Senior Centres in Canada and the United States: A Scoping Review

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RÉSUMÉ

Les centres pour personnes âgées ont été identifiés comme des points focaux pour la prestation de services pour la population vieillissante, qui est en forte croissance au Canada et aux États-Unis. Malgré ce rôle important des centres pour personnes âgées, peu de recherches leur ont été consacrées. Cet examen de portée a ciblé les études empiriques en langue anglaise portant sur les centres pour personnes âgées qui ont été publiées dans des revues scientifiques depuis 2000. Un total de 58 études ont été repérées (n = 51 pour les études américaines, n = 7 pour les études canadiennes). La majorité de ces articles était centrée sur des thèmes liés à la participation d'individus dans les centres pour personnes âgées, et quelques études seulement traitaient du milieu associé aux centres pour personnes âgées. Ces résultats suggèrent que les recherches futures devraient cibler les avantages de la programmation des centres pour personnes âgées, avec une attention particulière sur les besoins des baby-boomers, sur les facteurs clés liés au financement, aux espaces et au personnel, ainsi que sur les caractéristiques et les rôles des centres pour personnes âgées dans le contexte canadien.

ABSTRACT

Senior centres have been identified as a "focal point" for delivering services to the rapidly growing older adult populations in Canada and the United States. Despite this important role, academic research studying senior centres has been limited. This scoping review identified English-language empirical research studies focusing on senior centres that were published in an academic journal in 2000 or later. A total of 58 studies were identified (n = 51 American and n = 7 Canadian). The majority of the articles focused on themes related to the participation of individuals at senior centres; a smaller number focused on themes related to the senior centre environment. Based on the findings, it is suggested that future research focus on benefits of senior centre programming, with specific focus on needs of baby boomers; key factors related to funding, space, and staffing; and the characteristics and role of senior centres in the Canadian context.

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Introduction

Currently, both Canada and the United States are undergoing a period of unprecedented population aging, driven by the aging baby boomer cohort (1946–1965), increased life expectancy, and declining birth rates. In Canada, older adults made up 15 per cent of the population in 2013, and it is estimated that by the year 2038 approximately 22 to 23 per cent of the population

will be older adults (Statistics Canada, 2015). Similarly, in the United States older adults made up 15 per cent of the population in 2014, and it is estimated they will make up 22 per cent of the population by the year 2040 (United States Census Bureau, 2015). Aging populations mean that health, social, and community services will have increasingly important roles to play in Canada and the United States in the future.

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Senior centres have been described as a "focal point" for delivering services to the more than 5 million older adults in Canada and 46 million older adults in the United States. According to Manoj Pardasani, one of the foremost researchers on senior centres in the United States:

Senior centers play a vital role by providing opportunities for socialization, volunteer development, information and referral, advocacy, education, outreach, nutrition, and preventive care. They not only provide opportunities for socialization in a centralized location, but also provide access and homebound supportive services that help deter dependence on institutionalized care, such as hospitals and nursing homes. Thus, they perform a vital function in preventive care by allowing the elderly to retain their independence and self-reliance for the longest duration possible. (2004a, p. 29)

The first senior centre in the United States was established in New York in 1943 (Weil, 2014), and today the National Council on Aging reports there are more than 11,400 senior centres in the United States (National Council on Aging, 2017). During the 1960s and 1970s, senior centres experienced significant growth, influenced by the passage of the Older American Act (OAA) in 1965 (Weil, 2014). Under Title III of this act, funding is provided for senior centres and many of the programs offered by them (Wacker & Roberto, 2014). The OAA mandates that services be targeted towards older adults with the greatest economic and social needs. The largest portion of OAA funding (approximately 40%) goes towards meal and nutrition programs (Fox-Grage & Ujvari, 2014). Although the OAA has undeniably had an impact on the development and operation of senior centres in the United States, Pardasani and Goldkind (2012) reported that only about two-thirds of senior centres receive funding from the OAA, and for most centres, it makes up 15 per cent or less of their budget. Other key sources of funding include state programs, municipal/county programs, participant fees, fundraising, the United Way, private grants/sources, and funding from parent organizations.

In Canada, senior centres play a similar role to their counterparts in the United States. The sector is less cohesive than in the United States, however, and there is no federal legislation or OAA equivalent. Some provinces have legislation pertaining to senior centres and offer specific funding for them (e.g., Ontario) (Ministry of Seniors Affairs, 2017), whereas others (e.g., British Columbia) do not. Senior centres are usually operated by non-profits or municipalities (Levi & Kadowaki, 2016; Older Adult Centres' Association of Ontario [OACAO], 2010). Funding comes from a variety of sources, including membership/program fees, municipal and provincial funding, fundraising and donations,

gaming revenues, public and private grants, and facility rentals (Alberta Association of Seniors Centres [AASC], 2014; Levi & Kadowaki, 2016; Sheppard, Myers, & Dubé, 2016).

Despite the important role senior centres play in delivering services to older adults, academic research on these centres is limited. Most of this research was conducted between 1970 and 1990, and around the mid-1990s the focus of research shifted away from senior centres themselves to senior centres as a site for research (Weil, 2014). To our knowledge, there are no published academic literature reviews on the topic of senior centres. Consequently, we conducted a scoping review, summarizing the current research on senior centres in Canada and the United States, thereby identifying research gaps and a research agenda for the future. Our primary research question was, "What is the nature and scope of current research on senior centres in Canada and the United States?" A secondary research question was, "How do senior centres in Canada differ from senior centres in the United States?"

Methods

Scoping reviews are well suited for dealing with large, complex, and heterogeneous bodies of literature that are not well suited to systematic reviews (Peters et al., 2015) and allow for inclusion of many different study designs (Arksey & O'Malley, 2005). Scoping reviews may be conducted to (a) map out a research area, (b) determine the potential value of undertaking a systematic review, (c) summarize and disseminate research findings, and (d) identify gaps in the literature (Arksey & O'Malley, 2005). Our scoping review focused primarily on the last two purposes and followed the five steps for scoping reviews outlined by Arksey and O'Malley (2005): (1) identify the research question; (2) identify relevant studies; (3) select relevant studies; (4) chart the data; and (5) collate, summarize, and report the results.

We conducted a search for empirical research in English-language academic journals published in 2000 or later. Studies were excluded if (a) the focus of the study was not judged to be on senior centres; (b) the study was not conducted in the United States or Canada; (c) the study reported on an intervention or program being implemented at a senior centre by an external party (i.e., interventions or programs being piloted/run at senior centres by an external organization/researcher); (d) the study used the senior centre as a sample population to study a topic not focused on senior centres; or (e) the study was a descriptive piece/commentary and not an empirical research study.

We used the search engine EBSCOHost to search the databases AgeLine, CINAHL, Medline, Social Sciences, PsychInfo, and Academic Search Complete. The five search terms used were senior centre, older adult centre, senior activity centre, senior community centre, and senior citizen centre. Both the Canadian spelling of the word "centre" and the American spelling "center" were used. The literature search was conducted by the first author (LK) in March 2017. We identified a total of 1,270 articles, and after removing the duplicates there were 753 articles. The abstracts of all of the articles were screened by LK, and 57 met the criteria for inclusion. Reference lists were also reviewed by LK, and one additional article was identified for inclusion from a reference list. The total articles included in this review were 58 (see Figure 1 for an outline of the search strategy).

