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Evaluating age-friendliness:
A case example of a baseline assessment of one mid-sized Canadian city

Abstract

Global, national, and local policy frameworks highlight the importance of creating age-friendly cities and communities (AFC) to respond to the increasing aging population. Much has been published related to the development of AFC initiatives and strategies. Relatively less has focused on evaluation, specifically, on baseline measurements of age-friendliness, which is key to any AFC initiative and strategy. This article seeks to contribute to the literature related to baseline assessments of the age-friendliness of municipalities. It presents baseline results of the age-friendliness of Calgary, a mid-sized Canadian city. Data collection methods included: i) 17 focus groups with age sub-cohorts (n=79) and ethno-cultural baby boomers (n=43) and ii) an online survey of older adult service providers (n=32). Quantitative data were analyzed using descriptive statistics and qualitative data were analyzed for themes. Seventy percent of service providers rated the city "moderately" age-friendly. Five baby boomer groups rated the city as age-friendly, seven groups provided mixed ratings, and five groups indicated that the city was not age-friendly. Strengths and concerns were identified related to a variety of age-friendly features. The findings of this study provide an example of why and how a baseline assessment of age-friendliness is conducted and the potential local and global implications and recommendations of such findings. As such, this study contributes to the limited literature related to evaluating age-friendliness, particularly from an age sub-cohort and ethno-cultural perspective.

Key words: age-friendly cities, baseline assessment, Canadian city, baby boomers

Introduction

In 2007 the World Health Organization (WHO) released a document entitled *Global Age-Friendly Cities: A Guide* (hereafter referred to as the WHO Guide), which outlines eight age-friendly features and encourages countries to proactively plan for the aging population taking place worldwide. The age-friendly features include eight domains: transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, community support and health services, and outdoor spaces and buildings. Examples of these domains include the affordability of public transportation for older people, the design and/or modifiability of housing, a range of social participation events and activities available to older people, community inclusion of older people, employment and training options for older persons and policies, the range of ways in which information is communicated, the range of community support and health services offered, and well-maintained and safe green spaces.

Since the publication of the WHO Guide (2007), cities and communities around the world have responded by developing age-friendly strategies and initiatives. In Canada, federal, provincial and municipal efforts have been made related to creating age-friendly communities. In 2007, the Federal/Provincial/Territorial Ministers Responsible for Seniors (2007) developed a guide for age-friendly practices in remote and rural communities, which provides a process for communities to determine their level of age-friendliness and offers a checklist of features required to meet older adults' needs in these communities. Further, the Public Health Agency of Canada (PHAC) (2016) asserts that one of the most effective ways to support the health and well-being of Canadians as they age, is by supporting age-friendly communities. In keeping with this ideology, the PHAC has a dedicated webpage with responses to questions, information about provincial initiatives, and resources related to age-friendly communities.

Individual provinces have also developed initiatives to support communities wishing to become more age-friendly. For example, the British Columbia Government (2011) created a guide, which suggests steps on becoming age-friendly and developed a recognition program for communities to work toward. The Alberta Government (2012) developed a framework, which describes its commitment to support "individuals and families, municipalities, the non-profit and private sectors, and communities to ensure [the] province is ready to meet the changing needs of an aging population" (p. 1). They also offer three resources to support and guide communities to become more age-friendly: i) 'A Guide for Local Action', ii) 'Accompanying Materials', and iii) 'Creating an Age-Friendly Business.' In 2008, the Age-Friendly Manitoba Initiative was introduced (Manitoba Government, 2008). This initiative is committed to healthy aging by promoting older adults to live "active, socially engaging, [and] independent lives" (p. 2). In 2013, the Ontario Government (2013) published a comprehensive guide entitled: *Finding the Right Fit: Age-Friendly Community Planning*, which includes: i) what an age-friendly community is, ii) a hub of resources, iii) characteristics of individual communities, and iv) a framework and assessment tools.

Municipalities have also developed strategies to become more age-friendly. For example, Waterloo is one of fourteen Canadian cities, which has been designated a member of the WHO Global Network of Age-Friendly Cities (City of Waterloo, 2013). Their strategy is strongly based on the eight domains recommended by the WHO and measures their age-friendliness based on these eight dimensions and their criteria. Successful implementation and on-going support of their age-friendly strategy is credited to the collaboration of "various levels of government and civil society" (p. 2). The city of Guelph also utilizes the framework, which was

informed by the WHO Guide (City of Guelph, 2012). The guiding principles of their strategy are: i) citizen's inclusion and participation, ii) dignity and respect, iii) active involvement in decision-making and communication, iv) safety within communities, v) equity and fairness, and vi) choice and self-determination. Within their initiative, there is a commitment to continual growth, such as regular reviews of recommendations and annual progress reports. Toronto is yet another Canadian city that has committed to age-friendliness (City of Toronto, 2013). Using a service plan approach (which means the "primary focus of The Toronto Seniors Strategy will be on issues that fall within the City's authority to plan, manage, and deliver"), the strategy focuses on four key service planning principles: equity, inclusion, respect, and quality of life (p.5). Commitment to the initiative is enforced through an accountability and monitoring program to ensure plans are followed through and measures are in place for ongoing improvements. In 2015, the Calgary City Council approved the Seniors Age-friendly Strategy and Implementation Plan 2015-2018 which provides a localized version of the WHO Guide (City of Calgary, 2015). After consultation with stakeholders and the public, six priority areas were set: i) access to information and services, ii) community support and health, iii) housing, iv) participation and inclusion, v) prevention and response to elder abuse, and vi) transportation and mobility. The strategy and implementation plan align with one of the Council's priorities in the City of Calgary Action Plan: 2015-2018, "respond to the needs of an aging population," and the "sustainability 2020 target for Calgary to be an age-friendly city by 2020" (p. 6).

