

Evidence-informed policy brief

Evidence-based recommendations to assist adults with depression to become lifelong movers

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Executive summary

Depression is the most common and prevalent mental disorder today, affecting an estimated 1 in 4 Canadians at some point in their lifetime. Physical activity is recommended as a primary treatment for mild to moderate depression and a secondary treatment for moderate to severe depression. Despite this, specific guidelines are still lacking on how to best promote physical activity in this population. Accordingly, this policy brief provides evidence-based recommendations for primary care providers and allied health professionals to promote lifelong physical activity in individuals with depression. Recommendations include asking for permission to discuss physical activity with the individual; framing physical activity as something that they have control over in order to feel better; clarifying that incorporating even a few more minutes of weekly physical activity is better than nothing and that mild forms are enough to achieve mental health benefits; and providing choices of activities to try and accompanying them on their first few sessions.

Moreover, this article highlights the importance of promoting physical activity enjoyment for this population, which can be done by guiding the individual to slowly build up the frequency, duration and intensity of activity; encouraging them to be self-compassionate toward physical activity; suggesting they engage in outdoor activity, listen to music, and/or participate with a buddy or group; and incorporate self-monitoring or journaling to solidify the link between physical activity and improved mood. Practitioners are encouraged to use these evidence-informed recommendations—especially maximizing choices, enhancing physical activity enjoyment and emphasizing personal preferences—to help individuals with depression move, recover and flourish. These recommendations may also be used to tailor future interventions and inform policy guidelines to reduce depression rates in Canada.

Keywords: *physical activity, depression, promotion, public health, policy*

Introduction

Depression is the most prevalent mental disorder today, affecting an estimated 1 in 4 Canadians at some point in their lifetime.¹ In fact, depression is the number one cause of disability in Canada, accounting for 22.5% of disability claims—and disability represents 4% to 12% of payroll costs in Canada—a significant cost burden.² While medication and psychotherapy

are effective treatments for depression, medication has unpleasant side effects that contribute to poor compliance, and psychotherapy is not always available nor is it affordable for most. Overwhelming scientific evidence supports the antidepressant effects of physical activity,* including many meta-analyses.⁵⁻⁷ In Canada, the Canadian Network for Mood and Anxiety Treatments (CANMAT) has recently revised treatment guidelines and

now recommends exercise as a front-line intervention for mild to moderate major depressive disorder (MDD) and a secondary therapy for moderate to severe MDD.⁸

While this is clearly progress, specific guidelines for practitioners on how to best promote physical activity among individuals experiencing depression are still lacking. A scoping review was done recently on the barriers and facilitators related to physical activity among adults with depression.³ The present article builds on

Highlights

- Physical activity is proven to prevent and treat depression.
- Lower levels of physical activity and mild forms are enough for mood gains.
- Practitioners should promote enjoyable physical activity experiences by guiding individuals with depression to slowly build up their physical activity, and by suggesting they choose activities based on preferences, play outdoors, incorporate music and/or participate with a buddy or group.
- Other recommendations are to ask for permission to talk about physical activity and frame it as something that can be done to feel better; clarify that a little physical activity is better than nothing; provide choices to try; and, if possible, accompany the individual on their first few sessions.

* Physical activity is defined as any bodily movement that increases energy expenditure.³ Exercise is a type of physical activity that is planned, structured and repetitive with the objective of maintaining or improving fitness.⁴ Sport can be defined as a type of physical activity in which an individual or team engages in competition that involves physical fitness and skills.⁴

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this review and is informed by many other high quality reviews, meta-analyses and studies. Specifically, the purpose of this evidence-informed policy brief is to make evidence-based recommendations for primary care providers such as physicians, physician assistants and nurses; allied health providers working in primary care or in the community, such as kinesiologists, physiotherapists and psychologists; and policy makers to activate individuals with depression and keep them moving in order to reduce depressive symptoms, prevent future episodes of depression, improve quality of life during and after treatment and save on health care spending. These recommendations may also be used to tailor future interventions and inform policy guidelines to reduce depression rates in Canada.

