Sedentary Behaviour, Therapists, and Clients: Promoting Positive Health Behaviours in Therapy La sédentarité, les thérapeutes et les clients : promouvoir des comportements sains en thérapie

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ABSTRACT

Sedentary behaviour is increasingly on the rise and has many negative health effects. This article provides a literature review on the health effects of sedentary behaviour and explores how this information is relevant to the field of counselling psychology. Additionally, it offers preliminary suggestions for how positive health behaviours regarding sedentary behaviour and movement may be promoted in therapy.

RÉSUMÉ

La sédentarité est en progression et elle a de nombreux effets nocifs sur la santé. Cet article présente une revue de la littérature sur les répercussions de la sédentarité sur la santé et examine comment cette information est utile en psychologie du counseling. Il formule également des suggestions préliminaires sur la façon de promouvoir des comportements sains en thérapie pour lutter contre la sédentarité et favoriser l'activité physique.

With levels of sedentary behaviour on the rise in modern society (Asare & Danquah, 2015; Ng & Popkin, 2012; Owen, Healy, Matthews, & Dunstan, 2010; Thosar, Bielko, Mather, Johnston, & Wallace, 2015), understanding what sedentary behaviour is and how it affects our health and well-being are important concepts for all health-related professionals. There is now considerable research that indicates that engaging in lengthy periods of sedentary behaviour throughout the day on a regular basis has the capacity for numerous negative health effects (Katzmarzyk, Church, Craig, & Bouchard, 2009; Matthews et al., 2012; Owen, 2012; Patel et al., 2010). This is troublesome given the following two considerations.

First, numerous studies have explored the negative physical effects of sedentary behaviour and how health professionals such as doctors and health psychologists can intervene (Katzmarzyk et al., 2009; Matthews et al., 2012; Patel et al., 2010; Vallance et al., 2011). However, there are fewer studies on the effects of sedentary behaviour on mental health and little to no dialogue on how mental health professionals outside of health-care settings should consider and integrate this information.

Second, the impact on therapists who engage in consecutive sedentary sessions each workday is not yet a part of the academic dialogue despite what is known about the negative effects of lengthy bouts of sedentary behaviour. Given that self-care is crucial for those in helping professions (Skovholt & Trotter-Mathison, 2011) and physical health is an aspect of self-care (Theriault, Gazzola, Isenor, & Pascal, 2015), it is especially important to include therapists in the dialogue on how to reduce workplace sedentary behaviour. In addition, because therapists are doing interventions with clients, the considerations for reducing sedentary behaviour in the workplace may be different for therapists than for the average person working in an office, who is more likely to be working on a task at a computer or a desk. As a result, research and dialogue on the topic of reducing workplace sedentary behaviour specific to therapists may be required.

The purpose of this article is to synthesize the current literature on the topic of sedentary behaviour and explore the implications for those in the field of counselling psychology. First, a definition of sedentary behaviour is provided, along with a review and discussion of the effects of sedentary behaviour in our modern society. An exploration of how these topics relate to the field of counselling psychology, existing therapies that incorporate movement, and what the implications for the field might be follows. Last, limitations and areas for further research are discussed. For clarity, throughout this article the term *therapist* is used to refer to any mental health professional conducting therapy, although mental health professionals may identify by a number of different titles in their professional work. Given the negative health effects of sedentary behaviour, it is important for therapists to consider how positive health behaviours with regards to sedentary behaviour might be promoted with clients and to examine the impacts that consecutive daily sessions of sedentary counselling may have on themselves.

DEFINING AND EXAMINING SEDENTARY BEHAVIOUR

Prior to engaging in the dialogue specific to counselling psychology, it is important to understand the nature of sedentary behaviour and its negative impacts. Behaviour happens on a continuum that ranges from sedentary behaviour to vigorous activity (Canadian Society for Exercise Physiology, 2012). On the far left of the continuum is sedentary behaviour, which can be defined as behaviour that requires little to no exertion and very low levels of physical movement (Pate, O'Neill, & Lobelo, 2008). Sedentary behaviours include sitting, lying down, watching television, playing passive video games, using motorized transportation, and passive computer usage (Canadian Society for Exercise Physiology, 2012; Jette, Sidney, & Blumchen, 1990; Pate et al., 2008) and are becoming increasingly popular in modern society (Asare & Danquah, 2015; Ng & Popkin, 2012; Owen et al., 2010; Thosar et al., 2015).

The Rise of Sedentary Behaviour

Many elements of modern society have contributed to the rise of sedentary behaviour in the general population today. There has been a global decrease in agriculture-based economies as well as a global increase in industrialization, the socioeconomic status of the average individual, and the reliance on technology (Asare & Danquah, 2015; Ng & Popkin, 2012; Owen et al., 2010; Thosar et al., 2015). As a result, the number of desk jobs has increased and there has been an increase in the attainability of luxury items that encourage sedentary behaviour, such as personal vehicles, video games, televisions, and computers (Asare & Danquah, 2015; Ng & Popkin, 2012; Owen et al., 2010; Thosar et al., 2015). This means that not only are more people sedentary at work, but there are also increased opportunities for sedentary behaviour during the commute to work and leisure time. As a result, it is important to examine the health impacts of these changes in behaviour.

