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Older Adults and Outdoor Physical Activity Equipment: A Social Ecological Analysis

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Abstract

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Keywords

qualitative case studies, built environment, physical activity, older adults

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Outdoor adult playgrounds (OAPs) have in some cases been in socioeconomically underserved neighbourhoods to improve community members' access to physical activity infrastructure. Older adults have been identified as one population group who could particularly benefit from OAP equipment. The purpose of this study was to explore and identify the social ecological factors that influenced older adults' uptake of an OAP installed in a neighbourhood of low-socioeconomic status. We employed the social ecological model (SEM) using a case study design and argue that the OAP's location may help to lower inequalities in access to physical activity infrastructure. We end this paper with a discussion into all-ages and age-friendly policy as they relate to OAPs and suggest novel ways of activating municipal parks for seniors.

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Introduction

Older adults represent one of the fastest growing demographics in Canada (Statistics Canada, 2017a). With 23% of the population set to be 65 and over by the year 2031 (Statistics Canada, 2017a), unique challenges and opportunities exist for Canadian policymakers at all levels of government. Frequently noted challenges associated with older adults' health include rising healthcare costs, low physical activity participation, and the high prevalence of chronic health conditions (Canadian Medical Association, 2016; Federation of Canadian Municipalities, 2013; Government of Canada, 2014; Jackson et al., 2017). Implementing preventative health measures, such as improving physical activity participation, is a strategy adopted by Canadian governments to counter these challenges to older adults' health (Federation of Canadian Municipalities, 2013; Government of Ontario, 2017). Canada's low rate of physical activity participation across all populations (Statistics Canada, 2019) reflects a need for change in current physical activity practices. Across all adult age groups in Canada, including older adults, less than 2 in 10 participate in the recommended 150 minutes per week of moderate-vigorous physical activity (Statistics Canada, 2019). Within this population, low-income older adults, who are a growing subset of the older adult population (National Seniors Council, 2017), are less likely than higher-income older adults to participate in adequate levels of physical activity (Dogra et al., 2015).

Cost considerations related to physical activity programming and infrastructure (Toto et al., 2012), physical and mental health status (Dogra et al., 2015), and limited access to safe and appropriate spaces for physical activity (Loukaitou-Sideris et al., 2016) are all examples of barriers to low-income older adults' participation in physical activity. Neighbourhood factors such as poverty, social deprivation, and feelings of vulnerability to crime can negatively influence older adults' wellbeing (Scharf et al., 2003), and limit their use of outdoor public

spaces (Scharf et al., 2001). At the same time, positive neighbourhood factors such as strong social cohesion can mediate the negative effects associated with low-income status on older adults' wellbeing (Cramm et al., 2012). Therefore, when an outdoor physical activity initiative is introduced to an otherwise underserved neighbourhood and is partly designed for older adult use, contextual neighbourhood factors that are beyond the control of the individual have the potential to both negatively and positively influence the initiative's uptake (Levinger et al., 2018).

Outdoor adults' playgrounds are physical activity initiatives of both the past and the present. Popular in the 1970's, OAPs have enjoyed a resurgence in North America and globally in recent years (Levinger et al., 2018; Madren, 2013; Yarmohammadi et al., 2019). In Canada, hundreds of municipalities have invested in these kinds of infrastructures under various names like outdoor gyms, outdoor fitness equipment, family fitness zones, and outdoor adult playgrounds (e.g., McGinn, 2011). Despite differences in terminology, the initiatives have the shared goal of improving community access to free physical activity and play infrastructure. Characteristics such as durability, all-weather function, and stationary design are common across OAPs, while the specific design features and scope of each infrastructure reflects the needs of the community combined with the availability of equipment from any one manufacturer. Many communities have invested in play-based equipment designs with the understanding that there is added value in participating in outdoor play-based physical activity, (e.g., Ping-Pong; Larkin, 2012). In some cases, communities have invested in OAPs for the purpose of improving physical activity infrastructure access to specific populations: for example, older adults (Larkin, 2012) and low-income users (Madren, 2013).

In the study presented in this paper, we employed the social ecological model (SEM; McLeroy et al., 1988) to identify factors influencing older adults' uptake of an OAP located in a lower-income neighbourhood, and supported by a local community organization, *Strong Neighbourhood* (pseudonym). In 2016, 26.3% of the neighbourhood's population where the OAP is located had an income below Statistics Canada's after-tax low-income measure (Statistics Canada, 2017b): a value that nearly doubles the City of Wymont's (pseudonym) overall prevalence (13.8%). The Strong Neighbourhood organization plays an important role in providing social programming to residents, particularly to youth in the area. One of the city's reasons for installing the OAP in the neighbourhood was the presence of a community association that would help monitor and support its use.