Results

Of the studies found, 51 were American and 7 were Canadian. Table 1 provides an overview of the study characteristics. The studies used a mix of quantitative (n = 38), qualitative (n = 15), and mixed methods study designs (n = 5). A cross-sectional survey was the most common study design used. We decided to organize the studies into themes due to the large number of studies and the natural clustering around certain topics. The noticeable contrast between studies that used the individual as the unit of analysis versus the senior centre prompted us to organize the themes under the headings of Senior Centre Participation and Senior Centre Environment. During the data charting process, we identified seven key themes, under which the studies were then organized. Three themes related to the participation of individuals at senior centres:

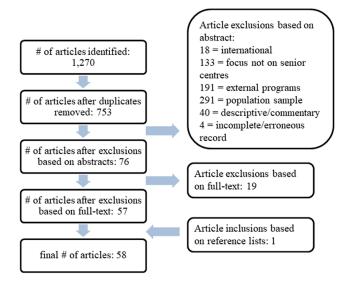


Figure 1: Literature review search strategy

Table 1: Study characteristics of scoping review on senior centres

Total # of Studies: 58

Study Methodology

- Quantitative: 38
 - o Cross-sectional: 36
- Cohort: 2Qualitative: 15
- Qualitative description: 6
- o Ethnography: 2
- o Phenomenology: 2
- o Community-based participatory research: 1
- o Case study: 4
- Mixed methods: 5

Country of Origin

- United States: 51
- Canada: 7

Focus of Study

- Participation: 41
 - o Participants and non-participants: 14
 - o Benefits of participation: 18
 - Experiences and perspectives: 9
- Environment: 17
 - O Socio-physical environment: 4
 - Organizational models: 2
 - o Programming: 7
 - o Policy and advocacy: 4

participants and non-participants; benefits of participation; and experiences and perceptions of participation. Four themes related to the senior centre environment: the socio-physical environment, organizational models, programming, and policy and advocacy. Some studies had content that aligned with more than one theme, in which case the study was assigned to the theme that was judged to best fit its purpose and content. The majority of studies focused on themes related to the participation of individuals at senior centres (n = 41). A smaller number of studies (n = 17) focused on themes related to the senior centre environment. Tables 2 and 3 summarize the studies on senior centre participation and the senior centre environment.

Summary of Findings: Senior Centre Participation

Senior Centre Participants and Non-participants

Fourteen studies (10 American and 4 Canadian) focused on characteristics of senior centre participants and non-participants, and on barriers and facilitators of participation. Most of these studies were quantitative (n = 11) and relied on cross-sectional surveys for their data.

First, in examining general senior centre participation in the United States, both Pardasani (2010) and Schneider, Ralph, Olson, Flatley, and Thorpe (2014)

Table 2: Studies on senior centre participation

Author and Location	Study Purpose	Study Design	Sample	Key Findings
Senior Centre Participants	and Non-Participants			
Ashida & Heaney (2008) United States	Examine social network characteristics associated with intention to participate at a newly opening senior centre	Quantitative: Cross-sectional survey with follow-up	126 older adults living in an urban low-income neighbourhood (111 at follow-up)	-Higher intention to participate was associated with more female and younger network members, fewer network members living in close proximity, higher levels of social support, and lower levels of social connectedness -Intention to participate was not found to be associated with actual participation
Dondzila et al. (2014) United States	Assess whether awareness or utilization of community-based fitness resources (gym, exercise classes, etc.) at senior centres are influenced by proximity to the centre	Quantitative: Cross-sectional survey	417 older adults living within 5 miles of 7 senior centres	-Approximately 50% of older adults were aware of the community-based fitness resources, but only 3% used them -Proximity did not affect awareness or use of community-based fitness resources -Lack of interest was the top reason for not using community-based fitness resources
Gavin & Myers (2003) Canada (Ontario)	Examine and compare participation in beginner tai chi classes and line dancing classes	nner tai chi classes and line methods (administrative		-Participation in tai chi and line dancing was highest in the fall and declined over the other seasons, with few classes offered in the summer -Average attendance for tai chi classes was 72% and the dropout rate was 23%; for line dancing it was 68% and 10% -Similar rates of adherence and dropouts were found for tai chi senior/recreation centre participants and Taoist tai chi participants
Giunta et al. (2012) United States (New York)	Compare older adults attending racially/ethnically diverse senior centres versus those attending non-diverse centres	Quantitative: Secondary data analysis of cross-sectional survey	11 diverse centres and 45 non-diverse centres (1,870 older adults)	-Participants attending diverse centres were more likely to be African American or Latino, speak Spanish, live alone, and not have family/social support -No significant differences were found for perceived mental or physical health among diverse and non-diverse centre participants
Hickerson et al. (2008) United States	Examine the physical activity involvement of older adults at senior centres	Qualitative: Case study	-Focus groups with 16 older adults -13 in-depth interviews -Participant observation at 1 senior centre	-Four major themes emerged: organizational resources, personal capital, relational capital/social structure, and physical activity and enjoyment
Jung et al. (2010) United States (California)	Identify potential barriers to low-income minority older adults enrolling in internet training classes at a senior centre	Quantitative: Cross-sectional survey	91 older adults from 5 congregate meal sites of the senior centre	 -Lower computer anxiety, lower aging anxiety, and gender (male) were predictors of enrollment in the training course -Only 18% of the sample chose to sign up for the training course

Table 2: Continued

Author and Location	Study Purpose	Study Design	Sample	Key Findings	
Lai (2006) Determine the prevalence and Quantitative: Canada (National) predictors of use of senior centres among elderly Chinese immigrants of cross-sectional survey		1,537 elderly Chinese immigrants	 29% of elderly Chinese immigrants reported using a senior centre in the past year Predictors of use were older age, having a religion, living alone, level of education (secondary), country of origin (Vietnam), stronger Chinese ethnic identity, stronger social support, and lower English competency 		
Lai (2001) Canada (Alberta)	Examine the factors explaining use of different services by elderly Chinese participants at senior centres	Quantitative: Cross-sectional survey	97 Chinese older adults attending a Chinese senior centre	-Recreation services were the most commonly used, while support services were the least -The four different types of services (recreation, acculturation, task assistance, and support) varied in their predictors of use	
Miyawaki (2013) United States (California)	Examine the preferences of Japanese Americans for ethnic and non-ethnic senior centre and social service environments	Quantitative: Cross-sectional survey	183 Japanese American older adults and 230 Japanese American baby boomers	-Both older adults and baby boomers preferred a mixed environment (Japanese-specific and non-ethnic specific) for activities -For respondents fluent in Japanese and with lower English capability there was a strong preference for Japanese-specific environments	
Pardasani (2004b) United States (New York)	Examine how the racial and linguistic diversity of staff and programming influence the participation of minority older adults at senior centres	Quantitative: Cross-sectional survey	219 senior centres	-Estimated 80% of senior centre participants were Caucasian and 20% from minority groups (similar ratios for staff) -Senior centres offering programs targeted at minority groups/in other languages and with minority group staff were more likely to have diverse clientele	
Pardasani (2010) United States (Indiana)	Examine the characteristics of senior centre participants and non-participants	Quantitative: Cross-sectional survey	1,283 older adults (722 participants and 563 non-participants)	Participants were more likely to be female, Caucasian, older, lower income, live in a rural area, live alone, not require assistance with ambulation, and not be a caregiver The most common reason for participation was socialization	
Schneider, Ralph, Olson, Flatley, & Thorpe (2014) United States (New York)	Identify predictors of senior centre use among older public-housing residents	Quantitative: Secondary data analysis of cross-sectional survey	1,000 senior public-housing residents	-Predictors of senior centre use included race/ language, living alone, being at risk of depression, living in senior-only or naturally occurring retirement community housing, and older age with no activities of daily living limitations -Predictors of higher frequency of use included: race/language and gender (female)	