One of the most commonly heard recommendations around health and physical activity is the amount of moderate or vigorous activity one should engage in daily or weekly and suggestions for mechanisms to mediate these effects. Moderate or vigorous activities can be understood as activities that allow one to still converse but not sing (moderate activity) or converse only in short phrases (vigorous activity) and include brisk walking, running, gardening, heavy housework, swimming, exercise classes, and most sports (Canadian Society for Exercise Physiology, 2012; Jette et al., 1990; Pate et al., 2008). It is important to note that these two categories of activity guides because both categories of activity serve equally well when targeting the improvement of the overall health and well-being of the general population (Canadian Society for Exercise Physiology, 2012). This means that, on the continuum of activity, one can choose any intensity level that fits within the moderate intensity range or higher, which starts near the centre of the continuum and extends to the far right.

The Canadian Society for Exercise Physiology (2012) recommends that adults get 150 minutes of moderate or vigorous aerobic activity per week and that youth and children get 60 minutes per day in bouts of 10 or more minutes. However, in the most recent available data from Statistics Canada, Colley et al. (2011a, 2011b) found that, from 2007 to 2009, only 15% of Canadian adults and fewer than 7% of Canadian children and youth hit these targets. In addition, at the time of that survey, only 5% of adults regularly got 30 minutes of moderate or vigorous activity at least 5 days a week and 47% of adults got 30 minutes less than 1 day per week (Colley et al., 2011a). Furthermore, the reports demonstrated that Canadian adults are sedentary for nearly 10 waking hours per day and children and youth for almost 9, in addition to lacking the recommended weekly physical activity (Colley et al., 2011a, 2011b). Considering the following negative health effects of sedentary behaviour, those numbers could be considered alarming.

Negative Health Effects of Sedentary Behaviour

When reviewing the negative health effects of sedentary behaviour, it is important to note that many people who do engage in the recommended daily or weekly amount of moderate or vigorous activity still spend large amounts of their day sedentary (Owen, 2012). The health outcomes of sedentary behaviour and physical activity are independent of each other, which means that, unfortunately,

engaging in the recommended amount of moderate or vigorous activity does not prevent an individual from suffering from the negative health effects of sedentary behaviour (Katzmarzyk et al., 2009; Matthews et al., 2012; Owen, 2012; Patel et al., 2010). As a result, regardless of fitness levels, both individuals who spend large amounts of their day sedentary and the health-related professionals who work with them would benefit from increased knowledge about the negative effects of sedentary behaviour.

There is a strong link between sedentary behaviour and negative physical health effects. First, sedentary behaviour has been linked to all-cause mortality, early mortality, and overall poorer physical health (Katzmarzyk et al., 2009; Matthews et al., 2012; Patel et al., 2010; Schmidt, Ricci, Baumeister, & Leitzmann, 2016). In addition, sedentary behaviour has been specifically linked to insulin resistance (Helmerhorst, Wijndaele, Brage, Wareham, & Ekelund, 2009), obesity (Matthews et al., 2012; Sugiyama, Healy, Dunstan, Salmon, & Owen, 2008), significantly decreased circulatory function (Padilla, Sheldon, Sitar, & Newcomer, 2009), short-term back pain (Zemp, Fliesser, Wippert, Taylor, & Lorenzetti, 2016), hypertension, high cholesterol, decreased bone health, gall bladder disease, diabetes (Matthews et al., 2012), cardiovascular disease (Katzmarzyk et al., 2009; Matthews et al., 2012; Patel et al., 2010), and cancer (Howard et al., 2008). It is important to note that this list is not exhaustive and that there were limitations to each study. However, given the extensive list of the negative physical health effects of sedentary behaviour, it is clear that decreasing sedentary behaviour needs to be a priority in public health and to health care professionals (Ng & Popkin, 2012).