While much has been published related to the development of age-friendly cities (AFC) initiatives and strategies, relatively less has focused on implementation and evaluation (Dellamora et al., 2015), specifically, on baseline measurements of age-friendliness, which is key to any AFC initiative and strategy. Dellamora et al. (2015) state that "The process of evaluating the strengths and weaknesses of a community across the eight domains can be undertaken using a variety of methods, but must begin with some form of baseline assessment" (p. 2). A baseline assessment is necessary to capture the progress a community has made towards specific strategic goals. Conducting a baseline assessment is one of the key milestones/stages within the four-stage (planning, implementation, progress evaluation, and continual improvement) AFC process outlined by the WHO Global Network of Age-Friendly Cities and Communities, which have committed to "a cycle of continually assessing and improving their age-friendliness" (WHO, 2009, p. 1). London, Ontario, the first Canadian city to join the network, published a baseline assessment report in 2014 (Age Friendly London, 2014). This baseline assessment used a quantitative survey (which included questions across the eight domains that asked participants to select a response based on a 5-point Likert scale of excellent, good, fair, poor, and don't know) and engaged 670 older adults. The results were summarized and presented as the percentage of respondents that provided ratings of excellent or good for each domain. The follow are the results: outdoor spaces and buildings (57%), transportation (71%), housing (53%), social participation (81%), respect and social inclusion (66%), civic participation and employment (69%), communication and information (72%), and community support and health services (72%). The authors of the report concluded that the results "helped to identify survey questions with the lowest ratings as priority areas, and to match these priority areas with specific [Age Friendly London Action Plan [developed in 2012] strategies for improvement" (p. 32).

Two other examples of baseline assessments conducted in Canada are the ones conducted by the City of Waterloo (2013) and the Peterborough Council on Aging (2016). The City of Waterloo's assessment methodology was based on both quantitative and qualitative data that was collected through five separate community events. The number of participants engaged in each

of the events was not reported, except for one (which was stated as an approximate number of 180). The findings from these events were collected together to make up the baseline assessment. The summary of the results highlighted five key points: 1) Waterloo is highly valued by its older residents; 2) Waterloo needs to address its stock of Age-Friendly housing; 3) Waterloo needs to improve opportunities for social participation and engagement; 4) personal mobility is critical to maintaining senior independence; and 5) walkability is a behaviour rather than a physical issue (p. 1). The Peterborough Council on Aging (2016) assessment "included a community-wide survey and focus groups with older adults, informal caregivers, and service providers" (p. 1). The total number of participants engaged were not identified in the report. The summary of the results is presented in terms of the strengths and challenges within each domain. For instance, regarding transportation, strengths included, for example: "support for active transportation infrastructure" and "community-based driving services," and challenges were, amongst others: "sidewalk condition, availability, and accessibility," and "winter maintenance of roads and sidewalks" (p. 4). Each domain had between 2 to 7 points of strengths and challenges.

While these are some Canadian examples of baseline assessments of age-friendliness, a paucity of literature continues to exist particularly in academic peer-reviewed literature related to baseline assessments of age-friendliness. Having a baseline assessment of age-friendliness is imperative when considering unique contextual factors influencing age-friendly priority areas when developing a strategy, and determining the extent to which interventions are effective.

This manuscript explores baby boomer and service provider perspectives of the age-friendliness of Calgary, a mid-sized Canadian city, and identifies local and global implications for developing and sustaining age-friendliness. It presents baseline results of the age-friendliness of this city as part of a larger mixed-methods, multi-stakeholder study of one age-friendly feature - social participation. An assessment of age-friendliness was included in the larger study to provide the local context for understanding social participation opportunities and challenges, to inform the local strategy, and to contribute to the literature related to baseline assessments of the age-friendliness of municipalities.

Methodology

Creswell and Plano Clark's (2011) convergent mixed methods research design was used for this study. The collection of qualitative and quantitative data from various sources and multiple stakeholders provided a holistic and comprehensive perspective of the age-friendliness of this city. The Conjoint Faculties Research Ethics Board at the University of Calgary granted ethics approval for this study which is a requirement for research conducted at this University.