Table 2: Continued

Author and Location	Study Purpose	Study Design	Sample	Key Findings
Strain (2001) Canada (Manitoba)	Examine senior centre participation in Manitoba and changes in use over a four-year period	Quantitative: Cohort study	1,399 older adults in 1991/92 and 956 at follow-up in 1995	 -1/5 of older adults had visited a senior centre in the past 6 months (proportion remained consistent over the 4-year period) -Older adults who were female, low-income, had fewer instrumental activities of daily living limitations, lived alone, and were rural residents were more likely to participate
Walker, Bisbee, Porter, & Flanders (2004) United States (Texas)	Flanders (2004) senior centres		-Surveys of 289 participants and 14 senior centre directors, plus supplemental surveys of non-participating friends -Interviews with 20% of respondents and 30 non-participants	-Predictors of more frequent senior centre participation included faith-based participation, appropriate size groups for activities, knowing about activities, and transportation availability -The most common themes from interviews were need for transportation, desire for more musical programs, and requests for favourite foods to be served more frequently
Benefits of Senior Centre Part	ticipation			
Aday, Kehoe, & Farney (2006) United States (National)	Examine the relationship between friendships and senior centre participation for women who live alone	Quantitative: Secondary data analysis of cross-sectional survey	415 women participating at senior centres (274 living alone and 141 living with a spouse)	-Women who lived alone were more likely to participate at the senior centre, and more likely to report benefits of participation and rely on social support/friendships from the centre -Benefits included increased independence, improved mental health and life satisfaction, and increased social support
		Quantitative: Cross-sectional survey	62 senior centre participants	 Positive relationships were found between general subjective age and depressive symptoms, and total senior centre activity and subjective age (no direct relationship between depression and total activity, however)
Farone, Fitzpatrick, & Tran (2005) United States (National)	Explore the role of senior centres as a moderator of stress-related distress	Quantitative: Secondary data analysis of cross-sectional survey	2,299 elderly Latino people	 Respondents using senior centres experienced lower levels of psychological distress in stressful situations than those who did not use the centres
Fitzpatrick, Gitelson, Andereck, & Mesbur, (2005a) Canada (Ontario)	Examine the impacts of social support received at senior centres on physical and mental health	Quantitative: Cross-sectional survey	186 participants from 2 senior centres	-Social support received in the forms of caregiving and advice had positive impacts on mental and physical health

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Table 2: Continued

Author and Location	Study Purpose	Study Design	Sample	Key Findings
Fitzpatrick, McCabe, Gitelson, & Andereck (2005b) United States (Arizona)	Determine what factors influence perceived benefits of senior centre participation	Quantitative: Cross-sectional survey	1,026 participants from 7 senior centres	-The key types of benefits identified were social and health -Gender, age, income, distance from centre, working at the centre, and meal programs were all factors which influenced the perceived benefits of participation
Fulbright (2010) United States (Arkansas)	Examine the role senior centres play in decreasing depression in older adults	Quantitative: Cross-sectional survey	257 participants from 9 senior centres	-75% of participants reported improvements in their lives due to participation, and improvements were primarily attributed to social support -Making friends at the centre had the most significant effect on depressive symptoms
Gitelson, Ho, Fitzpatrick, Case, & McCabe (2008) United States (Arizona and South Carolina) Identify perceived benefits of senior centre participation		Quantitative: 1,119 congregate meal program Cross-sectional survey participants from 19 senior centres		-Senior centres were perceived as important providers of information -Most important perceived benefits were socialization and meals -Older women, ethnic minority older adults, and low-income older adults perceived the most benefits
Hand, Cavanaugh, Forbes, Govern, & Cress (2012) United States (Maryland)	Investigate impact on previously inactive older adults of participating in exercise at senior centres for a 12-week period	Quantitative: Cohort study	38 self-selected fitness centre users at the senior centre and 29 controls	-The fitness centre users experienced improvement in body mass index and weight, functional fitness, and health-related quality of life, while the control group did not
Kirk & Alessi (2002) United States (Louisiana)	Examine the impact of senior centre meal program participation on quality of life of participants	Quantitative: Cross-sectional survey	275 older adults (182 meal program participants and 93 non-participants)	-Despite participants being more likely to live alone and be widowed, they reported more social contact, lower levels of loneliness, and higher quality of life than non-participants
Kirk, Waldrop, & Rittner (2001) United States (Louisiana)	Examine the relationship between informal social support and quality of life for senior centre congregate meal participants	Quantitative: Cross-sectional survey	182 participants from 4 rural senior centres	-Despite the fact the majority of the sample had limited social contacts and lived in poverty, 2/3 reported they were not lonely and 98% that their quality of life was good or excellent
Rhynes, Hayslip, Caballero, & Ingman (2013) United States (Texas)	Examine the relationship between senior centre attendance and the health and well-being of grandparents raising grandchildren	Quantitative: Cross-sectional survey	130 grandparents raising grandchildren (67 were attending senior centres) from 12 nutrition senior centres and 3 support groups	-Senior centre attendance was associated with improved quality of life and well-being, lower caregiver burden, and increased role satisfaction

Table 2: Continued

Author and Location	Study Purpose	Study Design	Sample	Key Findings
Swan, Turner, Shashidhara, & Sanders (2010) United States (Texas)	Explore physical activity participation at senior centres	Quantitative: Cross-sectional survey	798 participants at 21 senior centres	-58% of the sample had participated in physical fitness classes, and 53% reported they had increased their level of physical activity - Participants in physical fitness classes, chair exercise classes, and dance/aerobics reported greater increases in physical activity in the past year compared to non-participants
Swan, Severance, & Turner (2016) United States (Texas)	Examine the impact of senior centre meal programs on participants	Quantitative: Secondary data analysis of cross-sectional survey	989 participants at 28 senior centres	 2/3 of participants attended the centre 3 or more days/week for meals 58% felt the meals were important to improve their diet, and 39% felt that they had improved their health Ethnic respondents were more likely to eat frequently at the centre, attend nutrition classes, and attend to improve their diet
Tang, Heo, & Weissman (2011) United States (Pennsylvania)	Examine health disparities and impacts of social participation for senior centre participants	Quantitative: Cross-sectional survey	101 participants (85 were women) at 3 senior centres	-Older women who had been participating for longer periods of time experienced fewer functional limitations and chronic conditions -African American women reported more functional limitations despite attending the centres more frequently than white women
Taylor-Harris & Zhan (2011) United States (Georgia)	Examine the benefits of senior centre participation for African American older adults	Qualitative: Qualitative description (interviews and observations)	-Interviews with 15 African American participants at a senior centre and 1 coordinator -Participant observations at 1 senior centre	-Benefits identified included physical benefits, psychological and emotional benefits, and social benefits
Turner (2004) United States (Texas)	Explore participation and the benefits of participation at senior centres	Quantitative: Cross-sectional survey	856 participants at 27 senior centres	 -91% of participants ate weekly at the centres, and most participated more for socialization than meals -Majority of the participants in health and exercise programs found them useful -Over half of participants said they had learned about important topics at the senior centre
Turner (2006) United States (Texas)	Explore the relationship between body mass index (BMI) and senior centre participation and activities	Quantitative: Cross-sectional survey	740 participants at 21 senior centres	 No association was found between meal program participation and BMI Individuals with higher BMI (overweight or obese) had lower rates of participation in physical activity programs