Although the link between mental illness and sedentary behaviour is not as well explored, findings point to concerning correlations. It has been found that individuals with major depressive disorder, dysthymia, panic disorder, or agoraphobia spend more of their leisure time than control groups engaging in television watching and computer usage, both of which are sedentary behaviours (de Wit, van Straten, Lamers, Cuijpers, & Penninx, 2011). Furthermore, comorbid depressive and anxiety disorders are associated with sedentary behaviour (de Wit et al., 2011). Similarly, many studies have found that the presence of depression is associated with lengthy bouts of sedentary behaviour (Arredondo et al., 2013; Sanchez-Villegas et al., 2008; Teychenne, Torres, McNaughton, Salmon, & Ball, 2014; Vallance et al., 2011). Based on the research presented, we know that that sedentary behaviour and mental illness are positively correlated and that those clients presenting the previously noted mental illnesses are likely to be highly sedentary (Arredondo et al., 2013; Sanchez-Villegas et al., 2008; Teychenne et al., 2014; Vallance et al., 2011). However, as noted by Teychenne et al. (2014), very little research has been completed to investigate the mediating factors in this relationship. Despite lacking a clear understanding of the relationship between sedentary behaviour and mental illness, the positive correlation invites serious consideration regarding how therapists might promote more positive health behaviours targeting the decrease of sedentary behaviour by clients struggling with mental illness.

APPLICATIONS TO COUNSELLING PSYCHOLOGY

Although some psychotherapies involve movement and require alternative counselling environments to facilitate the interventions, therapy is most commonly done while the therapist and client are both in a seated position and in highly sedentary office spaces (Pearson & Wilson, 2012). It is troubling to consider that the average therapy session may be modelling sedentary behaviour to clients and contributing to negative physical outcomes for the client and especially the therapist.

Sedentary Behaviour and Clients

As previously mentioned, clients showing mental illness are likely to engage in frequent lengthy bouts of sedentary behaviour (Arredondo et al., 2013; Sanchez-Villegas et al., 2008; Teychenne et al., 2014; Vallance et al., 2011). Most clients, especially those struggling with a mental illness, may well experience enhanced well-being if they engage in less sedentary behaviour (Da Silva et al., 2012; Song, Lee, Baek, & Miller, 2012; Strine et al., 2008). Evidence of this can be found in treatments that involve physical activity for various mental illnesses. For example, the Canadian Network for Mood and Anxiety treatment guidelines for depression recommend exercise therapy and yoga therapy as second-line treatments after pharmacotherapy and psychotherapy (Kennedy, Lam, Parikh, Pattern, & Ravindran, 2009). It has also been found that the use of exercise to treat depression may have similar success to the use of pharmacotherapy in some individuals (Blumenthal et al., 2007; Cooney et al., 2013; Hughes et al., 2013). Further, exercise may be beneficial in treatment for clients with schizophrenia (Gorczynski & Faulkner, 2010), panic disorders (Wolff et al., 2011), anxiety (Jayakody, Gunadasa, & Hosker, 2014), and obsessive compulsive disorder (Abrantes et al., 2009; Brown et al., 2007). Additionally, research has demonstrated that exercise may play a preventive role in and increase resilience to depression (Dusek et al., 2009; Goodwin, 2003; Otto & Smits, 2011). However, a symptom of depression is the inability to mobilize to create change in one's life (Otto & Smits, 2011); modelling how to decrease sedentary behaviour in session where the client is supported by the therapist could be the first step clients with depression need.

It may be easy to look at each counselling session in isolation from the rest of the client's week as only one hour of sedentary behaviour if the client attends weekly. However, less than half of the general population gets the recommended weekly exercise (Colley et al., 2011a) and given that the average Canadian adult spends 10 waking hours of their day sedentary (Colley et al., 2011a), it is reasonable to suspect that many clients may use a sedentary means of commuting, engage in sedentary leisure activities, and work in sedentary jobs (Asare & Danquah, 2015; Ng & Popkin, 2012; Owen et al., 2010). There are certainly clients who do have active jobs, commutes, and lives in general. However, those clients who lack options for activity throughout their day may benefit from having someone model how to decrease sedentary behaviour in their daily lives. This task could be done

in session either weekly or as a part of an intervention during a single session depending on the clients' needs.

Modelling by the therapist can be an important part of therapy. For example, in emotion-focused therapy, the therapist's willingness to express emotions as an empathic mirror and sensitively respond to the client can model how to move through emotions and normalize the experiencing of them (Greenberg, 2010). Modelling can also be used to teach clients new skills, such as in cognitive-behavioural therapy (CBT), when teaching a strategy like the use of the CBT triangle (Meadows & Phipps, 2002), or in clinical settings, such as teaching clients with schizophrenia social skills as a part of treatment (Ottavi et al., 2014). Furthermore, modelling can also be used in problem-solving therapy to demonstrate problem-solving skills (Felgoise, Maguth Nezu, & Nezu, 2002) and during group therapy to model interpersonal skills and group norms (Yalom & Leszcz, 2005). However, little consideration is given to what therapists are modelling with regards to physical behaviour in session with clients. Although the founding therapists of the aforementioned theoretical models that use modelling in therapy may not have envisioned using modelling in this manner, one could draw on how modelling has been useful in other applications in therapy and apply it tentatively to new circumstances. Thus, it is reasonable to hypothesize that modelling could be used in session to normalize, demonstrate, and teach the skills needed for replacing or interrupting sedentary behaviour for those clients for whom it would be beneficial, especially those struggling with mental illness. Simply setting up the counselling office in a manner in which clients could be active if they so choose could model the changes clients could make in their own spaces to incorporate activity. For example, the counselling office could have a sit-stand or active workstation. Whether the therapist wants to use it or not, having this option would leave room to open the conversation about daily activity levels with clients, allow the therapist to be a positive role model in demonstrating the choice to be active over sedentary, and give the therapist the opportunity to be less sedentary while doing paperwork as well.

