

Fostering a Culture of Lifestyle Physical Activity That Is Relatable for All Individuals and Communities to Embrace

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Abstract Most American and Canadian adults do not obtain the recommended PA guidelines of 150 minutes of moderate to vigorous physical activity (MVPA) and muscle-strengthening activity each week. Decades of attempting to increase PA within the adult population have clearly fallen short. What do we know about adult preferences, barriers and perceptions to PA and exercise that can influence the way we promote, connect and educate communities to move in a way that is more meaningful for them and likely to continue throughout adulthood and beyond? The purpose of this mini-review is to provide a rationale for the need to promote community lifestyle PA in a variety of ways based on research findings that can help educate, inspire and motivate all populations to become more engaged in PA. Customized, tailored, community PA visuals which are culturally and environmentally specific will be presented. Community graphics representing a small town (MyGaffney Activity), a mid-size town (MyGuelph Activity), a US state (MySouthCarolina Activity), and an airport (MyAirport Activity) will be introduced. The ultimate goal is to incorporate an effective PA intervention through a lifestyle PA paradigm addition, which will emulate a more realistic, doable, enjoyable, and natural form of PA in addition to the already established traditional exercise model for the benefit of the public to increase PA levels and improve health outcomes.

Keywords: *physical activity, community engagement, intervention strategies, health promotion, motivationally tailored activity graphics*

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1. Introduction

Despite years of educating the public to the importance of physical activity (PA), the rate of obesity and related conditions as well as sedentary lifestyles have increased. Therefore, more research studies have focused on PA lifestyle interventions in an attempt to improve community PA levels during the course of the day at home and work, and in particular through increasing active transportation [1,2]. Unfortunately, few Canadians and Americans (only 15 and 22%, respectively) meet the suggested U.S. and Canadian guidelines [3,4] of 150 minutes of moderate to vigorous physical activity (MVPA) plus 2 or more strengthening activities per week [5,6]. However, there is still a high rate of obesity and sedentary behavior [7-11] despite the well documented benefits to increasing PA including prevention of diabetes and cardiovascular disease, reducing hypertension and high cholesterol levels, better quality of sleep, minimizing osteoporosis, reducing depression and stress, reducing arthritis, and improved

cognition skills. As a result, how do we inspire, connect, motivate and educate people to be more physically active in a way that truly connects to their willingness to want to participate? What does it take to convince our communities to whole-heartedly desire to commit to lifelong PA? The purpose of this mini-review is to lay the foundation of the significance of lifestyle PA, highlight the impact the physical environment has on increased PA levels, feature Southern Ontarians' preferences and barriers to PA, and finally to discuss the need for community wide promotional lifestyle PA intervention strategies in an effort to increase lifestyle PA culture, community awareness and levels of lifestyle PA.

2. Evidence for the Benefit of Lifestyle PA

There is growing evidence to suggest there are robust health benefits to lifestyle PA in and around the home. Mowing the grass with a push mower, vacuuming, dusting, raking leaves, gardening, shoveling snow, walking the dog, are all examples of lifestyle PA at home [12-16]. In

addition, PA in the workplace has proven to help employees improve their health and overall productivity while feeling more relaxed, content and focused [14,17-21]. Workplace PA can also increase morale and lower healthcare expenses [22]. Furthermore, leisure and active transportation physical activities such as walking, biking, and skating are all associated with improved health and can also accomplish goal-oriented tasks such as transporting to work, delivering a message, picking up the mail, or buying groceries [14,16,19,20,23-26].

3. Community Environmental Determinants to Improve Physical Activity Levels

Built facilities, pathways and bike lanes that encourage active transportation, the physical determinants of a neighborhood environment and the availability of green space all play an important role in the rise of community PA levels.

Neighborhoods with higher reported levels of PA through active transportation (particularly walking and biking) tend to be safer, aesthetically pleasing, and include sidewalks and/or shorter city blocks that connect to more residential and commercial business areas. Neighborhoods that are seen as “walkable” can offer substantial health benefits, including meeting the United States and Canada PA guidelines [2,27,28]. Walking is the highest reported PA in the United States and is linked to overall health benefits including cardiovascular, improved body composition, core and lower body strength and lower cholesterol levels [29,30].