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Table 2: Continued

Author and Location	Study Purpose	Study Design	Sample	Key Findings	
Turner, Schmitt, & Hubbard-Turner (2016) United States (North Carolina)	d-Turner (2016) older adults who use a senior centre Cross-sectional survey a		29 fitness facility users and 16 controls	-No differences between the groups were found for number of steps taken	
Experiences and Perceptions	of Senior Centre Participation				
Cohen-Mansfield, Parpura-Gill, Campbell-Kotler, Vass, & Rosenberg (2005) United States (Maryland)	Investigate older adults' preferences for topics of discussion and interest groups at senior centres	Quantitative: Cross-sectional survey	148 residents of 5 low-income senior apartments	-The most preferred topics/interests were music groups, games, and health and legal issues -Interest in groups was associated with higher levels of education, loneliness, and younger age	
Dattilo et al. (2015) United States	Examine the role of leisure in the lives of older adults using senior centres	Qualitative: Qualitative description (focus groups)	34 participants from 4 senior centres, plus follow-up focus groups with 50 participants	-Key themes about leisure were drive for self- determination; challenges associated with aging and the need for adaptations; leisure engagement; and achieving self-determination through leisure engagement	
Gallant & Hutchinson (2016) Canada	Examine what factors undermine or contribute to citizen power at senior centres	Qualitative: Community-based participatory research	-Research team meetings (consisting of 5 core senior centre members and research team) -Participant observations at 1 senior centre	-Members generally felt they were powerless over the activities and functions of the centre and were reluctant to claim power, although they did try and claim power in some small ways	
Hostetler (2011) United States	Explore how the role of senior centres is conceptualized	Qualitative: Qualitative description (interviews and observations)	-Interviews with 30 service providers -Observations at 1 senior centre	-Community and choice were key words used when describing the role of senior centres -Senior centres increasingly are trying to provide individual choice and appeal to younger older adults	
MaloneBeach & Langeland (2011) United States	Survey baby boomers on their perspectives on retirement and senior centres	Quantitative: Cross-sectional survey	225 individuals between the ages of 50–59	-68% of respondents would use a senior centre -Primary perceptions of senior centres were (a) place to engage socially and (b) place for activities	
Marken (2005) United States	Understand older adults' perceptions of leisure and their expectations for a new senior centre	Qualitative: Qualitative description (interviews and observations)	-Interviews with 7 middle-aged adults and 2 senior centre staff -Observations at 1 senior centre	-Key themes were desirable environment, quality activities, facilitating positive aging, and intergenerational contact	
McCaffrey (2008) United States (Florida)	Describe the experiences of Haitian older adults being integrated into a senior centre in a small town in Florida	Qualitative: Phenomenology	16 Haitian older adults participating at a senior centre in a small town in Florida	-Key themes were being accepted, welcomed, and valued in their new community and hopefulness for a good life	
McGovern, Brown, & Gasparro (2016) United States (New York)	Explore the impact of an LGBTQ senior centre on its participants	Qualitative: Qualitative description (focus group and interviews)	-Focus group with 9 participants at an LGBTQ senior centre in the Bronx -Interviews with 3 key informants	-Key themes were the centre as family, feeling accepted, and the Bronx (location and culture)	
Rossow-Kimball & Goodwin (2014) Canada	Understand the leisure experience of older adults with and without intellectual disabilities at a senior centre	Qualitative: Phenomenology	8 older adults (with and without intellectual impairments) participating at the centre and 3 staff members	-Key themes were shared leisure motivations, expecting too much from mainstream participants and staff, and wanting even more	

Table 3: Studies on the senior centre environment

Author and Location	Study Purpose	Study Design	Sample	Key Findings
Senior Centres and the Soc	io-Physical Environment			
Cohen et al. (2009) United States	Examine and compare changes in use at a senior centre and a skate park after renovations	Qualitative: Case study	1 senior centre and 1 skate park undergoing renovations (plus a comparison site for each)	-The number of senior centre participants was significantly lower (decreased from 478 to 198) after renovations, while at the comparison site there were no changes -Use at the renovated skate park, in comparison, significantly increased
Eaton & Salari (2005) United States	Examine the fit between the physical environment of senior centres and lifelong learning activities	Qualitative: Ethnography	-Observations at 3 senior centres -Interviews with 10 participants at each centre	-Characteristics of the centre considered the best fit for lifelong learning included learner-centred, provided volunteer and leadership opportunities, and had separate rooms for socialization and learning
Ruggiano (2012) United States	Examine older adults' experiences in intergenerational shared sites	Qualitative: Qualitative description (participant observation and interviews)	-Observations at 2 intergenerational shared sites (senior centres co-located in community centres) -12 interviews with staff	-Sharing space/resources with children created issues due to the prioritization of the children's activities, leading to negative behaviours and territoriality by older adults -The intergenerational environment produced some positive interactions; however, sound was a stressor for older adults
Salari, Brown, & Eaton (2006) United States	Observe territoriality in senior centres	Qualitative: Ethnography	-Observations at 3 senior centres -Interviews with 10 participants at each centre	-Main area where territoriality was an issue was the dining room -Territoriality was an issue in the two centres which had multipurpose dining rooms, little participant empowerment, and few leadership roles
Organizational Models of	Senior Centres			
Pardasani & Thompson (2012) United States (National)	Identify innovative senior centre models and evaluate their impacts	Qualitative: Case study	35 innovative senior centres	-Six innovative models were identified: community centre, wellnes centre, lifelong learning/arts, continuum of care/transitions, entrepreneurial centre, and cafe program
Velez Ortiz (2015) United States (New York and Puerto Rico)	Examine whether the integration of mental health services into senior centres impacts awareness of mental health services	Quantitative: Cross-sectional survey	167 Puerto Rican older adults from 2 senior centres (1 integrated mental health service model in New York and 1 mainstream referral model in Puerto Rico)	-Older adults at the integrated model centre had greater awareness of mental health services
Senior Centre Programming	9			
Bobitt & Schwingel (2016) United States (Illinois)	Identify factors which impact the implementation of evidence-based health and wellness programs at senior centres	Mixed Methods: Mixed methods (surveys and interviews)	-Survey of 23 senior centres -Interviews with 12 senior centres and directors of 4 Area Agencies on Aging	-Senior centres lacked familiarity with evidence-based health and wellness programs, and were skeptical over whether they were effective and desired by clients -Funding was considered the key barrier to implementation
Casteel, Nocera, & Runyan (2013) United States (National)	Describe current state of health promotion programming in senior centres	Quantitative: Cross-sectional survey	Random sample of 500 senior centres in the United States	-Blood pressure monitoring and nutrition programs were the most common types of health promotion programs -Urban centres were more likely to offer health promotion programming than rural

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Table 3: Continued

Author and Location	Study Purpose	Study Design	Sample	Key Findings
Felix et al. 2014 United States (Arkansas)	Explore the barriers and facilitators for senior centres invited to participate in a randomized controlled trial	Mixed Methods: Mixed methods (administrative data and interviews)	-Administrative data on the 50 invited centres -Interviews with 16 participating and non-participating senior centres	-Primary barriers to participation were staffing and perceived inability to recruit participants -Primary facilitator was desire to offer the program
Pardasani (2004a) United States (New York)	Explore the programs and services offered by senior centres	Quantitative: Cross-sectional survey	219 multipurpose senior centres, senior clubs, senior centres, and nutrition sites	-Centres offer programming in key areas of recreation, volunteering, health, nutrition, and social services -Most popular services were meals, exercise, and information and referral
Skarupski & Pelkowski (2003) United States (Pennsylvania)	Identify possible community health nursing roles at senior centres	Quantitative: Cross-sectional survey	59 participants at a senior centre	-Based on the survey and past research, several areas for community health nursing interventions were identified: loneliness and social support, diet and nutrition, oral health, self-rated health and exercise
Tobias et al. (2014) United States (New York)	Examine the types and prevalence of pain-relevant programs offered by senior centres	Quantitative: Cross-sectional survey	195 senior centres	-On average, centres offered 9 pain-relevant programs, and the most common were exercise, handicrafts, dance, and walking dubs -Programs involving movement were identified as the most helpful for pain
Zachary, Casteel, Nocera, & Runyan (2012) United States (National)	Examine the prevalence and barriers of senior centres offering multi-component falls prevention programs	Quantitative: Cross-sectional survey	Random sample of 500 senior centres	Only 33% of centres offered all three falls prevention components (balance exercise class, medication management, and home safety) Lack of staff, lack of time, and lack of experience with falls prevention were identified as the top barriers
Senior Centre Policy Issues	and Advocacy			
Higgins (2001) United States (Massachusetts)	Examine the extent that casino gambling trips are supported by senior centres	Mixed Methods: Mixed methods (interviews and surveys)	-Interviews with 16 senior centres -Survey of 14 additional senior centres	-Gambling trips are in high demand at senior centres -Only 8 of the centres had gambling intervention policies -Policy options include discontinuing trips, limiting trips, and offering gambling education programs
Higgins (2005) United States	Explore gambling experiences at senior centres	Qualitative: Case study	7 senior centres	 -Lack of agreement on whether gambling is an issue at senior centres -Gambling is important source of revenue for some centres -Local regulations have significant effect on gambling at senior centres
Pardasani & Goldkind (2012) United States (National)	Investigate how senior centres are navigating the funding environment and the advocacy strategies they utilize	Quantitative: Cross-sectional survey	376 members of the National Institute of Seniors Centres	-88.5% of administrators reported engaging in policy advocacy -The most common reason for engaging in advocacy was funding -Barriers to engaging in advocacy included lack of knowledge, experience, and support
Pardasani & Sackman (2014) United States (New York)	Develop more in-depth understanding of the role and impact of senior centres, and the operational challenges they face	Quantitative: Cross-sectional survey	155 senior centres	-Senior centres offer programming in the areas of recreation, health and fitness, social services, and continuing education and volunteerism -The top barriers to daily operations were lack of funding, lack of space, need for more staff, and need for centre improvements