Therapists' ability to be role models for activity may be important, as Owen et al. (2011) noted that there are few role models in the media who choose movement over sedentary behaviour. One could argue that professional athletes are role models for activity. However, even though the three most viewed television events in 2016 were sporting events (Nielsen, 2016), the sedentary nature of our society is only increasing (Asare & Danquah, 2015; Ng & Popkin, 2012; Owen et al., 2010; Thosar et al., 2015). Canadian adults spend 10 waking hours of their day sedentary, and less than half of the population is engaging in the recommended physical activity per week (Colley et al., 2011a). This may indicate that professional athletes are encouraging spectatorship but not participation in activity (D. Kreillaars, personal communication, November 17, 2016). By having an office space that is designed to accommodate movement and offering the choice of non-sedentary sessions to clients, therapists could serve as more tangible role models than what is being modelled by professional athletes and in other media sources.

Sedentary Behaviour and Therapists

Aside from the concern that sedentary therapy sessions may be modelling negative health behaviours to clients, the effects of consecutive sedentary sessions per day on therapists should also be taken into consideration. Although there is growing occupational health research examining the impacts of the physical workspace on the well-being of employees, this dialogue has not extended to those in the mental health profession. Therapists should certainly not be excluded from the group of employees who can benefit from interrupting or replacing sedentary behaviour in the workplace. This is especially true because it is well known that self-care is central to avoiding burnout and compassion fatigue in those in helping professions (Skovholt & Trotter-Mathison, 2011). Self-care has been marked as so important for therapists that it is included as a necessary element for ethical practice by the Canadian Psychological Association (2017) and the Canadian Counselling and Psychotherapy Association (2007) in their ethical guidelines.

As noted by Theriault et al. (2015), self-care activities can include those aimed at emotional health, such as seeking emotional support, and those aimed at physical health, such as regular exercise or decreasing sedentary behaviour. However, it is important to recall that even those therapists who do get the recommended amount of weekly activity are susceptible to the negative effects of lengthy bouts of sedentary behaviour because the two outcomes (physical activity and sedentary behaviour) are independent of each other (Katzmarzyk et al., 2009; Matthews et al., 2012; Owen, 2012; Patel et al., 2010). Thus, it is important for all therapists to consider their workspace and how it may be impacting their health and well-being. Although this may include incorporating movement into therapy with clients if that is a part of the clients' goals, it could also include active workstations at which therapists could complete their paperwork and limiting the number of consecutive sessions without at least a brief break for movement.

It is also important for therapists to consider how their priorities with regards to their own health may be impacting clients. One way to examine how a health culture changes is to examine how past changes in health culture have occurred, such as the changes in the culture of cigarette smoking that occurred between the 1960s and the 1990s (Schudson & Baykurt, 2016). During that period, it was found that patients with ischemic heart disease were more likely to cease smoking if their doctor was a nonsmoker (Miwa, Fujita, Miyagi, Inoue, & Sasayama, 1995). This was possibly because physicians who smoked were less likely to have a positive attitude to smoking cessation education and thus less likely to give their patients this information (Miwa et al., 1995). Similarly, therapists who believe that decreasing sedentary behaviour in their own lives is a priority may also be more likely to promote doing so with clients. As a result, therapists should be considering how their health behaviours may be impacting their work with clients.

Therapies That Incorporate Movement

While it may seem daunting and infeasible to change the format of therapy or the workday to incorporate movement, some pioneers in the field are already doing so successfully. Examples of therapists incorporating movement into session include dance and movement therapists, therapists using the BodyMind Approach, yoga therapists, therapists using therapeutic enactment, and nature therapists. Although most therapists may not be interested in the specific training or specialized environments that are required to implement these therapies, they are evidence that movement can be a part of therapy and is thus a place to start.