Environmental determinants such as safety, aesthetics, accessibility to nearby parks, convenience to shops and other services can positively influence behavior change towards increased levels of PA, including walking [31-36]. Studies indicate urban parks and the construction of urban parks that allow for designated PA spaces can help increase PA levels within a community as well as encourage people to maintain their physical activity levels, particularly if the parks are located close to home [37,38,39]. Community environmental determinants that are associated with PA engagement include neighborhood walkability [27,28,40], accessibility to PA facilities [35,41,42] and more condensed (as opposed to sprawling out) communities [43].

Interacting with green spaces and natural settings have often helped people relieve stress while also enhancing one’s well-being cognitively, psychologically and affectively. Greater than a built environment, green spaces can be more restorative and beneficial health-wise improving mood, mental health and productivity [44-50].

Consequently, the research evidence supports that community settings matter and directly contribute to the reasons why people may or may not partake in PA in and around their immediate environment. Decisions made towards the natural, material and safety aspects of a community directly impact their decision making in relation to PA.

4. Examining Barriers and Preferences to Physical Activity in a Southern Ontario Community

We recently performed a study to examine the barriers, motivators and preferences for PA and exercise in a wide range of participants from several distinct Southern Ontario communities [51]. The overall purpose of this study was to examine adults’ barriers to PA and exercise and explore the attitudes, values, and behaviors of Canadian adults regarding the types of PA needed to meet the guidelines. It was hypothesized lifestyle PA would be more preferable to the more traditional, regimented, planned and structured forms of moving, such as exercise, and that select lack of time, physical and psychological PA barriers would be significant, especially among women.

A two-phase mixed methodology approach was employed. Phase I was qualitative whereby focus group discussions with 234 Canadian adults from 13 diverse focus groups residing in or near Guelph, Ontario, Canada, explored the attitudes and values towards PA and exercise. Discussions were conducted regarding their perception of PA and exercise, and the prevalent physical, lack of time and psychological PA barriers. Based on the feedback from phase I, a research-generated survey was designed by three content experts to be administered to 323 Canadian adults from the same community groups in phase II of the study. During the group facilitated discussions, it was clear that some adult participants didn’t think day to day lifestyle PA such as taking the stairs, walking around the neighborhood, taking Salsa lessons, shoveling snow, etc., counted as MVPA. However, research has clearly shown otherwise [12,13,14,16,19,23,24,26,52]. Part of motivating people to be physically active is educating them of the benefits of lifestyle movements that we may undervalue. Mowing the lawn with a push mower, shoveling snow, gardening, walking the dog around the neighborhood all have significant PA benefits, even though they are not considered traditional exercise.

Our results from Phase II of this study indicated that most adults, regardless of age, wanted their PA to be part of their everyday living. This is also consistent with the findings of previous studies, which point to the tendency for day-to-day lifestyle PA over exercise [53,54,55]. It may be that people engage in lifestyle PA for a broader range of reasons than those who exercise. Completing a necessary task or performing useful work is often part of lifestyle PA and as a result, people may be more inclined to perform these kinds of PA than explicit exercise. Indeed, the vast majority of our participants (approximately 90%) indicated that PA was easier to maintain if it was goal oriented [51]. Finding time to exercise (“so many other important things for me to do”, and “other things are more important and require my time”) were the most commonly reported barriers to PA and exercise. Therefore, it makes sense to incorporate PA in the most natural way into a person’s routine lifestyle, rather than convince them to carve out extra time to go to the gym.

5. Discussion

Taking into consideration the results from this study [51] and others, a major paradigm addition is critically important to the depiction of what exercise should look like and how to go about achieving PA. More PA perspectives should reflect moderate to vigorous daily household tasks, everyday jobs, active transportation, errands, and worksite

responsibilities relatable in various community and public settings, as demonstrated in MySouthCarolina Activity (Figure 1), MyGaffney Activity (Figure 2), MyGuelph Activity (Figure 3), and MyAirport Activity (Figure 4). Connecting community images of lifestyle PA at the local, state and national level consistently educates and motivates the public to a more realistic, doable, natural and enjoyable way of meeting our PA guidelines for health and longevity.