Evidence-based recommendations to promote lifelong physical activity in adults with depression

Based on the research to date, we propose the following recommendations to optimize sustained involvement in physical activity among individuals with depression.

1. Ask for permission to discuss physical activity and frame it as something they can do to feel better

Glowacki and colleagues⁹ developed a toolkit to provide health care providers with an evidence-based resource to use in practice to guide and facilitate conversations about exercise as a treatment for depression. The toolkit is designed to be a starting point in helping health care professionals integrate the CANMAT guidelines⁸ into practice before making a referral to an exercise specialist. The toolkit is available online at www.exerciseanddepression.ca. When bringing up the topic of physical activity, practitioners should ask for permission to discuss this behaviour, as it creates a fertile behaviour change climate and reduces resistance.¹⁰

Moreover, in all conversations or messaging it is important to frame physical activity as something individuals can do to feel better. Indicate that it is something they have control over and can build into their life to improve their mood and increase their overall well-being. Indeed, a growing body of research is showing that discussing physical activity as a means to acquire physical health or for healthy aging or weight loss or maintenance is not activating

from a behaviour-change perspective, as compared to the more immediate “feel good” benefits.¹¹ A scoping review suggests using the following messaging in verbal and visual communications: “Physical activity can decrease negative emotions and increase positive ones.”¹² In line with this suggestion, another study recommended using the words “Inactivity can drag you down, and physical activity can pull you up.”¹² Since physicians are limited in the amount of time they can spend with each patient, referral to an exercise specialist (e.g. a kinesiologist) is recommended to support long-term physical activity behaviour change.

2. Volume: clarify how much (i.e. frequency and duration) physical activity is required

Individuals with depression often experience lethargy and will likely find the prospect of having to incorporate 150 minutes of moderate to vigorous aerobic activity a week daunting.¹³ The evidence on dose for this population has shown that, compared to that required for physiological benefits, less weekly physical activity is needed to improve mental health and reduce mental illness symptoms.¹⁴ For instance, a systematic review of 30 high quality studies showed that even low levels of physical activity (e.g. walking less than 150 minutes/week) are effective for preventing depression.¹⁵ With regard to the treatment of depression (i.e. reducing depressive symptoms), Stanton and Reaburn’s review¹⁶ recommended supervised aerobic activity at a mild to moderate intensity for 30 to 40 minutes at a time, three to four times a week for a minimum of nine weeks. Similarly, Nyström et al.¹⁷ suggested physical activity at least three times a week, for a minimum of 30 minutes at a time, preferably under supervision. This review concludes by stating that future research should focus on tailoring physical activity recommendations to the individual’s personal physical activity preferences.¹⁷ Therefore, specific strategies and tools to individually customize physical activity and enhance enjoyment are offered throughout this article (see section 5).

More recently, research has shown that even less physical activity is needed to prevent and treat depression. For instance, a study of 33 908 Norwegian adults with no previous history of a mental disorder monitored their levels of physical activity and symptoms of depression over 11 years;

findings showed that just one hour of physical activity a week protects against new-onset depression.¹⁸ This is in line with a recent review of the relationship between physical activity and happiness showing that as little as 10 minutes per week, or one day of physical activity per week, could result in increased levels of happiness.¹⁹ This is concordant with an earlier meta-analysis on the mental health benefits of green exercise (i.e. physical activity in the presence of nature) showing that the mental health indicators self-esteem and mood showed the greatest change in the shortest duration (i.e. 5 minutes).²⁰ Therefore, practitioners and policy makers should approach the issue from the perspective that “every bit of physical activity helps, and some is better than none.” This approach also aligns well with research showing that physical activity adherence rates are significantly better with lower doses of physical activity.²¹