Dance and movement therapy. Recognizing body movement as a means of communication and expression, dance and movement therapy (DMT) utilizes the therapeutic relationship as well as creative body movement and dance to help clients integrate various aspects of the self, such as their emotional, social, spiritual, cognitive, and physical self (Association for Dance Movement Psychotherapy UK, n.d.). DMT incorporates techniques such as guided grounded breathing, improvisation, awareness exercises, circle dances, and role play (Brauninger, 2014; Lee, Lin, Chiang, & Wu, 2013; Woolf & Fisher, 2015). Clients can also use DMT techniques to express their physical symptoms, which are linked to their mental and emotional symptoms (Woolf & Fisher, 2015). Furthermore, Brauninger (2014) suggested that clients can better control overwhelming feelings by harnessing the power of performance and expression to create emotional distance and externalize their emotions. This is particularly important in the treatment of trauma (Brauninger, 2014). Lee et al. (2013) proposed that DMT enables clients to work through trauma by allowing their bodies to guide them through the re-experiencing of the past. Furthermore, Woolf and Fisher (2015) suggested that one of the advantages to DMT is that there is no specific skill-set or language ability required to be able to participate and benefit from DMT, because movement is a universal language, making it an excellent technique for culturally sensitive counselling.

The effectiveness of DMT within a treatment plan has been demonstrated with depression (Koch, Kunz, Lykou, & Cruz, 2014; Mala, Karkou, & Meekums, 2012), anxiety (Koch et al., 2014), stress management (Brauninger, 2012; Koch et al., 2014), schizophrenia (Koch et al., 2014), and trauma (Koch & Weidinger-von der Recke, 2009; Lee et al., 2013), as well as in palliative care (Woolf & Fisher, 2015) and geriatric care (Brauninger, 2014; Koch et al., 2014). Additionally, Brauninger (2014) asserted that DMT can also be effectively integrated into a treatment plan for grief, suicidality, addictions, impulse control, and low energy. Overall, the integration of DMT into therapy offers clients the option not only to include movement into therapy, but also to experience the benefits of centralizing the body-mind connection during sessions for various mental health concerns.

The Body Mind Approach[™]. The BodyMind Approach (BMA) is a form of psychotherapy that is rooted in DMT and was developed specifically for clients with medically unexplained symptoms (MUSs; Lin & Payne, 2014; Payne & Stott, 2010). The BMA is also an extension of personal construct psychology (Lin & Payne, 2014). The BMA emphasizes the importance of using verbal and nonverbal treatments together to address the connection between bodily symptoms and the mind (Payne & Stott, 2010). Clients of BMA "[become] aware of how emotions are closely linked to physical reactions" (Payne, 2009b, p. 85). Through creative movement, clients taking part in the BMA explore, process, and make sense of aspects of the unconscious impacting their physical, mental, and emotional health (Lin & Payne, 2014; Payne, 2009a). The BMA is completed in phases in which clients (re)connect their body and mind, raise their levels of body awareness, create a deeper and broader connection between their inner and outer world, and find explanations for their body symptoms through movement (Lin & Payne, 2014; Payne, 2009a).

Pilot studies with the BMA demonstrated that clients with MUSs experienced decreased anxiety and depression (Payne & Stott, 2010), increased their number of coping strategies, and experienced an increased sense of control over their lives (Payne, 2009b). In addition, clients engaging in the BMA reported that some of their symptoms completely disappeared, while the impact of other symptoms decreased significantly (Payne, 2009b). The BMA is also suggested as highly accessible and culturally sensitive as it "[transcends] barriers of ability and language" (Payne, 2009a, p. 298). Although the BMA is specifically targeted at clients suffering from MUSs, it is yet another example of a therapy that successfully incorporates movement into session.

Yoga therapy. Like DMT, yoga therapy allows therapists to bring the body-mind connection to focus during sessions. According to the International Association of Yoga Therapists (2016), yoga therapy combines psychological and biomedical knowledge with the principles and assessments used in yoga practice to help clients develop a therapeutic plan for improved health and well-being. Gerbarg and Brown (2015) further elaborated that one of the purposes of yoga is to "unite the mind, body, and spirit" (p. 50). Additionally, mind-body practices can reduce levels of fear, anger, and anxiety, which can reduce barriers to treatment, such as the intolerance of intense emotions and the inability to regulate emotions (Gerbarg & Brown, 2015).

Describing the mechanism through which yoga therapy is effective, Emerson and Hopper (2011) asserted that, through yoga postures and breathing, clients can connect with their selves, increase their ability to remain present, and develop an improved relationship with their bodies. In particular, breathing practice helps clients suffering from anxiety, depression, and PTSD to engage in and benefit from the therapeutic process (Gerbarg & Brown, 2015). Furthermore, traumasensitive yoga helps clients come to be at peace with and comfortable in their own bodies (Emerson & Hopper, 2011). Finally, yoga therapy can help clients gain entry to their emotions at a somatic level, which can help with clients who gravitate to intellectualizing their challenges and emotional experiences (Emerson & Hopper, 2011).

