on and on. It started here [in her knees] and now this finger is going too.

As well as noticing changes in how their bodies functioned, some of the participants (three men and nine women) commented on the appearance changes that had accompanied the onset of their mobility limitations. One man and six women spoke of the postural changes that had contributed to their walking limitations. For example, Edward had this to say:

I know that I'm stooped... I've been conscious of that because I know for a fact I'm getting a bit bent... I guess my spine is not as flexible, I don't know why... I've got a bent back... and I don't like that because I try to straighten out, but it doesn't work... So I'm conscious of how my body looks.

Dorothea remarked: "I'm very careful when I'm walking... I'm always looking to see if I'm standing straight. It's such an easy habit of bending over that way, you know... When you're walking you need to have a smart step". Moreover, three men and six women described how their walking difficulties had caused them to gain weight. Helen stated, "Of course I know I'm overweight. That comes with not getting enough exercise... because I can't go for long walks or anything". Likewise, Charles recounted how his back surgery had resulted in "major weight gain":

I had the back surgery, and I couldn't walk anymore... [Before the surgery] I was thin. I was under 200 pounds, and I was in good shape. I was walking 14 times around the track, and I felt good, I felt healthy, I lost weight. Since I've had this operation, I just ballooned up, you know, I'm over 350 pounds probably. And there's not really much I can do. I can't go fast enough to burn it off.

# Leslie similarly contended:

I sure am fatter, but I don't think there's much to blame for that except that I probably eat too much for the exercise I'm doing... I didn't used to have a weight problem, but I do now, so that sucks. It's not easy to take the weight off either. It's hard. I mean, you're not moving around as much... I used to be able to walk very quickly and then I wouldn't weigh so much.

In this way, both the symptoms caused by their bodily impairments and the consequences of having walking difficulties impacted the participants' perceptions of their bodies.

# 4.4 "I'm Mostly Healthy": Perceptions of Health and Impairment in Later Life

Even as they detailed their numerous health and mobility concerns, nearly all of the participants (five men and 17 women) perceived themselves to be in good health. For instance, Helen contended:

I'm mostly healthy. I've had several operations, but my general health is alright... I've had some arthritis in [my knees], and they scraped it out, and then a bladder operation, and a few months ago I just had what could've been breast cancer, but wasn't. They sliced through, took a little thing out, wasn't cancer. There's a huge scar right there. So I had three operations in one year, plus colon cancer. I had to put a thing on the computer, because every time you go in, they ask you, "How many operations? When were they? What were they? When were they?" So I've got them all listed.

Charles, who was one of the most physically impaired participants due to a combination of asthma, diabetes, kidney failure, severe back pain, and depression, similarly viewed his health in positive terms:

I don't have any trouble, I feel blessed... [Walking is] my big problem there, but all my other [health issues] are all better now... They're all under control... Mostly everything is under control. Diabetes is good, blood sugar is good, and my asthma is under control, which makes things a lot easier. I'm lucky I'm alive to be here.

Three men and 10 women described the onset of illness and impairment as "normal illness" (Williams, 2000, p. 49), or an expected part of growing older. Dorothea contended that illness and impairment were "just something that [older people have] to cope with... It's just part of life... You change as you go along". Leslie had this to say of her walking difficulties:

I think it's something I would expect as part of growing older. Maybe not for everyone, but for a lot of people... It's normal aging. A lot of people are going through this... I'm not alone, that's for sure. I think it is just part of the natural aging process.

#### Likewise, Edward remarked:

I have days when I get arthritis in my leg, but that's part of daily life now - the pains. And one tends to get illnesses more quickly... I keep popping pills, which I hate, but that's just a part of the aging process. I mean, at my age, what more can you expect? One accepts it. At least I do. I accept that fact. Your body changes as you grow older, and one of the things, when you get into the 90's is that things aren't working quite the same as they were when you were in your 20's and 30's.

As such, these participants minimized and normalized their mobility limitations by framing their experience of illness and impairment as a natural and expected part of later life.

Comparing themselves to individuals they perceived to be more ill or disabled, two men and eight women made comments similar to those of Joy, who stated that "it could be worse... much worse". These men and women differentiated between their walking difficulties and total mobility loss, echoing the words of Leslie, who stated: "It's not that I can't walk... I just don't walk around a lot". Some specifically referred to people using wheelchairs, mirroring Marieke's assertion that seeing individuals whose mobility was more impaired than her own put her own walking difficulties in perspective:

In the beginning, I thought, "Oh, now I'm an old lady". That's what I had in my mind. Then I saw other people in wheelchairs, and I thought, "You know, I have to think different. Look at all that I've got: I can read, I can use my hands. There's so much what I can do still".

Ki-Young likewise stated: "When I see younger people using a wheelchair, then I feel that... oh, I'm still better than him or her". Others were like Joy, who contrasted her physical abilities against those of older adults with memory or cognitive deficits:

I think if your mind is going a bit, you may be treated differently, but I still think I'm pretty good... It could be worse getting old... Fortunately... I've still got my mind and my memory. If you were going to get something, I'd rather have something physical than mental. You know? I'd like to keep my brain. And once my brain goes, I don't want to be here. You know, that changes so much of your life, that's when people treat you differently.

Two men and six women contended, as Marieke put it, that they "[couldn't] complain" because they were healthier than they had expected to be and/or because their current health and mobility concerns were far less debilitating than other health problems they had faced in the past. For instance, Diane compared her walking difficulties to a previous bout of cancer:

You know, quite frankly, it could be worse. I don't view this as a huge issue. It's disappointing in some regards, because you maybe don't do some of the things you may have done before, but as I said, it could be a lot worse. I mean certainly, compared to the colon cancer, this is not as drastic as that was... Having been through the colon cancer, this was the lesser of the two... It's not life threatening... So this is nothing to really worry about.

Isabella considered her current mobility limitations to be uneventful compared to the prognosis she had received at the hospital after the fall that left her with a broken femur, hip, knee, and arm:

If [I'm] out somewhere, [and someone asks] "Why are you using a walker?" ... I start telling them what happened [and they ask] "You're still walking? That can't happen!"... When I saw [the orthopaedic surgeon after the surgery she had to repair her crushed knee and hip]... he said, "This is the consensus, you'll not walk again... Physically, you shouldn't be here"... But I'm able to stand up and I'm not in the wheelchair as that doctor thought, and this is what's keeping me going.

Two of the participants, who had progressive chronic illnesses, considered themselves lucky in light of the typical progressions for their illnesses. Jackie remarked: "[My doctor] said I have what's called secondary progressive [MS]... Luckily for me, although no one with MS is lucky, I'm still mobile, I'm still driving... Luckily for me, it's moving very slowly". Likewise, Doreen stated: "I'm certainly glad this disease I have is a chronic disease. The opposite of it, the acute one is called [Guillain-Barre disease] and it affects people immediately, and you can't breathe and sometimes you have to go on a heart-lung machine, and you can't move". Some of the participants also noted that having health issues in later life was, in the words of Joy, "better than the alternative". Edward contended:

I don't see [have walking limitations] as a negative really.... Because I always have the compensation of saying, well, I'm in my 90's, so I've got something to be grateful for. You know... I accept the fact that I'm here to complain. I'm grateful to be old, simple as that.

In this way, the men and women endeavoured to diminish the perceived severity of their health conditions and impaired mobility by de-emphasizing the impact of their walking difficulties, normalizing mobility limitations as a natural aspect of growing older, and comparing themselves favourably to those they considered to be more disabled.

# 4.5 "You're Not a Useless Person": Perceptions of Successful Aging in the Face of Mobility Impairment

At the same time as they discussed their mounting activity losses, many of the participants (five men and 12 women) perceived that they were aging successfully (Rowe & Kahn, 1997), leading socially and physically active lives in the face of their walking difficulties. For instance, Ki-Young stated that "[he did his] best to spend [his] time efficiently", while Doreen contended that she remained industrious despite the effects of her CIDP:

I do get very tired very easily, and sometimes if I go out... it just hits me [and] I am so exhausted all of a sudden. So I have to try and monitor my activities so I don't do too much all at one time. But it doesn't stop me. I go to exercise classes and I'm interested in hospice and I'm one of the directors [at a local hospice centre]... and I have my activities at the seniors' centre.

#### Edward had this to say:

I paint and I read a lot. I think those are the two big activities that I'm involved in now... I certainly do a lot more reading than I did before, because as I mentioned earlier, it's easier to sit down and read than do something active... But my less productive days... are few and far in between.

Four men and eight women indicated that while they were unable to exercise or play sports in the same way they had in the past, they nonetheless attempted to remain physically active to the best of their abilities. For instance, Ki-Young, whose walking difficulties prevented him from continuing to take part in his walking group, outlined the workouts that had replaced his weekly walks:

I come [to the community centre] for exercise three, four times a week to keep healthy. I walk only 10 minutes or 15 minutes at the maximum. Here I can walk on the treadmill, holding the handlebar. That's the way to keep myself a little bit healthy. If I don't keep moving, [I] will be getting worse and worse... I'm getting old. You cannot stop it. But I do my best to keep healthy as long as I live.

Some, like Diane, took part in organized fitness activities:

A friend of mine... recommended [this exercise class], and she said, "The lady who teaches it has a background in rehab"... It's not like [the weight lifting] I did before...But I've been going to that for probably two years and it's made a noticeable difference to me.

Others were like Marieke, who had recently tried to take a fitness class aimed at older adults, but realized she was unable to perform many of the exercises. She described how she found her own ways of staying physically active: "I'm trying to do more walking... So what I do sometimes when I go to the store is I park quite a ways from the store and do my walking down there". Similarly, Robert discussed his exercise routine:

I can barely walk a block... [But] I do try to get some walking in every day. Even if it's only pushing the Safeway cart around the garage, I do make a point of getting some exercise... Quite often I make a point of coming up the stairs so as to get more exercise... I do push-ups, standing on my toes and things like that, because I think exercise is very important.

One man and nine women underscored their social engagement and involvement in their communities. Some spoke at length about the ways in which they, in the words of Marieke, "still [gave] a lot" through volunteering. For instance, Jackie remarked:

[I'm] much more active than a lot of my friends who have nothing wrong with them... I'm a vice president on the board of [a seniors' advocacy group]... We just started a huge peer support program, and I assist them a lot in writing grants... I panic when the day comes [when] I have nothing to do.

Adeline, who volunteered at two community centres and at a phone-in resource line for older adults, had this to say:

I'm not extremely that happy that [I got sick with MS] when I think about how I was active... [But] I think I'm accepting more and more... because I can still be helpful to other people... This is one of the things that I've found with being disabled. You're not helpless and you're not a useless person. You know, you can still do a lot.

Three women mentioned that they looked after or helped neighbours and friends who were older or who were in worse health. For instance, Nora, aged 98, noted that she made weekly social phone calls to a friend who was ill and living in a long-term care facility, while Helen remarked that she "[checked] in with [her] neighbour next door to see if she's okay, and if she might want something from the [store]", often driving her neighbour shopping and to medical appointments. For three of the participants (Diane, Isabella, and Ki-Young), volunteering to participate in the study was a form of community service. Ki-Young stated:

I miss so many things, you know. I [was] a very active person when I was healthy, and now [I'm not]... So this kind of interview, it encourages me mentally. It's really good to me, because I have a feeling I'm helping somebody, you know.

As such, the men and women highlighted the ways in which they had maintained their membership in the third age (Gilleard & Higgs, 2013) by remaining socially and physically engaged even as their health and ability to mobilize independently continued to deteriorate.

# 4.6 Discussion: Embodied Experiences of Aging and Mobility Impairment

The preceding sections considered the ways in which the study participants perceived and experienced their walking difficulties. The participants described the physical symptoms that had affected their health and mobility, as well as their experiences of their walking difficulties in the context of their everyday lives. In addition, the men and women talked about how their perceptions of both the function and appearance of their bodies had been affected by their walking limitations.

The participants' accounts of their physical impairments reflected previous research linking walking aid use to a number of medical conditions (Gell et al., 2015; Iezzoni et al., 2001; Kaye et al., 2000; Obembe & Eng, 2015). Echoing this earlier research, the participants in the current study reported experiencing multiple health problems that are commonly associated with mobility impairment, including rheumatoid arthritis and osteoarthritis, stroke, vision impairment, diabetes mellitus, cerebrovascular disease, and orthopaedic impairments such as hip, back, and knee problems. The higher percentage of female participants in the study was also consistent with research indicating that older women are more likely to experience health inequalities and chronic conditions that contribute to mobility limitations in later life (Iezzoni et al., 2001; Murtagh & Hubert, 2004; Warner & Brown, 2011). While not all participants were cognizant of the specific conditions that had led to their walking difficulties, all 24 men and women described the ways in which their various chronic illnesses and physical impairments had resulted in pain, diminished balance, and loss of coordination, thus contributing to walking difficulties. The interviews additionally highlighted two health concerns that, to date, have been infrequently cited as contributing factors to walking limitations, namely fatigue and incontinence.

As a result of their deteriorating health and subsequent mobility limitations, the participants struggled to perform everyday activities such as housework, meal preparation, grocery shopping, getting around the home, and self-care activities. These findings are similar to those of previous studies, which have shown that older walking aid users tend to experience difficulties carrying out activities of daily living and instrumental activities of daily living (Hartke et al., 1998; Kaye et al., 2000; Shields, 2004; Statistics Canada, 2015). There were gender differences in the ways in which the men and women in the sample discussed the bodily and losses and activity limitations they had experienced. For instance, the male participants in the study were far more reticent to discuss their physical symptoms and the daily challenges they experienced as a result of their walking difficulties. Previous research has similarly drawn attention to the ways in which hegemonic masculine gender norms that emphasize strength, stoicism, and physical prowess often make older men unwilling to candidly discuss poor health, disability, and dysfunction (Courtenay, 2000; Hurd Clarke & Bennett, 2012; O'Brien et al., 2007; Oliffe, 2009; van den Hoonaard, 2009; 2010). In contrast, many of the female participants related their activity losses to feminine gender role expectations (Hurd Clarke & Bennett, 2013; Sanders et al., 2002). In particular, the women expressed dissatisfaction with the ways in which their walking difficulties had diminished their abilities to accomplish household tasks and perform gendered social roles, such as parenting and caregiving.

Even as the participants detailed their debilitating physical symptoms and the ways in which these had profoundly impacted their lives, they also described themselves as healthy, active, and socially engaged. Indeed, many of the men and women perceived themselves to be aging successfully (Rowe & Kahn, 1997), as they discussed the ways in which they had remained useful and productive members of the third age (Gilleard & Higgs, 2013) in the face of

declining health and mobility. Some of the participants also portrayed their walking difficulties as "normal illness" (Williams, 2000, p. 49), or as an expected part of old age that was commonly experienced in one's later years. Others favourably compared themselves to individuals whom they perceived to be in poorer health than themselves, such as people with total mobility loss or those suffering cognitive impairments. Minimizing the impact of their walking limitations and normalizing their experiences by positioning themselves as similar to older adults without mobility limitations, the participants may have been actively managing other's perceptions of them in light of ageist and ableist assumptions about later life as a time of dependence and decline (Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; Higgs & Jones, 2009; Katz, 2000). Moreover, the men's and women's emphasis on their activity and productivity may have been an attempt to contradict societal conceptions of older adults as dependent, burdensome, and a drain on health and economic resources (Angus & Reeve, 2006; Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; Higgs & Jones, 2009; Katz, 2000).

At the same time as the men and women characterized themselves as healthy, active, and independent members of the third age, many also experienced their walking difficulties as a "biographical disruption" (Bury, 1982, p. 167). The participants reported experiencing increasing social isolation due to their inability to take part in activities designed primarily for able-bodied older adults. A number of the men and women expressed their fears of experiencing further bodily losses and being a burden to others, with some stating that death was preferable to being completely dependent on loved ones. A small number of men and women described current their health and mobility concerns as part of their "biographical flow" (Faircloth et al., 2004, p. 242), or as an anticipated occurrence given the health problems they had experienced in the past. The

women in particular perceived their current mobility limitations to be continuous with previous health concerns, reflecting research by Sinding and Wiernikowski (2008) that has shown that women's experiences of poor health and marginalized social roles across the lifespan may lead them to normalize illness in later life.

In addition to experiencing the effects of illness and impairment on their everyday lives, the men and women were also greatly impacted by the symbolic signification of having mobility impairments in later life, or what Bury (1988) term the "meaning as significance" (p. 91) of illness. For many of the participants, the onset of walking difficulties complicated their ability to present a healthy, engaged, and successfully aging self by disrupting social roles and pursuits that signified active lifestyles, physical and mental health, and thus, membership in the third age (Gilleard & Higgs, 2013). The experience of walking difficulties was especially disruptive for the study's youngest participants (aged 67-72), whose mobility difficulties had precipitated their involuntary retirement from work. For these participants, the onset of walking difficulties had marked not only the transition into poor health, but also into retirement from productive labour (and into a lower socioeconomic bracket). Other participants recounted the ways in which their walking difficulties had limited their physical activity and ability to partake in valued recreational activities that are typically associated with the third age (Gilleard & Higgs, 2013) such as volunteering, participating in social and cultural events, and travelling.