3. Type/domain: encourage leisure-time physical activity, active transport and domestic physical activity

While personal physical activity preferences are very important to promote enjoyment, intrinsic motivation and ensuring maintenance,²² research has shown that when it comes to decreasing depressive symptoms, optimizing mental health and fostering happiness, not all types of activities offer the same benefits. A meta-analysis by White and colleagues²³ found that leisure time physical activity (LTPA) such as dancing and hiking, and transport physical activity such as walking and biking to work both had a positive association with mental health. This confirmed previous studies reporting that LTPA, even in low doses, was consistently and strongly associated with reduced likelihood of depression.²⁴ In addition, a large-scale study including over 11 000 adults from 15 European countries showed that “a lot” of LTPA was positively associated with happiness.²⁵ It is hypothesized that LTPA is more strongly linked to mental health and mental illness outcomes because there is choice involved, it provides a distraction from stress and it offers opportunities for improved self-esteem and self-efficacy.²³ Richards et al.²⁵ also found a positive relationship between “a lot” of domestic physical activity, such as gardening, and happiness. It should be noted that this study assessed domestic activities that were recreational versus

heavy housework and chores that tend to have a more negative connotation.

Finally, growing evidence is pointing towards yoga as a favourable physical activity for treating depression because, in addition to movement, it also involves breath regulation and mindfulness.²⁶ In support of this, a review of physical activity and happiness found that aerobic and stretching/balancing exercises were both associated with increased happiness.¹⁹ Furthermore, another recent meta-analysis showed that resistance exercise training (RET; strength training) was associated with a significant reduction in depressive symptoms.²⁷ In sum, many types of physical activity are beneficial for preventing and treating depression but personal preference and choice is also important.

4. Intensity: emphasize that mild is best but personal physical activity preferences are paramount

There has been much debate about high intensity interval training (HIIT), which involves training at a high intensity for a short period of time. Most exercise physiologists claim that it is the most time-efficient exercise option for quick physiological results,^{28,29} while most exercise psychologists state that it is not feasible nor sustainable as it is quite unpleasant.^{30,31} Even among a nonclinical adult population, a 12-month intervention involving an unsupervised HITT program showed a rapid decline in regular participation throughout the study period.³² Poor adherence has been attributed to a lack of enjoyment while engaging in HITT.³⁰ Indeed, Saanijoki et al.³³ indicated that HITT leads to greater negative emotions during and after an exercise bout. Individuals with depression are already managing negative emotions, so this form and intensity of physical activity may not be suitable for this population, and could even cause them to give up on physical activity altogether. Indeed, the most prominent barriers individuals with depression report with respect to engaging in physical activity are that they are “too tired” or have “low energy,” which makes HIIT difficult.³ In line with this, a six-week physical activity intervention among Canadian university students found that high intensity exercise led to increased perceived stress, while continuous moderate training resulted in decreased depressive symptoms.³⁴

Furthermore, there is a growing body of literature recommending mild physical activity for mental health/illness. Mild physical activity has been associated with higher levels of positive affect than vigorous physical activity.³⁵ This is in line with an earlier meta-analysis concluding that the greatest improvements in positive affect after physical activity occurred for the lowest intensity of physical activity, and this benefit was twice that of moderate-vigorous physical activity (MVPA).³⁶ As mentioned previously, yoga is one example of mild physical activity that has been shown to significantly reduce depressive symptoms.^{37,38} In addition, a meta-analysis found that self-esteem improvements from green exercise declined with growing intensity of activity.²⁰ Another study found that physical activity of a less intense level contributes more to the well-being of individuals than more intense levels.³⁹ Finally, a recent cross-sectional study of healthy adults found that mild-intensity physical activity related positively to psychological well-being and negatively to depression scores.⁴⁰