have conducted studies comparing participants and non-participants. Pardasani (2010) surveyed a purposive sample of older adults in Northwest Indiana, and identified that participants were more likely to be female, Caucasian, older, lower income, living in a rural area, living alone, not requiring assistance with ambulation, and not being a caregiver. Schneider et al. (2014) analysed data from a sample of senior public housing residents (approximately 1/3 of whom had used a senior centre in the past 3 months). Predictors of use included race/language (Chinese-speaking Asians had the highest rates of use), living alone, being at risk of depression, housing type, and being older with no activities of daily living (ADL) limitations. In a Canadian study, Strain (2001) analysed data from a cohort study of older adults living in Manitoba. The proportion who had visited a senior centre in the past 6 months remained consistent over a 4-year period (approximately 1/5 of the sample). Participants were more likely to be female, lower income, having few instrumental activities of daily living (IADL) limitations, living alone, and living in a rural area.

Although there are some inconsistencies, these studies suggest that participants are more likely to be female, older, lower income, living alone, living in rural areas, and having few functional limitations. In other studies that have surveyed senior centre participants (but that did not compare them to non-participants), similar demographic profiles have been found (e.g., Fitzpatrick, Gitelson, Andereck, & Mesbur, 2005a; Fitzpatrick, McCabe, Gitelson, & Andereck, 2005b; Turner 2004; etc.). It is worth noting that older adults with functional limitations and higher health needs were less likely to participate, suggesting there is an important portion of the older adult population that senior centres are not reaching but who may benefit from their services. Almost half (43%) of Canadians aged 75 and older have a disability (Statistics Canada, 2017), suggesting there is a growing population of older adults who would benefit from targeted programming and outreach.

In addition to these studies comparing participants and non-participants, a Canadian study by Lai (2006) specifically examined predictors of participation in a sample of elderly Chinese immigrants (approximately 1/3 of whom had used a senior centre in the past year). Predictors of use were older age; having a religion; living alone; having a medium (secondary) education level; immigrating from Vietnam; and having stronger Chinese ethnic identity, stronger social support, and lower English competency. Although some of these predictors are the same as those identified in the studies with general populations (e.g., older, live alone), others are unique to Chinese older adults (e.g., stronger Chinese ethnic identity, stronger social support). Another study by Lai (2001) found that although Chinese older adults

made use of recreational, acculturation (e.g., English classes), and task assistance (e.g., filling out forms) programs at a Calgary senior centre, support services (e.g., counselling, friendly visiting) were underutilized.

The level of participation of ethnic minorities at senior centres has been an important concern in the literature, and two studies specifically addressed the diversity of participants. In a survey of 219 senior centres in New York, it was estimated that about 80 per cent of participants were Caucasian and 20 per cent were from minority groups; however, participation by minority groups varied significantly by centre (Pardasani, 2004b). Senior centres offering programs targeted at minority groups or in other languages and with minority group staff were more likely to have diverse participants (Pardasani, 2004b). Another study from New York by Giunta et al. (2012) compared older adults attending racially/ethnically diverse senior centres versus those attending non-diverse centres. Out of the 56 senior centres in the sample, 11 were classified as diverse. Participants attending diverse centres were more likely to be African American/Latino, speak Spanish, live alone, and not have family/social support. Miyawaki (2013) took a different approach to studying diversity by surveying Japanese Americans on their preferences for ethnic and non-ethnic senior centres. The majority of respondents preferred a mixed environment with both Japanese and non-ethnic specific activities, likely reflecting their high levels of acculturation as second- or third-generation Japanese Americans, coupled with their wish to maintain aspects of their ethnic culture. However, for individuals for whom Japanese was their native language and had limited English proficiency (most of whom came to the United States following WWII), there was a strong preference for Japanese-specific environments.

Based on the mixed findings from the studies examining participation and diversity, it is difficult to draw conclusions on the diversity of senior centre participants. It seems, however, that whereas underrepresentation of ethnic minority older adults may be a systemic issue at some senior centres, there are high rates of participation at some "diverse" senior centres. In addition, certain ethnic groups (e.g., Chinese older adults) have high rates of participation. These studies also suggest that language and acculturation may be factors more important than ethnicity in affecting participation. This highlights the importance of offering culturally relevant programming in the languages spoken by ethnic groups in the communities surrounding senior centres and hiring staff who speak these languages in order to increase participant diversity.

Both Pardasani (2010) and Strain (2001) also reported in their studies that the primary motivation for senior centre participation was the desire for socialization. Ashida and Heaney (2008) surveyed older adults on their intention to participate at a new senior centre and found that higher intention to participate was associated with fewer social network members living in close proximity, and higher levels of social support but lower levels of social connectedness. When the new centre opened, 19 per cent of those surveyed actually participated at the centre (however, stated intention to participate was not associated with actual participation; therefore, it is difficult to draw conclusions on the basis of this study).

Although the studies described above focused on participant characteristics, five additional studies identified factors that facilitate or act as barriers to participation. Walker, Bisbee, Porter, and Flanders (2004) found higher levels of participation were associated with participating in faith-based activities; having appropriate size groups for activities; knowing about activities; and having transportation availability. In a case study examining physical activity at a senior centre, Hickerson et al. (2008) identified three major factors that contribute to physical activity participation and enjoyment: organizational resources, personal capital (i.e., an individual's motivation, competence, etc.), and relational capital (i.e., social support and social structure). Jung et al. (2010) surveyed low-income minority older adults to identify barriers to their participation in internet training classes at a senior centre. Only one-fifth of the older adults surveyed ended up participating in the internet training classes, and psychological barriers were the key barriers to enrollment.

In a Canadian study, Gavin and Myers (2003) examined participation in beginner tai chi and line dancing classes. Participation in these classes was highest in the fall and then declined over the other seasons. Both the tai chi and line dancing classes had average attendance rates of around 70 per cent and average dropout rates of 10 to 20 per cent. Interestingly, age, health limitations, activity, and overall limitations were not predictors of attendance or dropouts. Finally, Dondzila et al. (2014) surveyed older adults living within 5 miles of seven senior centres and found that proximity did not affect awareness or utilization of community-based fitness resources (gym, exercise classes, etc.) at the senior centres. Taken together, these five studies suggest that a number of factors may influence senior centre participation and should be considered when offering programs, such as availability of transportation, season, comfortableness with activities, and so on.

Benefits of Senior Centre Participation

The most common theme in this review (n = 18) was investigating the benefits of general senior centre

participation or participation in specific senior centre activities. Only one of these studies was Canadian (Fitzpatrick et al., 2005a). The majority of the studies relied on quantitative methods (n = 17), and specifically cross-sectional surveys as their source of data (n = 16).