Although the efficacy of yoga therapy is still being explored, there is some promising research in the area. Paikkatt, Singh, Singh, Jahan, and Ranjan (2015)

discovered that yoga therapy helped manage delusions and decreased negative symptoms and emotions in male inpatients with schizophrenia when used in conjunction with pharmacotherapy. Additionally, yoga therapy has been found to decrease depression, anxiety, and stress in adult populations, including pregnant women (Newham, Wittkowski, Hurley, Aplin, & Westwood, 2014; Skowronek, Mounsey, & Handler, 2014). Furthermore, the overall health benefits of practicing yoga in general include decreased anxiety, decreased depression, reduced stress, enriched interpersonal relationships, and improved sleep (Holcombe, 2015; Pascoe & Bauer, 2015; Villate, 2015). While yoga therapy certainly requires a specialized space and education, it is another example of how physical movement is being successfully incorporated into therapy.

Therapeutic enactment. Therapeutic enactment is a psychodrama-informed group-based intervention that is used to help clients integrate unresolved critical events and traumas (Westwood & Ewasiw, 2011; Westwood, Keats, & Wilensky, 2003; Westwood, McLean, Cave, Borgen, & Slakov, 2010). Therapeutic enactment is preceded by group or individual sessions in which critical events and traumas are identified for enactment (Westwood & Ewasiw, 2011; Westwood et al., 2010). The focus of therapeutic enactment is to move away from language and into action where clients "re-create an event in concrete terms" (Westwood & Ewasiw, 2011, p. 80) by activating sensory motor functioning along with their emotional processes and experiences (Westwood & Wilensky, 2005). This activation allows clients to re-experience the event, including all emotions, behaviours, and thoughts, so that they can deepen and integrate insights and self-discoveries made through language-centred therapy and re-story the meaning of the event to the self by bringing it into the physiological realm (Westwood & Ewasiw, 2011; Westwood et al., 2010).

Therapeutic enactment has been used successfully with veterans experiencing pervasive posttraumatic stress reactions over long periods of time. Although their sample size was small, Westwood et al. (2010), experienced no drop-outs in running their Veterans Transition Program, which featured therapeutic enactment as a key intervention in the group-based treatment program. Further, both qualitative and quantitative data demonstrated decreased depression and traumatic-stress symptoms and increased self-esteem (Westwood et al., 2010). However, Westwood et al. (2003) stated that one of the criticisms of interventions such as therapeutic enactment was a lack of outcome-based research, which remains true today. It is important to note that other psychodrama-based approaches also likely involve movement, but what distinguishes therapeutic enactment as a distinct intervention is that the "emphasis is placed on pre-planned, structured experience" whereas psychodrama traditionally focuses on spontaneity (Westwood, Black, & McLean, 2002, p. 226). Therapeutic enactment as well as more traditional psychodrama interventions would both qualify as examples of therapies currently in use that enable movement.

Nature therapy. Although nature therapy does not focus on movement and the mind-body connection, it is another type of therapy that successfully ac-

commodates movement within the therapy session. Nature therapy is rooted in ecotherapy theory (Jordan, 2015), which is based on the belief that we are "intimately connected with, embedded in, and inseparable from the rest of nature" (Buzzell & Chalquist, 2009, p. 18). Ecotherapy emphasizes the role of the human-nature relationship on well-being with the purpose of promoting healing and well-being through a connection with nature (Burls, 2007; Buzzell & Chalquist, 2009). However, nature therapy is not well defined and includes numerous types of more specific interventions, many of which are lacking an official name (Jordan, 2015).

Various types of nature therapy can involve movement. One such unnamed intervention is for clients with traumatic histories in which the physical work of gardening can metaphorically represent clients' processing (Jordan, 2015). For example, a client who is weeding their garden may be metaphorically pulling up the negative and unhelpful emotions related to their trauma (Jordan, 2015). In other types of nature therapy, nature may be used as a tool, a part of the backdrop the client creates for their work, or a direct part of the therapeutic relationship (Jordan, 2015). A final example of nature-related therapy is adventure and wilderness therapy, which is traditionally used with at-risk youth and treatment-resistant groups (Jordan, 2015). Adventure and wilderness therapy often has the therapeutic aim of improving the self-concept of the participants and uses outdoor activities to reach that aim (Jordan, 2015).

However, although there are numerous types of nature-related therapy and there is a great deal of writing on ecotherapy, there is little empirical evidence on the efficacy of using it as a treatment. That being said, there is some research and literature on the topic worth noting. For example, in employing the Wilderness Adventure Therapy program with outpatient youth presenting with mental illness, Bowen, Neill, and Crisp (2016) found that the program had a positive effect on self-esteem, reduced clinical depression from severe to mild in both the short and long term, improved behavioural and emotional functioning, and reduced long-term suicidality. In another population, Hawkins, Townsend, and Garst (2016) advocated for the use of nature therapy with veterans due to what they described as "nature's ability to draw out the strengths of participants" (p. 58). Mowatt and Bennett (2011) gave an account of the experiences of veterans suffering from PTSD who went on a four-day fly fishing trip. In this qualitative study, the veterans described their interaction with nature as the most crucial part of their experience (Mowatt & Bennett, 2011). Overall, the research on nature therapy thus far suggests that it is worthy of further exploration.