While mild forms of physical activity, including walking interventions,⁴¹ appear to show promise, some studies have found the contrary—that moderate-vigorous intensities have a greater influence on reducing depressive symptoms.^{42,43} For instance, a randomized controlled trial by Hughes and colleagues⁴³ showed that depressive symptoms were reduced more quickly in individuals engaging in vigorous physical activity compared to mild physical activity throughout a 12-week intervention. However, at follow-up, individuals in both the vigorous and mild physical activity groups showed improvement in depressive symptoms, and there were no significant differences between groups. In line with this finding, other studies have concluded that any physical activity, regardless of the intensity, is beneficial to mental health.^{15,18,25,44} Mammen and Faulkner’s systematic review also found that any intensity of physical activity decreases the risk of developing depression.¹⁵ This was followed by a review showing that the influence of physical activity intensity on happiness is minimal.²⁵ Similarly, a randomized controlled trial including adults with mild to moderate depression showed that mild (e.g. yoga), and moderate and vigorous intensity (e.g. aerobic training) physical activity are all effective in reducing depressive symptoms.⁴⁴ Finally, a longitudinal study conducted over 10 years among an initially

healthy cohort revealed that regular LTPA of any intensity provides protection against future depression.¹⁸ Taken together, this evidence suggests that the intensity of physical activity is not particularly important when it comes to mental health and mental illness.

5. Promote positive, enjoyable experiences

What does seem vital is physical activity enjoyment. Physical activity and fun are not typically associated in most people’s minds; however, enjoyment is an important evidence-based motivator for long-term physical activity participation.^{22,45} Moreover, physical activity enjoyment has been shown to increase self-determined motivation for physical activity, which is linked to positive mental health outcomes, including reduced depressive symptoms.⁴⁶

This is particularly important for individuals with depression, who tend to have motivational deficits and typically experience less pleasure in everyday living. Therefore, enhancing physical activity enjoyment is crucial in order for individuals with depression to obtain mental health benefits.⁴⁷ Following are some scientifically grounded recommendations for enhancing physical activity enjoyment that may apply to both the general population and individuals with depression.

a. Try the “commit 10” strategy and encourage a slow buildup

One strategy that often works for individuals who are inactive, both for associating physical activity with positive feelings and for assisting with time management, is the “commit 10” technique.⁴⁸ The practitioner asks the individual whether they might be able to find 10 minutes in the next week to take a walk outside. The individual almost always says yes. Then, the practitioner specifies that they are to go outside for a 10-minute walk and if they feel as good (or better) than they did when they left, they can choose to continue. If not, then they end their physical activity session. This typically anchors walking/moving to positive feelings and experiences, which is very important to foster physical activity enjoyment. From there, the individual should be encouraged to build up walking frequency and duration slowly, to minimize discomfort and ensure enjoyable experiences. Setting small and progressive goals also helps build self-efficacy, which is a key determinant of physical activity behaviour change in the general

population,⁴⁹ and has been found to be both a barrier and facilitator for physical activity among individuals with depression.³