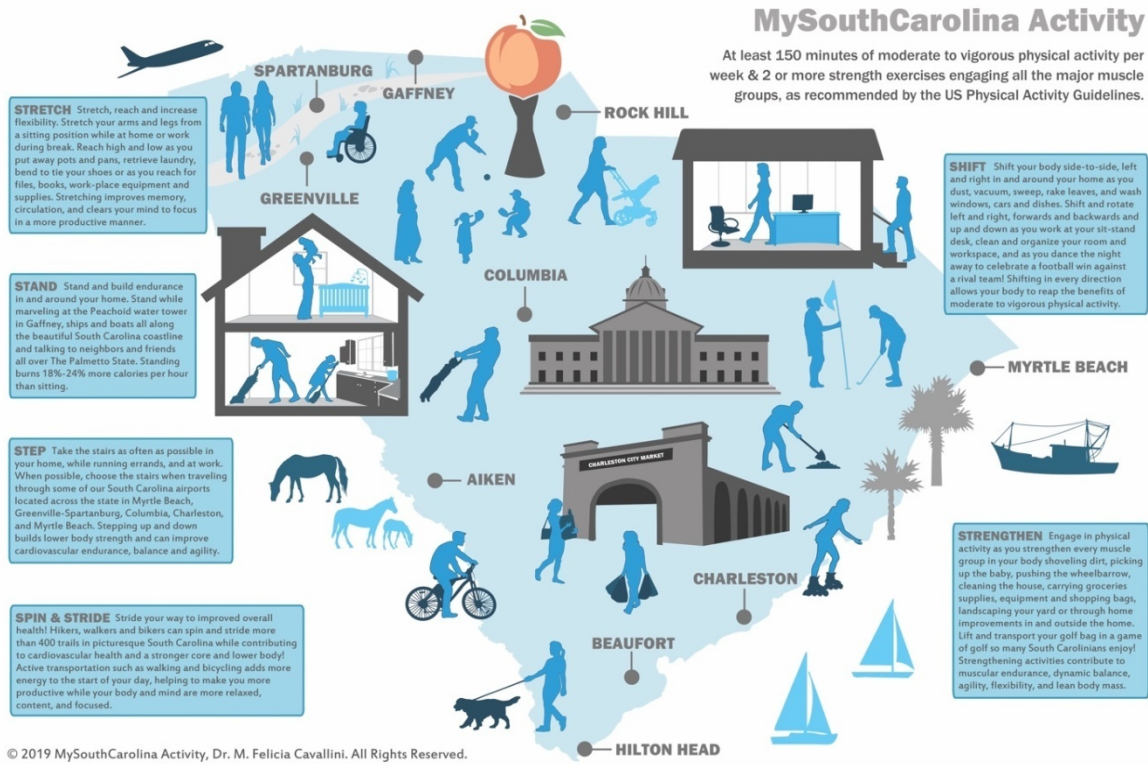


Figure 1.