The men's and women's experiences of biographical disruption were also tied to the ways in which the onset of walking difficulties had unsettled their perceptions of their taken-forgranted bodies and altered their body images. Conscious of their changing gait, posture, and newly developed ways of walking, the men and women experienced their bodies as 'dysappearing' (Leder, 1990). That is, the participants spoke of gaining more awareness of their

bodily movements as the ways of walking they had become accustomed to throughout their lives suddenly changed. For some of the participants, previously taken-for-granted tasks became uncertain and difficult. For others, the sensations and movements associated with walking became new and unfamiliar. In this way, the current study's findings were similar to those of Plach et al. (2004) and Waskul and van der Riet (2002), whose findings illustrate the ways in which the uncertainty and loss of bodily control that frequently accompany mobility impairment can heighten older adults' awareness of their bodies (Plach et al., 2004). This was particularly true for participants who had neurological conditions and illnesses that made their bodies unpredictable and out of control. The participants discussed how they were continually aware of their changing bodies and symptoms as they attempted to adjust to their constantly varying abilities. For a few of these participants, the vulnerability and uncertainty that accompanied their changing bodies resulted in a mind-body dichotomy that resulted from their inability to trust their bodies. Similar to the participants in Finlayson and van Denend's (2003) study, the men and women experienced a profound disjointing of body and self (Charmaz, 1995) as they contended that they were no longer in control of their unpredictable, uncooperative bodies. This was particularly evident in the ways in which the men and women spoke of their impaired body parts as alien and disconnected from their core selves. As a result, and similar to the findings of Waskul and van der Riet (2002), the men and women were constantly vigilant of their bodies so as to guard themselves against any "corporeal mishap" (p. 488), such a stumble or a fall.

The onset of walking limitations additionally altered the men's and women's body images by making conspicuous the non-normative appearances of their bodies. Both male and female participants spoke of being highly conscious of the ways in which their walking limitations had changed their posture and had led to weight gain. These findings were consistent

with previous research that has shown that older adults with physical impairments are dissatisfied with the weight gain that often accompanies the experience of chronic illness and impairment in later life (Hurd Clarke et al., 2008). Unlike previous research, none of the participants discussed their body image in relation to other aspects of impairment, such as pain, fatigue, or loss of strength (Hurd Clarke & Bennett, 2013; Hurd Clarke et al., 2008). While some previous studies have noted gender differences between men's and women's ways of talking about age-related bodily changes (Finlayson & van Denend, 2003; Hurd Clarke & Bennett, 2013; Hurd Clarke et al., 2008), there were no clear gendered patterns in the men's and women's comments in the current study. It is possible that the study's focus on functional mobility prompted the men and women to discuss mobility-related topics such as postural changes, rather than the ways in which the changes in their bodies related to gender norms and expectations.

# 5: Perceptions and Experiences of Using a Cane and/or a Walker

In the second findings section, I examine how the participants perceived and experienced the use of canes and walkers in their everyday lives. I begin by discussing the participants' reasons for acquiring their walking aids. I go on to consider how the use of a cane and/or a walker was both an enabler and a hindrance to autonomous mobility for the men and women in the study. Finally, I examine how the cultural meanings of canes and walkers influenced the men's and women's perceptions of their walking aids.

# 5.1 "I Knew Then, You Have to Always Have a Cane": Experiences of Cane and Walker Acquisition

When asked to discuss their reasons for acquiring their walking aid(s), three men and 10 women indicated that they had obtained a cane or a walker as a result of the progressively debilitating nature of their chronic health conditions. For instance, Thomas reported that he began using a walker "when [he] started falling [because of his advancing Parkinson's disease] ... and [a doctor] suggested that [he] use the walker so that [he] wouldn't get hurt if [he] tripped". Joy, who had since progressed to a walker, described how she first acquired a cane on the advice of her family physician, who told her that she "wasn't walking straight" and that a cane would help to "keep [her] upright". These participants recalled their initial unwillingness to utilize their walking aids, and the ways in which they initially undertook the management of their walking difficulties using strategies like leaning on walls and furniture and converting objects such as umbrellas and grocery carts into makeshift walking aids. Nora recounted the following:

I didn't use a walker, I used a [shopping] buggy and a lot of the women thought it was kind of [funny], you know, but I didn't care what they thought. That was the

way I had to get around. I wasn't driving anymore, and I couldn't carry things because my hands are no good... So I'd used that for five, six years to go and get groceries and well, go anywhere.

However, the participants' ambivalence about their canes and walkers diminished once they began to perceive their walking aids as beneficial. Adeline articulated the reasons behind her decision to use her cane and two walkers in this way:

A friend of mine... gave me a couple of canes a long, long time ago... because he ended up in a wheelchair... He said, "You're going to probably need them" and I said, "Oh no, I won't". I was walking slow, but I was still okay. But a couple of years later, I did start using them... and then I've just started using the walkers, because when you can't walk properly and all of a sudden you start using [a walker], you start thinking, "Oh, this is a little bit easier", you know, "I can walk and I'm not going to fall over".

In contrast, three men and eight women reported that after experiencing walking difficulties for a number of years, they had finally been persuaded to start using a walking aid as a result of a traumatic event, such as a surgical procedure (two men and three women) or a fall (one man and five women). Participants who began using a cane or a walker after surgery shared similar stories to that of Marieke, whose osteoarthritis had been impacting her mobility for over 10 years. She reported that it was not until she had both knees replaced that she made the decision to use a cane at the urging of her doctor:

I had both knee replacements in 2005... It was so full of arthritis... I bought a cane in March, when I first had the first [knee] done and I didn't [use it]... But then [my doctor] said, with the second knee, "Now you have to promise, always use the cane"... He said, "Promise, because people don't always see you and they bump against you and your balance is out now a bit"... [Because] after [the first surgery] my balance never came back. So when I came out of the hospital with my second knee, then I had to promise to use it. I talked to myself and I thought, "You silly, this is helpful, so why don't you just [use it]?"

Those individuals who began using a cane or a walker after a fall recounted stories similar to that of Edward, who recalled his experience of the fall that ultimately persuaded him to use the cane he had had in his possession for several years:

I fell once coming out of the liquor store. I had two bottles of wine in a bag, and I didn't have my cane with me. I just left it in the car and I tripped over the curb and fell... The steps were about four or five inches, but I didn't have the support and over I went... I knew then, you have to always have a cane.

Aware of their physical limitations, several of these participants indicated that they had purchased a walking aid "just in case" months and sometimes years prior to experiencing the events that eventually spurred them to use their canes and walkers. For instance, Edith asserted:

I've had a bad back for years and [I used] a cane just for support [but] my kids had been bullying me to get a walker [for a while]... They kept saying, "Oh mom, you should get a walker", but I didn't think I needed it. They'd been pricing them at \$600, and I said, "Well, I don't need one, why should I spend the money on it?"... One day, I went down to [the medical] building and... this display had them on for \$373, so I bought one and... put it away in the corner until I needed it. And then [last] Christmas I had a fall... I slid [and fell] into the wall and pushed my fist into the side of my ribcage and hipbone... and bashed the back of my neck... All of a sudden I needed [the walker], so I started using it.

However, much like the participants who had acquired their canes and walkers as a result of their deteriorating health, these men and women delayed purchasing and/or using their walking aids until their health and mobility were threatened.

# 5.2 "You Can Do So Much More": Experiencing Canes and Walkers as Mobility Enablers

Despite their initial reluctance to utilize their devices, many of the participants (four men and 15 women) expressed their pragmatic acceptance of, if not gratitude for the ways in which their canes and walkers had enabled them to, in the words of Diane, "maintain a certain level of

mobility that [they] might not have otherwise". For instance, Joy had this to say about her walker:

[Before I got the walker] I couldn't get anywhere, you know... [The walker] means I can get around... You can do so much more if you have it. When you first start using them, you're hesitant about it... But then after you get used to it, you think, "Why wouldn't you [use a walker]? I should have started using this much sooner".

Although Charles stated that he had "hated [his walker]" when he began using it because he had "wanted to walk on [his] own", now maintained that he "loved every part of [his] walker" as it enabled him to "get up and get out and do things" instead of "sitting in a chair for the rest of [his] life". Similarly, Alma remarked:

At first I don't like to use the cane, because I'm ashamed... Now, whenever I go out, I'm using my cane. It's very helpful for me... It's very easy to walk, and I can walk faster. It helps a lot... Without my cane, I cannot walk fast. Without my cane, my knee is aching. Without a cane, I cannot go wherever I want to go... By using [a] cane, I can go out alone now... Before [I got the cane], sometimes I [didn't] go out... I just [stayed] at home... Now I can go out, I'm not afraid anymore.

Two men and eight women described how the use of a cane or a walker had improved their mobility by helping them to negotiate a variety of environmental barriers. Although only Alma stated that she "[could not] go up the stairs" without her cane, I observed a number of participants using their canes and walkers to negotiate staircases and steep slopes during our walk-along interviews. The participants additionally indicated that their walking aids had enabled them to walk on rough or uneven terrain. For instance, Edith maintained:

For short distances it's not bad, because you can walk it out. But for any lengthy [distance, I need my walker]... When we went out to [a social activity on a farm] last week, I was very glad of having it because it was rough ground and I would've had trouble.

Marieke noted that her cane came in handy when she was out in her garden "because grass is not very easy to walk on", while Alice contended:

When you're out, there's just so much unlevelled ground... and some of the curbs around here are pretty high... I mean, even just going to the [grocery store], you're going up and down curbs... And [the] walkways, they all go from brick to cement to pavement to [something else]... so [it's] important to have the cane... [The cane] helps, because I can go places that I probably wouldn't be going.

Seven women discussed how their walking aids had enhanced their mobility by helping them to manage their pain and fatigue levels. For example, Leslie spoke of how her cane had increased her ability to cope with arthritis-related back and knee pain:

My back's bothering me, so definitely I've been leaning on [my cane] more... And my knee... I [can't] walk very far [because] my knee starts bothering me. It's always something! So [I'm] using the cane for that. I'm depending on it more.

Others, like Jackie, noted that their walking aids were valuable tools for dealing with fatigue:

Fatigue is very big with MS, so the walker is definitely a necessity... I can get out of bed... pull [myself] up... pull [myself] into the bathroom. It's come in handy other times, because it has a seat. It's great for taking a cup of coffee from the kitchen to the bedroom. If I know I'm going somewhere that's a little bit more walking than usual, I will take the walker, [because] then I can have a seat.

### Likewise, Adeline elaborated:

I really like the walker... It's very efficient... because I don't tire myself [using] the walker... so it's been really, really good for me. [My physiotherapists] said to pile on the food [on the walker]. See, what I was doing before, I would go and I'd get my cup of coffee, bring it into the room, then I'd go back and I would cook my dinner, and then I would take the plate, and sometimes I could take the cutlery, but I had to do this all separately. And so by the time I got to sit down and eat... I was really quite tired. Whereas with the walker, you can put everything on there, and then just trot in there and sit down and eat. So it's very convenient... and it saves a lot of my [energy].

Five men and 12 women indicated that their canes and walkers had enabled them to maintain their mobility by addressing their balance concerns. For example, Charles remarked: "This is my lifesaver... I get wobbly because of the diabetes... So if I didn't have this, I'd be on the floor". Edith had this to say of her walker:

With the walker, I can balance... That's why I use it. Because even walking out [into the garden]... I've got to be careful with my balance... That's what started me using it... I felt that I was not staying steady on my feet... I'm a little more sure of myself with it.

Ki-Young spoke of the consequences of not using his cane:

For the balancing problem, it's safer [to use a cane] than losing balance... I like to keep using this, because sometime I lose the balance and fall down, and then [I'm] finished, you know? It's really hard to get up... So without this, I cannot walk.

In addition to providing them with physical support, the men and women contended that their canes and walkers also increased their sense of "security", or in the words of Dorothea, gave them the "assurance that [they were] going to be okay". Isabella explained how her walker helped her to feel safer by allowing her to have "more control of [her] movements":

If I feel a little bit insecure or unsure of myself, then I have something that I can grab onto... If you're walking without it, you don't have the control. This way you have the control over [my body]. You can have something there in front of you that you can grab onto if [your] leg feels like it's going to give out... The walker gives me more stability and more self-assurance.

Henry and Regina remarked:

Henry: [The cane] gives [Regina] confidence... She has some trouble [because] her balance is not good.

Regina: Oh no, my balance is not good.

Henry: So it gives her a little confidence. She's got something to hang onto, you know. You feel security when you put it in your hand.

Lastly, five women asserted that their walking aids increased their safety by providing a visual reminder of their disabilities to able-bodied individuals. For instance, Leslie said:

It's a visible sign. "Do not go near me. Don't knock into me"... If you have something like that, people will give you a little more [room]. And people are pushing and shoving all the time, I don't know if you notice that... People shove you around and it doesn't take much to set me off balance, so it is a really good support for that. It just gives [me] more of a feeling of security.

Likewise, Diane stated: "You know, the cane is a good visible thing for people to see. Sometimes when people see you have a cane, they tend to give you wider berth, and so it's a good thing to have in that regard". This was particularly important for Isabella, who noted that her cheerful and positive demeanour sometimes made her pain and walking difficulties less obvious to others. During our walk-along interview, Isabella told me the story of how a volunteer she worked with did not recognize the extent of her walking impairments, and had brusquely asked why she required help carrying her cafeteria tray, implying that Isabella was lazy. Isabella was deeply hurt by the incident, and commented on how her walker was essential for making able-bodied others more aware of her mobility limitations. In this way, the participants perceived their canes and walkers to be useful physical supports and a means of increasing their sense of confidence and safety.

# 5.3 "It Gets in the Way": Experiencing Canes and Walkers as Hindrances to Mobility

Even as they described numerous benefits to having a cane and/or a walker, the majority of the participants (three men and 16 women) also discussed how their walking aids frequently hindered their autonomous mobility. To begin, four women reported that the use of a cane or a walker had limited their mobility by causing pain and stiffness. For instance, Edith noted that she would have preferred her walker to be "a little higher" because she was "a bit stooped usually" while she was using the device, resulting in a walking posture that was "a little hard on the back". Alice was reluctant to walk with her cane for extended periods of time as it aggravated her arthritis symptoms, saying:

It shouldn't be too painful walking, except this wrist now is really starting to bother me... Even holding [the cane] in my hand is getting quite painful... If I was using it for a while, it starts to shoot a bit.

Marieke had this to say: "I have carpal tunnel operated on both hands... Yeah, that's the trouble with walking with the cane, you know. It is [difficult to use]. Sometimes your hands go to sleep because... the pressure... I mean, it just goes on and on".

Three women reported that their walking aids had made walking more challenging by compromising their balance. Dorothea explained how using a cane impeded her balance, saying: "I find that the Nordic poles give me very good balance, whereas a cane, you're walking and flopping to one side or wandering over there and then back". Isabella pointed out that her walker sometimes caused her to be less steady on her feet:

If I'm out somewhere... and if I have a bag, I take this crutch and put it across this way [on the opposite side of the walker] for balance... I need something, because it does... throw things off-kilter and... I do not want to pop a hip.

Likewise, Helen asserted that her cane often put her in danger of falling:

I don't like it... When I walk, it jars me, you know, it makes you feel like you're going crooked. It's too slow and it gets in the way too, [and] you can trip on it... It can get in the way as much as it can help you.

Two men and 12 women described how their mobility had been impeded by their walkers' substantial size and weight. For instance, Robert noted that he avoided using his walker because it was "quite heavy":

Although I do have a walker, I haven't used it all that much... It's in the trunk of the car. Now, one of the problems is [that] although I can lift it out all right, it is sort of an effort. Not great effort, but *some* effort [emphasis in original]... It's easier to say, "Oh, I'll just take the Safeway shopping cart and I'll push that instead"... I would be afraid that when I'd be pulling it up [out of the car trunk] it might sort of run down and pull me [down] with it or something.

Leslie had this to say about why she primarily utilized her scooter in combination with a cane rather than mobilizing with her walker:

[The walker is] a chore to use. It's not an advantage... It's too darn heavy for me... Every time I use the walker, I'm sore after. Like the next day I've got sore muscles, so it doesn't give me a lot of motivation to use it.

These participants also asserted that the large size of their walkers made them difficult to manoeuver, especially when compared to a cane. Alma, who had previously used a walker following her knee operation, explained why she had switched to a cane even though a walker made her feel more secure:

[The walker] is very big for me, and when we go up to the bus, it [takes up a lot of] space... When you go somewhere ... it's a very big thing to bring, that one. Not like the cane. [The cane] is very simple. If you don't like to use your cane, you just put it in your arm like that [or] fold it and put inside your bag.

#### Isabella contended:

My four-wheeled [walker] doesn't fold... and it takes up too much room. The other night we went over to the mall and had supper, and [the server said], "Well, take your walker and put it over there". I said, "Sorry that's not convenient". What if I have to get up and go to the bathroom? ... [And] if you've got a walker that doesn't fold, what do you do? ... Your lifestyle is different. I mean you're always planning on where you're going.

Additionally, six women maintained that their unwieldy walkers caused them embarrassment when, in the words of Helen, the "cumbersome" devices "[got] in other peoples' way". Edith stated:

[In] stores, their aisles are very narrow, some of them. And if there's people in them, then it's awkward, and I don't like to interfere with people in the store, so I don't go to the store if I don't have to. If I'm going to be in stores, quite often I'll take my cane, and leave the walker in the car, if [I'm with] family... because I don't like to push people around. I don't like someone always having to move out of the road for me, I just don't like it. That's my biggest objection, is that you have to be quite inconsiderate sometimes of others. It's difficult.

Given the numerous ways in which their canes and walkers caused them to experience pain and discomfort, compromised their balance, and impeded their mobility by virtue of their size and weight, it is perhaps unsurprising that the majority of the participants viewed their walking aids as, in the words of Doreen, "a damn nuisance".