In conclusion, every therapy certainly has its limitations, and further research is warranted to continue to explore the efficacy and application of each. However, not only is integrating movement into therapy possible, but it can be an effective part of the treatment plan when using the aforementioned modalities. Although current therapies that incorporate movement require specific training and access to specialized therapeutic environments, their existence and success demonstrates that movement can be successfully incorporated into therapy in some circumstances.

Feasible In-Session Movement: Suggestions, Challenges, and Limitations

Based on my review of the literature, studies investigating the impact of in-session sedentary behaviour and incorporating movement into therapy are relatively nonexistent. Therefore, the purposes of this section are to offer original suggestions pending further research and identify potential challenges and limitations.

For those therapists who have the luxury of working near green spaces or paths, a simple way to integrate movement into therapy might be to offer clients the option of walking together during sessions. This aligns with the basic premises of ecotherapy in which exposure to green space is seen to enhance well-being and is especially ideal when the weather is nice (Burls, 2007; Buzzell & Chalquist, 2009; Jordan, 2015). Prior to selecting a walking session, clients and therapists might want to make several considerations. These include whether it is safe to do so depending on the clientele and neighbourhood, if anything needs to be added to liability waivers, the anticipated content of each session, and the possible interventions that might be used. This is important in planning the session, as it would be difficult to use some interventions, such as a trauma intervention like Eye Movement Desensitization and Reprocessing, while walking. Further, walking would limit the therapists' ability to draw on handouts during session, although such tools could be accommodated by walking for only part of the session. Weather may also pose an additional challenge. To minimize the challenges of a walking therapy session, walking could even be incorporated into a small part of the session, such as when the agenda is being set or when the client is recounting their most urgent concerns from the past week. Additionally, therapists could use green space and paths for short walks between sessions to prevent themselves from being sedentary for large chunks of time throughout the day.

For therapists that don't have access to green space, an ideal office space may be near a recreation or fitness centre. Knowing the positive benefits of physical activity on mental health and well-being, therapists could partner with the recreation or fitness centre to offer discounted rates for clients as an incentive to increase the accessibility of recreation spaces to clients. Therapists could also partner with personal trainers and group fitness instructors to develop programming sensitive to the needs of clients with mental illnesses. Further, therapists may also have greater ability to take activity breaks throughout the day themselves if housed near a recreation or fitness centre.

However, it is important to recognize that recreation and fitness centres can bring a certain level of shame due to the prevalence of body shaming in North American society and the potential for gym patrons to engage in shaming actions, which have been highly publicized news items as of late (Brown, 2012; Glyde, 2016; Jancelewicz, 2016). Although partnering with personal trainers and group fitness instructors might create sensitive supports within the facility, one cannot control client interactions with the public. Additionally, the therapist should be aware that assigning clients the homework of attending the attached recreation or fitness facility could create shame in clients if they are unable to follow through. The therapist should also be purposeful in not promoting a specific facility, but rather remaining attuned to the individual needs and resources of each client. Further, while promoting the reduction of sedentary behaviour or the increase in physical activity, one must be mindful to avoid inducing shame in clients, given that therapists work within the context of a body-shaming society (Brown, 2012; Glyde, 2016).

Although some therapists have the privilege of unrestricted workspaces, many therapists are restricted to the confines of offices due to employment in more regulated organizational contexts (Pearson & Wilson, 2012). One challenge to this is that altering those regulated contexts might be difficult and costly. Having to work within an office space brings the challenge of finding cost-effective equipment for movement if needed and creating a space that has enough room for feasible and desirable movement for the therapist, client, or both.

The conditions in therapy offices are often similar to those of an office workplace, which is one of the most researched areas of decreasing sedentary behaviour; in most instances, this research makes use of sit-stand workstations, treadmill desks, or cycling desks to give employees nonsedentary workspace options. Such options have been shown to have little impact on processing speed, selective attention, and the ability to complete cognitive tasks (Alderman, Olson, & Mattina, 2014; Alkhajah et al., 2012; Commissaris et al., 2014; Koren, Pisot, & Simunic, 2016). This might also indicate that active workstations would not interfere with a therapist's ability to complete paperwork; however, it is unknown whether it would interfere with the therapeutic process. Further, active workstations require the purchase of specific equipment, which may not be feasible for many practices, and clients may be unable to attend therapy in attire that is suitable for activity.

In addition, although engaging in therapy while walking on a treadmill alongside the other party might be highly attractive to some clients and therapists, it is likely to be highly unattractive to others based on preferences, theoretical orientation, client goals, and previous experiences. For example, treadmills could be associated with shame for clients who have experienced body shaming that included remarks about spending more time on a treadmill. However, having a counselling office with such equipment available for booking would be ideal for respecting client autonomy and accommodating individual client needs. Having other options that might be associated with less shame may be necessary as well. Furthermore, simply having options for incorporating movement would decrease the amount that therapists model sedentary behaviour.