Data Collection

Data for this baseline assessment were collected using a combination of: i) an online survey using Survey Monkey with service providers, and ii) focus groups with community residing baby boomers (born between 1946 – 1964). The survey and focus group guide were developed by the research team based on extensive involvement with several business units from the City of Calgary as well as directors and managers from the older adult sector. To assess the level of age-friendliness, focus group participants were asked, "Do you think Calgary is an age-friendly city?" "In what ways is it an age-friendly city?" and "How can it be more age-friendly?" Online survey participants were provided with the following statement, "An age-friendly city is one where policies, services, settings and structures support and enable people to engage in active aging." and asked, "On a scale of 1 to10, how age-friendly would you rate the city of Calgary? Please explain your response." It is important to note that since this assessment was a component of a larger study focusing on social participation, the questions asked were broad and

general rather than specific questions representative of each of the age-friendly domains identified by the World Health Organization (2007).

Recruitment and Participants

Service providers from the older adult sector and baby boomers across three different age sub-cohorts, four geographic locations in the city, and five ethno-cultural backgrounds were recruited to provide diverse perspectives about the city's level of age-friendliness.

Service providers. To reach potential participants, invitations to participate in the online survey were emailed to agencies and organizations offering social programs and services to baby boomers and older adults. A list of sector representatives with email addresses was obtained using three key sources: Directory of Community Associations (n=133), Seniors Directory of Services Guide (n=79), and an older adult sector email list (n=63). A total of 275 email invitations were sent. Forty-three surveys were submitted. Eleven were not included in the analysis due to the fact that participants only completed the first question (n=10) or the survey was incomplete for most questions (n=1) suggesting that the participant did not have adequate knowledge of the older adult sector to answer the subsequent questions. Thirty-two surveys were included in the analysis which the research team considered a moderate to high response rate given their knowledge of the older adult sector.

While emails were sent to 275 addresses, it is not possible to determine an accurate response rate. Due to limited resources, the invitation was cross posted and duplicate emails were not removed. Given that organizations offering programs and services for older adults were likely captured by the Directory of Services Guide (n=79), one could use this as a proxy resulting in an approximate response rate of 54.4% and 40.5% when incomplete surveys were removed.

Ethno-cultural baby boomers. Focus groups were held with five ethno-cultural groups, chosen based upon the distribution of ethno-cultural populations in Calgary: Filipino, Cantonese, Mandarin, Hindi, and Punjabi. Various service providers were contacted to request: i) referrals/suggestions for potential candidates for the role of cultural based research assistant (CBRA) and ii) space for facilitating the focus groups. The CBRAs played an integral role in the successful recruitment and facilitation of the focus groups. Their responsibilities included: translating the recruitment material, recruiting 8-12 participants born between 1946-1964 for the focus groups, facilitating the focus groups, transcribing the focus groups, and then translating the transcripts to English. A total of 43 baby boomers participated across five ethno-cultural focus groups.

Age-specific baby boomers. Three age sub-cohorts of baby boomers were recruited for the study: 1) early (1946-49), 2) mid (1950-56), and 3) late (1957-64). Additionally, the four geographic quadrants of the city (northeast, northwest, southeast, and southwest) were represented, creating one focus group per age group in each of the four quadrants (a total of 12 groups). The Federation of Calgary Communities, the City of Calgary, Community and Neighborhood Services, and the Calgary Public Library assisted with recruitment through their connections with local community associations, social groups, and community facilities. Once a community hub agreed to host and assist with recruitment, a date, time, and baby boomer age group was selected based on what the host thought would be most appropriate. The hosting community hub distributed and advertised with flyers within their networks and spaces (e.g., community bulletin boards). Members of the research team distributed electronic copies of the flyer to online communities (e.g., meet up groups/forums online) and distributed flyers to businesses, public spaces, and homes in the neighbourhood where the focus group would be held. A total of 79 baby boomers participated in the 12 age-specific focus groups.

Data Analysis

The closed-ended survey question was analyzed using descriptive statistics. Responses were grouped according to: a) very age-friendly (rating 10); b) high age-friendly (rating of 8 or 9); c) moderately age-friendly (rating of 5, 6, or 7); d) low age-friendly (2, 3, or 4); and e) not age-friendly (rating of 1). The open-ended survey response and focus group transcripts were analyzed for thematic content following a constant comparison method (O'Connor, Netting, & Thomas, 2008; Strauss & Corbin, 1998). The analysis process used to identify themes and reach saturation included four stages: 1) individual review of data source and generation of initial codes, 2) team meetings to verify codes and identify new codes, 3) collated codes into an excel spreadsheet using a "saturation grid" (Brod, Tesler, & Christiansen, 2009), and 4) team meetings to discuss and identify themes and sub-themes. We utilized the WHO Guide (2007) as a conceptual framework for age-friendliness. Therefore, the themes in this study were identified deductively and many (but not all) of the names of the themes correspond with the age-friendly features noted in the guide.

Findings

In this section, we present the findings in the following manner. Firstly, we present the findings based on the three stakeholder groups: Service providers, ethno-cultural baby boomers, and age-specific baby boomers. Secondly, for each stakeholder group we present the overall responses or ratings of age-friendliness. It is important to note that the service providers' overall responses are summarized differently than the baby boomer groups as two different data collection methods were utilized (as mentioned above in the methodology section). Thirdly, we identify the age-friendly themes highlighted, whether the themes were expressed as a concern, strength, or both, and provide the evidence to support each theme via quotes.