# 5.4 "You're Getting Old When You Need These Things": Perceptions of Walking Aids as Stigmatizing Symbols of Disability, Dependence, and Old Age

In addition to experiencing physical challenges to using their walking aids, many of the participants (three men and 14 women) also expressed ambivalence towards their canes and

walkers as a result of their perceptions of the devices as signifiers of advanced age, decreasing physical abilities, and diminished autonomy. These men and women echoed the sentiments of 92 year-old Edward, who had this to say about his cane:

It's a symbol of aging, to my mind... or incapacity... You create the picture of depending on something. You're losing independence... [When] I'm walking with this [cane]... You think people are thinking... "Here's dear old Edward, walking with a cane".

Adeline remarked: "Using a walker is [equivalent to saying] 'I'm an old, feeble person' and, therefore, there's a stigma attached with it... It means that [the person who is using it] is an old fart".

The participants often had difficulty reconciling their previous views of themselves as youthful, healthy, and able-bodied individuals with their newfound identities as cane and walker users. For instance, Ki-Young, aged 85, noted that when he had bought his cane a couple of years prior to our interview, he experienced a "funny psycholog[ical effect]", suddenly feeling "really [like] an old person [and] a very sick person" because he "[could] not walk anymore". Seventy-eight year-old Joan likewise recalled that acquiring a walker at age 77 had made her feel "a little embarrassed at first, because I thought, 'Oh my gosh, I'm really getting on... It was hard to think that [I was] getting [so] old that [I needed] to have some help to walk". When asked what it was like to start using her walker in her late 70's, Joy replied:

It wasn't really that hard [to use], but it was more vanity. That silly pride you have, you know, that "I can do this, I don't need help" thing. You're getting old when you need these things. Even though I knew I was getting old... You hate to admit that you're old... Suddenly you realize you're mortal and you're going downhill.

Leslie, aged 69, articulated the reasons for her discontentment with her walking aids in this way:

For the first while I used a cane, I felt a little embarrassed. I thought, "You phony, you don't need a cane!" You know? I figured I was too young. I thought, "Well, most people I know don't use canes and so I should be able to get along without one".... And I found that a hard adjustment to make in that sense... I'm not *that* old [emphasis in original].

In addition to making them more cognizant of their advancing age, one man and five women reported that using their canes and walkers had also exacerbated their concerns about their appearances. For instance, Marieke remarked that her cane made her look more stooped as she walked:

I feel when I walk with the cane I'm more bent over. I know it because when I look in the mirror or a window, I think, "Oh wow, I'm really bending over". My cane is still high enough, but you [bend over] automatically because you lean.

Louise noted that using a walker had made her more self-conscious of the weight gain she had experienced in later life:

One thing that bothers me is being fat and leaning on the walker. Sometimes your shirt rides up and you've got a bit of a bare back. I'm always conscious of covering up, making sure that I'm wearing the right clothes so that I'm not going to look silly... But at the same time, I sometimes catch sight of myself shopping, and I think, "Egad, I look terrible, I'm so fat! This great fat behind is sticking out behind the walker!"

The participants' perceptions that their canes and walkers were reminders of their old age and disability were often reinforced by their interactions with younger people and individuals who did not use walking aids. For instance, Helen observed that her cane heightened the visibility of her impairment:

People look at you [differently] when you've got a cane. They think, "Oh yes, she's this infirm person", and so they treat you different. You know, they make sure you're alright crossing the road or whatever it is. And it makes me feel quite old...

I'm not that old, but I think my cane indicates to people that I'm unsteady on my feet.

#### Edward similarly contended:

I'm conscious of the fact that I look bent [when I use the cane]... I know because when I'm trying to cross the road... people always stop... They obviously see that I'm old. Otherwise they wouldn't stop... I know they can see me as an old person... They notice an infirmity.

The men and women additionally commented on how their use of a cane or a walker sometimes led younger, able-bodied people to provide them with unsolicited help. Adeline, who utilized a cane, a walker, and a scooter to mobilize, had this to say:

If you're [shopping], strangers come up to you... [And] if somebody's coming to my aid, you know, the voice changes. The voice comes up because they think I'm deaf or something. "Oh, can I get that for you up there? Is it okay? Would you like me to get that for you?" In that kind of tone of voice, as if I'm a little kid or something. I'd like to smack them!

Finally, seven women voiced their fears that the visibility of their impairments would make them more vulnerable to ageism and ableism. To begin, the women asserted that mobility impairments in later life were often associated with other negative characteristics. For instance, Louise contended that older adults who had severe mobility impairments were sometimes "treated as if they're stupid". She added: "When I start speaking to people, they accept me [as] normal... But some people get treated as if they're a little retarded. [People] translate [a physical disability] as mental... That's something that we handicapped people have to deal with". The women's perceptions often stemmed from their personal experiences of age-based discrimination and stereotyping. Adeline, who worked part-time as a fitness instructor, spoke of the ageist

expectations younger individuals often had of her and the older adults who took her exercise classes:

I found it very difficult... teaching in the community center, because... their focus seems to be on the youth... So for me to bring in people that have disabilities, you know, I felt a little uncomfortable... because I really felt that people didn't understand about the disability issue. For example... a younger person came in [to the class] and she said... "My god! They really work hard!" I said, "You're darn tooting they do." I mean, what the heck? What do you think this is?

Likewise, Isabella spoke of experiencing several instances of overt ageism and ableism:

I've had people who've said, you know, "Get out of my way, you stupid old lady" and use words that I'm too much of a lady myself to repeat... I used to take the bus... from [my house] every day... One day out here, when we were going home, it was three of our ladies from [the seniors' centre] behind me with their walkers... And the [bus] driver said to me, "You shouldn't be seen out in public... You're handicapped"... And he wouldn't put down the stairs for myself or for the [other] people from here... Somebody that's in public service should not be driving a bus if they're going to be treating our seniors like that. That's wrong - very wrong. What do you expect us to do? Sit in a corner and be totally useless?

In this way, the participants' concerns about the social signification of their walking aids often derived from their own past experience or realistic fears about the mistreatment of older, disabled individuals

#### 5.5 Discussion: Meanings of Cane and Walker Use in Later Life

In this chapter, I considered the men's and women's perceptions and experiences of utilizing a cane and/or a walker. I began by looking at the participants' reasons for obtaining their mobility aids and discussed how the use of a cane and/or a walker had enabled many of the study participants to experience independent mobility. At the same time, I looked at the ways in

which many of the participants perceived their walking aids to be a hindrance to autonomous mobility and a stigmatizing symbol of agedness, disability, and dependence.

The study participants indicated two reasons for acquiring their canes or walkers, namely the mobility restrictions that stemmed from the progressively worsening symptoms of their chronic conditions and the occurrence of traumatic events (such as falls and surgical interventions). These corresponded with the men's and women's experience of multiple and severe health conditions, previously outlined in Section 4.1. Similar to earlier research (Copolillo & Prohaska, 2001; Gell et al., 2015; Gooberman-Hill & Ebrahim, 2007; Haggblom-Kronlof & Sonn, 2007; Hartke et al., 1998), the majority of the current study's participants' stated that they had acquired a cane or a walker to address the activity limitations they had begun to experience following the onset of their walking difficulties. Like prior research that has linked older adults' acceptance of and satisfaction with their walking aids with the perceived benefits of their use (Aminzadeh & Edwards, 2000; Bateni & Maki, 2005; Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Kylberg et al., 2013; Lofqvist et al., 2009; Resnik et al., 2009), many of the men and women indicated that they overcame their initial ambivalence about cane and/or walker use when they began to see the usefulness of their devices. The participants were pragmatic as they expressed gratitude for the ways in which their canes and walkers had enabled them to overcome environmental barriers to access, thereby enabling them to maintain independent mobility. These findings reflect previous research that found that older adults tend to hold positive perceptions of their walking aids when these are perceived to facilitate activities of daily living and support a good quality of life (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al., 2009; Thomas et al., 2008). Similar to earlier research (Bateni & Maki, 2005;

Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Haggblom-Kronlof & Sonn, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Resnik et al., 2009; Roelands et al., 2002; Thomas et al., 2008), the findings revealed that cane and walker use often ameliorated the men's and women's ambulatory capacities by addressing balance concerns and increasing individuals' psychological sense of security. To date, no research has examined the impact of cane and walker use on the experience of pain and fatigue. The current study found that the use of a cane and/or a walker often helped the participants to manage their pain and fatigue levels, thereby enhancing their mobility. Interestingly, five women additionally noted that their walking aids enhanced their safety by acting as a useful reminder of their mobility limitations for able-bodied individuals. In this way, the women perceived their canes and walkers as a useful means of making their disabilities visible to others in an effort to increase their safety and reduce the risk of falls.

At the same time, the majority of the men and women also perceived their canes and walkers to be barriers to independent mobility. Many of the participants noted that while their canes and walkers provided physical support, they also got in the way and interfered with their balance. For some (particularly participants who had osteoarthritis), the use of a cane or a walker caused discomfort, pain, and stiffness. Moreover, the walker users in the study reported that their devices were difficult to utilize, and as such, were often a hindrance to independent mobility. While previous research has shown that age-related physical limitations such as poor balance and decreasing strength affect mobility users' abilities to use their devices (Lofqvist et al., 2009), the current study found that particular design elements in walkers may also impede older adults' ability to ambulate freely and safely. In particular, the study participants spoke of the ways in which their walkers' large size, limited manoeuvrability, and heavy weight often constrained

their mobility. For some of the women in the study (but none of the men), the walkers' bulk also contributed to feelings of embarrassment, as they perceived their wide and unwieldy walkers to be overly large and conspicuous. While no previous studies have examined gender differences in men's and women's perceptions of their walking aids, research on men's and women's experiences of chronic illness may help explain the current study's findings (Hurd Clarke & Bennett, 2013; Sanders et al., 2002). This research suggests that the women's feelings of embarrassment may have been related to feminine gender role socialization. In particular, the women's comments about how their walkers "[got] in other people's way" and "interfere[d] with people" are consistent with studies that have shown that women's experiences of illness and impairment are often shaped by gendered expectations that women should be selfless, caring, and considerate of the needs of others (Hurd Clarke & Bennett, 2013; Sanders et al., 2002). The women may also have been attempting to acquiesce to cultural ideals that equate femininity with physical attractiveness, delicateness, and grace (Garland-Thompson, 2005).

In addition to experiencing their canes and walkers as physical hindrances to mobility, many of the participants also perceived their walking aids as stigmatizing signifiers of aging, frailty, and dependence. Echoing earlier research (Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hedberg-Kristensson, et al., 2007; McNeill & Coventry, 2015), more than half of the participants expressed the opinion that canes and walkers denoted incapacity and physical decline. Paradoxically, the use of a cane or a walker often enabled the men and women to maintain their membership in the third age (Gilleard & Higgs, 2013) by allowing them to remain independent, increasing their opportunities to engage in social and physical activities, and reducing their reliance on others. Conversely, the men and women expressed positive attitudes towards their walking aids when these enabled them to engage in activities of daily living and

social pursuits that signified their health, youthful vibrancy, and independence (Aminzadeh & Edwards, 1998; 2000; Bateni & Maki, 2005; Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hedberg-Kristensson et al., 2007; Lofqvist et al., 2009; Resnik et al., 2009; Thomas et al., 2008). At the same time, the men's and women's canes and walkers acted as potent reminders of their disability and old age, bringing into stark contrast the participants' aging bodies and declining mobility and their previous perceptions of themselves as healthy and able-bodied individuals. The use of a walking aid was perceived to draw attention to signs of ill health and immobility, identifying the men and women as members of the fourth age (Gilleard & Higgs, 2009; 2013; Higgs & Jones, 2009; Higgs et al., 2009). Moreover, the participants' canes and walkers were conspicuous indicators of their agedness and disability to younger individuals and those who did not require walking aids. Indeed, similar to the findings of previous research (Resnik et al., 2009), some of the men and women described experiencing unwanted attention and ageist discrimination when they utilized their canes and walkers in public spaces. As such, while the use of a cane or a walker denoted independence and activity to many of the study participants, it was also a constant reminder of their ongoing mobility declines and a recognizable mark of old age, frailty, and disability.

#### 6: The Social and Environmental Context of Mobility

In the last findings section, I examine the social and environmental factors that shaped the participants' use of their canes and walkers. I begin by discussing the ways in which the men's and women's marital and work histories had influenced their mobility practices. In addition, I present the participants' accounts of the spatial barriers and enablers to mobility they encountered in their everyday lives, focusing particularly on the accessibility of public spaces and transportation. Finally, I consider the importance of supportive social networks and community inclusivity for establishing and maintaining independent mobility.

### 6.1 "I Worked All My Life": Biographical Context of Mobility

Four men and nine women indicated that their mobility had been shaped by their work histories and marital relationships. Two men and four women, the majority of whom had lower incomes and had had working class occupations throughout their lives, viewed their walking difficulties as inevitable outcomes of their former vocations. For instance, Charles attributed his walking difficulties to the back problems he had developed while performing janitorial work:

I worked all my life... My wife can't work, so I worked. And I worked two jobs for a long time. Physical jobs. Cleaning. I worked [as a janitor] for 35 years... I did all the heavy stuff... When I started in [the 1970's], I did all the physical work, because the majority [of the workers were] ladies, so I got all the heavy stuff. And then when the guys started coming in, I still did the heavy stuff because the boss put me on it... So I'm shot. My body's shot... from doing the janitor work.

Likewise, Marieke traced the roots of her arthritis to her work as a housecleaner in her 30's and 40's:

You know, you did everything on your knees. You washed the floor on your knees because you had to do the corners. When I started to work here [after immigrating to Canada], I did housecleaning... so you worked on your knees, and that gradually became arthritis.

Leslie, a former nurse, had this to say:

My body is wearing out... [But] I don't feel like my body is betraying me. I worked hard. I worked very hard physically, so it's kind of getting used up now, and that's okay. I mean, that's just wear and tear. That's normal.

As such, these participants contextualized their experiences of having limited mobility within their histories of performing physically demanding labour.

In addition to describing how their employment histories had shaped their experiences of having restricted mobility, three men and seven women discussed how their past and present marital relationships had impacted their walking abilities. One man and two women commented on how their current relationships had enabled or impeded their mobility. For instance, long-time married couple Henry and Regina described their dependence on one another in this way:

Henry: We work together on everything, you know.

Regina: Work around things.

Henry: I grab her and she grabs me, you know. I mean, we've been together now for 51 years. We just rely on each other.

Regina: We just deal with whatever we've got to deal with.

Henry: And help each other out.

Regina's reliance on Henry was also evident in the way Henry helped her to arrange the majority of her social outings (including the study interviews), driving her to and from most of her

activities. In contrast, Jackie found that her husband's attitude towards her MS sometimes compounded her walking difficulties:

My husband had a hard time with [my MS] because when we got married, I was the strong one, right? He had a very hard time coming to grips with the fact that I had this thing... I have a handicapped parking pass. He won't park in the handicapped spot because somebody who's *really* [emphasis in original] handicapped could use the spot, right? I mean, he helps... but he has a very, very hard time with it.

Two men and five women, all of whom were recently widowed, framed their mobility losses in the context of their partners' deteriorating health. For instance, Marieke spoke of her late husband's illness as a precipitating factor in the development of her walking limitations:

I used to take a strong walk, you know? I always loved walking and gradually, with [my husband] not being well, you just stay at home. And of course, I took the car when I went grocery shopping [because] I was always rushing, so you don't do your walking. You're back and forth quickly because you know he's alone here... The last two years, with my husband not [being able to] do too much, I just sat more with him and, of course, then you don't walk too much.

Edward spoke of how his late wife's declining health and his caregiving responsibilities had impacted his mobility:

Going back through the three-year period that my wife's health deteriorated... because I had to give her pretty constant attention, I wasn't doing my normal walking routines. Once upon a time... I'd walk an hour a day. When [my wife's] health began to deteriorate, I did no walking... I didn't have time for that... And as a result, my muscles lost their flexibility, I guess, so walking became difficult. It became an effort. And I found [that] 20 minutes was about all I could take.

As a result, four women and one man found that their mobility had improved following the deaths of their spouses. Alice, who cared for her husband over the course of a protracted illness, noted that her caregiving duties resulted in her "just [sitting] there", adding that it took her "a

few months [after her husband had passed] to realize that I can go [out] and do things". Louise elaborated:

Since my husband died, I have just gotten much better health-wise... I'm more active and able to get out because I don't have a husband to worry about... So, actually, his death has been a great relief to me, sadly, but that's the truth.

In contrast, one man and one woman spoke of how their partners' passing had resulted in decreased mobility. Robert had this to say about why he ceased to do certain activities following his wife's passing:

Definitely there was a very noticeable change after she died... because we used to do everything together. We were like two peas in a pod and where [she] went, I went... I think it was more just a question of, well, she's not there anymore, so I'm not either.

Lastly, three women reflected on the ways in which the intersection of their employment and marital histories had impacted their current incomes, and how these in turn had affected their current mobility levels. Isabella, who had been a stay-at-home mother throughout her life and who was left with little income following her husband's death, recounted how her financial situation had hampered her ability to acquire a properly fitted walking aid:

I had wanted to get the heavier one [a four-wheel walker]... but they're a little bit more money... They can go up to \$600, which is quite expensive... When [I had to get a walker] I was thinking "Oh! ... This month I'm going to be stretched to beyond my abilities with my pension"... And it's hard – very, very hard... A lot of seniors [like me] have just strictly their pensions, and it'll be either I'm going to be buying this [walker]... or buying groceries... And the government does not pay for that... A lot of the attitude is, "Well, you're a senior, and you're going to pass away anyway, so why should we?"