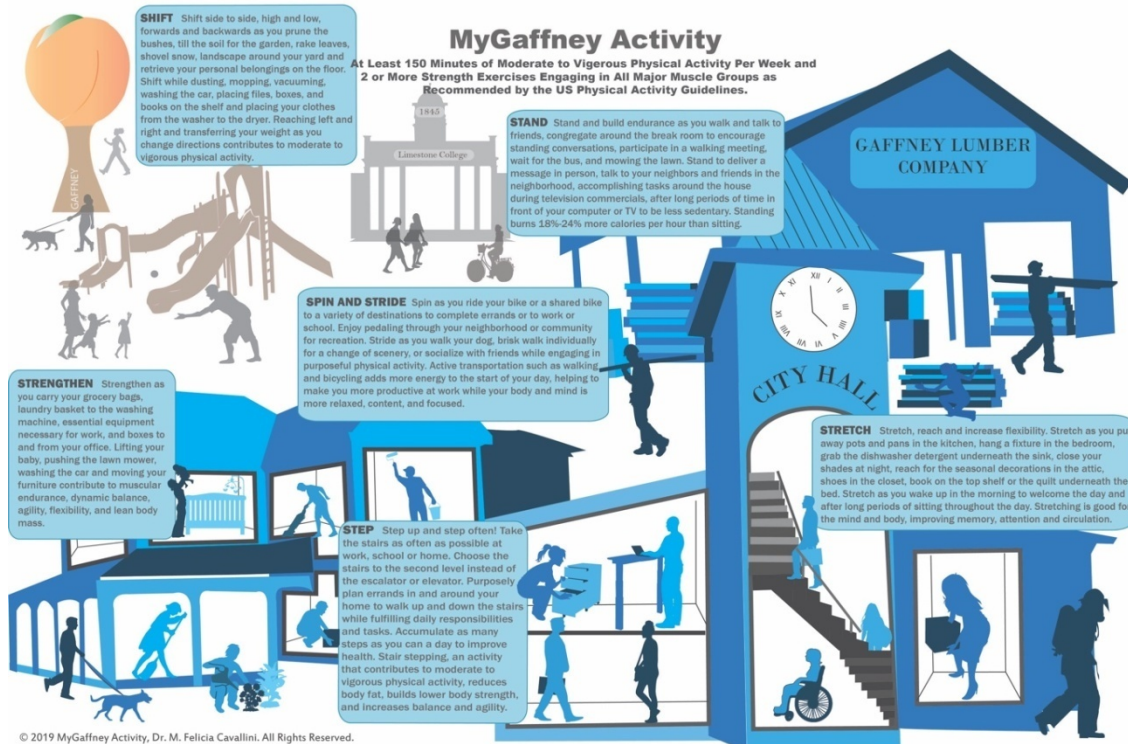


Figure 2.



Figure 3.

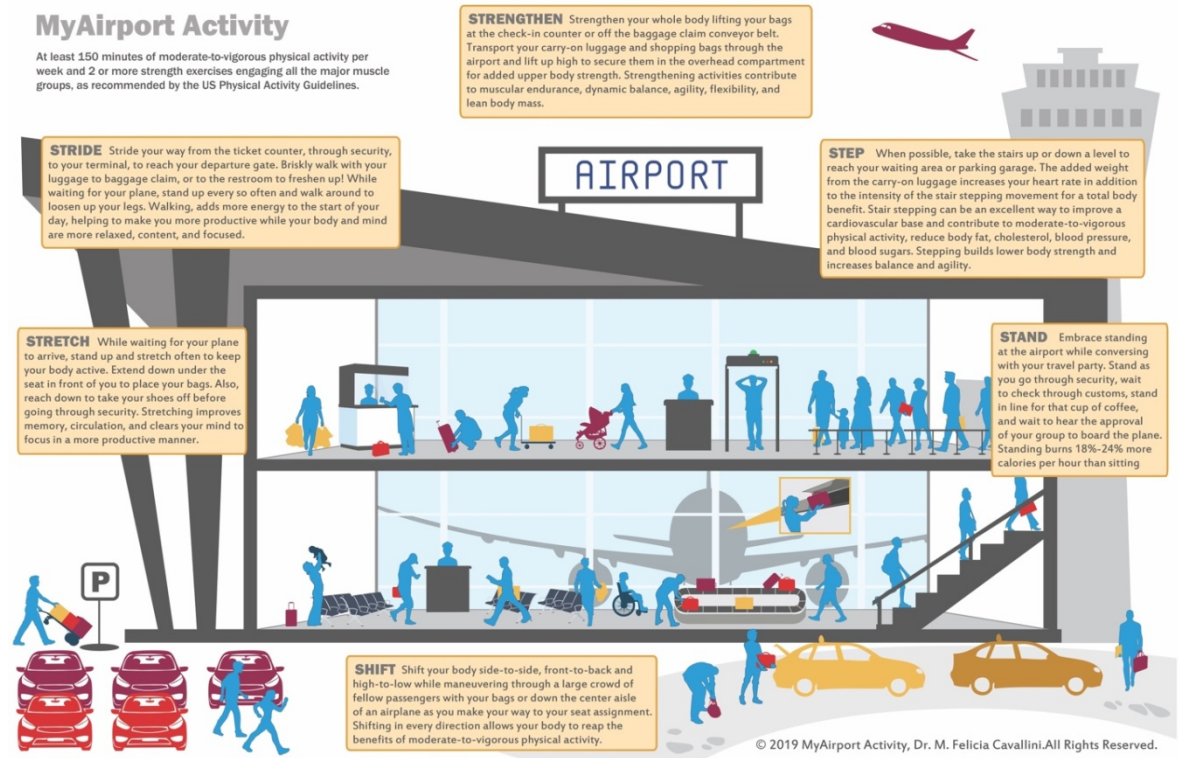


Figure 4.