Service Providers

Thirty of the thirty-two online survey participants responded to the question related to Calgary's age-friendliness. None of the 30 respondents rated the city at either end of the rating scale while the majority of respondents gave the city a moderate rating. Table 1 summarizes the service provider ratings of age-friendliness.

Table 1: Service Provider Ratings of Age-friendliness

Rating	Percentage of respondents (N=30)	
Not age-friendly (1)	0	
Low (2-4)	13	
Moderate (5-7)	70	
High (8-9)	17	
Very age-friendly (10)	0	

Moderately age-friendly. Twenty-one service providers (70%) rated the city "moderately age-friendly" (5, 6 or 7 rating) with 12 of the 21 participants offering comments. Table 2, summarizes the age-friendly themes highlighted among the respondents who provided a moderate rating.

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Age-Friendly Themes	Strength	Concern	Mixed
Broad comments			X
Affordability of public transportation			X
Accessibility of public transportation		X	
Accessibility of social participation activities		X	
Variety of social participation activities		X	
Affordability of social participation activities	X		

Five participants qualified their ratings with broad, mixed comments, such as "Calgary has some strengths, but there is still room for improvement." "I think it is better than it used to be, but more can still be done." and "Calgary is a good place to age but I think [more]...can be done...for aging people. There are needs that are not met." The rest of the comments were more specific and were primarily related to public transportation and social participation.

Comments about transportation referred to affordability and accessibility. In terms of the affordability of public transportation, the comments were mixed. For instance, one participant highlighted that "[there is] no free transportation for [seniors] to access if they are attending events, . . . the transit pass is increasing its price, [and] that will not be affordable for seniors who belong to a low-income bracket." In contrast, another participant suggested that this was an area of strength by stating "positives include . . . senior transit passes at discounted rates that make it economical to use the CT [Calgary Transit] services." In terms of the accessibility of public transportation, most of the comments highlighted this as an area of concern. For instance, comments included: "[there are] long walks to transit stops and between stops," "not enough [and] timely snow-clearing of transit bus platforms," and "a lot of older adults do not like to drive to unfamiliar areas but can't get there otherwise [e.g., public transit is inaccessible]."

Comments related to social participation referred to accessibility, variety, and affordability. The accessibility and variety of social participation were highlighted as areas of concern. For instance, comments included "not all buildings have disabled parking . . . [which] prevents them [seniors] from participating in some activities," "most of our club activities take place outside of Calgary," and "there are not as many opportunities that support social participation [and] where social participation is facilitated (seniors' centres primarily), the activities tend to focus on the activities that the older generation of seniors prefer, not providing a range of different activities that may be preferred by newer generations of seniors." The affordability of social participation activities was highlighted as an area of strength, whereby one participant noted, "positives include . . . senior courses offered at discounted rates at educational institutions, discounted senior rates at recreational facilities."

High age-friendly. Five participants (17%) rated the city as "high age-friendly" (rating of 8 or 9). Two of the five participants offered comments to support their rating. Both spoke about the active aging opportunities available in the city as an area of strength: "I think the city has a good variety at different cost levels for active aging" and "the City offers the opportunities for active aging, and it is up to individuals and communities to navigate the system and advocate for what they need." Table 3, summarizes the age-friendly themes highlighted among the respondents who provided a high rating.

Table 3: Age-friendly themes highlighted among high ratings

Age-friendly themes	Strength	Concern	Mixed
Variety of active ageing opportunities	X		
Availability of active ageing opportunities	X		

Low age-friendly. Four participants (13%) rated the city as "low age-friendly" (2, 3, or 4), with all four offering a variety of suggestions related to social inclusion and accessibility of services as areas of concern. For instance, comments made about social inclusion include: "many basic things that should be done [are not done] such as focusing on social engagement [and] civic engagement," "restaurants tend to be very noisy and crowded so seniors do not like to go out to eat," "transportation options within neighbourhoods [are] limited, making it hard for seniors to socialize and participate in community level activities," and "if a senior is unable to get to a center to participate in social activities, the risk of isolation and depression increase." Comments made about accessibility of services include: "providing . . . equitable access to services," "seniors spending days just trying to travel the city to access services," and "many businesses' phone lines are automated, a challenge for some seniors, especially those with hearing challenges." Table 4, summarizes the age-friendly themes highlighted among the respondents who provided a low rating

Table 4: Age-friendly themes highlighted among low ratings

Age-friendly themes	Strength	Concern	Mixed
Social inclusion		X	
Accessibility of services		X	

Ethno-Cultural Baby Boomers

When asked if they thought the city was age-friendly, three of the five ethno-cultural groups stated "yes", one group stated "no", and the other group provided a mixed response with half of the respondents saying "yes" and the other half saying "no." Participants were then asked to explain their responses. Regardless of whether a group initially responded "yes" or "no," each group highlighted both areas of strengths and concerns. Table 5 indicates the responses of each ethnocultural group.

Table 5: Ethno-Cultural Baby Boomers Responses

Ethnocultural Group	Yes	No	Mixed
Filipino	X		
Cantonese			X
Mandarin	X		
Hindi		Х	
Punjabi	X		

Table 6 summarizes the age-friendly themes highlighted among the ethno-cultural baby boomers.