As a result, at the time of the interview, Isabella was primarily using an inexpensive walking frame that limited her ability to walk. Grace, whose separation from an abusive partner had left her in a difficult financial situation, explained how her small income had made it difficult for her to repair her broken walker:

[The back strap on my walker] has always been loose apparently and... I had gone somewhere... and I sat down on it... and [the strap] went, "poof!" and I've been trying to get it fixed since then, but I don't know where to go... I do know where to go, but it's going to cost a fortune just to get down there and get it fixed [emphasis in original]... I can't get anybody to fix it without going all the way down to [a suburb of the city where she resides], and that means two buses and it's just too much.

Although the broken back strap prevented Grace from using the walker's seat to rest when she was tired, she saw no alternative but to continue using her damaged device.

### 6.2 "There's Those Places That You Can't Get to": Environmental Barriers to Mobility

All 24 of the participants spoke of experiencing various environmental barriers to mobility in their homes and in public spaces. For example, three men and 10 women indicated that stairs were a significant obstacle to mobility, as they made comments similar to those of Louise, who stated:

I can't go up the stairs. We've lived [in this house for] about three or four months, and I've been there [on the second floor] twice. It's too dangerous. I find I'm very scared, especially coming back down. They're hard, stairs. I can't manage them.

In addition to being unable to walk up and down stairs on their own, these men and women reported having difficulties managing stairs with their canes and walkers. For instance, Robert had this to say:

If I go to the mailbox and get a bunch of mail out of the mailbox, then I have to use this hand [to hold the mail], and then the cane [is] in this hand and coming up the stairs is difficult. There's a rail here and a handful of mail, and the rail on the other [side], and I'm busy [holding] the cane [with my other hand]... And I really do need that hand for coming up the stairs, because I hold onto the rail and pull myself up.

Three women were like Joan, who was unable to mount staircases at all with her walker:

If I'm by myself... [I'm] not able to take it into the house because of all the steps [leading up to the house]... I have about 12 steps to get up to the house, and that makes it too hard... So I [usually] just leave [the walker] in the car... It's too difficult to get up the steps [with the walker].

At the same time, the participants noted that ramps were often an inadequate alternative to taking the stairs. Joy asserted:

Sometimes I'd rather go up the stairs and get someone to carry my walker, because [then] I don't have to... walk a mile to get to [the ramp]... They make these ramps for you, and they're great, except I have to walk six times as far to get up a ramp. So often what I do is I tell my son to pick it up the [walker], and I walk up the stairs. You know, three stairs is so much easier than 10 minutes back and forth and back and forth. Of course, some places don't have ramps, and that's worse still.

Louise pointed out that ramps were often poorly marked and inconveniently located:

Yesterday I went to the eye surgeon... And it [was] like going through a minefield to get in there, because there's these steep steps... and there is a ramp, but I mean I couldn't see it. I didn't know [it was there]. There were no signs saying there was a [ramp]. It was around the building somewhere. And in any case, it didn't go to where I needed to go.

One man and six women who used walkers indicated that they struggled to open doors and move through doorways with their mobility devices. For instance, Joan contended:

I find doors are a challenge, unless they have the automatic [door openers]. Like the bank has the automatic doors, and that's really handy. You just press the button and the door opens, but other doors, you have to open them and pull the walker through and I find that that's a bit of a challenge... I find that if I'm not careful, I want to go over backwards, so I have to be really careful about that.

Leslie remarked that she often struggled with the doors to her apartment building while using a walking aid:

[The front doors are] spring-loaded and they're heavy, and if you're carrying something, you have this hand to open the lock, but you're not allowed to pull on the lock, [so] you have to use [two hands to unlock the door and pull] the handle. But you might have some groceries in that hand, so then you have to get the key in the door and get the key out and then hold the door open and I mean logistically, it's quite a challenge!

During our walk-along interview, I also observed the complicated routine Leslie performed each time she exited her apartment building in her scooter. Because the building's only rampequipped entrance did not have automatic doors, Leslie was required to get out of her scooter, unlock and open the building's doors, get back in her scooter and drive through the doors, and get out once again to close them before leaving.

Two men and three women talked about the difficulties they had negotiating roadside curbs. For instance, Charles had this to say about the lack of curb cuts in his neighbourhood:

The only problem I have is when I go shopping... there's obstacles. You know, there's not ramps all over the place, so you have to lift your [walker] up [to] get up [the curbs]... Yesterday I had an *awful* [emphasis in original] time. Up and down the sidewalks and down the curbs and then I had an awful time getting into the hearing aid place... I've learned to get up on curbs [but] it's the high ones I have trouble with, you know, because of my weight.

During my walk-along interview with Nora, I witnessed her angling her walker as she walked down a curb cut to cross the street in order to prevent the walker from "running away from [her]". Adeline had this to say about her experience of using curb cuts with her walker:

This is the part that is very difficult with the walker, because one has to be very careful. The feet don't follow down the hill as fast as the walker does... I [get] really nervous... You know, when you're going down into the cuts in the sidewalk... that's really steep for a walker. It just kind of rolls away from you... So you really have to be in control and know how to manipulate your walker... I mean, it doesn't look like a hill to you, I'm sure, but if you're going down it with a walker, your feet are not going as fast as the walker is going... and I'm scared I might trip or something.

Three men and 11 women cited broken and uneven sidewalks as obstacles to outdoor mobility. These were also the environmental barriers that I observed most frequently during the walk-along interviews. For instance, while walking with Edith, I noticed that she had difficulty keeping her balance over unmaintained parts of the sidewalk as well as a section of pavement that was unfinished due to construction. Likewise, Henry reported: "Uneven ground, you know, that's dynamite... Some of these sidewalks, particularly around trees down the boulevard, when the roots push the [pavement up]... [make it] easier to trip on the concrete". Joy had this to say:

The worst part is the broken up sidewalks... it throws you [off-balance and]... it hurts, you know. I find... there's a lot of city sidewalks that need to be fixed. Around here they're really quite bad... I mean, walking on sidewalks that are uneven, you know, you could easily trip if your vision isn't good, and mine is going a bit right now... In fact, I walk on the road. I don't walk on the sidewalk.

Moreover, two women noted how navigating uneven terrain could be made more difficult by bad weather. Doreen explained: "If it's raining, or it's slippery, I have to be extra careful... because you have to make sure that... your cane is grounded. And it's not that easy when it's raining to see that it's grounded".

One man and six women observed that many public spaces lacked seating, thus making it difficult for individuals who required frequent rest breaks to mobilize in their communities.

Diane stated: "It would be nice if there were more places to sit down. [The mall] has benches, but you know what? Department stores and things like that – where do you sit?" Charles similarly remarked:

In the mall area next door they took away all the benches, so... there's nowhere to sit. It's really unfair. And all's they're doing there is putting roofs on... and making it earthquake proof. So there's still enough room to put benches there, you know, because old people have trouble... I don't know what they're thinking. There's a lot of old people around here.

Alma spoke of the consequences of mobilizing in places without readily accessible seating:

In the mall, when we go there with my daughter, I'm looking for a bench inside the mall. Because... some stores [have a] bench outside, but there is no [bench inside the store]... [And] I walk and walk there inside [the store], and I'm leaning [on my cane] already because my back is aching. I like to sit down [but] there's no bench... So I [would] love a bench inside the store or something... I need that.

These participants pointed out that when seating was provided, it was often inappropriate for older and/or disabled individuals because it was too low, overly soft, or lacking back support and arm rests. For instance, during our interview, Alice mentioned that she found the chairs at the senior's centre in which the interview was held to be difficult to use, saying: "At home, I manage quite well... but right now, I'm going to have a little struggle getting up, because once you get down in these cushiony things, it's more difficult to get out of them".

One man and three women discussed the challenges they experienced utilizing their walkers in small and crowded spaces. These participants were like Louise, who contended: "I think I have more balance... with the walker... [But] sometimes... I can't get through [the door

with my walker], so I use the cane... There's those places that you can't get to with the walker". For instance, Charles recalled the effort required to move about the room he had previously been assigned in his residential facility:

The room I was in was so small that I had trouble manoeuvring [my walker] around... I mean, it was scary because I had to walk backwards, and then your wheel gets stuck under the bed or somewhere. And I had real trouble even getting in and out of the bathroom. I had to back in... It was awful.

Joy had this to say about the inaccessibility of public toilets to walker users:

Some of the older buildings are not very good, like the washrooms and that sort of thing are not very good for walkers or wheelchairs, or even a big person. My doctor's office is terrible. I mean, the toilets were meant for children they're so small... I don't usually take the walker in with me unless it's a good-sized stall, a handicapped stall, you know.

In this way, the men and women confronted a number of barriers to independent mobility within their built environments.

Only a small number of participants (three men and four women) discussed environmental enablers to mobility, speaking particularly of the accessibility of their own homes. For instance, Henry, who lived independently in the community with Regina, noted:

Fortunately, the house we're in now was, there was a lady with a wheelchair in there, so everything in there is [accessible, including] the bathtub and all that. It's all on the flat and we don't have to climb stairs, so it's fortunate that it worked out that way.

Adeline, who resided in government-subsidized housing designed especially for older adults, was grateful for the accessible elements that were included in the building's design:

I've got an elevator and everything, whereas we had stairs all the time [in the apartment building I used to live in]. And even though I need to walk stairs, it's a heck of a lot easier to go in the elevator... Every morning I'm so grateful for this place because you see... I could fall down, and I would've fallen down many times if it wasn't for those [horizontal] bars [running along the walls of the apartment]. I just grab a hold of them. And then I got some extra bars put up beside the shower, so when I come out of the shower, I can grab on... if I have any difficulty in getting up... So they've saved my bacon many times.

Charles praised his long-term care facility's open design concept, which made it easier for him to mobilize with his walker: "Everything's wide open. The lunchroom is wide open and the games [room] and the hallways. Everything is wide open, so it's excellent".

A few participants (one man and four women) were able to make accommodations to their homes and communities to make them more accessible. For instance, Diane, who was a former nurse and one of the few participants who had knowledge of her community's home support resources, showed me the numerous adaptations she had made to her apartment:

A friend of mine, a retired public health nurse, told me about the fall prevention program here... So I got a note from the GP [general practitioner], I contacted them, and I got the occupational therapist to come over here and do an assessment... We made some changes in the bathroom and bedroom, which I'll show you... I got a bath chair... and there's a neighbour down the hall who's a contractor and I asked him if he would put [bath] bars in, and I use [them] all the time.

Likewise, Robert told me that he had asked a neighbour to affix roofing tiles onto the wooden outdoor stairwell that led to his apartment in order to make the stairs less slippery:

I did have one serious tumble down the stairs, right from the top. Tumbled all the way down to the bottom. And what happened was the stairs had just been revarnished and I had leather soles on and it was raining and I went out and my feet went from under me. Yeah, the neighbour next door, he said, "Oh, I'll fix that for you", and he very kindly went out and bought the tiles and installed them... to make things a little bit safer.

It should be noted that these five participants had higher levels of education and income relative to the rest of the sample, and as such, were likely more knowledgeable about and able to invest in accessible accommodations for their homes.

#### 6.3 "I'm Still Fortunate I Can Drive": Transportation as a Mobility Barrier and Enabler

Many of the participants (six men and 11 women) spoke of the ways in which accessible transportation affected their ability to mobilize independently. To begin, six women, whose primary mode of transportation was walking, indicated that they felt vulnerable as pedestrians as a result of drivers who were not mindful of the needs of individuals with mobility impairments. Edith stated that "mostly at crosswalks, they don't really wait for you", while Diane had this to say:

Crossing the street... there are people that don't look left and right... And they swing out of driveways without looking. Some of them don't even put their signals on... Also, normally when you cross [the street], the walk sign doesn't stay on long enough... I can walk at a fair click, even with this [walker], but sometimes you get halfway across and the walk sign's off. So it doesn't accommodate people who move at a slower pace. And a lot of times, I've stayed back on the sidewalk, because if I see cars that look anxious to start making a left-hand turn, I think, "I'm not going to risk it, I'll just wait for the next light".

Three of these women reported that as a result, they were, in the words of Isabella, "leery of walking" alone and in unfamiliar areas.

Two men and eight women commented on the various challenges they faced while using public transportation. For instance, Isabella, who lived on the outskirts of her town, had particular trouble reaching the closest bus stop to her home:

I can't [take the bus] right now, because I live out in [a relatively remote area]... The city made the shoulder of the road [leading to the bus stop]... into a little a path... and with my walker, it's so very dangerous... It's a little teeny tiny path that [is] kind of worn down. It's not very wide, and the ground is not level at all, so it's not good. So my friend drives me here and if I go anywhere, my kids take me.

While Henry and Regina lived in their town's centre, Henry described how the bus stops in his neighbourhood were nonetheless inaccessible to the couple:

We don't use our [public transportation], you know. For one thing we've got almost three miles to walk to the nearest bus stop, you know? Well, over a mile anyway. So the bus routes aren't that handy in [our community].

These men and woman also experienced difficulties boarding public transportation and managing their walking aids on crowded transit vehicles with limited seating. Some indicated that they were unable to enter high-floor transit vehicles, with or without their canes and walkers. Joy maintained that she "[didn't] bother with the bus [because] usually [she couldn't] make it up that first step", while Edith contended:

I could take the bus more often, but I hesitate because I'm not steady on my feet without [my walker]... But I don't like to try getting on the bus with it because to handle it and me at the same time is not safe.

Others, like Adeline, discussed the challenges they encountered on crowded transit vehicles: "Taking the [bus] with a walker, with all those crowds and stuff? Forget it. You know, it gets really hectic and stuff... Those express [buses] have got so many crowds in there... and you can't come on". In addition to being unable to get onto crowded busses and trains, Joy pointed out that, "If it's crowded, you have to stand". Charles explained how a lack of available seating could be dangerous to cane and walker users:

If you take the bus, good luck! Bus transit is no good... When I get on the bus, nobody moves [to give you a seat]... One time [the driver] put the brakes on [while I was standing] and I went flying and my walker went flying... They put on the

brakes on fast because somebody cut in front of the bus, so I couldn't hold on. So I won't go [on buses] now.

Dorothea was equally apprehensive about taking the bus:

It takes a little aggressiveness [to ride the bus]... I have had to call out, "I'm not seated yet! Don't start the bus!" You know? You have to be very observant and make sure that... you can sit down properly [while the bus is stopped]. I was reading an article where a woman sued transit [because] she broke her hip... She went up to the driver to get her ticket checked [and] before she could [sit down], he had started the bus. She fell and slid all the way down and broke her hip. I don't want that to happen.

Participants who utilized walkers and power mobility devices often felt uncomfortable using public transportation because of how slowly they boarded transit vehicles or the amount of space they occupied with their walking aids. For instance, Ki-Young was self-conscious about the length of time he needed to seat himself, saying:

Sometimes if I take [the bus] just a few stops, then I don't sit, because sitting and then standing is sometimes too much work for me. Very slow too. If I stand up too slow, so many people have to wait, so usually one stop before I get off, I stand up and I move to beside the door... When the bus stops, I get off as quickly as I can.

Edith was distressed by large amount of space her walker took up on the bus:

My problem is if I wanted to get the bus, there's a place where you can put the seat up and slide [your walker] into [that space]. But that first seat has to be empty first and I'm just not particularly happy to do that. I don't like disturbing people.

The participants' feelings of discomfort often stemmed from uncomfortable past experiences, such as the one described by Leslie:

Walkers are tricky because they don't collapse up or hide in a corner, so they're always in somebody's way. And then the driver, depending on which one you get, [could say]: "You have to get that out of the aisle!" and if I get on and [the seats are] taken, the [bus drivers] make [the passengers] move so I can get in and I'm actually a little embarrassed.

Diane similarly recalled a negative experience she had had on a bus:

I got on [the bus] over here once, and nobody was going to stand up, and I was standing in the middle of the bus with this walker, and [the driver] said, "Somebody has to get up". He said, "She cannot stand on a moving bus with a walker". So eventually I got off because nobody would stand up... which [was] kind of an odd feeling.

While the men and women held generally favourable opinions of HandyDART, a provincial shared ride service for people with disabilities, they nevertheless encountered a number of problems as they attempted to utilize it. For instance, Thomas noted that "HandyDART [was] not always that easy to book". Likewise, Adeline had this to say:

The thing is, for example, say I'm not feeling well during the night and I want to go to the doctor in the morning... I can't get a HandyDART. I have to phone six days in advance... So any time somebody invites you somewhere and you want to take the HandyDART, forget it.

#### Joy likewise added:

HandyDART is a *very* good service [emphasis in original]. It was great when they started it, but they're cutting it back so much that you know, it's pretty hard to use all the time... Sometimes they can take you somewhere but they can't bring you back... Well, that's ridiculous.

Moreover, Thomas pointed out that while the service "[gave riders] a window of half an hour" during which they might be picked up, individuals who used HandyDART often waited up to

two hours for their rides to arrive. The uncertain pick-up time often made social outings, activities, and medical appointments difficult to plan and attend in a timely manner. Charles contended:

The only problem I don't like about [HandyDART] is [if] they say they'd be back [to pick you up] by 2:00, sometimes it's 3:00 or 3:30... I mean, they got such a huge clientele, I feel bad for them... but I don't want to stay out that long.