Given the overwhelming preference for lifestyle PA and the busy lives that many people lead, it may be necessary to emphasize and endorse household, worksite, leisure, and active transportation as valuable methods of PA that contribute to meeting the current PA guidelines. In addition, the perceived priorities in fulfilling the

demands and responsibilities of day to day living, require time and energy away from a physically active routine. As such, PA promoters should address the value and potential of lifestyle physical activities as displayed in Figure 1, Figure 2, Figure 3, and Figure 4 fostering optimal health through movement.

It is often overlooked that while increasing PA in itself is important, part of the prescription for a healthy lifestyle is simply to avoid being sedentary [56]. Any level of physical activity helps reduce sedentary time and is tied to health benefits [56]. Walking is a form of PA that is relatable and doable to almost everyone. Walking can be incorporated into many aspects of the daily routine, such as walking and talking socially in the neighborhood, being physically active in the home or at work and taking breaks throughout the day if working in front of a computer. Ten thousand steps a day is frequently mentioned as a target, but even 5,000 or 7,500 steps a day is valuable to achieve one's overall PA goals. The bottom line is that finding opportunities to fit walking into the daily routine is a fantastic way to break up sedentary behavior and improve health.

5.1. Media Based Print Material to Enhance Public Awareness

PA intervention strategies that target communities combining specific printed materials that educate and provide doable options to be physically active coupled with community physical activities free to the public such as safe, aesthetically pleasing walking trails, bike paths, and playgrounds can be an effective health promotion strategy. In addition, family fun activities that involve recreational PA such as organized walks, bike rides, and dancing can be very effective [57,58].

Because of the obesity problems we face, it's important to connect, educate and motivate people to understand lifestyle PA so that they can boost their confidence to want to make the necessary changes in order to be more physically active [59]. Large scale promotional PA campaigns have been conducted in both the United States and Canada to improve PA levels. "Participation" in Canada and the "Healthstyle" program were both part of a national promotional campaign to boost awareness in physical activity and exercise [60,61].

Multiple studies reveal that the motivationally tailored print-based materials representing lifestyle PA are more effective in motivating people to change behavior than traditional exercise literature. Multiple studies have indicated that many of the participants were inclined to be more engaged in PA due to the motivationally-tailored print material [62-66].

5.2. Community Strategies to Establish a PA Culture and Improve PA Levels

Community partnerships with local businesses, worksites, neighborhoods, and schools should support lifestyle PA initiatives that are preferred by a majority of people. Printed materials that target an audience can be an excellent source of encouraging behavioral change towards physical activity. Policy makers, practitioners and administrators should be made aware of innovative and creative print material and should always be cognizant of promoting customized materials to all their citizens.

Encourage community members to establish a PA culture in your living environment. For instance, walking to meetings in close proximity (rather than driving), taking the stairs, engaging in walking meetings instead of always

sitting down, and stretching and standing throughout the day. People who participate in PA through active transportation (walking, cycling, etc.) tend to be more relaxed, content and focused [24,26,52]. Incorporating a worksite PA culture can boost employee productivity, minimize injuries in general, increase day-to-day attendance and improve worker loyalty [22]. Children who are more active at school tend to concentrate and behave better in the classroom [67-70]. Kids should be encouraged to walk or bike when going to school if possible, weather and safety permitting, or even around the school campus. In addition, students can form a walk or bike club at school or in their own neighborhood.

6. Conclusion

The culture, physical environment and PA promotional efforts within a community can have an enormous impact on the PA buy-in from the public. Municipalities, regional areas, state officials and the federal government should consider the powerful role communities can play in offsetting a sedentary way of living. Instead, a comprehensive approach to help to improve the opportunity and acceptance of engaging in lifestyle PA as a way to improve overall health and quality of living is critically important to the future of our PA participation rate. Populations need support and education to understand that lifestyle PA is a viable way to meet the PA guidelines. As a result, more promotional actions need to reflect day-to-day living with the overarching goal of incorporating lifestyle PA fully and seamlessly into the fabric of our culture for the betterment of society.

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Statement of Competing Interests

The authors have no competing interests.

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