

# Understanding Motivation for Exercise: A Self-Determination Theory Perspective

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Understanding the factors that motivate health-enhancing physical activity has considerable merit given the role of this lifestyle behaviour in combating disease and promoting quality of life. The purpose of this article is to provide a broad overview of research investigating participation issues in exercise from the perspective of self-determination theory (SDT; Deci & Ryan, 2002). Evidence informing the application of SDT to the study of motivational issues in exercise is reviewed around three central questions: (a) Does the quality of motivation regulating exercise behaviour “matter”?, (b) How important are basic psychological needs within exercise contexts?, and (c) Can contextual variables be manipulated to create adaptive environments for exercise? The available evidence is supportive of many propositions set forth within SDT by Deci and Ryan’s (2002). Future avenues for exercise motivation research are offered based on the available evidence with a view to addressing unresolved issues and advancing SDT’s development.

*Keywords:* exercise behaviour, motivation, basic psychological needs, organismic integration

Since Kraus and Raab (1961) coined the phrase “hypokinetic disease,” health professionals have maintained an interest in the importance of regular physical activity. This is hardly surprising given the longstanding observation that engaging in regular physical activity confers a variety of health benefits including reduced likelihood of coronary heart disease, adult onset diabetes, obesity, certain cancers, and more recently, metabolic syndrome (Bouchard, Blair, & Haskell, 2007; Gilmour, 2007). Convincing epidemiological evidence has linked physical inactivity with reduced life expectancy for Canadians irrespective of gender (Katzmarzyk, 2006). Furthermore, health economists have provided compelling data to justify the endorsement of campaigns to increase physical activity implicating these initiatives as a viable cost-effective strategy to reduce the burden of chronic disease on Canada’s health care system (Katzmarzyk & Janssen, 2004).

Consistent with the biomedical benefits derived from regular physical activity, a growing body of research implicates a variety of psychological health consequences stemming from the adoption or maintenance of more physically active lifestyles (Fox, 2002). For example, emerging data suggest that variations in cognitive

functioning in older adults are, in part, attributable to levels of fitness emanating from regular physical activity (Colcombe et al., 2003). Mental health benefits stemming from regular physical activity include enhanced self-esteem, vitality, and satisfaction with life (Fox, Stathi, McKenna, & Davis, 2006), and reductions in levels of ill-being marked by psychological maladies such as depression, anxiety, and chronic stress (Acevedo & Ekkekakis, 2006). Collectively, the evidence is supportive of the biomedical and psychological benefits derived from adopting and maintaining physical activity at a level commensurate with public health guidelines.

Given the value of regular physical activity to combating disease onset and progression, it seems paradoxical that population-health reports often reveal insufficient participation in health-enhancing physical activity, particularly in adults. Recent data (Gilmour, 2007) derived from the Canadian Community Health Survey indicate that 47.8% of Canadians aged 12 and over were inactive during their leisure time.<sup>1</sup> Substantial variation was evident across population strata with physical activity rates varying as a function of age, gender, geographic region, immigration status, ethnicity, and income (Gilmour, 2007). The trend favouring sedentary behaviours is not unique to Canada (Bouchard et al., 2007) and has led experts to identify physical inactivity as a key public health epidemic rivalling obesity (Katzmarzyk & Janssen, 2004). Consequently, a concerted effort has been made to understand why some people engage in physical activities such as exercise and sport with fervour, whereas others prefer to maintain a more sedentary lifestyle (Hagger & Chatzisarantis, 2007).

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<sup>1</sup> Measuring physical activity is challenging in free-living populations where social desirability and recall bias contaminate self-report estimates. Inactivity was classified by Gilmour (2007) as using less than 1.5 kilocalories/kilogram of body weight/day. Stated differently, inactive Canadians walk less than 30 minutes per day (Gilmour, 2007).

One theoretical perspective that appears useful for understanding various motivational issues in physical activity settings is self-determination theory (SDT; Deci & Ryan, 2002). SDT accounts for the quality of motivation regulating behaviour, as well as, the processes that facilitate motivational development (Deci & Ryan, 2002) that holds considerable appeal for understanding “why” people initiate, persist, and terminate their involvement in various physical activities (Hagger & Chatzisarantis, 2007). One application of research embracing SDT as a guiding framework has examined the applicability of the theory to exercise contexts. Exercise and physical activity are not synonymous terms, with exercise typically conceived of as a subset of leisure-time behaviour involving repeated bodily movements in planned and structured physical activities designed to maintain or improve physical fitness (Bouchard et al., 2007). This review will focus on the application of SDT to the study of issues germane to exercise (see Pelletier & Sarrazin, 2007, and Vallerand, 2007, for reviews of SDT in sport).