Grace commented on how her incontinence made HandyDART difficult to use:

They schedule you an hour before you leave... So they give themselves a half hour to pick you up... I've already have had to cancel an appointment because I didn't see how I was going to be waiting for a full half day away from here... They were going to pick me up between 11:00 and 11:30, and return me after 3:30, and when you're having to pee all the time, that doesn't work. It's just not good at all.

Edith, who utilized the HandyDART service twice a week to visit her local seniors' centre, explained how she tailored her activities to HandyDART's irregular pick-up times:

It's the waiting, that's the biggest problem with HandyDART. As I said, a day like yesterday, I wanted to leave [the seniors' centre] at noon, and they wouldn't even hear it... It's annoying. So I go to lunch [after my activities] and I always take my knitting with me while I wait. You know, you wait half an hour here and you wait half an hour there and it just seems like such a waste of time.

Given their displeasure with and/or inability to access public transportation, it is perhaps unsurprising that four men and seven women expressed their gratitude for their continued ability to drive their own vehicles. These participants made comments similar to those of Jackie, who stated: "I'm lucky I can still drive" and Robert, who contended: "I don't know how I'd really manage without the car". Conscious of their declining abilities, the men and women were often wary of driving in the dark or over long distances. For instance, Alice stated that she "[didn't]

drive in heavy traffic, [didn't] drive at night... and [didn't] drive very far". Marieke would only drive during the day:

I never drive in the evenings and... when I go somewhere in the evenings [my family or friends] always pick me up... Now I don't even dare try to drive in the dark, because your vision is not [good]. I had cataracts removed, and the second eye never became right... so I never drive at night. I don't take chances, no.

In addition, the participants were cognizant of the precariousness of retaining a driver's license in later life. Henry remarked:

I don't know how long I'm going to be able to drive... Within two months I'll be 80, and they'll start checking up on me [to] see how I'm doing, because when you're getting too old, you can't drive anymore. Personally I [see] the teenagers flying past me, breaking all the laws, but because I'm 80, I'm going to get [my license taken away]. The world is a funny place to live in... As long as I can drive, I can take [my wife] anywhere she wants to go [but] there'll come a day when that's going to end.

Indeed, the loss of a license was devastating for participants like Edith, who had this to say:

[The doctor said he] didn't think I should be driving at 89 years old "because of your age". I said, "Age has got nothing to do with it!" I've been driving for 60 years and I have a clear record... I've driven for 60 years, not even a ticket. I got my new license [three years ago]... Three months later, he phoned and made an appointment for me to have my license re-taken... And I lost my license... I shouldn't have sold the car, should've hung onto it. It was stupid... If I had my car back I'd be fine.

Unable to utilize public transportation with her walker or rely on HandyDART, Edith was left with few transportation options, which severely curtailed her mobility.

## 6.4 "You Have to Have a Reason to Get Out of Bed": Community Inclusion as a Barrier and Enabler to Mobility

An important enabler to independent mobility cited repeatedly by some of the participants (two men and eight women) was the importance of feeling included in their communities. These men and women echoed the sentiments of Edith, who explained why community inclusion was necessary:

You have to do something! ... I think maybe for a lot of the older people that's a problem. There isn't something that sparks them. I'm fortunate that I've got two or three things that do spark me, but I know [for] some people the days just seem to drag on... My worst days are right here [at home]... I need to get out and do something [emphasis in original] and keep busy.

Likewise, Alma opined: "We [may be] seniors, but we also [want to] do something... We want to go out [and] not always [be] inside, especially in the cold season here. We don't want to just stay at home". Like Marieke, the participants spoke of their desire to have opportunities to remain socially engaged in later life:

There are people that don't do much, really. They say, "Oh, I do a lot of reading", but that's not mixing with others... You have to get out and meet other people"... When my husband passed on, [I felt] sad and [like] there's not much to life... And then when I read in the [newspaper] that the [community centre nearby] was reopened, I thought, "You know, I think I will go there and just inquire" and... I [got] involved right away and that was it... I've met lots of people and I was involved again. I thought, "There's so much that you can do still".

Louise noted that social engagement was essential to her mental well-being:

I want to make sure I have something to do as often as possible... It would be so easy not to bother to get up and go out again and just sit in this chair... and do nothing... If there's nothing [to do], I think, "Where am I going to go? What am I going to do? Why am I going to go out?" It doesn't make sense... You have to have a reason to get out of bed... I find if I sit in the house say, three days in a row, I'm starting to get depressed. I need to get out and mix with other people.

At the same time, only four women spoke of having had their walking difficulties accommodated by the organizations and groups in which they were involved. For instance, while Joan was unable to stand for long periods of time, she joked that her choral ensemble had not "said anything about kicking [her] out yet". Joan indicated that her fellow choir members often helped her to get to practices and accepted her inability to stand during performances. Isabella, Adeline, and Marieke all noted that the seniors' centres in which they volunteered recognized their walking difficulties and were able to provide them with volunteer positions that required little physical exertion.

In contrast, two men and seven women discussed how community organizations often did not take into account the needs and desires of older adults with mobility impairments. Some of the participants were like Marieke, who noted that many of the activities offered at community and seniors' centres were focused on activity and movement, and as such, were exclusive of individuals with mobility impairments. During our walk-along interview, Marieke noted how the neighbourhood house she belonged to had been designed with older adults in mind, featuring a coffee room where people could "just chat for a while, or read. Just get out of the house". In contrast, the community centre in which she volunteered mainly catered to a younger clientele and had no place for older adults to gather for leisurely, low-impact activities. Others pointed out that exercise classes and group activities often presumed the able-bodiedness of participants. For instance, Ki-Young commented on his inability to attend the fitness classes offered at his local community centre:

If I was able to walk with [the walking group], we would walk [for] two to three hours... But now I'm not able to walk two to three hours anymore... There is [a] Tai Chi exercise [class that] I used to do but I don't do that anymore, because I'm

not able to turn [with my cane] and I don't want to fall down. So I want to go, but I'm not able to go.

Doreen recounted her experience of attempting to join a walking club at her local seniors' centre:

They've got a [group] at the center for speed walking, you know with the poles. I tried that one time, but I told the teacher "I can't walk fast, because I'm afraid my balance is not good so I have to be careful, and I cannot walk fast". But you see, their class was for fast walkers, so it didn't suit me. And the [instructor] kept looking behind her where I was and I felt sort of embarrassed because I was so far behind, so I didn't go again.

In this way, the participants' comments illustrated the importance of community inclusion in later life, as well as the lack of opportunities for community engagement faced by many disabled older adults.

#### 6.5 Discussion: Barriers and Enablers to Mobility in Later Life

This chapter discussed the social and environmental factors that shaped the participants' use of their canes and walkers, including their marital and work histories, the built environment, and their social networks. The findings reported in this section were consistent with research that has found that individual health trajectories are shaped over the life course by the accumulation of opportunities, resources, and risks associated with social class, occupation, education, gender, and marital status (Mullings & Schultz, 2006). For instance, similar to the work of Sanders et al. (2002), a small number of participants attributed their current mobility impairments to the physically demanding nature of their working class occupations. Some of the men and women additionally discussed the ways in which caregiving, emotional labour, and support within the context of marital relationships had enabled or hindered their mobility. While some research has indicated that marriage and co-habitation may act as protective factors against mobility

impairment (Hartke et al., 1998; Warner & Brown, 2011), few studies have examined the impact of caregiving within martial relationships on health and mobility. A small number of participants spoke of the ways in which they had been or were currently reliant on their partners for daily activities and opportunities for socialization. At the same time, the current study's findings also showed that the added stresses of caregiving could limit independent mobility, even within supportive marital relationships. The women in the study in particular discussed how the provision of care to their partners often made them neglectful of their own health, which further compounded their walking difficulties. Lastly, three women discussed how the intersection of gender role expectations and socioeconomic status had compromised their mobility through the loss of financial independence. Similar to some previous findings (Resnik et al., 2009; Statistics Canada, 2008), these women contended that their precarious financial status had made it difficult for them to acquire or properly maintain their walking aids. These findings speak to feminist disability research that has indicated that older women are particularly vulnerable to psychosocial and economic factors (such as stress and low income) that undermine health and threaten mobility in later life (Driedger & Owen, 2008; Owen & Troschuk, 2004).

In addition to discussing the socio-economic factors that had shaped their cane and walker use, the men and women experienced a number of environmental barriers and enablers to mobility. The study findings substantiate theorizing in geographies of disability regarding the production and reproduction of disability within the built environment (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). To date, only one study has examined the environmental challenges facing older adults who utilize walking aids (Kylberg et al., 2013), as previous research has tended to focus instead on the ways in which age-related physical limitations affect cane and walker use (Aminzadeh & Edwards, 2000;

Lofqvist et al., 2009). The prioritization of non-impaired bodies in the design and construction of both common public spaces and the participants' homes was evident in the many environmental obstacles experienced by all 24 of the participants, including stairs, doorways, curbs, and uneven sidewalks. The men and women additionally discussed the ways in which accessibility interventions meant to aid individuals with mobility impairments were often inadequate or illsuited for cane and walker users. These remarks echoed Hansen and Philo's (2007) reflections on the tokenistic and superficial nature of most environmental modifications, which are frequently biased towards the needs of wheelchair users. Indeed, some participants noted how certain accessibility features such as ramps and curb cuts, which likely enabled wheelchair users, hindered their own mobility. Other participants' comments illuminated the ways in which the needs of older disabled adults are rarely reflected in the design of public spaces. For instance, many of the participants contended that public spaces lacked readily accessible seating or sufficient space for walking aid use, which often restricted their ability to mobilize independently. The small number of participants who discussed environmental enablers to mobility typically talked about buildings that had been specifically designed for older adults with disabilities (specifically assisted living facilities and subsidized seniors' housing) or modifications that they had been able to make to their own homes. Notably, the few participants who had been able to make accessibility accommodations to their homes were better educated and had more financial resources than the rest of the sample, highlighting once again the ways in which economic inequalities shape health and mobility in later life (Warner & Brown, 2011).

An aspect of environmental inclusion that has rarely been discussed within the geographies of disability studies is older adults' access to public spaces within automobile-oriented communities. The study participants cited inadequate transportation as one of the key

barriers to independent mobility among cane and walker users. The participants commented on a range of issues, including their increased vulnerability as pedestrians, the challenges they faced using public transportation and HandyDART, and their mounting concerns about their driving abilities. The men and women who were reliant on public transportation contended that it was not simply the physical design of transit vehicles, but also the behaviours that ableist and ageist design elicited from non-impaired individuals that impeded their mobility. For instance, a number of the men and women were hesitant to utilize public transportation, expressing discomfort with holding up other passengers or taking up too much space with their walking aids. In this way, the physical design of transit vehicles (the lack of bus ramps, narrow aisles) and able-bodied individuals' reactions to older adults' attempting to inhabit these spaces (impatience with slow boarding or barring walker users from boarding a vehicle) combined to discourage the participants from utilizing public spaces. Further evidence of the marginalization of older adults from the construction of public spaces and services came from the participants' accounts of travelling by HandyDART. While the service has been ostensibly designed specifically for older adults and individuals with disabilities, many of the participants found the service difficult and impractical to use because of common concerns like long wait times and irregular pickups. Participants who were still able to drive were quick to express their gratitude for their remaining abilities, particularly in light of their declining abilities and the precarious nature of retaining a driver's license in later life. In contrast, those who were reliant on public transportation indicated that they had become increasingly socially isolated, as their ability to travel outside their homes had declined following the loss of their license.

In addition to reflecting on environmental barriers to mobility, many of the participants also described community inclusion as a necessary component to overcoming the barriers to

mobility presented by the built environment. While the men's and women's participation in leisure pursuits such as exercise and volunteering was a means of anchoring themselves in the third age, these activities were also a way of maintaining access to their communities and safeguarding their well-being. At the same time, there were few accommodations made for the participants, even in spaces designed for older adults, as they noted how recreational facilities, volunteer programs, and spaces for socializing often focused on activity and movement, thus excluding disabled older adults. In this way, the participants' accounts demonstrate the ways in which youth and able-bodied privilege is cemented in the design of many public spaces and communities, which favour those who are able to walk, move, and utilize their own or public transportation vehicles with ease. The participants were "made homeless" (Hughes, 2002, p. 604) in their own communities as they attempted to move through spaces that normalized the able, youthful body and codified their corporealities as abnormal, different, and "out of place" (Kitchin, 1998, p. 345). These findings support previous theorizing in the geographies of disability that has proposed that the ableist organization of the built environment can contribute to the marginalization of older adults within their communities (Crooks & Chouinard, 2006; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998).

#### 7: Discussion

This study examined older Canadian men's and women's perceptions and embodied experiences of living with mobility impairment. In addition, the study explored older adults' experiences of being reliant on a cane and/or a walker, and aimed to elucidate the ways in which the use of a cane and/or a walker in later life was shaped by the ageist and ableist configuration of the socio-material environment. To that end, the study utilized a feminist interpretative approach grounded in the social model of disability (Campbell, 2001; Corker, 1999; French, 1993; Hughes & Paterson, 2006; Shakespeare & Watson, 2001; Thomas, 2002) and built on existing literatures in rehabilitation (Aminzadeh & Edwards, 2000; Kraskowsky & Finlayson, 2001; Kylberg et al., 2013; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al., 2009; Thomas et al., 2008), social gerontology (Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; Higgs & Jones, 2009; Katz, 2000) and geographies of disability (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). The study utilized multiple sit-down and walk-along interviews with six men and 18 women aged 67 to 98. During the interviews, I encouraged the participants to discuss their walking limitations, their everyday use of their canes and/or walkers, and the factors that limited and enabled their mobility. In the following sections, I summarize the study's key findings and consider its methodological and theoretical contributions and limitations in light of my research questions. I additionally outline the practical implications of my study for the design of accessible public spaces and assistive devices for older adults.

#### 7.1 Summary of Findings

### 7.1.1 Q1: How Do Older Men and Women Perceive and Experience Having Walking Restrictions in Later Life?

When asked to describe what it was like to have walking difficulties in later life, the men and women often began by discussing the physical symptoms that had contributed to their mobility restrictions and their dissatisfaction with the resultant changes to their daily lives. Having previously perceived themselves as healthy and active members of the third age (Gilleard & Higgs, 2013), the men and women confronted a new reality wherein they struggled to perform basic, taken-for-granted routines of daily living (such as grocery shopping and meal preparation), move about their homes and communities, and engage in work and leisure pursuits. As a result, many of the participants experienced their walking restrictions as biographically disruptive (Bury, 1982) as they struggled to readjust their lives to their diminishing capabilities. Perceiving that their social and physical worlds were shrinking as their mobility difficulties increased and as their everyday activities became more and more curtailed, the men and women attempted to come to terms and live with the "meaning as consequence" (Bury, 1988, p. 91) of their impaired mobility. However, some were so fearful of possible future mobility losses that might push them further into a fourth age of obscurity and dependence (Gilleard & Higgs, 2013) that they expressed a preference for death to becoming a burden to others.

At the same time, the men's and women's negative perceptions of their mobility impairments and fears about incurring further bodily losses were reflective of societal anxieties about aging, disability, and dependence as well as discourses of successful aging (Rowe & Kahn, 1997). For instance, many of the men and women were initially hesitant to discuss their health and mobility concerns, suggesting that they too had internalized stigmatizing conceptualization of later life as a time of irrelevance, dependence, and decline (Calasanti, 2004; Calasanti & King,

2005; Dillaway & Byrnes, 2009; Estes, 2001; Gilleard & Higgs, 2010; 2011; Higgs & Jones, 2009; Katz, 2000). The participants' negative perceptions of their walking difficulties echoed prior research that has found that the "meaning as significance" (Bury, 1988, p. 91) of chronic illness and impairment often complicates older adults' experiences of poor health (Sanders et al., 2002; Tagizadeh Larsson & Jeppsson Grassman, 2012). While the number of men in the sample was small, it is interesting to note that the women in the study were far more expressive and forthcoming with their illness and impairment narratives than the men. It is possible that the men's reluctance to disclose their disabilities was shaped by the intersection of negative notions of old age and gendered expectations of older men that emphasize strength, stoicism, and invulnerability, encouraging older men to dismiss symptoms of illness and supress expressions of pain and discomfort (Courtenay, 2000; Hurd Clarke & Bennett, 2013; O'Brien et al., 2007; Oliffe, 2009).

A number of participants considered the onset of illness and impairment in later life to be "normal illness" (Williams, 2000, p. 49), and as such, positioned their walking limitations as a natural and commonly experienced aspect of growing older. Describing illness and mobility loss in later life as an anticipated occurrence, these men and women endeavoured to minimize and normalize their experiences of walking difficulties. Indeed, many of the participants perceived themselves to be aging successfully (Rowe & Kahn, 1997), even as they detailed the consequences that their debilitating physical limitations had had on their everyday lives.

Countering discourses of decline and dependence, the men and women in the study underscored the ways in which their walking difficulties did not preclude them from being active and engaged members of society. At the same time, the participants' attempts to position themselves as healthy, active, and vibrant members of the third age (Gilleard & Higgs, 2013) often drew on

downward comparisons with individuals they perceived to be in poorer health (for instance, those with total mobility loss and individuals with cognitive deficits), and as such, worse off than themselves. It may seem paradoxical that the men and women underscored their continued productivity, social engagement, and independence even as they lamented their diminishing physical activities, work and leisure pursuits, social roles, and support networks. However, the participants' feelings of dismay and concurrent attempts to shore up remaining activities that signified the robust lifestyle, physical and mental health, and social engagement associated with the third age were reasonable in light of the privileging of activity and productivity in contemporary society and the moral stigma associated with failure to age well (Angus & Reeve, 2006; Calasanti & King, 2005; Dillaway & Byrnes, 2009). Indeed, an acknowledgement of aging unsuccessfully would have been an admission to complicity in their inability to modify and prevent the lifestyle risk factors associated with mobility loss.