Table 6, Summary of age-friendly themes highlighted among ethno-cultural baby boomers

Age-Friendly themes	Strength	Concern	Mixed
Variety of social and recreational opportunities	X		
Affordability of public transportation	X		
Accessibility of public transportation	X		
Availability of volunteering and outreach activities	X		
Government decision making and resource allocation for			
seniors		X	
Ageism and ageist attitudes		X	

Areas of strength. Three themes related to strengths were identified: 1) social and recreational opportunities (identified by four groups: Filipino, Cantonese, Mandarin, and Punjabi), 2) transportation (identified by three groups: Mandarin, Filipino, and Hindi), and 3) volunteer and outreach services (identified by two groups: Tagalog and Mandarin). Discussion about social and recreational opportunities referred primarily to variety. Participants' comments include: "they give seniors social activities, so they can have fun...so they don't get lonely...so their minds get busy...so they don't age fast," "Calgary provides more social activities," "there are programs for...elderly individuals. For example, dancing and swimming," "we have all kinds of programs including the ESL [English as Second Language] and computer programs," "there are various activities run by the [local, cultural] Association," and "activities at the [55+ Centre,] ... [which] can give me recreational activities like, exercise, doing some carpenter projects, dancing and singing."

Strengths related to public transportation included affordability (e.g., discounted transportation fares, such as bus tickets for seniors), and accessibility (e.g., Handi-buses that are made available to seniors who are unable to use regular public transportation).

Comments related to volunteering and outreach activities include situations where seniors are the volunteers (e.g., a seniors' club going as a group to volunteer at the drop-in homeless centre) and recipients (e.g., meal delivery services for seniors, snow removal for seniors, and relief goods given out to seniors).

Areas of concern. Two themes related to concerns were identified: 1) government decision making and resource allocation (identified by three groups: Cantonese, Hindi and Punjabi), and 2) ageism and ageist attitudes (identified by two groups: Cantonese and Hindi). Discussion about government decision making and resource allocation referred to funded services (e.g., "take the subsidized senior bus pass, as an example, the government just takes that away") and language barriers (e.g., "when we go see a doctor there is no interpretation services," and "seniors, . . . due to their language barrier, . . . simply do not know where to get the resources needed").

References to ageism and ageist attitudes were in the context of employment (e.g., "when we see a resume and it shows that a person is around 65...though they have the talent, they have everything, [and] they know the subject, still...the employers are reluctant to hire the senior

people") and resources (e.g., "society is not caring for the elderly...we are the minority group and governmental resources do not adequately cover our needs").

Age-Specific Baby Boomers

When asked if participants thought the city was age-friendly, responses varied across groups. Similarly to the ethno-cultural groups, regardless of a group's initial response, every age-specific group highlighted both areas of strength and concern when asked to explain their responses. Table 7 indicates the responses of each age-specific group.

Table 7: Age-Specific Baby Boomers Responses

Age-Group	Yes	No	Mixed
Early (n=4)	n=2	n=2	
Mid (n=4)		n=2	n=2
Late (n=4)			n=4

Note: n=number of groups, not participants

Table 8 summarizes the age-friendly themes highlighted by the age-specific groups as strengths, concerns or mixed areas.

Table 8, Summary of age-friendly themes highlighted among age-specific groups

Age-friendly themes	Strength	Concern	Mixed
Accessibility of public transportation		X	
Affordability of public transportation		X	
Accessible or age-friendly housing design		X	
Ageism and ageist attitudes		X	
Number and variety of social participation activities	X		
Accessibility of the physical environment			X

Areas of strength. One age-friendly area was identified: social and recreational opportunities. All 12 focus groups across all three sub-cohorts discussed the number and variety of social and recreational opportunities in the city as an area of strength. For example, comments included: "I'm involved in lots of activities and I always find that older people are welcomed and there's lots of opportunity to get involved in things regardless of age" and "they have daily activities, they have a walking group, they have aerobics, they have carpet bowling, [and] they have golf. They have art classes, they have speakers come in, they do mystery tours and dinners and...movies." Both formal and informal opportunities were discussed. Formal opportunities included programs and activities organized by the library, recreational centres, community associations/centres, and churches. Specifically, all three age groups identified the libraries as a great place that hosts social opportunities. For example, one participant spoke highly about the library she attends: "Our library... has events at least once a week for seniors.... They have different activities going on.... I would say our libraries are fantastic." Informal social opportunities included coffee and meet up groups that were organized by community members.

One participant highlighted this in her/his community: "In the northeast, they've got a coffee club in the [Library and Recreational Centre], they just meet in the food court you know." In terms of differences between the age groups, the early boomer groups' discussions focused almost entirely on opportunities for socializing, while the mid and late boomer groups' discussions included a balanced focus on both social and recreational opportunities.