Previous research has yet to examine the role of community and organizations as they relate to barriers and facilitators of physical activity participation among older adults generally (Yarmohammadi et al., 2019), and in relation to OAP uptake specifically. This represents a notable gap in the literature, as community-related factors play an essential role in supporting physical activity initiatives (Sallis et al., 2006). Sallis and colleagues (2006) identified three ecological characteristics of physical activity interventions that are crucial to their success. The first characteristic, creating a space for safe and accessible physical activity, has been briefly examined in previous literature concerning OAPs through quantitative observational methods or semi-structured interviews (e.g., Chow, 2013; Cohen et al., 2012; Copeland et al., 2017). The other two characteristics, the presence of programs highlighting the intervention, and the use of community organizations "to change social norms and culture" (Sallis et al., 2006, p. 299), have yet to be examined in the OAP literature. Thus, we provide a novel contribution to the budding literature examining OAPs (e.g., Copeland et al., 2017; Sibson et al., 2018; Stride et al., 2017) by exploring through a SEM lens, community organizations' roles in supporting older adults' use of a new OAP.

Methods

Using a case study design and the SEM, we explored “a contemporary phenomenon (the “case”)” – older adults’ engagement with an OAP – “in depth and within its real-world context” (Yin, 2014, p. 16). In line with case study inquiry, multiple data collection methods were used to obtain a thorough understanding of the case, including participant observations of OAP users, semi-structured interviews with one older adult user of the OAP and eight community stakeholders, and document review. Community stakeholders were identified through information publicly available on their respective organizations’ websites and included based on their involvement with physical activity, older adults, and programing in the city. Multiple data collection methods aligned with using the SEM, which is a framework for understanding multi-level influences (e.g., individual, environmental, community) on health behaviours (McLeroy et al., 1988). The SEM is flexible and has been effective in studying various health behaviours (Rowe et al., 2013), including physical activity and sport (Rowe et al., 2013), family planning (Schölmerich & Kawachi, 2016), sedentary behaviours (Perchoux, 2016), and tobacco use (Dawson et al., 2012).

Following ethical approval through the authors’ institutional Research Ethics Board, the first author spent approximately 48 hours at the OAP site over a 6-month period conducting participant observations. We used the System for Observing Play and Recreation in Communities (SOPARC: Cohen et al., 2012) participant observation schedule to measure OAP use for two weeks in the summer, one week in the fall, and one week in the winter. The SOPARC schedule, which seeks to provide an accurate measurement of typical park use over a one-week period, requires observations two days throughout the week and on both days of the weekend with an hour observation time slot for the morning, afternoon, and evening of each day (Cohen et al., 2012). The age and gender of all park users were estimated and noted by the first author, and written field notes were captured using a reflective journal following each hour of observation. Participant observations served the dual purpose of recruiting older adult users for interviews; however, only two older adult users were observed using the equipment, and only one older adult user agreed to participate in a semi-structured interview.

Policies and reports were identified through a search of the municipality’s online document database. Policies are an integral piece of public health, as they can both restrict and facilitate community access to programs and healthy environments (McLeroy et al., 1988). A review of City of Wymont documents thus helps explore the influence of community policies on OAP uptake. We included documents in our analysis if they discussed OAPs specifically or municipal older adult physical activity strategies generally.

Data Analysis

To draw out themes from the varied data sources (i.e., participant observations, semi-structured interviews, municipal policies), we followed Braun and Clarke’s (2006) six-step guide to thematic analysis. According to Braun and Clarke (2006), thematic analysis is a flexible qualitative strategy that can be employed within multiple qualitative approaches. An in-depth and comprehensive analysis “involves a constant moving back and forward between the entire data set, the coded extracts of data that you are analysing, and the analysis of the data that you are producing” (Braun & Clarke, 2006, p. 86). We used this analysis to generate codes from the data sources and identify themes, then structured and analyzed the themes using our theoretical model (i.e., SEM). The SEM served as a useful framework for sorting themes based on their level of influence (e.g., individual, environment, policy, etc.). Through this analysis, several themes are presented that coalesce from the content of the data (Creswell, 2013).