Several studies examined the impacts of senior centre participation on the health and well-being of older adults. Key benefits included the following:

- Provision of meals (Gitelson, Ho, Fitzpatrick, Case, & McCabe, 2008; Turner, 2004)
- Increased independence (Aday, Kehoe, & Farney, 2006)
- Improved quality of life (Rhynes, Hayslip, Caballero, & Ingman, 2013)
- Improved mental or psychological well-being (Aday et al., 2006; Cerino & Leszczynski, 2015; Farone, Fitzpatrick, & Tran, 2005; Fitzpatrick et al., 2005a; Fulbright, 2010; Rhynes et al., 2013; Taylor-Harris & Zhan, 2011)
- Improved physical health (Fitzpatrick et al., 2005a; Fitzpatrick et al., 2005b; Taylor-Harris & Zhan, 2011)
- Lower caregiver burden (Rhynes et al., 2013)
- Fewer functional limitations and chronic conditions (Tang, Heo, & Weissman, 2011)
- Socialization (Aday et al., 2006; Fitzpatrick et al., 2005b; Gitelson et al., 2008; Taylor-Harris & Zhan, 2011; Turner, 2004).

In addition, several of the studies attempted to identify who benefits most from participation. Aday et al. (2006) found that women living alone reported greater impacts of participation than women not living alone. Fitzpatrick et al. (2005b) found that being female, younger, having lower income, living closer to the centre, working at the centre, and attending lunch at the centre were all associated with increased likelihood of perceiving benefits. In a survey of congregate meal program participants, Gitelson et al. (2008) found that older women, low-income older adults, and ethnic minority older adults were more likely to perceive benefits.

Three studies specifically investigated the benefits of participating in physical activity at senior centres. A study comparing older adults who used the centre fitness facility to those who attended the centre but did not use the fitness facility found there was no difference between the groups for number of steps taken (Turner, Schmitt, & Hubbard-Turner, 2016). On the other hand, in a cohort study by Hand et al. (2012) previously inactive older adults who engaged in exercise for 12 weeks at senior centre fitness facilities experienced improvements in body mass index and weight, functional fitness, and health-related quality of life whereas the control group did not. Swan, Turner, Shashidhara, and Sanders (2010) surveyed senior centre participants as a part of the annual program evaluations, and 53 per cent of those participants reported they had increased their level of physical activity.

Four studies specifically examined the benefits of meal program participation at senior centres. Kirk and Alessi (2002) surveyed meal program participants and found that although participants were more likely to live alone and be widowed, they reported more social contact, lower levels of loneliness, and higher quality of life than non-participants. Another study by Kirk, Waldrop, and Rittner (2001) in rural Louisiana reported similar findings. In a survey of senior centre participants in Texas, Turner (2006) found no relationship between level of meal program participation and body mass index; however, obese and overweight individuals had lower participation rates in physical activity programs. In another Texas study surveying meal program participants, Swan, Severance, and Turner (2016) found that 58 per cent of meal program participants felt the program was important to improving their diet, and 39 per cent felt it had improved their health. In addition, 38 per cent said the senior centre was their only source of social interaction. Ethnic older adults were more likely to eat frequently at the centre, attend nutrition classes, and attend to improve their diet, all of which were associated with increased odds of perceiving improvements to health.

Overall, these studies suggest that senior centre participation provides benefits to older adults in the areas of socialization, physical health, and mental/psychological well-being. One of the most common findings in these studies was the important role of socialization at senior centres. Several of the studies found that vulnerable populations of older adults (e.g., older women, lowincome older adults, ethnic minority older adults) receive greater benefits from participation (e.g., Aday et al., 2006; Fitzpatrick et al., 2005b; Gitelson et al., 2008; Swan et al., 2016), suggesting that senior centres benefit some of those with the greatest needs. The majority of the studies utilized data from cross-sectional surveys; therefore, although positive associations were found, the temporality of these relationships cannot be established. Only the study by Hand et al. (2012) utilized a longitudinal approach. There was also the potential for bias in some of the studies due to lack of control groups, potential bias in recruitment processes, failing to control for confounding variables, and the measures of participation utilized (e.g., classifying someone who had visited a senior centre once in the past year as a participant). It is apparent that there is a need for more rigorous research on the benefits of senior centre participation.

It should be noted, however, that there is already a sizeable body of high-quality literature, which does not focus on senior centres but links their key programming areas to the health and well-being of older adults. For example, literature reviews have found physical activity (e.g., de Vries et al., 2012; Wayne et al., 2014),

recreational activities (e.g., O'Neill & Dogra, 2016), and creative arts (e.g., Noice, Noice, & Kramer, 2013) to all be positively linked to the health and well-being of older adults.

Experiences and Perceptions of Senior Centre Participation Nine studies (seven American and two Canadian) focused on experiences and perceptions of senior centre participation. All but two of these studies used qualitative methods. The majority of studies focused on the perceptions and experiences of participants or staff, while three focused on the perceptions of older adults (or baby boomers) who were not currently participating at senior centres.

The perceptions and experiences of marginalized populations (LGBTQ, immigrants, and older adults with intellectual disabilities) were explored in three studies. McCaffrey (2008) interviewed Haitian older adults on their experiences at a senior centre in Florida where a project had been initiated to encourage them to use the centre. Two themes were identified: feeling accepted, welcomed, and valued, and creating hope for a good life. McGovern, Brown, and Gasparro (2016) explored the impact of the opening of an LGBTQ senior centre in the Bronx, and three themes emerged: the centre as family, feeling accepted, and being connected to the Bronx (in terms of location and culture). In a Canadian study, Rossow-Kimball and Goodwin (2014) sought to understand the experiences of older adults with intellectual disabilities at a senior centre that had a program designed to facilitate their participation. Although the older adults with intellectual disabilities felt included and happy with their experiences, the mainstream older adults were ambivalent towards them and made limited efforts to connect with and include them. These three studies show that programming at senior centres, if designed to be inclusive, can be successful in including marginalized members of older adult populations.

Two studies focused on perceptions of specific aspects of senior centres: leisure (Dattilo et al., 2015) and power within a senior centre (Gallant & Hutchinson, 2016). Dattilo et al. (2015) conducted focus groups with senior centre participants and found leisure engagement was perceived as a way to achieve self-determination. In a Canadian study, Gallant and Hutchinson (2016) engaged in community-based participatory research to explore perceptions of power at a senior centre. At the senior centre where the study took place, older adults were treated as "clients" and provided with few opportunities for leadership or decision-making. The members generally felt powerless over the activities and functions of the centre, although over the course of the research project they did try to claim power in some small ways.

Hostetler (2011) explored how the role of senior centres is conceptualized by staff. The study found that while creating a sense of community for older adults remained a key concept; in many cases, the focus at centres is shifting towards providing individual choice and appealing to younger generations of older adults. Building on this desire to attract younger generations, three studies surveyed senior centre non-participants and/or potential future participants to explore how to encourage their participation. Marken (2005) interviewed pre-retirees about their perceptions of senior centres, and key features that were important to them were desirable environments, quality activities, facilitation of healthy aging, and intergenerational contact. Cohen-Mansfield, Parpura-Gill, Campbell-Kotler, Vass, and Rosenberg (2005) surveyed residents of senior apartments and found the most preferred topics for discussion/groups at senior centres were music groups, games, and health and legal issues. MaloneBeach and Langeland (2011) surveyed baby boomers, 68 per cent of whom reported they would use a senior centre. Respondents primarily perceived senior centres as places to engage socially and participate in activities. These studies on non-participants and potential future participants provide useful information for future planning for senior centres; however, none of the studies explored perceptions of non-participants and potential future participants in-depth, as all relied on crosssectional surveys. Thus, without further research, it remains unclear what the true reasons for nonparticipation are (e.g., lack of stimulating programs, misconceptions about senior centres, etc.) and how to attract baby boomer participants.