Areas of concern. Participants predominantly focused on concerns related to age-friendliness. Specifically, concerns were related to: 1) transportation, 2) housing, and 3) ageism and ageist attitudes. Concerns related to transportation were focused specifically on the accessibility and affordability of transportation. Eleven groups across three age groups discussed concerns over the accessibility of public transit, which include the long wait times, long travel times (e.g., the amount of bus transfers needed for one trip), infrequent bus services, safety, and lack of washroom facilities (which was specific to the early boomer group only). For instance, one participant mentioned that,

Another problem [is] if people have to transfer, it can take you an hour and a half to two hours to get to an appointment or meeting. One of the ladies in [a south west community in the city] had to go to therapy after she broke her arm. She did get a ride sometimes, but other than that it was two hours. So, she had to take a bus to downtown, the C-train to the end of the route and then another bus that only runs every half hour. There aren't any washrooms along the way. The nearest stores near the C-trains often have signs "no public washrooms."

In terms of safety, another participant said,

I was going to say that I have been taking the LRT [light rail transit] and sometimes my local bus, for some different things. I am afraid at night on the LRT. I don't think that it's safe, it doesn't appear to be safe...Not that I would say there [have been] incidents [where] I've called 911. I haven't been involved in anything. But it's that perception that your safety is not so good. Mainly on the train. I haven't noticed it so much in the station but on the train when you've got a [long] ways to go.

Furthermore, many of the concerns were related to the long cold weather months in Calgary. For instance, one participant commented,

We have a bus two feet from my door, really close. I never take it, because . . . I'm not going to wait forever with a titanium knee, pretty soon two titanium knees, they get pretty cold at 30 below zero. They actually don't move. Sitting up there waiting for hours is not an option for me and for most people I doubt it.

Other comments included, for example: "We also have climate to deal with. We have 6 to 8 months of winter here and people who are 80 years old shouldn't be walking down icy sidewalks, when it's 30 [degrees] below [celcius] to get their oranges," "it would be really nice if the city transit would send their smaller buses through the communities from about October to about May or March...the ice season and pick up a few people and drop them off at their local community centres. To me that would really get people out of their houses" and "all winter long I was pretty much stuck in the house unless somebody could come along and pick me up, which I found really hard."

Two additional concerns related to the accessibility of transportation were brought up by only the early and mid-baby boomer groups. Firstly, concerns related to the long wait times for Access Calgary (an alternative public transportation system for people with disabilities and others who cannot use public transit). Secondly, concerns related to not enough designated parking spots for seniors.

Concerns over the affordability of transportation was discussed only by the early and late boomer groups, and the focus was on public transit fares. The concerns were all regarding news they heard that the subsidized seniors' transit pass would be discontinued. For instance, one participant commented,

They've taken that [subsidized seniors transit pass] away. The bus pass is another one. Even though I don't use it, a lot of people need it. They take that away. So, you plan for it [and] then they keep changing the rules. What are they going [to] take away next?

Concerns about housing were also raised by eight focus groups across all three age groups. The affordability of owning and/or renting you own home and the high (and increasing) costs associated with maintaining the house (e.g., insurance and property tax) were discussed by all three age groups. For instance, comments included: "they really have to look at having more affordable senior housing because there's a whole group of people who are going to be needing that," "I don't think there's enough variety of housing choices for seniors and affordability is an issue. The community where I live, the average house price for new houses is CDN\$800,000" and "Trying to keep your house because the taxes have gone up so much. Trying to keep your house is going be hard enough."

Concerns related to accessible/age-friendly housing (which include the design of homes, such as bungalows, and/or the supports necessary for living independently, such as programs to help with lawn care, snow removal, etc.) were discussed by the early and mid-baby boomer groups but not the late boomer group. However, some concerns with accessible/age-friendly housing were also intertwined with concerns over affordability, as highlighted by one participant's comment:

For instance, I just had a knee replaced and I would dearly love to have a bungalow. [I] can't find one here, unless I pay eight or nine hundred thousand [dollars or] whatever.

Right now, I'm not prepared to do that. So, reasonable housing is not here. It just isn't. Other comments were for example: "My husband and I know that we're not always going to be able to stay in our two-level house, because one of these days my knees are going to give out...and so, that's just one of the things that I have started thinking about. How many years do we have left in our house and then what are we going to do?" "I just really want housing on one level, I can't climb stairs that well. I'd be able to stay in my house a long time if they would just make it flat" and "Just one other thought about helping seniors to stay in their own homes...is [to have] more programs like Mow and Snow, [which are] those types of programs [that] help them [seniors] with yard work, and all that, or in the [case of] snow storms."

Concerns related to ageism or ageist beliefs, stereotypes and attitudes were identified by eights focus groups across all three groups. For instance, one participant commented:

I find what's happening, and there's nothing you can do, [is that] the world is changing and there's a little less respect for older people. I find that a challenge for me, sometimes, because I was raised that an older person, good, bad, or indifferent, they're elderly. I find, in our community [neighborhood in the southwest quadrant] and it's amazing how many young people are there, but I find that social[ly], when you go to different things in an environment you're old. You know it's that perspective...