Findings

In total, eight community stakeholders were interviewed, along with one older adult user (Dave¹). Community stakeholders included one park planner with the municipal government (Werner), two stakeholders with the municipal government involved in older adults' physical activity (Lisa and Susan), two stakeholders from a community organization involved with community physical activity initiatives (Megan and Debra), one executive with the community association Strong Neighbourhood (Linda), one city stakeholder who is also involved with the community's Age-Friendly organization (Rebecca), and one community stakeholder involved with supporting older adults' physical activity (Nancy). The scarcity in older adult interviewees was the result of a dearth in observed older adult OAP users.

The varied data collection methods and sources produced a wide range of themes related to older adults and the OAP. We structured our results following the SEM, beginning with individual demographics observed at the OAP and ending with policy factors associated with OAP uptake. First, from a demographic point of view, we briefly report on OAP use throughout the four weeks of participant observations. Due to the dearth in older adult interviewees, we could not fully describe individual factors associated with older adult OAP uptake. Then, we describe factors influencing older adults' uptake of the OAP at the social environment and interpersonal level, the built and outdoor environment level, the organizational and community level, and finally uptake factors that could be influenced by policies.

Individual Observed Use

Table 1 displays the number of users observed at the OAP over four separate weeks of observations.

Table 1
Observed Outdoor Adult Playground Users

	Weekday 1 Users	Weekday 2 Users	Saturday Users	Sunday Users	Total Observed Users
Summer Week A	14	2	4	10	30
Summer Week B	9	17	1	0	27
Fall Week C	0	0	3	2	5
Winter Week D	0	1	0	0	1
				Total Observed Users	63
				Total Older Adult Users	2

¹ The interview participants who wished to remain anonymous have been assigned the pseudonyms "Megan," "Debra," and "Susan." All other participants wished to keep their identities known.

The first author estimated users' age into three groups (see Table 2), as well as estimated users' gender. Demographically, only two older adults were observed using the equipment during participant observations. Both were males, and only one had arrived at the OAP with the intention of working out; the other male came with his grandchildren and was demonstrating how the equipment functioned. The first older adult, who was also the lone older adult interviewee, confirmed the absence of an older demographic:

There's usually somebody else over there using the equipment when I go over there but they're usually, you know, in their 20s, 30s - younger. Which is great, but I haven't seen anybody – I'm 62, so I haven't seen anybody my age over there yet. (Dave)

Other observed users generally appeared to be males under the age of 55. Only 12 of the 63 (19%) observed users appeared to be female (Table 2). Other significant groups of users were teens and children. They were not the target population but often used the equipment for its intended purpose. The youth – or adults – who did not use the equipment for its intended purpose, but merely played on the equipment, were nevertheless included in the number of observed users. As previously noted, OAPs can be more than a place for exercise, and users who did not participate with the equipment as it was designed may have still accrued benefits related to physical activity or socialization. Thirty-nine of the 63 (61.9%) total participants appeared to be under the age of 18.

Table 2

Observed Outdoor Adult Playground User Demographics

<u>Age</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
18 and younger	31	8	39
19-54	18	4	22
55 and older	2	0	2
Total	51	12	63

Social Environment/Interpersonal Factors

Unintended parks use, such as vandalism, was perceived as a barrier to use among both observed park users and community stakeholders. Linda described how people outside of her neighbourhood:

were shocked – I know folks who aren't from the neighbourhood, there was a lot of discussion of how things would be wrecked [...] It's difficult for folks to take on, but they don't live and enjoy our neighbourhood the way we do.

Linda's comments echoed comments heard in the field from community members such as, "A new gym! I hope the kids don't wreck it" (field notes). Another community stakeholder similarly pointed out, "anywhere you put stuff in, it [park infrastructure] gets vandalized" (Nancy). The sole older adult interviewee also described this perception as a barrier to use. While a few minor incidents of vandalism were observed by the first author over the period of the research project, these were not significant and were quickly fixed by municipal staff.

As a counter to the sometimes-negative perception of implementing an OAP's in this neighbourhood noted by some community stakeholders and park users, many interactions observed between OAP users appeared to be positive and also appeared to build social

connection. Observed interactions included knowledge sharing between users on exercise prescription and OAP equipment “best practices.” On multiple occasions the first author was asked how certain pieces of equipment functioned, how the equipment can be modified to suit individual needs, and to demonstrate the proper way to use the equipment. These observed positive social interactions were not aligned with the negative perceptions held by some observed community members.

Built and Outdoor Environment Factors

Factors identified via interviews and observation at the built and outdoor environment level included weather and equipment design.