The relationship between my findings and the concept of successful aging warrants further comment. For many scholars, the successful aging paradigm has been a useful means of promoting an age-integrated society and challenging the harmful ageist stereotypes associated with growing older (Kahana et al., 2003; Rowe & Kahn, 1997). Rowe and Kahn (1997) have contended that acknowledging older adults' potential for health, social engagement, and productivity can help to shift the taken-for-granted equation of the aging process with pathology and decline. Viewed through the lens of successful aging, the participants' remarks about their numerous physical, leisure, and volunteer activities can be seen as a challenge to negative stereotypes of older adults as indolent, burdensome, and a drain on economic resources. By focusing on their continued contributions to society and on the ways in which they had maintained many of their social and physical activities in the face of illness and disability, the

men and women presented a resilient and optimistic outlook on the final decades of life. The men's and women's subversion of expectations of normal aging can be seen as particularly profound in light of societal perceptions of walking aids as signifiers of debility and diminished autonomy.

However, the successful aging paradigm has also been critiqued for its narrow definition of positive aging as the absence of illness, lack of functional limitations, and ongoing engagement with society (Angus & Reeve, 2006; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2011, 2013; Higgs et al., 2009; Holstein & Minkler, 2003; Katz & Calasanti, 2015; Katz & Marshall, 2003; Martinson & Berridge, 2015). As previously discussed, few of the study participants would be classified as aging well under the traditional definition of successful aging. For this reason, some scholars have suggested that the successful aging paradigm would benefit from a relaxing of its criteria, as well as the addition of benchmarks of positive aging generated by older adults themselves (Martinson & Berridge, 2015). Within the current study, the presence of disability or chronic illness was not predictive of the participants' subjective beliefs about successful aging, as many of the men and women tended to perceive themselves to be aging successfully despite their walking limitations. More indicative of subjective beliefs about aging well were characteristics such as the ability to maintain personal fulfillment, subjective quality of life, and agency in the face of changing resources and abilities. Lastly, a key critique of the successful aging paradigm has been its failure to capture the personal, social, economic, and political contexts of aging (Angus & Reeve, 2006; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2011, 2013; Higgs et al., 2009; Holstein & Minkler, 2003; Katz & Calasanti, 2015; Katz & Marshall, 2003; Martinson & Berridge, 2015). The study findings echo previous research that has shown how social and

economic factors such as access to steady employment across the lifespan, a healthy income, and an inclusive social environment help certain populations age more successfully (Martinson & Berridge, 2015). In the current study, participants emphasized the importance of access to education and steady employment, environmental accessibility, transportation, and community inclusion to their abilities to age well. In this way, rather than focusing on individual behavior, the study results support calls for policy interventions that would help increase older adults' opportunities to age successfully. These might include improving environmental accessibility, increasing federal and provincial benefit rates in a way that would bring older and disabled recipients above the poverty line, and enhancing social programming that targets social isolation among older adults.

Finally, the experience of walking difficulties also altered the participants' body images, causing a profound disruption of the body and self (Charmaz, 1995). The onset of mobility difficulties unsettled the men's and women's perceptions of their taken-for-granted bodies, as their changing gaits, postures, and ways of walking led to the experience of corporeal 'dysappearance' (Leder, 1990). Confronted by their unpredictable bodies, the men and women grew more attuned to bodily movements and sensations, reflecting the findings of Plach et al. (2004) and Waskul and van der Riet (2002) concerning the heightening of one's awareness of the body (Plach et al., 2004) following the onset of illness and impairment. For some of the participants, the variability of their bodies and changes they experienced to their appearance added to the perception that the body was no longer a reliable vessel. Feeling as if they were no longer in control of their untrustworthy and alien bodies, the participants began to perceive their once taken-for-granted bodies as obstacles to overcome. The participants' attempts to dissociate their core selves from their ailing bodies also aligned with their attempts to decouple their mobility

restrictions from their abilities to remain vibrant and engaged individuals who were aging successfully despite their physical limitations.

# 7.1.2 Q2: How Do Older Men and Women Perceive and Experience the Use of a Cane or a Walker in Their Everyday Lives?

Similar to previous research (Aminzadeh & Edwards, 2000; Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hedberg-Kristensson, et al., 2007; Lofqvist et al., 2009; Kylberg et al., 2013; McNeill & Coventry, 2015; Resnik et al., 2009), the findings of the current study highlighted the ambivalence that often characterizes walking aid use in later life. Echoing prior research that has examined a variety of walking aids (Aminzadeh & Edwards, 2000; Bateni & Maki, 2005; Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Kylberg et al., 2013; Lofqvist et al., 2009; Resnik et al., 2009), the current study found that many of the men and women experienced the use of a cane or a walker as enabling. Many of the participants expressed gratitude for the ways in which their canes and walkers had facilitated the maintenance of autonomous mobility and a good quality of life. Offering a reprieve from pain and imbalance, the participants' canes and walkers became useful tools for the management of activities of daily living, symptoms of illness, and the anxieties that frequently accompanied walking with impaired balance. For some of the men and women, their walking aids also acted as useful reminders of their often-invisible disabilities to able-bodied others, who frequently became more safety-aware and mindful of the men's and women's physical limitations when they witnessed their cane and/or walker use.

Despite the usefulness of their walking aids, the majority of the participants were ambivalent about their canes and walkers due to the stigmatizing cultural meanings of walking aid use in later life (Estes, 2001; Estes & Binney, 1989; Gilleard & Higgs, 2010; Higgs & Jones,

2009; Higgs et al., 2009; Twigg, 2004). The majority of the men and women experienced felt stigma (Goffman, 1963) as a result of the deeply discrediting social meanings associated with cane and walker use, namely, their symbolic value as markers of old age, frailty, and dependence. Some of the men and women additionally described the enacted stigma (Goffman, 1963) they experienced (in the form of patronizing and discriminatory behaviour) when they used their canes and walkers in public spaces. Similar to the findings of previous research (Gooberman-Hill & Ebrahim, 2007; Hedberg-Kristensson, et al., 2007; McNeill & Coventry, 2015; Resnik et al., 2009), the participants considered the continued deterioration of their physical abilities and the resultant use of a walking aid to be a distressing indicator of their transition into a fourth age (Gilleard & Higgs, 2013) of dependence and indignity. Incongruously, the use of a cane or a walker simultaneously enabled the participants to maintain the autonomous mobility and social engagement necessary to maintain their membership in the third age, even as it outwardly signified their diminishing mobility and independence. While some of the participants were able to frame the experience of illness and mobility impairment in later life as "normal illness" (Williams, 2004, p. 49), the use of a cane or a walker was a visible reminder of disability and old age, bringing into stark contrast the participants' aging bodies and declining mobility with their perceptions of themselves as healthy and able-bodied individuals.

Lastly, the men's and women's negative perceptions of their canes and walkers were often compounded by the ways in which the devices themselves hindered their mobility. Similar to the research of Bateni and Maki (2005) and Van Riel et al. (2014), the participants reported that the use of their canes and walkers regularly interfered with their balance, caused discomfort, and exacerbated physical symptoms such as pain and stiffness. At times, the devices (and particularly walkers) proved difficult to use, owing to their large size, heavy weight, and limited

manoeuvrability. Some of the women in the study (but none of the men) additionally expressed feelings of embarrassment over their unwieldy and overly conspicuous walkers. The findings suggest that the women's feelings of embarrassment may have been related to feminine gender role socialization. In particular, the women's comments about how their walkers "[got] in other people's way" and "interfere[d] with people" are consistent with studies that have shown that women's experiences of illness and impairment are often shaped by gendered expectations that women should be selfless and considerate of the needs of others (Hurd Clarke & Bennett, 2013; Sanders et al., 2002).

## 7.1.3 Q3: How Does the Social and Environmental Context of Mobility Shape Individuals' Use of Canes and Walkers in Later Life?

The findings of the study highlighted the ways in which social and spatial practices organize older adults' use of their canes and walkers in their everyday lives. Although their bodies contributed to the men's and women's experiences of disability, the participants' everyday lives were also shaped by the ageist and ableist design of the built environment. Echoing theorizing within the geographies of disability literature that has examined the privileging of able, youthful, and autonomously functioning bodies (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998), the current study showed how disability in later life is bolstered by the design of public space. Narrow aisles, heavy doors, difficult to navigate sidewalks, and inaccessible public transportation complicated the men's and women's attempts to accomplish the tasks of everyday life. The participants' fatigue and pain were often exacerbated by thoughtless design elements such as the lack of public seating, short crossing light signals, and ramps that lead to entrances that had no automatic doors. The men and women often found accessibility interventions that were designed

to enable walking aid users to be inadequate or ill-suited for cane and walker users. Finally, in addition to experiencing physical obstacles to access, the men and women spoke of the many barriers to community inclusion they faced due to their limited mobility and cane and/or walker use. In this way, the men and women were disabled by the youth-centric and ableist design of their surroundings, which magnified their physical limitations and restricted their opportunities for access and independent mobility.

The findings additionally demonstrated how the men's and women's experiences of walking difficulties and cane and walker use were shaped by the lifelong accumulation of social and economic opportunities, risks, and resources (Mullings & Schultz, 2006; Warner & Brown, 2011). In particular, the intersection of inequalities related to age, gender, and socioeconomic status impaired the men's and women's health, mobility, and access to home modifications and properly fitted and maintained walking aids in later life. The participants' accounts of the ways in which these health disparities contributed to their experiences of mobility impairment in later life contrasted with the rhetoric of successful aging and its espousal of the "will to health" (Higgs et al., 2009, p. 686) that was evident in their emphasis on their continued productivity, social engagement, and independence, and despite mounting mobility restrictions. That the participants believed that they were, at least in part, responsible for their mobility impairments speaks to the difficult position in which many older adults find themselves. Exhorted to minimize the lifestyle risks associated with cane and walker use (such as a sedentary lifestyle), the experience of illness and disability in later life is tinged with the stigma of moral failure, as older adults are censured not only for their inability to age successfully, but also for their complicity in inadequately preventing their physical, mental, and social decline (Angus & Reeve, 2006; Calasanti & King, 2005; Dillaway & Byrnes, 2009). As such, the participants' accounts of the social and

environmental contexts of their experiences of cane and walker use helped to re-contextualize their disability as a structural rather than an individual problem. The social and spatial barriers to mobility experienced by the men and women were reflective of the systematic marginalization of older adults within a society that privileges youthful, mobile, and independent bodies (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998).

#### 7.2 Methodological Contributions and Limitations

The current study makes a methodological contribution by coupling walk-along interviews with qualitative sit-down interviews in order to better contextualize older adults' embodied experiences of mobility impairment. The use of qualitative sit-down interviews alongside walk-along interviews allowed for a multi-faceted data collection that captured additional nuance in the complex lived realities of the men and women interviewed. To date, relatively little research has employed the walk-along interview with older participants, and no studies have utilized the method to explore the mobility practices of older disabled adults. Indeed, the walk-along interview method has chiefly been utilized to explore personenvironment relationships, rather than individual experiences of movement through space (Carpiano, 2009; Evans & Jones, 2011; Hein et al., 2008; Jones, et al., 2008).

Within the current study, the walk-along method proved useful as a means of gathering rich, detailed information about the participants' daily routines and the environmental factors that influenced their mobility practices. To begin, the casual, participatory format of the walk-along interviews was often an effective means of building rapport with the men and women, helping to facilitate the discussion of sensitive or uncomfortable topics. As previously mentioned, I found that the participants were often more candid and expressive about their health issues and walking difficulties during the walk-along interviews compared to the sit-down

interviews. Moreover, the walking-along interviews revealed many of the routine barriers to mobility that the participants confronted each day. The mundane and minute obstacles to performing everyday tasks like shopping and meal preparation that I observed during the walkalong interviews would likely have remained invisible or forgotten during the sit-down interviews. Finally, the use of the walk-along method helped me to explore older adults' embodied experiences of walking difficulties within the environmental context of mobility disability. For instance, the walk-along interviews provided an opportunity to directly observe the participants as they engaged with their environmental surroundings and made use of the social and material resources at their disposal. The use of this method also enabled me to observe the ways in which the study participants experienced somatic sensations related to their walking difficulties in visceral and immediate ways. Feminist disability scholars have emphasized the importance of disability research that explores the embodied realities of disability in the context of everyday life (Gabel & Peters, 2004; Goodley, 2010; Hansen & Philo, 2007). Coupled with a descriptive interpretive approach grounded in disability feminism, the walk-along interview method provided a useful tool for centring disabled older adults' embodied experiences of fatigue, pain, and physical limitations, while leaving space for examining the realities of everyday life.

At the same time, the study had several methodological limitations. To begin, the use of the walk-along interview method presented a number of practical challenges. For instance, traffic noise and ambient sounds made it difficult to obtain good sound quality in the digital recordings of the interviews. Some safety risks arose over the course of the interviews, which was perhaps unsurprising given the physical limitations of the participants coupled with the largely unaccommodating spaces in which the walk-along interviews took place. The timing of the

interviews posed a methodological challenge, as many of the walk-along interviews that were held outdoors were performed in good weather. While this minimized the risk of harm to the participants, it likely also precluded the participants from commenting on the effects of bad weather on their mobility. Indeed, only two of the participants spoke of the impact of weather conditions on their use of a cane or a walker, despite the typically wet climate of the region in which the men and women resided. Lastly, all the men and women interviewed resided in a major urban centre in Canada, and as such, had more public transportation, social programming, and medical service options compared to rural older adults. In the future, it would be interesting and important to examine the experiences of older adults living in rural areas, in which the lack of transportation, health care, and social resources might pose additional challenges for individuals with walking limitations.

In addition, while the recruitment process aimed to be inclusive of individuals of varying ages, genders, racial and sexual identities, the study sample was largely comprised of white, Canadian-born, low income, heterosexual women. Many of these sample characteristics (and in particular lower income and female gender) were representative of the population typically impacted by mobility limitations in later life (Gell et al., 2015; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Shields, 2004; Statistics Canada, 2015). For instance, demographic trends show that women make up the majority of older cane and walker users (Gell et al., 2015; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Shields, 2004; Statistics Canada, 2015). In addition, the illnesses and physical impairments reported by the participants, namely rheumatoid arthritis and osteoarthritis, stroke, vision impairment, diabetes mellitus, cerebrovascular disease, and orthopaedic impairments such as hip, back, and knee problems, are representative of the conditions normally associated with walking aid use (Gell et al., 2015; Iezzoni et al., 2001; Kaye

et al., 2000; Murtagh & Hubert, 2004). The sample composition was also consistent with previous findings indicating that the use of a walking aid is higher among older men and women who are single and/or are living alone (Hartke et al., 1998), as the majority of the sample consisted of single or widowed individuals.

While high rates of walking aid use have been observed among older Black, Hispanic, and Indigenous individuals (Angel & Whitfield, 2007; Cornman & Freedman, 2008; Gell et al., 2015; Kaye et al., 2000), my sample consisted primarily of White and Asian older adults, and as such, the findings cannot speak to these trends. Some research has suggested that black and non-black Hispanic older adults' attitudes towards walking aids may differ from those of white older adults (Resnik et al., 2009). Studies have also shown that non-white older adults may be more vulnerable to poverty and poor health (Cornman & Freedman, 2008; Gell et al., 2015; Kaye et al. 2000; Resnik et al., 2009), likely influencing their experiences of cane and walker user. In light of the well-documented racial/ethnic disparities in health and mobility in later life (Angel & Whitfield, 2007; Moen & Spencer, 2006; Mullings & Schultz, 2006; Warner & Brown, 2011), it will be important to consider how older adults of different racialized groups experience the use of canes and walkers in their everyday lives in the future. Future research should also examine the impact of possessing several intersecting stigmatized identities on older adults' experiences of living with mobility impairment and utilizing a cane or a walker.

#### 7.3 Contributions to the Rehabilitation Literature

The current study builds on and adds to the growing rehabilitation literature concerning cane and walker users in later life. Similar to previous research that has shown that older adults who obtain a cane or a walker are motivated by the devices' potential to address functional limitations, facilitate daily activities, minimize pain, reduce the risk of falling, and enhance

mobility (Copolillo & Prohaska, 2001; Gell et al., 2015; Gooberman-Hill & Ebrahim, 2007; Haggblom-Kronlof & Sonn, 2007; Hartke et al., 1998), the current study participants' acquisition of their walking aids was driven largely by need factors, including pain, diminished balance, and loss of coordination. Additionally, the study participants discussed two aspects of chronic illness that, to date, have been infrequently cited as contributing factors to walking difficulties, namely fatigue and incontinence. The omission of incontinence and fatigue from the existing literature is unsurprising given the highly stigmatizing nature of invisible illness symptoms and the bodily taboos of elimination. The findings are also consistent with research that found that older adults tend to hold positive perceptions of their walking aids when these are perceived to facilitate activities of daily living and support a good quality of life (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Lofqvist et al., 2009; Porter et al., 2011; Resnik et al., 2009; Thomas et al., 2008). Indeed, the study participants spoke of the ways in which their canes and walkers had improved not only their physical safety, but also their psychological sense of security. Five women additionally indicated that their canes and walkers enhanced their safety by making their invisible mobility limitations more obvious to able-bodied individuals, an aspect of cane and walker safety that has previously not been explored within the rehabilitation literature.