Mixed responses. The accessibility of the physical environment was discussed by 11 focus groups across all three age groups but the comments were mixed. Concerns related to the physical environment (which include for example, buildings, community designs, sidewalks, and street signage) of the city were raised by all three age groups. Many of the concerns were related

to the location of activities and services being too spread out or too concentrated in one area (e.g., downtown). For instance, one participant commented,

because I am still healthy enough to drive so I'm driving to the train station and parking and then taking the train to do my core activities...where most of the things are happening. They are not happening for me in the suburbs. So, I have to leave my nest in order to go out into the world.

Another participant stated,

Making sure that there are the number of health programs that we need for seniors. A variety of them and in locations where they're easily accessed. Because...to have to go to some of the major hospitals and pay for parking or even transit, I mean sometimes it's two and three buses to get there...that's very difficult. So, I think if we're moving services out in the community if we could have them at community health centres, make them easy to access, and [have] a variety of them. I think that's really important.

Strengths related to the accessibility of the physical environment were discussed only by the mid and late boomer groups, and not by any of the early boomer groups. In contrast, two of the mid boomer groups (specifically the ones in the northwest and northeast quadrant) mentioned that the location of activities and services, which are all within close proximity to one another enhanced accessibility. For instance, one participant said:

Yeah but if you're living here, I mean I can't think of a nicer place in Calgary to live than [in three northwest communities]. They're all within walking distance, [like] 10 minutes [to] Market Mall, Northland, Brentwood station, [and] I mean anything you would need or want shopping wise...

Similarly, a northeast participant mentioned: "Well I like [where] the seniors apartments are, I think they are still there . . . and the Co-op is there, the doctor's office [is there]...It was very convenient for a lot of seniors." Other areas of strength related to the accessibility of the physical environment included, the availability of more disability parking stalls (which contrasts the comments above), the plus 15 system (which is an indoor pedestrian skywalk system), and wide pathways for walking.

Discussion

In this section we discuss the implications of the findings and identify recommendations at the local level concerning Calgary, and at the global level regarding areas for future research on age-friendlinesss assessments.

Local Implications and Recommendations

Concerning the overall level of age-friendliness of Calgary, 83% of service providers rated the city as low to moderately age-friendly and 12 of the 17 baby boomer groups rated the city as not age-friendly or held mixed opinions. All three stakeholder groups, which include service provider participants, ethno-cultural groups, and age-specific groups, identified strengths and concerns regardless of their rating. Albeit, concerns were predominant for the age-specific groups. These findings suggest that there is room for age-friendly progress in Calgary. To identify specific focal points for progress, we compare the findings with the WHO Guide (2007) and the local Calgary Age-friendly Strategy (City of Calgary, 2015) which was being developed at the same time as this study.

When the themes identified in this study were compared to the WHO Guide (2007) and the local strategy, four age-friendly domains were specifically highlighted across the three stakeholder groups: transportation, respect and inclusion, social participation, and housing. This

finding indicates that these four domains are a good focal point for progress, locally, for Calgary, terms of age-friendliness.

Additionally, when comparing the findings with both the WHO Guide (2007) and the Calgary Strategy (2015), there are several themes or age-friendly features that were not highlighted by the stakeholder groups in this study. Namely, age-friendly communication and information, access to information and services, (which are features included in both the WHO Guide and the Calgary Strategy) and the prevention and response to elder abuse as a priority area (which is a feature of the Calgary Strategy). These omissions suggest that there may be other age-friendly features to consider in addition to those raised by service providers and baby boomers, and that the perspectives of other stakeholders are also important to engage (e.g., municipal government, policy strategist, funders, and academics in addition to service providers and baby boomers) to identify such features.

In addition to the age-friendly domains, the findings of this study confirmed the importance of considering two key attributes: accessibility and affordability, which are identified in both the WHO Guide (2007) and the Calgary strategy (2015) as core features of a domain. These attributes were mentioned by all three stakeholder groups as both strengths and concerns which intersected with transportation, social participation, and housing.

Accessibility may have been highlighted by participants given the fact that Calgary experiences cold, snowy winters which impact accessing transportation, the ability to attend social participation opportunities, and mobility in and out of one's home. With respect to affordability, at the time of the study Calgary was experiencing a booming oil industry which afforded some city residents with substantial affluence while certain subpopulations of older adults continued to experience risk and vulnerability associated with complex or compounding issues (e.g., experiencing health problems, having a low income or socioeconomic status, newcomers or immigrants, seniors experiencing abuse, seniors with mental health issues) (Miller, Simpson, Buckle, & Berger, 2015). These findings support the focus on these features across multiple domains when developing an age-friendly strategy at a local level. Given the downturn of the Calgary economy, it would be interesting to see if affordability has been impacted.

While there were some commonalities across baby boomer groups with respect to agefriendly assessments, important domains, and key attributes, it is also important to acknowledge the diversity that was evident. For instance, how perspectives among and between the stakeholder groups can vary and sometimes conflict. For example, concerning transportation, the ethno-cultural groups highlighted that affordability and accessibility of public transport was a local strength, while the age-specific groups shared that it was an area of concern. Another example of varied perspective is concerning social participation, whereby the baby boomers (both the ethno-cultural and age-specific groups) highlighted that the variety of social participation activities offered was a strength, while service providers noted that as a concern. Potential reasons for the variations within and between stakeholder groups could be due to differences in geographic location (e.g., the specific community where participants live) and demographic variables (e.g., gender, household income, education, etc.) thereby warranting further analysis to explore how such factors attribute to these differences. Nevertheless, findings of diversity within and across sub-cohorts and ethno-cultural groups corroborate the literature acknowledging the heterogeneity of baby boomers (Pruchno, 2012; Wister, 2017) and call attention to the need for future age-friendly strategies to consider diversity and intersectionality when planning.