Summary of Findings: The Senior Centre Environment

Senior Centres and the Socio-physical Environment Four American studies (qualitative) focused on the physical environment of senior centres. Two studies drew on data from a comparative ethnography study of three senior centres in the western United States. The first study focused on the fit between the physical environment and lifelong learning activities (Eaton & Salari, 2005), and the second study focused on territoriality in senior centres (Salari, Brown, & Eaton, 2006). A key finding in both of the studies was that a lack of dedicated space for activities (e.g., dining rooms that also doubled as activity areas) created challenges for delivering activities and contributed to displays of territoriality. The studies also emphasized the importance of participant empowerment and leadership in order to create a positive environment.

Cohen et al. (2009) studied how aspects of the built environment affected usage at a senior centre that underwent major renovations, including the addition of a gymnasium and new fitness equipment. A number of organizational changes also occurred during this time period (i.e., introduction of a new director, reduction in program hours, and introduction of new fees). After the renovation, the number of participants significantly decreased (from 478 to 198) whereas at a comparison senior centre there were no changes in participation. The authors concluded that improving the structure of recreation facilities does not necessarily increase use, and other organizational factors must also be taken into consideration. Ruggiano (2012) examined the experiences of older adults at two intergenerational-shared sites (senior centres co-located with childcare programs). Although some positive informal interactions occurred at the shared spaces, at both sites there were issues of intergenerational inequity (prioritization of children's programs over those of older adults) and environmental stressors

Although there are not enough studies to draw conclusions about the optimal socio-physical environments for senior centres, these studies highlight the complexity of their environments. It is not just the physical environment that contributes to the quality and success of a senior centre – social and organizational factors (e.g., activity fees, member empowerment, etc.) also have a significant impact.

Organizational Models of Senior Centres

Two American studies examined different organizational models of senior centres. Velez Ortiz (2015) explored whether integrating mental health services into senior centres was effective for delivering mental health services to Puerto Rican older adults. The study compared older adults attending a senior centre in New York offering integrated mental health services to a regular senior centre in Puerto Rico, and found that awareness of mental health services was increased in the integrated model. Pardasani and Thompson (2012) assembled a taskforce to identify new and emerging models of senior centres as a part of a project for the National Institute of Senior Centres. They identified six innovative models: community centres, wellness centres, lifelong learning/arts, continuum of care/ transitions, entrepreneurial centres, and cafe programs. Community centres are multigenerational models, which offer a broad range of programs and include a recreation facility. Wellness centres offer a range of programs with health and wellness as the focus. Lifelong learning/arts centres offer programs, generally at multiple sites, for older adults to learn and grow. Continuum of care/transitions provides care to older adults as they age, with private insurance and service fees providing most of the funding. Entrepreneurial centres operate using business principles and provide opportunities for senior employment, skill development, and productivity. Cafe programs offer meals as their main service with a limited range of additional programs.

Senior Centre Programming

The programming offered at senior centres is a key aspect of the organizational environment on which seven studies (all American) focused. Five of the studies were quantitative and two were mixed methods. A survey of 219 senior centres in New York by Pardasani (2004a) provides a broad overview of the types of programming offered. Most centres offered programming in the key areas of recreation, volunteering, health, nutrition, and social services. The most popular services were meals, exercise, and information and referral.

A key focus of the research on programming has been health and wellness programs. Skarupski and Pelkowski (2003) surveyed older adults at a senior centre and identified areas for targeted programming: loneliness and social support, diet and nutrition, oral health, health, and exercise. Two studies reported on health and wellness programs from a survey of 500 U.S. senior centres (Casteel, Nocera, & Runyan, 2013; Zachary, Casteel, Nocera, & Runyan, 2012). Casteel et al. (2013) reported the most commonly offered health and wellness programs were nutrition programs and blood pressure monitoring. Zachary et al. (2012) examined the prevalence of multi-component falls prevention education programs (balance exercise class, medication management, and home safety information) and found that only 33 per cent of centres offered all three components. The key barriers to offering multi-component falls prevention were lack of staff, lack of time, and lack of experience with falls prevention. In a survey of 195 senior centres in New York, Tobias et al. (2014) found that, on average, senior centres offered 9 pain management-related programs (programs with potential benefits for chronic pain management). The most common pain managementrelated programs were exercise, handicrafts, dance, and walking clubs.

Despite the significant number of health and wellness programs being offered, there is generally considered to be a lack of evidence-based programming at senior centres. Bobitt and Schwingel (2016) have found the majority of health and wellness programs are not evidence-based. Senior centres generally lack familiarity with evidence-based programs and are skeptical of whether they are effective and desired by clients. The major perceived barrier to implementing evidence-based programs is funding (Bobitt & Schwingel, 2016). Felix et al. (2014) explored the barriers and facilitators of senior centres offering lay health education

programs as a part of a randomized controlled trial, and found the primary barriers to be staffing and perceived inability to recruit participants.

Overall, these studies suggest that senior centres offer a wide variety of programs, with health and wellness a key cornerstone of programming. Indeed, several studies suggest that senior centres have been shifting their focus to health and fitness programs in a bid to appeal to younger older adults (e.g., Hostetler, 2011; Pardasani, 2004b). Health and fitness programs tend to be more complex than other types of programming, and if senior centres are expected to take on an increased role in this area, more support will be needed. The studies by Bobitt and Schwingel (2016) and Felix et al. (2014) suggest that funding and staffing are key areas where support is needed.

Senior Centre Policy Issues and Advocacy

Four American studies related to policy and advocacy at senior centres. Two of the studies were quantitative, one qualitative, and one mixed-methods. Two of the studies broadly explored policy issues and advocacy through large cross-sectional surveys (Pardasani & Goldkind, 2012; Pardasani & Sackman, 2014). In a national sample of 376 senior centres, Pardasani and Goldkind (2012) found that 88.5 per cent of administrators reported engaging in policy advocacy, most commonly to advocate for funding. A second study by Pardasani and Sackman (2014) was developed out of a grassroots need for advocacy and research, prompted by the New York City Department for the Aging's generation of a list of 50 senior centres for potential closure. A survey was conducted of senior centres in New York that provided data on numerous aspects of such centres. The top challenges for daily operations identified in the survey were lack of funding, lack of space, need for more staff, and need for centre improvements. The findings from this survey and the related recommendations were shared with the Department for the Aging, and several positive outcomes resulted, including increased funding for senior centres, commissioning of a longitudinal study of senior centre participants, and development of an innovative senior centres initiative.

Two additional studies focused on the specific policy issue of gambling and senior centres (Higgins 2001; 2005). In the first study, Higgins (2001) conducted a comprehensive policy analysis of senior centre gambling trips in Massachusetts and identified three policy options: discontinuing the trips, limiting the trips, or offering gambling education programs. In the second study, Higgins (2005) explored gambling at seven case study sites across the United States. At some senior centres, gambling (e.g., bingo, keno, etc.) emerged as

an important source of revenue for the centres, which raises ethical questions about gambling activities at senior centres.

The number of studies focusing on senior centre policy issues and advocacy is limited; however, as the study by Pardasani and Sackman (2014) illustrates, there is an urgent need for more data on senior centres, and these data can play an important role in influencing policy decisions and advocacy efforts.

Discussion

Comparison of the Canadian and American Literature

Literature available on senior centres in Canada was limited (n = 7), with all of the Canadian studies focusing on aspects of participation and four of the seven specifically on participants and non-participants. Generally, the Canadian studies were small scale and focused on specific aspects of senior centres; therefore, limited conclusions can be drawn in regards to the secondary research question. Notably absent from the Canadian literature were studies focusing on the senior centre environment. There were no Canadian studies on the socio-physical environment, organizational models, programming, and policy and advocacy. This is a key gap in the literature and, given the different contexts in which Canadian and American senior centres operate, may be one of the key areas where there are differences.

The findings from the few Canadian studies on senior centre participants and non-participants and the benefits of participation, although limited, did seem to align with the findings from the U.S. studies. Similar findings in the Canadian grey literature also suggest that some of the American literature may be relevant to the Canadian context. For example, grey literature suggests that senior centres in Canada offer programming similar to that of their American counterparts and that they face similar key policy issues such as funding, staffing, and space (e.g., AASC, 2014; Levi & Kadowaki, 2016; Sheppard et al., 2016).