### Self-Determination Theory: A Brief Overview

Central to SDT is an organismic-dialectic metatheory that accounts for the ongoing challenges faced by humans in terms of assimilating and adapting to social environments (Deci & Ryan, 2002). The current SDT framework has evolved from early research examining the factors shaping intrinsic motivation (Deci, 1971) into a multifaceted approach comprised of subcomponents (or “minitheories”; Deci & Ryan, 2002, p. 9) that explain different facets of human growth, assimilation, and integration of the self with the social world. Initial work in the area of SDT focussed on Cognitive Evaluation Theory (CET) that describes the impact of psychological needs and social conditions on the propensity to regulate behaviour for intrinsic reasons (Deci, 1971). Given that many social activities are not intrinsically appealing (e.g., maintaining a low-fat/calorie diet), a substantial body of research has examined the nature and function of variations in extrinsic motivation. Organismic Integration Theory (OIT) describes the degree of internalization accompanying extrinsically motivated behaviours (Deci & Ryan, 2002) and stipulates that the quality of extrinsic motivation regulating behaviour varies from highly controlled to more volitionally endorsed (or self-determined) processes. The practical importance of this distinction is reflected in the consequences associated with self-determined as opposed to controlled functioning. Deci and Ryan (2002) acknowledge that both controlling and self-determined motives are capable of regulating behaviour. However, behavioural engagement aligned with more controlling extrinsic motives is associated with poorer mental health and highly contingent self-worth, whereas engagement for more self-determined reasons is linked with both sustained behaviour and more authentic mental health. Causality Orientations Theory (COT) delineates individual differences in personality with respect to how people are orientated toward self-determined or controlled functioning across life domains (Deci & Ryan, 2002). Basic Needs Theory (BNT) is the fourth subcomponent comprising SDT, and is concerned with the role of competence, autonomy, and relatedness needs in relation to motivation and well-being (Deci & Ryan, 2002).

### Purpose

The purpose of this paper is to provide a broad overview of the research examining SDT as a guiding framework for understanding exercise motivation. To address this purpose, evidence is summarised that addresses key questions drawn from the SDT framework. Future directions are offered based on the available evidence as plausible areas worthy of additional inquiry to further our understanding of how basic SDT principles can be used to understand exercise participation.

### Applications of Self-Determination Theory to Exercise Science Research

The approach to understanding human motivation and development provided within SDT offers a macrolevel framework for addressing a number of important questions pertaining to exercise participation. SDT holds considerable appeal as an approach for understanding both initiation and persistence issues in exercise given that the theory specifies both the nature and function of motivation, as well as, the sociocontextual conditions that foster (or forestall) motivational development and well-being. The SDT approach provides considerable flexibility for understanding patterns of exercise behaviour, well-being outcomes associated with exercise participation, and intrapersonal (e.g., basic psychological needs) and interpersonal (e.g., autonomy supportive contexts) factors which promote more adaptive (or self-determined) motives for exercise. The following section provides an omnibus summary of the evidence attesting to a number of key questions integral to understanding exercise behaviour.

### *Does the Quality of Motivation Regulating Exercise Behaviour “Matter”?*

One substantive question stemming from applications of SDT to the study of exercise behaviour concerns the motivation-consequence link specified within OIT (see Markland & Ingledew, 2007, for a review). Initial research in this area centred on the development of instruments to assess exercise motivation consistent with SDT. Building upon early instrument development research (Ryan, Frederick, Lepes, Rubio, & Sheldon, 1997), Markland and colleagues created the Behavioural Regulation in Exercise Questionnaire (BREQ; Mullan, Markland, & Ingledew, 1997) and subsequent modification (BREQ-2; Markland & Tobin, 2004). The BREQ assesses three extrinsic motives (external, introjected, identified regulations) for exercise plus intrinsic regulation whereas the BREQ-2 includes an assessment of amotivation. Recent attempts to assess integrated regulation for exercise have been forthcoming and do not appear to compromise the validity of responses to the BREQ (Wilson, Rodgers, Loitz, & Scime, 2006).