Lastly, when considering the implications of the findings at a local level, we recommend that a subsequent study should be conducted to examine the extent to which a shift towards a higher level of age-friendliness is evident as a result of the local strategy presented in 2015, and if so, whether this is evident at both the service provider and community resident levels.

Global Implications and Recommendations

In this study, ethno-cultural participants were unique in identifying civic participation and employment. This is an interesting finding that diverges from the current literature, which highlights low levels of civic participation by ethnic minorities (Nahid, 2008; Wiertz, 2016). We recommend that further research be conducted to explore dimensions/differences of civic participation among older ethnic minorities.

Another unique finding was that housing was only an age-friendly theme identified among the age-specific participants. For example, the affordability of ownership/rent and supports for living independently were raised as concerns by this group. A potential reason why housing was not identified among the ethno-cultural groups, is the higher possibility, for these individuals, of living in multigenerational households. A Statistics Canada (2015) study exploring different living arrangements and family structures, found that ethnicity (e.g., South Asian, Southeast Asian, Filipino, Chinese, and other visible minority statuses), language (e.g., Punjabi, Tagalog, Mandarin, Cantonese), and immigration status were predictors of living in multigenerational households. Such living arrangements may alleviate some of the concerns over affordability of ownership/rent of housing (because of shared financial responsibility among the household members), amongst other concerns related to living independently. We recommend that future research concerning this age-friendly domain should seek to understand baby boomers' preferences of living arrangements, how responsibilities are shared, and what factors (beyond demographic characteristics) influence the decision to live in multigenerational households.

There are also global implications and recommendations for future research centred on age-friendliness assessment that we identified based on the design of our study and lessons learned. Firstly, 10 of the 17 focus groups were polarized (e.g., indicating a unanimous yes or no) with their assessment, however, subsequent discussion included comments that were mixed. It is possible that some level of "group think" or group dynamic may have occurred impacting how participants determined their overall assessment of the city (MacDougall & Baum, 1997). In light of this, it would have been helpful to have included a closed-ended survey question for focus group participants that could be used for comparison.

Secondly, the findings of this study support the need to include additional diverse perspectives when developing a baseline assessment of age-friendliness. For example, the budget for this study enabled only one focus group for each of the five ethno-cultural groups which limited insights into an ethno-cultural perspective. Also, while recruitment flyers were put into community residents' mailboxes and community locations were selected for focus groups, participation required a level of mobility and access to the location. In addition, recruitment notices were also posted at community hubs (e.g., community associations, libraries) which may not be key points of contact for reaching older adults subpopulations including newcomers or immigrants, Indigenous, LGBTQ+, caregivers, those with mental health issues, or those experiencing abuse who may disproportionately experience risk factors related to social isolation (Miller, Simpson, Buckle, & Berger, 2015). We recommend that future research needs to attend to recruiting diverse participants (beyond ethnicity) to ensure that a multitude of perspectives is represented.

Finally, using a focus group format with general questions about the age-friendliness of the city prompted rich discussion about a range of community characteristics and attributes. However, some key features may have been missed by not specifically informing participants about the eight age-friendly domains (WHO, 2007). We recommend that further research could benefit from using both an open-ended format as well as a questionnaire with an established assessment tool for measuring age-friendliness to generate a breadth and depth of insights. Providing participants with a baseline measurement assessment such as one of the tools discussed in Dellamora et al.'s (2015) review, in addition to or instead of a more general openended question, could ensure that a comprehensive assessment was conducted. This would also help to obtain a level of consistency across cities around the world.

Conclusion

Integral to the process of enhancing a city and/or community's age-friendliness are continual cycles of implementation and evaluation (Dellamora et al., 2015). Baseline assessments of age-friendliness are key to such enhancement processes, as cities and communities need to know where they are at (e.g., their current strengths and areas of concern/improvement) in order to work effectively and strategically toward the vision of age-friendliness they wish to achieve.

This study offered a glimpse of how age-friendly one mid-sized Canadian city is from the perspective of service providers, ethno-cultural baby boomers, and age-specific baby boomers. The findings highlight that overall there are areas for progress, and that the focal points locally for Calgary include transportation, respect and inclusion, social participation, and housing. Specifically, within each domain there needs to be a focus on accessibility and affordability. At the same time, the findings also indicate heterogeneity among and between the stakeholder groups concerning the strengths and concerns within each domain. Therefore, there is a need for more comprehensive, specific, and detailed assessments in the future with diverse subpopulations of aging adults. Additionally, this paper offered an opportunity for the researchers to reflect on the lessons learned in the design and implementation of the study and identify implications and recommendations for future research in the area of age-friendly assessments.

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