Outdoor Weather

The OAP received observably greater use over the summer weeks (July) than in either the fall (September) or winter weeks (November/December). There was also a noted drop-off in users from the first weekend of observations in the summer to the second weekend. The second weekend had a heat warning in effect with temperatures over 30 degrees Celsius. On Sunday, when the temperature felt like 35 degrees Celsius with humidity, field notes recorded stated, “While the OAP is shaded, it is still extremely hot out. I wouldn’t use the equipment in this heat.” Weather was not the sole indicator of OAP use; however, as the afternoon and evening temperatures in the fall week of observations all rose to the mid-high teens, this did not result in more observed users. Similarly, the temperatures throughout the observed days in late November/early December never fell below -3 degrees Celsius. On the first observed winter weekday, during which no users were observed, recorded field notes stated, “Really a beautiful day to be using the equipment,” as it was 6 degrees Celsius and sunny. One factor that potentially reduced the number of users during the two summer observation weeks was construction at the OAP. There were multiple instances over the summer where the OAP would rotate being open for use then closed for a period for construction, including for installing a rubber surface at the OAP.

Equipment Design

The OAP equipment and surrounding park area were designed by the manufacturers and park planners to be durable and functional across all seasons and over a period of many years. One trade-off of this durability is a lack of adjustability. At the OAP under study, none of the equipment was adjustable to the size or strength of the user. This created both confusion and frustration for users, which was captured through this field observation note: “His friend asked if the chest press and lat [back] pull down were ‘fixed yet.’ He then went on and tried it. It was still loose (as it is supposed to be), so he figured it was still broken.” The observed user thought that the machines’ relative lack of resistance meant the machines were broken; however, they were functioning as designed. A similar reaction was noted a week later: “The two men complained about the chest press and [back] pull. Wished you could increase resistance. Said it must be for only beginners. Also didn’t like the bike – no resistance... ‘only the pull-up and push-ups stations are good.’” These users recognized that the machines were functioning properly, yet their designed “all-ages” function did not meet their needs.

The one-size-fits-all approach to the OAP equipment had observed limitations. Each piece of equipment had short instructional plaques showing how to use the equipment and which muscles the equipment would activate during proper use. However, confusion was noted among many new users who were unsure how to use the “wheelchair accessible” side of the

stationary resistance machines. The plaques, for some users, “didn’t really give me what I needed. I needed something more” (Nancy).

Organizational and Community Factors

Factors identified at the organizational and community levels were interrelated and often overlapped; however, for ease of overview, they are separated by sub-factors. These factors included, organizational support, park programming/activating, and funding.

Organizational Support

Multiple community stakeholders interviewed cited monitoring of park use by city and/or community organizations as difficult to both quantify and justify. In terms of quantifying equipment uptake, a strain on organizational resources hindered the logistical capability of both Strong Neighbourhood and the municipal government. When asked during the interview what the role Strong Neighbourhood was expected to have when the equipment was installed, Linda replied, “Just the connection to the neighbourhood. Letting people know what was going on, that there was equipment coming. It would be watched. It would be monitored.” While Strong Neighbourhood’s presence at the park was, in part, intended to serve as a community champion of the OAP, no additional resources were provided to the organization for support or monitoring purposes. Thus, Linda viewed supporting the OAP as just “another thing that I do,” and monitoring as “challenging” to figure out. A representative from the municipal government stated that, except for outdoor hockey rinks, park infrastructure is monitored or measured “mostly anecdotally” (Werner). Werner described the challenges this could entail: “If I hear lots of either favourable or unfavourable comments, one-way or the other, that’s sometimes the barometer [of success]. It’s not the greatest one.” On the other hand, this stakeholder also challenged the purpose of a formal evaluation process:

[T]o say that, OK, we have an average X number of users on a facility per day, what would be deemed a success and what would be deemed not a success? I don’t know if anyone could give you an absolute number. If we’ve helped five people a day, is that enough justification to do another one [OAP]? Maybe not, maybe so. (Werner)

Another community stakeholder pointed to the difficulties in gauging the success of the equipment:

We hear in the community, I can only tell you what I hear, is that people use it, and they like it. So, I have to assume that it’s being well used and people like it and so therefore it’s a good thing. (Rebecca)

This stakeholder went on to describe how the success of OAPs in other communities supports the development of OAPs in Wymont: “[W]hen I see successes in other communities, then I have to assume that the [Wymont] one park is a success. Why wouldn’t it be?” (Rebecca)

Park Programming/Activating

Beyond monitoring, organizational responsibility for park programming was at times unclear. Werner described park infrastructure as “soft service” that is “not necessarily programmed rigorously.” Megan stated that putting on programming such as exercise classes

is “not really [our organization’s] role.” Instead, Megan’s health organization partners with community organizations interested in coordinating recreation or physical activity programming. On Strong Neighbourhood’s part, Linda stated that:

We need more instructors to come out and just be with the folks. Slowly gathering people together so they know, “[W]hat do you do with this thing?” We’ll try and show them where the stickers are, and there’s illustrations, but people don’t always see that.