The current study was novel in its inclusion of both cane and walker users, as well as both male and female device users. Despite the high prevalence of cane and walker use in later life (Gell et al., 2015; Hartke, et al., 1998; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Shields, 2004; Statistics Canada, 2015), relatively little research has focused specifically on these devices. The few studies that have examined older adults' utilization of canes and walkers have researched select populations such as female walking aid users (Porter et al., 2011), male walking aid users (Kylberg et al., 2013), cane users only (Aminzadeh & Edwards, 2000), and

walker users only (Thomas et al., 2008). To date, only one study has looked at the differing experiences associated with utilizing a cane versus a walker (Porter et al., 2011). Moreover, no studies have compared older men's and older women's cane and walker use, despite evidence that has shown greater rates of walking aid use among older women. Indeed, little is known about how demographic characteristics (such as gender, age, ability, and socioeconomic status) or device characteristics (such as size, cost, and ease of use) may influence older adults' acceptance and utilization of their canes and walkers in later life.

Although the study results are not generalizable due to the small size of the sample, it should be noted that there were several differences between the cane and walker users. The walker users in the study were more reliant on their walking aids for everyday ambulation compared to the cane users, as could be expected given that the use of a walking aid is strongly linked to greater disease burden (Gell et al., 2015; Hartke et al., 1998; Iezzoni et al., 2001; Kaye et al., 2000; Kraskowsky & Finlayson, 2001; Shields, 2004). The majority of participants who utilized a walker (or a walker in addition to another walking aid) had severe difficulties moving and walking around without the help of their devices. In contrast, individuals who primarily utilized a cane reported using their walking aids largely for outdoor mobility. Cane and walker users experienced differing obstacles to device acquisition and use. For instance, while cost was not a significant barrier to cane use, a small number of walker and multiple device users noted that the purchase and maintenance of a walker was difficult for individuals living on a fixed income, a finding that corresponded with the results of the 2006 Canadian Participation and Activity Limitation Survey (Statistics Canada, 2008). Only a small number of the participants mentioned feeling that their canes and walkers compromised their balance and increased the risk of falls (Bateni & Maki, 2005; Van Riel et al., 2014). However, the walker users in the sample

experienced unique challenges to their everyday mobility due to their devices' substantial sizes and weight. In addition, the walker users had greater difficulty navigating the environmental obstacles they encountered due to the limited manoeuvrability of walkers compared to canes. As a result, and similar to the findings of prior studies, the walker users experienced a greater number of adverse outcomes due to their limited mobility, such as increased social isolation and emotional distress (Groessl et al., 2007; Hirvensalo et al., 2000; Iezzoni et al., 2001; Metz, 2000; Rubenstein et al., 2001; Yeom et al., 2008). These findings are novel as previous research has tended to focus primarily on the ways in which age-related physical limitations such as poor balance and decreasing strength affect older adults' abilities to utilize their devices (Lofqvist et al., 2009), rather than how environmental obstacles to mobility and particular design elements in canes and walkers may impede older adults' ability to ambulate freely and safely.

This study additionally yielded new insights about the experiences of older male and female cane and walker users. Gender has remained mostly neglected within the literature on walking aid use in later life, as previous studies of cane and walker use have tended to examine single-gender populations (Kylberg et al., 2013; Porter et al., 2011) or exclude gender as a factor of analysis (Aminzadeh & Edwards, 2000; Thomas et al., 2008). Although the number of men in the study was small, it is worth pointing out that there were some gender differences in the men's and women's experiences of walking limitations and walking aid use. Firstly, the ratio of male to female participants in the study was reflective of the greater prevalence of cane and walker use among women, as well as broader population trends that indicate that older women experience greater health inequalities in later life (Iezzoni et al., 2001; Murtagh & Hubert, 2004; Shumway-Cook et al., 2005; Statistics Canada, 2015). The female participants were more expressive about their physical symptoms and were more likely to report feelings of embarrassment and

discontent about their walking aids, particularly when they perceived that their canes and walkers were overly large or conspicuous. These gender differences echoed prior research that has looked at the ways in which hegemonic masculine gender norms that underscore strength, impassiveness and physical prowess often compel older men to downplay symptoms of illness and supress expressions of pain and discomfort (Courtenay, 2000; Hurd Clarke & Bennett, 2013; O'Brien, 2007; Oliffe, 2009). The women's dissatisfaction with their canes and walkers also stemmed from the ways in which the use of a walking aid restricted their abilities to accomplish housekeeping tasks (such as cleaning and meal preparation) and their ability to fulfill nurturing roles, such as those of a parent, caregiver, or worker in a caring profession. These findings align with previous research that has shown that older women's experiences of illness and impairment are shaped by feminine gender role expectations that women should be selfless and considerate of the needs of others (Hurd Clarke & Bennett, 2013; Sanders et al., 2002).

## 7.4 Contributions to Research and Theorizing in Social Gerontology

My findings additionally contribute to the growing field of research that has explored the embodied experience of chronic illness and impairment in later life (Charmaz & Rosenfeld, 2006; Finlayson & van Denend, 2003; Kvigne & Kirkevold, 2003; Lorenz, 2009; Plach et al., 2004; Rosenfeld & Faircloth, 2004; Waskul & van der Riet, 2002). While mobility impairments have been alluded to in this literature, few studies have explicitly looked at mobility limitations or the use of a cane or a walker in later life. The findings of the current study illustrate how the use of walking aids in later life can exacerbate older adults' experiences of ageism and ableism (Calasanti, 2004; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Gilleard & Higgs, 2010; Higgs & Jones, 2009; Katz, 2000). The participants' desire to distance themselves from the undesirable attributes associated with old age and bodily decline was evident in their attempts to

represent themselves as successful agers (Rowe & Kahn, 1997). Whether through assertions that their mobility limitations were a normal and natural part of later life, downward comparisons of themselves to individuals they perceived to be worse off (e.g. wheelchair users and individuals with cognitive impairments), or attempts to remain socially and physically active, the men and women endeavoured to portray themselves as healthy, productive, and engaged members of the third age (Gilleard & Higgs, 2013).

The use of a cane or a walker both compromised and enabled the participants' abilities to present themselves as independent and able-bodied members of the third age (Gilleard & Higgs, 2010; Gilleard & Higgs, 2013; Higgs & Jones, 2009). Cane and walker use was perceived to draw attention to old age, vulnerability, and dependence, identifying the men and women as members of the fourth age (Gilleard & Higgs, 2010; 2013; Higgs & Jones, 2009; Higgs et al., 2009). Conversely, participants expressed positive attitudes towards their walking aids when these enabled them to engage in activities of daily living and social pursuits that signified their health, youthful vibrancy, and independence (Aminzadeh & Edwards, 1998, 2000; Bateni & Maki, 2005; Copollilo, et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hedberg-Kristensson et al., 2007; Lofqvist et al., 2009; Resnik et al., 2009; Thomas et al., 2008). These findings reinforce critiques of the successful aging paradigm's exclusion and marginalization of individuals who are unable to achieve the ideal of the healthy, able-bodied, and socially active elder (Angus & Reeve, 2006; Dillaway & Byrnes, 2009; Calasanti & King, 2005; Calasanti & Slevin, 2001; Holstein & Minkler, 2003; Katz & Calasanti, 2015). Dillaway and Byrnes (2009) have previously contended that the successful aging approach is underpinned by the assumption that older adults are invariably capable of controlling their health, social engagement, and physical abilities, and as such, that all individuals should be able to "overcome personal barriers

and work toward successful aging at all times; indeed, this is their responsibility" (p. 705). The current study's findings highlight the ways in which cultural myths that portray older adults as dependent, unproductive, and a drain on economic and health care resources (Angus & Reeve, 2006; Calasanti, 2007; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Katz & Calasanti, 2015), coupled with the "will to health" (Higgs et al., 2009, p. 686), increases both the burden of activity for older adults and their guilt for possessing bodies that deviate more and more from the youthful, able, and successful norm (Calasanti, 2007).

### 7.5 Contributions to the Geographies of Disability Literature

The study findings substantiated current theorizing in the geographies of disability concerning the spatial (re)production of disability (Freund, 2001; Gleeson, 1999; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). To date, no studies in the geographies of disability have examined the intersection of mobility impairment, the use of walking aids, and the experience of environmental barriers in later life. Similar to the findings of previous research in rehabilitation sciences (Brandt et al., 2004; Kylberg et al., 2013; Mortenson et al., 2005; Resnik et al., 2009; Thomas et al., 2008) and geographies of disability (Hansen & Philo, 2007; Kitchin, 1998), the current research study revealed the numerous environmental obstacles encountered by older cane and walker users within their homes and communities. In addition, the findings highlighted the tokenistic and superficial nature of many accessibility interventions, which are often biased towards the needs of wheelchair users (Hansen & Philo, 2007). For instance, many of the participants viewed accessibility features such as ramps and curb cuts as hindrances to mobility, underscoring the ways in which the needs of older disabled adults are often ignored in the design of public spaces.

Moreover, the study findings illustrate the ways in which older disabled adults are often excluded from their communities through the ableist organization of the built environment (Crooks & Choiunard, 2006; Hansen & Philo, 2007; Imrie, 2000; Imrie & Kumar, 1998; Kitchin, 1998). While previous research has focused primarily on the physical accessibility of the built environment (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Resnik et al., 2009; Thomas et al., 2008), this study also considered the ways in the structuring of social services, programs, and resources privileges individuals who fall firmly within the range of 'normal' embodiment (Hansen & Philo, 2007; Kitchin, 1998). In addition to discussing how the physical barriers to mobility they encountered often drew attention to their impairments and marked them as different from their able-bodied counterparts (Imrie & Kumar, 1998), the men and women in the study recounted the ways in which social interactions in public spaces contributed to their perceptions that they were unwelcome and "out of place" (Kitchin, 1998, p. 345). The numerous environmental challenges to mobility encountered by the participants illustrate how public spaces are constructed to be inclusive primarily of youthful and able bodies, thus impeding the mobility of disabled older adults and contributing to their estrangement from their communities.

## 7.6 Implications and Practical Contributions

The study findings have several practical implications with respect to the design of both walking aids and the built environment. Geographies of disabilities scholars have long advocated for consultation with disabled people in the design and construction of public spaces, so as to allow disabled individuals to better "recognize themselves in the way in which space and time are organized" (Hughes, 2002, p. 71). Likewise, the study findings reinforced the need to include older adults with mobility impairment in community planning and design. As Imrie and Kumar (1998) and Hansen and Philo (2007) have pointed out, the provision of accessible

accommodations for people with disabilities often remains an afterthought, resulting in superficial and tokenistic environmental modifications that favour certain disabilities and/or walking aid types (e.g. wheelchair users). Moreover, ageist assumptions that normalize the experience of disability in later life act to further exclude older adults from public consultation regarding accessibility, as older adults are rarely deemed to be a part of the disabled population. As a result, younger individuals (and young wheelchair users in particular) are over-represented in what little consultation is made with disabled people when it comes to community planning, and the needs of older adults with mobility impairments continue to be ignored. As the number of older cane and walker users (and older adults with mobility limitations in general) continues to increase, it will be important to take their mobility needs into consideration. Some simple solutions that might be implemented include longer crossing times at intersections (especially around locations frequented by older adults, such as seniors' centres), clearly marked stairs and ramps, and the provision of ample seating that is of an appropriate height for people with mobility limitations. Solutions that may require a greater degree of planning and engineering include large and accessible bathrooms that accommodate walkers, conveniently placed ramps and handrails, the inclusion of dedicated space for walker or scooter parking, and accessible transportation for older adults that takes into account specific needs such as fatigue and incontinence.

Similarly, the study results speak to possibilities for improvement in the design of assistive devices for older adults. Some of the preferences voiced by the participants in the current study included curved or easy-to-hold handles for canes, a strong grip on cane bases to increase balance, foldable walker structures, and attractive walking aid designs for both canes and walkers. Interestingly, some of the participants preferred highly visible walking aids that

enhanced their safety by making invisible impairment such as balance disorders and fatigue more apparent to able-bodied others. Others were made to feel self-conscious by their overly large and conspicuous walking aids. The availability of a wide variety of safe, appropriate, and affordable walker and cane designs would help older adults determine which devices would better suit their needs and utilize their walking aids with confidence. It is possible that the design and production of modern and visually appealing walking aids will help to reduce the stigma many of the cane and walker users in the study associated with walking aid in later life. For instance, some participants in Resnik et al.'s (2009) study discussed the ways in which canes have historically been associated with wealth and sophistication. At the same time, the strong symbolic value of canes and walkers as signifiers of old age and decline is difficult to ignore, and the destigmatization of canes and walkers may be difficult to achieve when cultural conceptualizations of "old age contain no positive content" (Calasanti & King, 2005, p. 7).

Lastly, the study results have the potential to inform future advocacy and policy-making efforts. In particular, my own current work in the non-profit sector focuses on providing older adults with inclusive social and physical activities, opportunities to remain connected to their communities in meaningful ways, and grassroots advocacy on mobility-related concerns such as public transportation, HandyDART services, and accessible housing. The interviews I conducted with the study participants have deeply shaped my understanding of the community needs of older adults with walking limitations, and as a result, have had practical implications on my work. In the upcoming year, I aim to utilize the participants' stories to illustrate the need for accessible transit improvements as part of my organization's continued municipal and provincial-level advocacy efforts. In addition, I hope to leverage the participants' accounts of the barriers and enablers to mobility they faced to secure funding for more social programs that

reduce social isolation and increase community engagement opportunities for older adults. In this way, I hope to empower older adults by enabling them to have greater options when it comes to accessing community amenities, resources, and social spaces that reflect and uphold their personal identities and interests.

## 7.7 Concluding Remarks

Despite the high prevalence of walking difficulties and widespread use of walking aids in later life, to date, there has been minimal scholarly interest in the study of canes and walkers. Much of the existing research on walking aid use in later life has tended to focus on individuals' attitudes towards and experiences of utilizing high technology devices such as power wheelchairs and motorized scooters (Auger et al., 2010; Brandt et al., 2004; Edwards & McCluskey, 2010; Korotchenko & Hurd Clarke, 2014; May et al., 2010; Mortenson et al., 2005; Papadimitriou, 2008; Petterson et al., 2006; Smith, Sakakibara, & Miller, 2014; Thoreau, 2015). Research that has included canes and walkers has tended to view the devices as interchangeable (Copolillo et al., 2002; Gooberman-Hill & Ebrahim, 2007; Hartke et al., 1998; Hedberg-Kristensson et al., 2007; Kraskowsky & Finlayson, 2001; Roelands et al., 2002) or from one another (Bateni & Maki, 2005; Lofqvist et al., 2009), or focused primarily on improving functional mobility among older adults, decreasing the risk of falls, and promoting safe and appropriate walking aid use (Aminzadeh & Edwards, 2000; Kylberg et al., 2013; Porter et al., 2011; Thomas et al., 2008), rather than the social context of cane and walker use in later life. The current study aimed to fill this gap by addressing the social and environmental factors that might underlie cane and walker use in later life.

The study findings highlighted the ways in which the cultural meanings of cane and walker use, as well as the intersection of social locations such as gender, socioeconomic status,

age, and impairment type, combine to shape individual experiences of mobility impairment and walking aid use in later life. The findings additionally underscore the ways in which the harmful rhetoric of successful aging and the stigmatizing conceptualization of old age as a time of dependency and decline compound older adults' negative perceptions of their aging, disabled bodies. Despite its attempts to offer an affirmative view of later life, age-related bodily losses remain thoroughly stigmatized within the successful aging paradigm (Calasanti, 2007; Calasanti & Slevin, 2001; Katz & Calasanti, 2015), which castigates disabled older adults for their dependence on others, decreased activity and social engagement, and lowered economic productivity (Angus & Reeve, 2006; Calasanti, 2007; Calasanti & King, 2005; Dillaway & Byrnes, 2009; Katz & Calasanti, 2015). Extolled to expend increasing amounts of time and energy into pursuits signifying their belonging in the third age while facing disruptive bodily losses, shrinking social networks, and increasingly inaccessible physical spaces, older adults with mobility impairments are placed in an untenable situation. Finally, the findings illustrate how mobility disability is (re)produced by the ageist and ableist design of the built environment in the ways in which public spaces often segregated and marginalized the men and women, or conversely, drew attention to their bodies in uncomfortable ways, highlighting the ways in which older and disabled individuals are often "passing through other people's spaces" (Hansen & Philo, 2007, p. 495). As ageism is the "one oppression that we will all face" (Calasanti & Slevin, 2001, p. 193), both the environmental and social construction of disability in later life deserves to be examined and dismantled.

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# **Appendices**

# **Appendix A: Recruitment Poster Version 1**

#### **VOLUNTEERS NEEDED FOR RESEARCH STUDY**

"Exploring the experiences of older cane and walker users"

## What is the study about?

This research project will investigate what it is like to use a cane or a walker in later life.

#### Who can participate?

Anyone over the age of 65 who is a regular cane or walker user. Any cane or walker users are welcome to participate, regardless of how long they have used their cane/walker.

#### What do you need to do?

You will be asked to take part in 2-3 interview sessions. One of these interview sessions will involve an outing into the community to a location of you choice. Each interview session will take approximately 30 minutes to 2 hours, depending on your preferences and interest in the study.