However, there may also be some key differences between Canadian and American senior centres. For example, congregate meal programs are a cornerstone in American senior centres due to the emphasis placed on them by the Older American Act and funding rules that may require they be offered (e.g., all New York City Department for the Aging–funded senior centres offer lunch programs as a core activity). In New York, Pardasani and Sackman (2014) reported that 76.5 per cent of senior centres (from a sample of 219) offer lunch programs, and in Texas, Turner (2004) surveyed a sample of participants from 27 senior centres and found that 91 per cent used meal programs weekly.

It is unclear if meal programs are emphasized and utilized to the same extent in Canada. One grey literature survey of participants from 26 senior centres in Ontario reported that only 9 per cent used congregate meal programs (OACAO, 2010). Further research would be required to identify if there is an actual difference between Canadian and American senior centres in terms of meal programs. Until there is more research conducted on senior centres in Canada, there will be a continued reliance on the grey literature and on findings from American studies.

Key Gaps in the Literature on Senior Centres

This review demonstrates some key gaps in the current literature on senior centres. To begin with, the majority of studies focus on the individual as the unit of study and senior centre participation, whereas less than one-third focus on the senior centre environment. There is a need for more studies on the impacts of different socio-physical environments, organizational models, and policies. Comparative studies would be particularly useful for exploring aspects of senior centre environments. For example, studies could explore the benefits of stand-alone senior centres versus multigenerational community centres (e.g., Neighbourhood Houses), differences between municipal and non-profit senior centres, and experiences of ethnic older adults at ethno-specific versus mainstream senior centres.

Although studies on the benefits of senior centre participation made up a large portion of studies in our review (n = 18), the need for more research highlighting the benefits of participation is clear, given the important role of senior centres, the wide range of programs/ services provided by them, and the current period of economic constraint. A wide variety of study designs should be used for this research, and in particular, longitudinal studies are needed, which would produce stronger evidence on the benefits of participation. Currently, the primary focus of research has been on new evidence-based health promotion and exercise programs developed by external partners, as evidenced by the large number of studies we excluded for this reason (n = 191). Although these programs often show strong evidence of benefits for older adults, and illustrate the types of programs that can be successfully offered, they are not representative of the majority of programs being offered by senior centres. As has been highlighted by Bobitt and Schwingel (2016) and Felix et al. (2014), many senior centres lack the capacity to provide these types of programs. Research needs to be conducted to evaluate the benefits of the regular programming at senior centres.

This need for research includes evaluating the benefits of programs such as bingo, crafts, cards, and so on, which are often viewed as purely recreational activities, but which research shows may actually have positive impacts on health and well-being (e.g., O'Neill & Dogra, 2016). Research is also needed on how to facilitate the offering of evidence-based programming, especially for those programs that focus on preventive health and well-being.

A broader range of perspectives should be included in the literature on senior centres. Although some studies (several of which were Canadian) explored the participation of ethnic minority older adults, the findings on this subject remain inconclusive, suggesting a need for further research. There also is a need for more studies exploring the experiences of marginalized populations at senior centres. In the literature, concern was expressed over perceived declining participation at senior centres and the challenges of attracting younger participants (e.g., Hostetler, 2011; Walker et al., 2004). It is likely the baby boomer cohort will have vastly different interests and expectations than previous cohorts, and more research is needed to learn about their perspectives and what they want from senior centres. Other groups whose perspectives it might be useful to explore include frail older adults, caregivers, volunteers at senior centres, and male participants. In-depth qualitative research studies would help to enrich our understanding of these different perspectives.

Finally, research should be conducted with the needs of senior centre administrators and front-line service providers in mind. There are a number of topics related to the operation of senior centres which might prove useful to explore, such as: development of strategic partnerships; governance models; implications of different funding models/sources; the role of volunteers; operational challenges (e.g., lack of funding, staffing, space, etc.); successful methods for increasing participation; and how to outreach to isolated older adults among other topics.

Future Research Agenda

This scoping review has identified many aspects of senior centres which require further study. Although a future research agenda might include many topics, four areas in particular stand out as deserving attention:

- Benefits of senior centre programming: More studies are required – in particular, studies with longitudinal designs – that evaluate the benefits of regular programming at senior centres. As many senior centres lack the capacity to conduct rigorous evaluations on their own, researchers could partner with them to evaluate the effectiveness of their existing programs.
- 2. **Funding, space, and staffing:** Funding, space, and staffing emerged as important operational issues for senior centres, and more research should be conducted to identify the

- extent to which these are issues, as well as the potential actions that can be taken to address them.
- 3. Needs and preferences of baby boomers: Currently, we are undergoing a significant period of population aging, and the baby boomer cohort is expected to have a substantial impact on senior centres. There is a need for more research identifying the baby boomers' needs and preferences regarding senior centres and the development of concrete strategies to attract this cohort.
- 4. Canadian research: This review has demonstrated that little is known about senior centres in Canada. More Canadian research is needed as it cannot be assumed that all American research can be generalized to Canadian senior centres given the differences in the social service and health care contexts in Canada and the United States.

Limitations of the Study

Some limitations of this review must be acknowledged. First, due to the heterogeneous nature of the body of literature and the common use of senior centres as a site for other research, it was not always easy to determine whether a study focused on senior centres and should be included in the review. It is possible that there are additional studies focused on senior centres, which were missed through our search strategy. Second, an inherent limitation of scoping reviews is that they focus on the scope of the literature and do not attempt to draw conclusions on the quality or weight of the evidence. In accordance with scoping review methodology, we did not include a quality appraisal of the studies included in this review. Although the studies that we found were grouped into seven key themes (participants and non-participants, benefits of participation, experiences and perceptions of participation, the socio-physical environment, organizational models, programming, and policy issues and advocacy), given there was such great variation within each theme, drawing conclusions on the evidence generally would not have been feasible. Third, we did not search for grey literature, research articles published before the year 2000, or non-English language articles for this review.

Conclusion

This scoping review identified 58 studies on senior centres from Canada and the United States. Most of this research focused on senior centre participation and the individual as the unit of analysis, whereas fewer studies took a broader approach and focused on aspects of the senior centre environment. Only seven studies were Canadian, and much less is known about senior centres in Canada than in the United States.

What does the future hold for senior centres in Canada? Several of the studies in this review raised questions about the future of senior centres and their continued relevance for the changing older adult population. Pardasani and Thompson (2012) have identified the

following key challenges for senior centres for the future: (a) meeting the needs of the heterogeneous older adult population, including engaging current senior centre participants as well as baby boomers; (b) responding to changing conceptualizations of retirement and participation; (c) reducing the stigma attached with senior centre participation; (d) redesigning and developing new facilities; and (e) identifying new funding opportunities and responding to declining public funding. The aging of the baby boomer cohort is expected to result in significant changes to the older adult population in Canada, and the potential impacts of these changes on senior centres cannot be ignored. Research is needed to learn more about the perspectives of baby boomers and what they want from senior centres, including whether current senior centre models will continue to be the most appropriate and relevant models for delivering services to them. A research agenda has been proposed that would begin to address some of these issues about the future of senior centres, and identify opportunities for innovation and the development of strategies to address the changing needs of the older adult population.

Given the current economic climate, it is imperative that senior centre administrators and leaders are able to justify the value of senior centres and make a business case for investment in them. Senior centres also need to develop strategies to respond to the changing needs of the older adult population. The grassroots advocacy and research project in New York by Pardasani and Sackman (2014) illustrates how research can be used by senior centres to effectively advocate for policy change and investment. As mentioned previously, there is generally less cohesion within the senior centre sector in Canada, and leadership is needed within the sector to encourage research, collaboration, and coalition-building so senior centres can continue to support the well-being of older adults now and into the future.

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