It is important to note that these options may not be workable for all clients or therapists depending on their abilities. For example, those with spinal cord injuries experience health benefits from physical activity, but may not be able to utilize a conventional treadmill (Fernhall, Hefferman, Sae Young, & Hedrick, 2008). Furthermore, the culture, beliefs, values, and goals of clients may not align with decreasing their sedentary behaviour in or out of session. Clients may also have different needs from session to session. For example, the content of what they want to discuss may or may not be conducive with movement, and some clients may be so active during the day that they look forward to seated therapy. As a result, the space would need to be flexible to accommodate the needs of all clients. Having a flexible space would allow clients to select seated therapy if they so desire, therapists to decrease their own sedentary behaviour throughout the day, and clients to offer suggestions for movement that align with their ability, culture, beliefs, values, and goals.

Other possible limitations to consider may include how engaging in movement may detract from the therapist's and client's ability to focus, create a strong working alliance, remain present throughout the session, engage fully with emotions, and engage in various interventions. Additionally, it is important to consider how bringing movement into the session may impact client comfort levels or induce shame. However, given the negative effects of sedentary behaviour on health, it remains important for therapists to consider the counselling environment's contribution to sedentary behaviour, how they might promote positive health behaviours, and, for those in the field of counselling psychology, how to engage in further research on this matter. To move forward with these ideas, a few pertinent questions should be asked. First, when is movement beneficial in therapy and when might it detract from therapy? Second, how can the average therapist incorporate movement if movement is beneficial? Last, how might therapists promote positive health behaviours with regards to sedentary behaviour when in-session movement is not beneficial?

AREAS FOR FURTHER RESEARCH

In the spirit of evidence-based practice, it is important that research is conducted on how effective incorporating movement into the average therapy session is at supporting positive health behaviours in clients and therapists. If introducing movement to therapy does prove beneficial, exploring what types of movement are conducive with therapy is needed so that guidelines can be developed with options for therapists. Further, circumstances in which movement may detract from therapy need to be explored with the results included in future guidelines if movement is to be suggested in practice. Last, exploring how effective in-session movement is at changing health behaviours versus other less disruptive options (such as having active workstations available for therapist use) is important as well.

If in-session movement does prove to have some benefit, exploring what types of movement are least disruptive to the therapeutic process while maintaining the benefits is important. To this point, there is limited research on what specific activities are best for interrupting or replacing sedentary behaviour in various settings. Some research has demonstrated that light activity can decrease the severity of depression (Conn, 2010; Song et al., 2012), have positive effects on blood glucose (Healy et al., 2007), decrease impairments in activities of daily living, decrease the likelihood of physical dependence (Sardinha et al., 2015; Sardinha, Santos, Silva, Baptista, & Owen, 2015), lower mortality, and improve overall health in older adults (Buman et al., 2010; Matthews et al., 2015), as well as decrease blood pressure in overweight adults (Larsen et al., 2015). However, for the concepts presented to be applied to the general population and in a setting as specific as therapy, further research on modelling and using movement in therapy is required.

Clarity is also required concerning what the drawbacks of incorporating movement into session are and under what circumstances the drawbacks may outweigh the benefits. This is especially true because incorporating movement into session could certainly be disruptive to the therapeutic process. Although the research does suggest that active workstations do not inhibit cognitive processes (Commissaris et al., 2014; Larsen et al., 2015; MacEwan, MacDonald, & Burr, 2015), further research needs to be completed on how it impacts more specific aspects of counselling. These include the formation of a working alliance, the ability to portray empathy on part of the therapist, the ability to remain present to the content of the session, the effectiveness of interventions, and emotional processes. Furthermore, if further research suggests that incorporating movement into session can be beneficial, standards of practice could be updated to include guidelines for liability and safety considerations that may come with more active sessions. Last, therapists would need to consider what additions they may need to make to their consent and confidentiality forms that would include the additional risks and benefits that may come with active therapy sessions.

CONCLUSION

It is well known that sedentary behaviour is increasingly becoming a health concern in our modern society (Ng & Popkin, 2012). It is important to consider how therapy may be used to model and encourage positive health behaviours on the matter, given the negative health impacts of sedentary behaviour; the amount of time the average Canadian is sedentary per day; the low number of Canadians that get the suggested amount of weekly physical activity; and the relationships between physical health, mental health, physical activity, and sedentary behaviour. In addition, the impact on the therapist of consecutive seated sessions day after day must be taken into consideration as well. Overall, considerable research is still needed on the topic, and each therapist will need to reflect on how relevant it is to them and their practice. However, as is clearly demonstrated by the research, sedentary behaviour produces numerous negative health effects that are too detrimental for the field of counselling psychology to continue to ignore.

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