Linda identified that volunteer support was needed for this. Similarly, Werner identified Strong Neighbourhood as perhaps the best-suited stakeholder to support the OAP through instruction:

[T]hey [Strong Neighbourhood] directly engage members of the community, and if they had members of the community providing that service and instruction, I think there may be a lot more buy-in from the users, rather than some person that’s from across town standing there.

Organizational Funding

A stakeholder in the municipal government responsible for community older adult physical activity programming (Susan) cited a heavy reliance on volunteers for free programs such as outdoor walking groups. Part of this reliance on volunteers for older adult community programming stems from municipal budgetary cuts. A stakeholder from an older adults’ recreation centre (Lisa) described budget cutbacks to seniors’ programming and a heavy reliance on volunteers at a time where demand for programming was at an all-time high.

An analysis of city documents revealed several municipal service action items, including considerations for investing in additional OAPs (City of Wymont, 2015). One community stakeholder (Rebecca) pointed out that the city has only recently started to invest in park infrastructure designed specifically for seniors, but that there is a recognized need for further funding in senior-specific programming and infrastructure. Both Werner and Rebecca pointed to funding challenges related to future investments, whether it was through a stagnation of departmental budgets, or a reduction in the municipal tax base. The newly created Recreation & Facilities Master Plan (City of Wymont, 2015) did point to public-private partnerships as a growing method of funding new capital projects.

Policy Factors

Two policy factors were identified through the analysis of municipal documents and via observation and interviews: conflation of policy directives and filling a void in older adult services.

Conflation of Policy Directives

There was, at times, a disconnect between what was stated in policy and what occurred “on the ground” at the OAP. In the municipal documents reviewed, the City of Wymont considered investing in OAPs as a potential tool to support community age friendliness. In the City Services Action Plan (2015), the City cites the OAP as a pilot project for future investments into OAPs “designed to help older adults stay mobile, healthy, and physically active in their communities” (p. 26). This document description of future OAP investment does not reflect municipal practices “on the ground,” where all-ages design is valued. There was

also an identified push towards “all-ages” policy compared to seniors-focussed policy. For example, the City Services Action Plan (2015) identified the need to emphasize “parks and outdoor spaces designed for all ages, including older adults” (p. 8). Werner emphasized a focus on all-ages park infrastructure, except for certain youth-focussed infrastructure. The stakeholder involved in Age Friendly Wymont also pointed out that while the “original intent of it [the OAP] was for seniors,” (Rebecca) the infrastructure is built for all-ages.

Filling a Void in Older Adult Services

Beyond the geographical area immediately surrounding the OAP, there was also an acknowledgement that the OAP attempts to fill a void in services for the older adult population in the city as a whole. For example, the older adult interviewee pointed to the tendency for outdoor spaces in the city to be largely youth-focussed: “in [the city] I don't know of any other place where adult, quality exercise equipment is really there. Jungle gyms, sort of, but nothing for the grown-ups” (Dave). As one community stakeholder pointed out, outdoor play structures for children “are all over” (Nancy), while play infrastructure for seniors is comparatively non-existent. Linda acknowledged, “we take for granted that there is equipment for children, babies, and youth. I think we haven't done the same for older adults.” A City stakeholder interviewee also emphasized the greater need for seniors' recreation:

But with the fact that our population is ageing, we know that we have to provide different forms of recreation for seniors. That's a given. That has to happen. We have to look at different programming. So, to me, somewhere along the line we have to start putting more money into that sector of the population, and that is in [exercise] equipment. (Rebecca)

Werner described how the Parks department is trying to accommodate older adults' need for services by modifying existing park infrastructure, such as painting pickle ball lines on tennis courts. Broadening an infrastructure focus to include older adults' needs also presents a financial challenge for the Department:

We don't have a dedicated line item in the budget every year for outdoor fitness equipment. We have it for playground equipment, but it is all getting more and more expensive, and our budget hasn't increased in 15 years probably. (Werner)