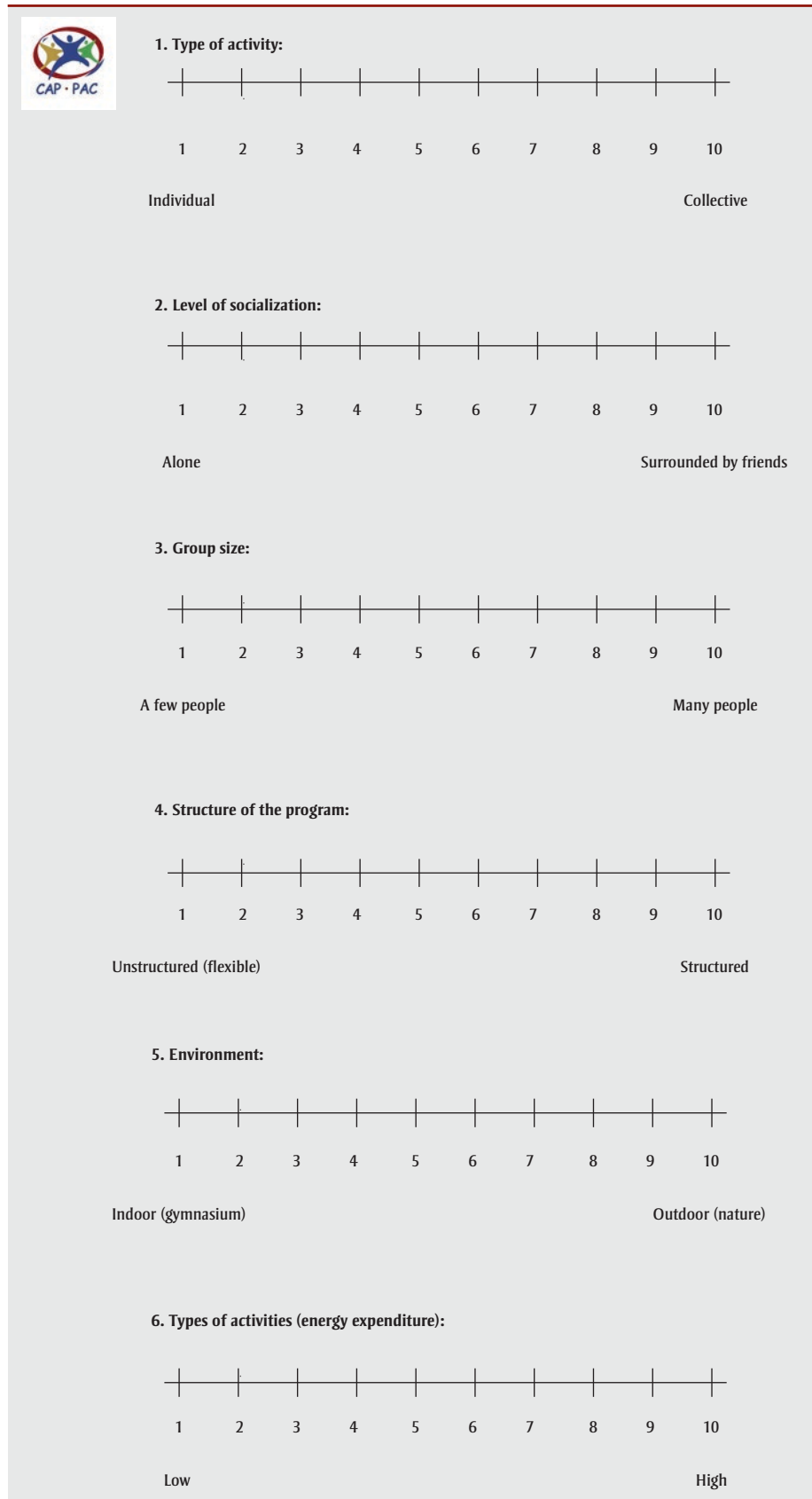
b. Help them choose other enjoyable physical activity options

Here practitioners have a few choices on how to proceed. They may ask the individual which activities they find the most enjoyable among the types that are found to best improve depressive symptoms (e.g. walking or biking to and from work, gardening, yoga; see section 2). They could also ask the individual about their own physical activity preferences (e.g. outdoor vs. indoor, competitive vs. cooperative, group vs. individual, high-energy expending vs. low-energy expending). This can be done using preference scales (Figure 1).[†] An alternative method is to show them a list of numerous physical activities and ask them if there are some they have tried before and enjoyed that they might want to try again, or if there are new activities they might find enjoyable. Figure 2 presents an example of such a list, developed by a multidisciplinary team for the Physical Activity Counselling (PAC) Trial. Once the person has chosen a few activities, the practitioner should suggest that the individual choose the most suitable and sustainable one or two activities, and then provide them with a lot of encouragement to give each a try. Some practitioners (e.g. kinesiologists) could even support the individual by doing the selected activity with them for the first few times or offering to connect them with someone at a fitness centre or club. Indeed, centre-based activities such as those offered at YMCAs are an excellent option, considering that supervision is a recommendation in some of the recent reviews of this topic.^{16,17}

c. Encourage them to be self-compassionate

Once the activities have been chosen and tried a few times, a reminder to the person to be gentle and compassionate with themselves is necessary to ensure maintenance. Pushing too hard when it comes to physical activity often leads to less enjoyment and sometimes injury and dropout.⁵⁰ Not only is it important for the individual to choose the type, frequency and duration of activity to optimize intrinsic motivation, but they should also self-select their intensity in order to promote positive feelings and experiences. Recently it was