A complimentary line of research examining the behavioural and well-being consequences associated with different exercise motives has emerged in conjunction with instrument development initiatives. Cross-sectional studies have supported the tenability of SDT’s differentiated approach given that more self-determined exercise motives irrespective of their intrinsic or extrinsic origin predict actual and intended behavioural frequency (Wilson & Rodgers, 2004; Wilson, Rodgers, Fraser, & Murray, 2004), as well as, markers of behavioural change for exercise (Daley & Duda,

2006; Landry & Solmon, 2004; Mullan & Markland, 1997). It is particularly interesting to note that evidence from these studies implies that self-determined extrinsic motives (particularly identified regulation) may be as important as intrinsic regulation in terms of understanding patterns of behavioural variation in exercise. Such observations are wholly consistent with Ryan's (1995) assertion that well-internalised extrinsic motives can be as useful for behavioural regulation as intrinsic motives when the target behaviour may not be inherently self-rewarding. An isolated number of studies, however, have also reported that introjected regulation is associated with more frequent exercise participation (Thøgersen-Ntoumani & Ntoumanis, 2006) with one investigation noting this effect for women only (Wilson et al., 2004). Complimenting this line of inquiry, additional studies have demonstrated initial support for links between more self-determined exercise motives (particularly intrinsic regulation) and markers of well-being such as enhanced physical self-worth (Thøgersen-Ntoumani & Ntoumanis, 2007) and positive affect experienced globally across life (Edmunds, Ntoumanis, & Duda, 2007). Taken collectively these observations raise interesting questions about the divergent influences stemming from identified and intrinsic regulations in terms of motivating persistent exercise behaviour as opposed to nurturing psychological well-being that seem worthy of further empirical attention (Burton, Lydon, D'Alessandro, & Koestner, 2006).

Although the lion's share of research concerning the motivation-consequence link in exercise has focussed largely on the OIT's regulatory continuum, a recent line of inquiry initiated by Vansteenkiste and colleagues has examined the motivational role of goal contents within exercise (Vansteenkiste, Soenens, & Lens, 2007). Goal contents represent the aspirations people focus on during their pursuits (i.e., "what" goals are pursued; Deci & Ryan, 2002) whereas motives represent the reasons for pursuing such aspirations (i.e., "why" goals are pursued; Deci & Ryan, 2002). Initial research indicated that holding intrinsic (e.g., health) as opposed to extrinsic (e.g., attractiveness) goals were associated with adaptive consequences including sustained exercise behaviour (Vansteenkiste, Simons, Soenens, & Lens, 2004). Subsequent studies have identified basic psychological needs and cognitive mechanisms (e.g., rigidity) as mediators transmitting goal contents' influence on performance and well-being (Vansteenkiste et al., 2007). Clearly, this line of research suggests the types of goals exercisers pursue are worthy of as much attention as the reasons for exercising in terms of understanding the motivational dynamics impacting initiation and persistence decisions.

### *How Important Are Basic Psychological Needs Within Exercise Contexts?*

Another unique aspect of the SDT approach to understanding exercise behaviour concerns the role afforded fulfilling basic psychological needs. According to Deci and Ryan (2002), basic psychological needs represent innate "nutriments" (p. 7) that when satisfied authentically within social contexts promote integration, adaptation, and directly impact well-being. In contrast, environments that stifle opportunities to satisfy basic psychological needs provoke ill-being (Deci & Ryan, 2002). The basic psychological needs for competence (effectively mastering challenging tasks within one's environment; Deci & Ryan, 2002), autonomy (feeling

a sense of ownership over one's behaviours such that they stem from an internal perceived locus of causality; Deci & Ryan, 2002), and relatedness (feeling a meaningful connexion with others in one's social milieu; Deci & Ryan, 2002) have long been advocated within the SDT framework as fundamental to human development and well-being.

Much of the early work exploring the importance of basic psychological needs in exercise settings was conducted using CET as an organising framework. CET is concerned with the factors that facilitate (or impede) the development of intrinsic motivation (Deci & Ryan, 2002). Four propositions were set forth within CET by Deci and Ryan (1985). The first proposition describes the effects of perceived autonomy (Proposition I) and competence (Proposition II) suggesting that satisfying both needs will result in greater intrinsic motivation (Deci & Ryan, 1985). Additional propositions concern the functional significance ascribed to external (Proposition III) and intrapersonal (Proposition IV) events that vary in terms of their informational, controlling, or amotivating nature (Deci & Ryan, 1985).<sup>2</sup> In brief, events interpreted as informational rather than controlling or amotivating, promote greater endorsement of intrinsic motivation via the fulfillment of autonomy and competence needs (Deci & Ryan, 1985).