Discussion

We used the SEM to frame our findings because we recognized that there are varying levels of influence potentially affecting older adults' participation with an OAP. While the noted lack of older adult users and interview participants reduced our ability to explore perceptions on the equipment and the barriers and facilitators to engaging with it, we nevertheless gained a rich understanding of the OAP through the other levels of the SEM. For instance, the interaction between individuals of all ages and the social and built environments can have a significant impact on the uptake of equipment use. Difficulties understanding the instructional plaques negatively impacted those who perhaps had not used exercise equipment previously. Individual and neighbourhood socioeconomic status combined with the location of the OAP produced a situation where inequities in access to physical activity infrastructure may have been reduced; this partly supports previous research by Taylor and colleagues (2007), who identified improving access to free gyms (although not necessarily outdoor gyms) as one of many methods of reducing disparities in physical activity for low-income urban woman.

Thus, it is not an indication of failure that a particular population group, in this case seniors, did not use the OAP.

All-Ages or Age-Friendly?

There was an acknowledgement among some stakeholders that additional efforts were needed to specifically support older adults' physical activity. As Megan noted, there are programs promoting physical activity to children specifically and some that target the general population (i.e., "all-ages"), yet little physical activity programming focus exclusively on older adults. A conflation of all-ages policy with seniors-focussed policy is a failure to recognize that seniors may require specific programming or supports that are not provided through an all-ages design. Larkin (2012) explored the benefits of OAPs and noted, "Arguably the biggest area of discussion—and different points of view—surrounds the question of whether to create a playground for older adults or an intergenerational playground" (p. 28). Intergenerational parks, Larkin (2012) argues, can tend to support younger generations' physical activity over older generations. As interviewee Dave pointed out, many parks have "Jungle gyms, sort of, but nothing for the grown-ups." Considering that seniors aged 65 and older now outnumber children aged 0-14 in Canada (Statistics Canada, 2020), a broadening of focus is needed in the areas of seniors' recreation.

Future Considerations for Policymakers and Planners

A broadening of focus in seniors' recreation does not necessarily assume substantial changes to park budgets. Specific to OAPs, Cohen and colleagues (2012) calculated the cost effectiveness of an OAP relative to increases in observed users' physical activity and identified encouraging but not significant results. Similarly, Madren (2013) highlighted the various sources of funding communities pursued in the United States to purchase OAP equipment, and highlighted a park planner's belief that OAP equipment is one of the most cost-effective park infrastructure investments. If cost remains a barrier for future investment into OAP equipment, the City of Wymont could look to other potential funding sources, whether through other levels of governments (e.g., Government of Ontario, 2018), or through corporate and private sponsorship. Indeed, stakeholders in this study did identify cost as a barrier to new park infrastructure for any age group, and thus novel ways of activating municipal parks for seniors is needed. One idea offered by a community stakeholder was to hire an "older adult specialist to work in the summer to activate parks and do things, training, with the outdoor gym" (Nancy). For the OAP, there was a potential knowledge gap for users who were unsure how some of the equipment functioned. Existing research has identified the use of trainers or exercise programs to support OAP participation (Chow et al., 2017; Copeland et al., 2017; Madren, 2013; Stride et al., 2017). Copeland and colleagues (2017) suggested that OAPs in small urban centres may require additional programmatic and marketing efforts (e.g., enhanced signage) in order to be successful. While younger age groups successfully used the OAP under study without such efforts, enhanced program and marketing could have benefited the older adult population and subsequently helped meet the municipality's desired outcomes – namely, older adult participation (City of Wymont, 2015).

In the future, stakeholders tasked with developing and implementing an OAP would benefit from a strategic use of the SEM. Utilizing the SEM could help identify (with the goal of bringing together) stakeholders and users, define the roles necessary for supporting the OAP, and hopefully target strategies to increase the number of older adult users at an OAP. Through our use of the SEM, we were able to identify potential factors beyond simply the design of the equipment that may help (e.g., location) or hinder (e.g., negative social perception) OAP

uptake. Examining the varying factors that could influence an older adult's decision to use an OAP in any given neighbourhood or setting, would provide a better understanding of the supports needed for potential older adult users.

To best support older OAP users and improve uptake, better alignment is needed between municipal policies and interests, and the needs of neighbourhoods and potential users in those neighbourhoods. A misalignment of the needs of older adults, the related lack of available supports to older adults, and interplaying contextual factors all combined to result in few older adults being observed using the equipment.

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