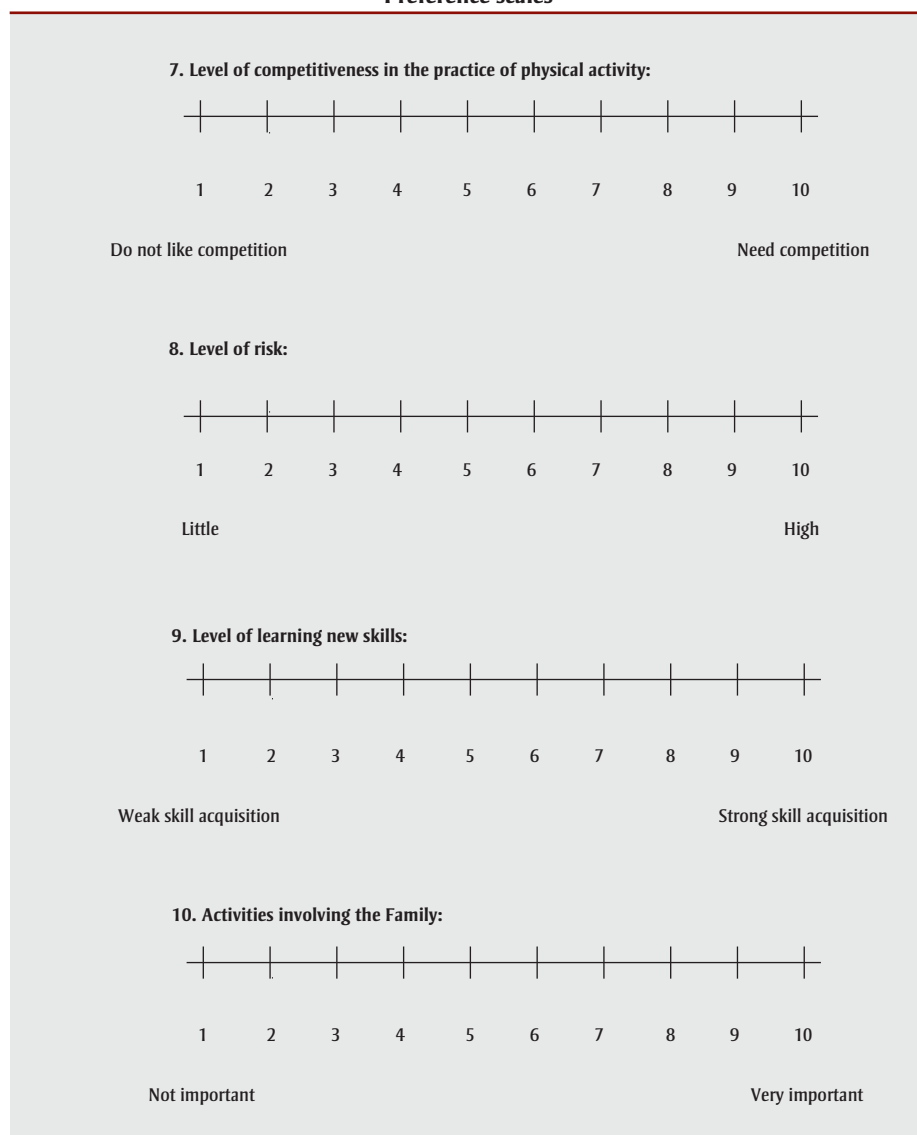
FIGURE 1
Preference scales



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[†] The preference scales were developed by a multidisciplinary team for the Physical Activity Counselling (PAC) Trial (2004–2006).