# Where will interviews take place?

At your home, at the University of British Columbia or at another location of your choice.

#### Who to contact for more information?

For more information or to take part in this study, please contact x.

# **Appendix B: Recruitment Poster Version 2**

#### **VOLUNTEERS NEEDED FOR RESEARCH STUDY**

"Exploring the experiences of men who use canes and walkers"

## What is the study about?

This research project looks at what it is like to use a cane or a walker in later life.

# Who can participate?

Men over the age of 65 who regularly use a cane or a walker. Any cane or walker users are welcome to participate, regardless of how long they have used their cane/walker.

# What do you need to do?

You will be asked to take part in 2-3 interview sessions. One of these interview sessions will involve an outing into the community to a location of you choice. Each interview session will take approximately 30 minutes to 2 hours, depending on your preferences and interest in the study.

#### Where will interviews take place?

At your home, at the University of British Columbia or at another location of your choice.

#### Who to contact for more information?

For more information or to take part in this study, please contact x.

**Appendix C: Consent Form** 

**Consent Form** 

"Exploring the embodied experiences of older cane and walker users"

I. Who is conducting the study?

Alexandra Korotchenko, a graduate student in the School of Kinesiology at the University of British Columbia, will be conducting the research as part of her doctoral dissertation. She can be

contacted at x.

Her supervisor, Dr. Laura Hurd Clarke, an Associate Professor in the School of Kinesiology, will

be overseeing the project as its Principal Investigator.

II. What is the purpose of the study?

The purpose of this research project is to explore what it is like to use a cane or walker in later

life. In particular, we want to know more about how people aged 65 and older perceive and use

their canes and walkers in their everyday lives.

You are eligible to participate in the study if you are aged 65 or older and use a cane and/or a

walker.

III. Your participation

Your participation in the research will involve taking part in three interview sessions to discuss

your experiences of using a cane or a walker. The first and third interview sessions will consist

of sit-down interviews that will last approximately 1-2 hours, depending on how much you wish

to contribute and how long you would prefer to be interviewed. These interviews will take place

at a location of your choice (for example, your home, the University of British Columbia, a

community centre) and will be audio-recorded with your consent.

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The second interview session will consist of a 'go-along' interview, during which the interviewer will accompany you on an outing you typically make (e.g. going to get groceries, going to church, visiting with friends). You will be able to decide how long the outing will be and where we will go. 'Go-along' interviews typically last approximately 30 minutes to 2 hours. The 'go-along' interview will also be audio recorded with your consent.

#### IV. Study results

The results of this study will be reported in a doctoral dissertation and may also be published in academic journal articles, books, and conference presentations. If you are interested, you will be provided with a report of the study findings and/or any articles that will be published using the study data.

#### V. Potential risks of the study

We do not think that there is anything in this study that could harm you. Some of the questions we ask you may seem sensitive or personal. You do not have to answer any questions if you do not want to.

#### VI. Potential benefits of the study

We hope that the information gathered in this research will help researchers design better walking aids for older people in the future. It is also our hope that the research findings could be used to increase the accessibility of communities for people who use canes and walkers.

#### VII. Confidentiality and anonymity

Your identity and any information collected during the interviews will be kept strictly confidential at all times. Your name and any identifying information will not be used in any publications resulting from the interviews (e.g. doctoral dissertation, academic publications, or conference presentation) unless you specifically ask to be identified in the research. According to university policy, all interview transcripts, audio files, photographic images, and consent forms will be stored on a password-protected computer or in a locked filing cabinet for five years and then destroyed.

# VIII. Who should I contact for more information?

If you are interested in participating in the study or if you would like additional information, please contact Alexandra Korotchenko:

By telephone: x

By email: x

# IX. Who can I contact if I have any complaints or concerns about the study?

If you have any concerns about your rights as a research subject and/or your experiences while participating in this study, you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Consent:
Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impact on you.
Your signature below indicates that you have received a copy of this consent form for your own records.
Your signature indicates that you consent to participate in this study.
Signed:
Date:
□Yes, I am interested in receiving a report of the findings. My mailing or email address is

provided below:

# Appendix D: Biographical Data Form

o Rented home/condominium

# **Biographical Data Form**

1.		Gender:			
		o Female			
		o Male			
2.		Date of birth:			
3.		Place of birth:			
4.		Where did you grow up?			
5.		What is/are your ethnicity/ethnicities?			
6.		What language(s) do you speak at home?			
7.		What was the first language you learned as a child?			
1.	. Marital status:				
	0	Married/Common Law			
	0	Divorced/Legally separated			
	0	Widowed			
	0	Never Married			
5.	. How long has this been your marital status?				
6.	. How many children do you have?				
7.	. How many grandchildren do you have?				
8.	. How many great grandchildren do you have?				
9.	. Where do you currently live?				
	0	Own home/townhouse/condominium			

	0	Family member's home (specify)						
	0	Assisted-living facility						
	0	Long-term care facility						
	0	Other (specify)						
10.	Wl	What is the highest level of education that you obtained?						
	0	Public school (Kindergarten through Grade 7)						
	0	Some high school (Grade 8 through Grade 12)						
	0	High school diploma						
	0	College or university (undergraduate)						
	0	Technical school						
	0	Graduate school						
	0	Other (specify)						
11.	Wl	nat is/was your occupation?						
12.	12. If you have a partner, what is/was his or her occupation?							
13.	3. If you are retired, when did you retire from work?							
14. What is the range of your current annual family (combined) income before ta								
	0	Less than 15,000						
	0	Between 15,000 and 25,000						
	0	Between 25,000 and 35,000						
	0	Between 35,000 and 45,000						
	0	Between 45,000 and 55,000						

- o Between 55,000 and 65,000
- o Between 65,000 and 75,000
- o Between 75,000 and 85,000
- o Between 85,000 and 95,000
- o Above 95,000

15. What mobility device(s) do you use (e.g. cane, walker, crutches)?

#### **Appendix E: First Interview Schedule**

#### **First Interview Schedule**

- 1. Tell me the story of your life (Probes: Where you were born? Where did you grow up? What are some things that you think I should know about you?)
- 2. Tell me about your walking difficulties.
  - a. When did you first start experiencing trouble walking?
    - i. What was/were the cause(s) of your walking difficulties?
    - ii. What was it like for you to start experiencing difficulties walking?
  - b. How did others (friends, family) respond when you began to have difficulties walking?
  - c. How has walking become easier or more difficult over time for you, if at all?
  - d. What kinds of things make walking more difficult for you?
  - e. What kinds of things make walking easier for you?
- 3. Tell me the story of how you initially came to use a cane/walker.
  - a. What lead up to your decision to get the cane/walker?
  - b. How did you acquire your cane/walker?
    - i. Who helped you obtain the cane/walker, if anyone?
    - ii. Did you have any input from a medical professional regarding your cane/walker? Have you had your cane/walker adjusted?
  - c. How did you learn how to use a walker/cane? What was that like for you?
  - d. How did you feel about using a cane/walker initially? How do you feel about it now?
  - e. What reactions did your friends and family members have to you beginning to use a cane/walker?

- 4. Tell me a little bit about your cane/walker
  - a. What does it look like? What kinds of features does it have? What is it like to use it?
  - b. What does the cane/walker mean to you?
  - c. What is your favourite thing about your cane/walker?
  - d. What do you like least about your cane/walker?
- 5. Tell me about your use of a cane/walker.
  - a. How do you typically use your walker/cane over the course of a typical day in your life?
    - i. How often do you use your cane/walker?
    - ii. What activities do you do on a typical day or week? Where do you go?
    - iii. How do you get there? Do you drive/take public transportation?
  - b. How does your cane/walker enable your everyday life activities?
  - c. How does your cane/walker restrict your everyday life activities?
  - d. How are your daily activities now different from those you used to do before you began using a cane/walker, if at all?
    - i. Are there any activities you do not do or places that you do not go because of your cane/walker? (If yes, why? What is that like for you? What do you do instead?)
  - e. How has using a cane/walker affected your physical activities?
  - f. How has using a cane/walker affected your social roles and activities?
  - g. What types of strategies do you typically use to accomplish everyday social and physical activities while using your cane/walker?

# **Appendix F: Second Interview Schedule**

#### **Second Interview Schedule**

- 1. Since we last met, have there been any changes or developments with respect to your use of a cane or walker?
- 2. How have your walking difficulties/cane or walker use affected how you feel about or perceive your body?
  - a. How has using a cane/walker affected your body?
    - i. How have your physical abilities changed or stayed the same since you started using a cane/walker?
    - ii. How has your appearance changed or stayed the same since you started using a cane/walker?
  - b. How has using a cane/walker changed the way you feel about your body, if at all?
  - c. How has using a cane/walker changed the ways that others react to you or interact with you, if at all? How has this affected how you feel about your body?
  - d. How has your self-esteem changed or stayed the same?
- 3. How have your walking difficulties/use of a cane or walker influenced how you feel about growing older, if at all?
- 4. How has using a cane/walker affected your sense of independence?
- 5. If you could make changes to your cane or walker, what would you change and why?
  - a. How would you change the appearance of your cane/walker? (e.g. its colour, size, weight, fit)
  - b. How would you change your cane/walker to make it easier to use?
- 6. What types of things do you think could be done in our communities to make it easier for you to use a cane/walker? What kinds of resources would you like?

- 7. What advice would you give to a new cane/walker user based on your experiences of using a cane/walker?
- 8. Are there any questions I should have asked you that I did not? Do you have anything that you would like to add?

## Appendix G: Codebook

## 1. Agency and independence:

- a. How did the participants define having "agency" and being "independent"?
- b. How did the participants describe their own independence?
- c. What strategies did the participants utilize to accomplish what they wished to accomplish on a daily basis?
- d. What were the participants' living situations?

## 2. Experiences of aging:

a. How did the participants view and discuss their experiences of aging?

# 3. Perceptions of the body:

- a. How did the participants describe their bodies?
- b. How did the participants feel about their bodies? (In terms of appearance, function, and overall health)
- c. How did the participants' current feelings about their bodies compare to how they felt about their bodies in the past?

# 4. Health and physical abilities:

- a. How did the participants describe their current health and physical abilities?
- b. How did the participants compare their current health status and physical abilities to their health and abilities in the past?
- c. How did the participants compare their health and abilities to those of their family members, peers, friends, etc.?
- d. How did the participant perceive their physical and mental health?

# 5. Onset of impairment:

- a. How did the participants describe the onset of their walking difficulties?
- b. When and why did the participant acquire their cane/walker?

#### 6. Assistive devices:

a. Which assistive devices did the participants currently use? Which assistive devices had the participants used in the past? Which assistive devices did participants foresee using in the future?

- b. How did the participants feel about their walkers/canes? How had the participants' feelings about their walkers/canes changed over time?
- c. How did the participants describe and react to other people's attitudes towards their canes/walkers?
- 7. Barriers to mobility: Challenges to the participants' mobility (including environmental accessibility, negative interpersonal interactions, safety concerns, lack of transportation, financial barriers, lack of knowledge)
- 8. Mobility enablers: Factors that enabled the participants to be mobile (including environmental accessibility, social and community resources, positive interpersonal interactions, available transportation, financial means, knowledge)
- 9. Meanings of walking over time
  - a. What meanings did walking have for participants currently and in the past?
  - b. What aspects of their personal histories did participants draw on when discussing the meanings of walking?
  - c. How did the meanings of walking change or stay the same for the participants in later life?

#### 10. Activities and social roles

- a. What daily physical and social activities did the participants engage in? What activities were participants unable to engage in? How had participants' activities changed over time and/or as a result of their cane/walker use?
- b. Which social roles did the participants occupy or strive to maintain?
- c. How did the participants define "activity"?
- d. How did the participants describe their own levels of activity?
- e. How did the participants compare their levels of activity to those of others?

**Appendix H: Participant Report** 

Canadian Older Adults' Experiences Of Using Canes And Walkers

**Participant Report** 

June 15, 2015

Dear [participant name],

I want to begin by thanking you again for your participation in my dissertation project, as well as

extending my sincerest apologies for the delay in getting this report to you. Attached, you will

find an update on the research project to date and a summary of the initial findings from the

study. It is thanks to you that my dissertation project on cane and walker use in later life came to

fruition. Your willingness to share your time and personal experiences with me have helped to

further current understandings of how men and women aged 65+

• Perceive and experience having walking limitations

• Experience using their canes and walkers in their everyday lives

• Experience barriers and enablers to mobility in their communities

I hope that you find the preliminary findings from the study both interesting and relevant to your

own experiences.

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#### FOCUS OF THE RESEARCH

Statistics show that more than one third of Canadians over the age of 65 experience difficulties walking, and that correspondingly, the use of mobility devices (such as canes, walkers, and manual and power wheelchairs) increases in later life. To date, the majority of the research on the use of mobility aids in later life has tended to focus on novel, high technology devices (such as power wheelchairs and motorized scooters). Little research has examined the use of low technology devices such as canes and walkers. To address this gap in the literature, the purpose of the current study was to gain a fuller understanding of older men's and women's perceptions and experiences of using a cane or a walker in their everyday lives

#### METHOD AND SAMPLE

In January 2013, I began distributing study posters and making recruitment presentations advertising the study at seniors' centres, community centres, neighbourhood houses, assisted living residences, and a rehabilitation hospital. This recruitment process, as well as your help spreading word about the study in your respective communities, resulted in 24 participants (18 women and 6 men) being recruited to the study by September 2013.

The men and women who participated in the study were a diverse group, ranging in age from 67 to 92 years of age (median age: 79.5 years). The women in the sample were slightly younger than the men (with the average age of the women being 79 years and the men's being 80 years of age). The participants varied by birthplace, marital status, educational attainment, household

income, and place of residence. The participants also differed in terms of the mobility devices they used (Please see Table 1 below).

Table 1: Characteristics of mobility device use (n = 24)

Mobility device(s) used	Total (n=24)	Women (n=18)	Men (n=6)
Walker and cane	7	6	1
Cane	6	4	2
Walker	4	3	1
Walker, cane, and power wheelchair or scooter	3	3	0
Cane and Nordic poles	2	1	1
Walker and manual wheelchair	1	0	1
Walker, cane, and crutches	1	1	0

#### CURRENT STATUS OF THE RESEARCH AND SUMMARY OF FINDINGS

The men and women who participated in the study took part in a combination of sit-down and walk-along interviews, which were completed by the end of September 2013. Each participant was interviewed two to four times for a total of 68 interviews (resulting in 76.5 interview hours). Because of the large amount of data that was generated by the interviews, their transcription (turning the digital interviews into Word documents) took approximately 10 months (from October 2013 until June 2014). Since June 2014, I have been analyzing the interviews, looking for patterns in your responses and compiling them into themes. Although the analysis of data is still ongoing, below are some of the preliminary themes that have emerged from the interviews:

#### 1) Perceptions and experienced of having walking difficulties

A variety of physical symptoms affected the study participants' mobility, leading them to use a cane or a walker, including pain, fatigue, and loss of balance. These physical symptoms often made movement difficult and everyday activities (such as grocery shopping, meal preparation, and exercise) challenging. For those participants who had been very active throughout their lives, the experience of walking difficulties was "disheartening", "sad", and "discouraging". However, most of the men and women in the study also described themselves as healthy, noting that they could be worse off, especially compared to individuals with no mobility (for example, wheelchair users) and individuals with cognitive impairments. Many of the participants (17 our of 24 participants) also talked about how they continued to be socially and physically active, pursuing a variety of activities and contributing to their communities, despite their walking limitations.

#### 2) Perceptions and experiences of using a cane or a walker

The men and women in the study had a wide variety of reasons for using their canes and walkers, from experiencing a fall, to surgery and chronic illnesses like arthritis and Parkinson's disease. The majority of the participants (18 out of 24 participants) had some initial misgivings about beginning to use their mobility aid, but eventually saw the benefits of their canes and walkers. For example, one participant had this to say: "You start thinking, 'Oh, this is a little bit easier...I can walk and I'm not going to fall over". The men and women talked about how their canes and walkers enabled them to maintain their balance and mobility, helped them to overcome environmental barriers like stairs and steep slopes, and increased their ability to continue to take part in everyday activities. At the same time, many of the participants (19 out of 24 participants)

talked about how their canes and walkers could hinder their ability to walk by causing pain and stiffness, compromising their balance, and putting them in danger of falling. Those who used walkers were particularly unhappy with the size and weight of their devices, which made them more difficult to manoeuvre. Some of the participants (17 out of 24 participants) also talked about how canes and walkers could be perceived as stigmatizing symbols of old age and incapacity.

#### 3) Barriers and enablers to cane and walker use

All 24 participants spoke about the social and environmental barriers and enablers they experienced to using their canes and walkers in their everyday lives. One of the most commonly discussed barriers was transportation. The men and women in the study talked about feeling vulnerable as pedestrians, and facing various challenges to using public transportation (including HandyDART). Those who were able to drive were grateful for their continued abilities, as expressed by one participant who noted, "I don't know how I'd really manage without the car". Participants also discussed how having supportive family members and friends helped them to remain mobile and active while using their canes and walkers. Another enabler to mobility that was noted by many of the men and women was "having something to do" and "having a reason to get out of bed". Activities like volunteering, hobbies, and creative and physical pursuits were listed as important enablers to continued community participation and mobility.

# **PARTING COMMENTS**

If you have any comments about the above findings, please feel free to contact me. The best way to reach me is by email at xxxxxxxx or by mail at xxxxxxxx. Thank you again for your participation in the study!