Outdoor fitness equipment in public parks

Is it an effective physical activity intervention?

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Introduction

Increasing access to exercise facilities is important for increasing physical activity at a population level. One in three Canadians say they would use places and facilities designed for physical activity if they were readily available. Similarly, a study in Alberta found adults who reported easy access to places they could exercise were 2.5 times more likely to be physically active.

The installation of outdoor fitness equipment in urban parks is an example of an intervention that increases public access to places for physical activity. Parks with fitness equipment, sometimes called “active parks”, can offer a number of benefits. Equipment stations are free to use and accessible to large numbers of people. They also provide access to equipment specifically for improving muscular strength, which is an area of fitness that often receives less attention, but is important for health. Active parks may also strengthen social connections, given previous studies have found that the use of common outdoor green spaces is associated with greater social interactions and a stronger sense of community.

If you build it, will they sweat?

Research has shown that introducing fitness equipment to parks can increase park use, attract new visitors, and increase physical activity among adults. Much of this work was done in two large cities — Los Angeles and a suburb of Sydney, Australia. Cohen and colleagues concluded that active parks would be most successful in densely populated areas. However, 50% of the world’s population lives in cities with fewer than 500,000 residents. Therefore, it is important to determine whether active park equipment is also an effective strategy in smaller urban centres.
In the context of Alberta, many communities have already invested in this equipment, including Lethbridge, Calgary, Red Deer, Fort McMurray, and Canmore. However, it is unclear if these parks truly have a positive impact on physical activity and community connectedness. There is a need to understand how many people actually use the equipment and what people think about active parks, before further investments are made.

To examine this question, we undertook a study to observe two active parks in Lethbridge, Alberta. The parks were observed for 100 hours across three seasons (spring, summer, and autumn). Observations were conducted at different times of day and included both weekdays and weekend days. The number of people in the park, as well as the type and intensity of activity, were recorded using a standardized system.

More than 1,000 people visited the two active parks during the observation period. Walking and running were the most common types of physical activity observed. Less than 3% of adults were observed using the fitness equipment.

How do people feel about active parks?

Although we observed that overall use of the equipment was very low, we wanted to understand patrons’ perspectives about the benefits of the active parks and ask about their equipment use. We interviewed 140 individuals by talking to people in the parks and going door-to-door in neighbourhoods with active parks.

Most people interviewed (86%) were aware of the fitness equipment in the park. Interestingly, many more people indicated they used active park equipment regularly than was actually observed, highlighting the importance of direct observation in research studies.

Most residents noted the equipment was rarely used by others. Thus, those we interviewed spoke about “the potential” the equipment had to improve health, increase physical activity, and enhance a sense of community in their neighbourhood. Many also appreciated that it was freely accessible. As stated by a mother who reported using the equipment regularly:

“I’m a low income parent. Going to the gym is not affordable for our family. That’s not an option…it’s my only option for resistance training equipment.” — Female, 25–39 years

Many residents also identified benefits for families and noted that parents could use the equipment while their child was playing nearby:

“Just a lot handier than actually going to the gym. I can bring my kid here and still get a workout in.” — Male, 25–39 years
Can we increase the use of active parks in small cities?

Residents interviewed had a keen interest in discussing ways to increase the use of the equipment. Frequent suggestions were more advertising and more information on how to use the equipment. As stated by one resident:

“Well, it just doesn’t look like what you find in a gym, so on first glance I don’t think people realize it’s exercise equipment. People are unaware and unsure of how to use it.” — Female, 40–59 years

Another suggestion was:

“(Give) ideas about how to get a workout using all the equipment...signs to let us know exactly what to do in order to use the equipment properly.” — Female, 25–39 years

The importance of signage is supported by other studies that found investment in signage was a key factor for increasing park use and activity intensity.\(^1\)\(^4\)\n
Hunter and colleagues\(^1\)\(^5\) suggested that customized messages appealing to specific populations may further increase physical activity. In our study, older adults made up almost 15% of adults observed using the equipment, and nearly 18% of adults using parks generally, which is similar to a previous study in Australia.\(^1\)\(^0\) This presents an opportunity to target older adults with messages about the exercise equipment. For example, signs could highlight the benefits of increasing and maintaining muscular strength as we age. This idea is supported by the comments of one park user:

“Maybe having some instructions on there — How can you use it? What benefit would it be? This equipment is good for the legs...Because a lot of the people look at it and wonder, ‘why would I use that?’” — Female, 60+ years

Residents also enthusiastically advocated for the idea of adding a human element to the equipment through no-cost trainers and group programming to motivate them and help ensure they are using the equipment correctly. This could also increase neighbourhood connectedness. As stated by one resident:

“I think that if you had door-to-door personal trainers and said, ‘Hey, come out on this night and we are just going to test out the equipment’ and just [go] door-to-door and say ‘Hey, like we welcome everyone — all shapes and all sizes’; and I think you need to make that personal connection, umm, to get the non-active people out.” — Female, 40–59 years

Adding programming to equipment sites was highlighted as a possible way to further increase community connectedness, as residents would come together in their neighbourhood to take part. Other studies support this suggestion, indicating that one of the best ways to get people to use parks is to increase the number of organized park activities.\(^1\)\(^6\) No-cost, drop-in fitness classes held regularly at outdoor exercise equipment sites during the warmer months could increase their use.

Lethbridge residents also highlighted the importance of ensuring the built environment around fitness parks supports public use and that the equipment is maintained.

“As far as I would say, the maintenance has got to be there and making it so that after it rains, you know, I don’t have a giant puddle to run around.” — Female, 60–69 years
Research to implementation: The Nicholas Sheran Family Outdoor Gym

Based on our results, a number of strategies were implemented to increase the use of a new active park installed in Lethbridge in 2016. The Nicholas Sheran Outdoor Family Gym was developed by the Healthy Communities Association of Lethbridge, with funding from the City of Lethbridge and an Alberta Blue Cross Healthy Communities Grant.

Equipment was chosen carefully to be durable and functional, with signs that provided detailed information on correct use and exercise suggestions for different levels of fitness. A community launch of the new gym was organized and well-publicized, with trainers present to provide exercise demonstrations. Local kinesiology students from the University of Lethbridge designed exercise programs for the public, which are freely accessible onsite and online (http://activelethbridge.ca/blog/article/how-to-use-an-outdoor-gym). Finally, the local Be Fit For Life (BFFL) Centre, in partnership with the City of Lethbridge, held 13 free fitness classes using the outdoor gym during summer 2016.

While systematic observations have not yet been conducted in this park, anecdotally the new outdoor gym is very popular and appears to have more users than other active parks in the city. For example, almost 100 people participated in the organized exercise classes run by the BFFL Centre. That is substantially more use than we observed in other active parks in the summer months.

Conclusion

Our research suggests that the installation of park fitness equipment in smaller cities is not likely to be an effective intervention without additional efforts. Valuable strategies to increase use include better marketing and ensuring the environment around the equipment supports public use with proper drainage and upkeep of the equipment through regular maintenance.

To reach people who are not already regular exercisers, it is helpful to provide workout suggestions for the equipment. This can be done via posters on-site, as well as online. Drop-in fitness classes at exercise stations are another great strategy to increase use.

All these initiatives would have associated costs, so decision-makers who are budgeting for fitness equipment should include these activities in their planning.

Community-based organizations and Primary Care Networks should be encouraged to take advantage of outdoor fitness equipment as a novel and low-cost idea for their programming. This would increase the visibility and awareness of the equipment for other park visitors.

Active parks have many potential benefits to the community. Relatively simple strategies can help ensure their success!

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References


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