FIGURE 1 (continued)
Preference scales



Source: The Physical Activity Counselling (PAC) Trial, 2004–2006.

concluded that physical activity participation rates among individuals with depression can be enhanced by considering participants' preferences for physical activity training.⁵¹

A kinesiologist or other practitioner can help the person to distinguish between the different intensities of physical activity, and to progress through them pleasantly. A self-compassionate mindset towards physical activity is essential for all individuals, especially those with depression, if they are to overcome setbacks and maintain their physical activity routine.⁵² Again, the practitioner can help by reframing setbacks as “tries,” by normalizing struggles with physical activity and by helping the individual speak kindly to themselves when they experience barriers.⁵³

If the above steps a to c do not lead the individual to have positive physical activity experiences or to engage in regular physical activity, the following extra steps d to g can enhance enjoyment and physical activity maintenance:

d. Encourage them to play outdoors in aesthetically appealing environments

While personal physical activity preferences are very important, there is growing evidence that outdoor activity is particularly enjoyable, restorative and healing.⁵⁴⁻⁵⁶ A meta-analysis on the mental health benefits of green exercise showed a medium effect size for self-esteem and a large effect size for mood, and both of these were larger than the effects of non-green exercise.²⁰ Moving outside combines the

benefits of nature and physical activity, and is very powerful for individuals with and without depression.⁵⁷⁻⁵⁹ There has been an emergence of these types of activities in the last few years and different terms have been used to refer to them (e.g. “nature walks,” “forest bathing” and “mood walks”). Finally, while all green environments improve self-esteem and mood, the presence of water may lead to even greater improvements.²⁰

e. Suggest energizing or soothing music while moving

Music is healing and often used in the treatment of mental health issues.⁶⁰⁻⁶² Moreover, a growing literature supports the use of music as a source of motivation during physical activity.^{63,64} Studies show that individuals who listen to music while performing physical activity are more likely to participate in and adhere to physical activity long term.^{65,66} In a recent study of nonclinical university students, exercise enjoyment was significantly higher among participants who participated in 20 minutes of moderately paced walking with a personal music player versus without.⁶⁷ In another sample of university students, Chizewski found that self-selected music elicited the greatest improvements in exercise enjoyment and duration compared to classical music, as suggested in the study, or no music.⁶⁸ Practitioners should suggest the individual make a playlist of their favourite songs or pieces to listen to while engaging in physical activity. Depending on what symptoms are present that day, the individual could choose energizing music leading up to and during their physical activity session or soothing music if anxiety symptoms are present that day.

f. Encourage them to engage in physical activity with a buddy or a group

One of the most common effects of depression is social isolation,⁶⁹ which worsens the illness, so any physical activity that involves social contact can be positive and motivating for an individual with depression. In fact, most often the benefits of physical activity on the prevention of depression are attributed to the physical and social effects.¹⁸ Engaging in interpersonal relationships while being physically active with others may satisfy the need for a sense of belonging (i.e. relatedness) which in turn has a positive influence on mental health.⁷⁰ In line with this, a recent review found that the effects of physical activity on happiness were

FIGURE 2
List of physical activities



Already practiced	Practiced in the last year	Interested to practice		Already practiced	Practiced in the last year	Interested to practice	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Aerobics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Swimming
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Aqua for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rollerblading
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Martial arts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ice skating
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rowing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pilates
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Badminton	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Windsurfing
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Broom ball	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bowling
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Baseball	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Racquetball
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Basketball	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hiking
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Canoe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Racket
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Curling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ringette
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Classical dancing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Skiing (alpine)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Social dancing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Skiing (cross-country)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Riding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soccer
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Climbing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Spinning
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Squash
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fencing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tai chi
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Football	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tennis
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Golf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Table tennis
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Handball	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Housework
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ball hockey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bike
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ice hockey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Volleyball
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gardening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water polo
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jogging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yoga
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Kayak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bodybuilding				

Source: The Physical Activity Counselling (PAC) Trial, 2004–2006.

partially mediated by increases in health and social functioning.¹⁹

Classes such as CrossFit are appealing due to the social or communal atmosphere that is typical in these settings. However, because of the high intensity of this type of workout, and because this setting typically attracts more athletic types, it may not be the best option for people with depression. Indeed, this population might feel intimidated in such an environment, potentially leading to an unpleasant experience. Examples of better options are snowshoeing with a friend, taking a dance class with a partner or attending a tai chi class to make new friends. Of course, the person could build up to a CrossFit-style workout, or another more intense activity such as spinning, if they are interested, as this combines aerobic activity, music and a group atmosphere.

Team sports are also something to consider. There is growing research showing that participation in team sports during high school protects against depressive symptoms in early adulthood,⁷¹ and recently a study with young adults found that informal physical activity groups and team sports were positively related to mental health and inversely related to depressive symptoms.⁷² Enjoyable physical activities that promote positive social interactions may be the best option to reduce depressive symptoms, improve mental health and promote long-term maintenance.

g. Encourage them to track their physical activity and their mood

Self-monitoring is a self-regulation technique by which individuals keep a record of their physical activity levels. It has been linked to successful physical activity behaviour change.⁷³⁻⁷⁵ Encouraging the individual with depression to track their physical activity (e.g. number of steps, minutes) promotes self-efficacy and accountability.⁷⁶ Self-monitoring also enables the individual to recognize the discrepancy between their behaviour (e.g. walking once a week) and the goal they set for themselves (e.g. walking 3 times a week). Encouraging the person to rate their mood on a scale before and after their bout of physical activity or to journal about how they feel after physical activity is also recommended because it will formalize the link between physical activity and positive feeling states or emotions to sustain motivation and physical activity maintenance.¹²

Conclusion

Building on the strong international evidence on the power of physical activity to prevent and treat depression,^{6,16,17} exercise is now recommended as an additional front-line treatment for depression in Canada.⁸ However, it remains unclear how to best promote physical activity uptake and maintenance among individuals with depression. Some earlier recommendations have been made in Australia¹⁶ and in Europe;¹⁷ however, these guidelines are not specific to the Canadian context and more research has emerged on the importance of promoting enjoyable physical activity that is tailored to individual preferences. Moreover, while the Canadian 24-Hour Movement Guidelines, which recommend hours per day for physical activity, sleep and sedentary behaviour, are useful, they do not specify to providers how to get their patients or clients to those levels. Accordingly, the purpose of this paper was to make evidence-based recommendations for Canadian policy makers and practitioners in assisting adults with depression to become lifelong movers.

Recommendations include: asking for permission to talk about physical activity; framing physical activity as something the individual has control over to improve their mood; clarifying that “a little physical activity is better than nothing, so do what you can”; providing choices of activities to try and accompanying them on their first few sessions. Moreover, this article highlights the importance of physical activity enjoyment for everyone, but especially for adults with depression.

While more research is needed to determine which factors increase physical activity enjoyment for different subgroups of this population, such as age below or over 65 years, or the presence of comorbidities, recommendations to promote enjoyment herein include guiding individuals with depression to slowly build up the frequency, duration and intensity of activity; encouraging them to be self-compassionate with regard to physical activity; suggesting they play outdoors, incorporate music, or participate with a buddy or group to make the experience more positive; and recommending they incorporate self-monitoring or journaling to solidify the link between physical activity and improved mood. Policy makers and practitioners are encouraged to use these

scientifically based recommendations, especially maximizing choices, enhancing physical activity enjoyment and emphasizing personal preferences for frequency, intensity, type and time/duration of activity to help individuals with depression move, recover and flourish.

Conflicts of interest

The authors declare no conflicts of interest.

Authors' contributions and statement

MF conceived the idea for the policy brief and prepared the draft manuscript. All authors provided revisions on the draft manuscript and approved the final manuscript for submission.

The content and views expressed in this article are those of the authors and do not necessarily reflect those of the Government of Canada.

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