Initial studies embracing CET in exercise focussed on the effects of feedback and perceived competence on intrinsic motivation using physical fitness testing in youth (Whitehead & Corbin, 1991) and young adults (Vallerand & Reid, 1984). Employing randomised experimental designs, intrinsic motivation was enhanced by positive reinforcement and undermined by negative reinforcement with additional evidence supporting the mediating effect of perceived competence on the feedback-intrinsic motivation relationship (Vallerand & Reid, 1984; Whitehead & Corbin, 1991). Subsequent studies by Markland extended this initial work by illustrating the mediating effects of perceived autonomy on the perceived competence-intrinsic motivation relationship (Markland & Hardy, 1997). An additional investigation of female exercisers, however, indicated that variation in perceived competence only influenced intrinsic motivation when women did not feel that their need for autonomy was being satisfied in exercise (Markland, 1999). These observations illustrate the synergistic role of competence and autonomy needs in terms of facilitating intrinsic motivation toward exercise postulated within CET (Propositions I and II) and serve as a useful platform for launching further research examining the conditions that optimise intrinsic motivation for exercise.

The focus of recent SDT research in exercise has emerged from Deci and Ryan's (2002) contentions pertaining to the role afforded satisfying basic psychological needs proposed within BNT. Early studies focusing on the satisfaction of basic psychological needs typically assessed one SDT-based psychological need and provided mixed evidence regarding the importance of psychological need satisfaction in exercise (e.g., McCready & Long, 1985). A second phase of research instigated the development of instrumentation focussed around the assessment of the psychological needs advocated by Deci and Ryan (2002) or adapting instruments from

<sup>2</sup> Proposition II implies an interactive effect between competence and autonomy perceptions that has been explored and partially supported in Markland's (1999) work.

other domains to assess all three psychological needs within exercise (e.g., Wilson et al., 2003). One conclusion emanating from this second phase concerned the lack of systematic instrument development research conducted to assess BNT's constructs specific to exercise settings. Two instruments have subsequently been developed to capture variation in perceived competence, autonomy, and relatedness experienced when exercising (Vlachopoulos & Michailidou, 2006; Wilson, Rogers, Rodgers, & Wild, 2006) in a manner consistent with BNT.

Aside from the focus on instrumentation, research using BNT has revealed a number of important findings. Cross-sectional studies of various exercisers imply that psychological need fulfillment is associated with more self-determined exercise motives (McDonough & Crocker, 2007; Vlachopoulos & Michailidou, 2006; Wilson, Mack, Muon, & LeBlanc, 2007) although two studies note that perceived relatedness is linked with controlling regulations for exercise (Peddle, Plotnikoff, Wild, Au, & Courneya, 2007; Wilson et al., 2007). Additional studies have linked fulfillment of psychological needs through exercise with well-being indices (Edmunds et al., 2007) despite contributions from other "candidate" psychological needs (Wilson, Rodgers, Murray, Longley, & Muon, 2006) and report small effects when predicting exercise participation with perceived competence accounting for the majority of behavioural variance (Edmunds et al., 2007; Peddle et al., 2007). Longitudinal studies support the premise that fulfillment of competence, autonomy, and relatedness needs within exercise is dynamic (Edmunds et al., 2007; Wilson, Rodgers, Blanchard, & Gessell, 2003), and note that observed changes in psychological need fulfillment predict well-being in exercisers consistent with SDT (Edmunds et al., 2007). Few attempts, however, have been made to disentangle the effects of sustained exercise behaviour on perceptions of psychological need satisfaction or capture the importance of satisfying each psychological need central to BNT via exercise to hedonic versus eudaimonic well-being (Wilson et al., 2006).

### *Can Contextual Variables Be Manipulated to Create Adaptive Environments for Exercise?*

One attractive feature of any theory concerns the practical recommendations conferred for motivating behavioural change within a given context such as exercise. In this vein, advocates of SDT have long extolled the virtues of creating "adaptive" environments via providing sociocontextual supports that promote the fulfillment of basic needs, facilitate more self-determined regulation of behaviour, and contribute to overall feelings of eudaimonic well-being and health (Deci & Ryan, 2002; Edmunds, Ntoumanis, & Duda, 2008). Three specific dimensions of the social environment have been forwarded within the SDT framework as catalysts of behavioural change for practitioners to consider. *Autonomy support* is the most studied sociocontextual component of the SDT framework in exercise settings and refers to authority figures listening with empathy, providing meaningful rationales for change without pressuring compliance, offering choice, and acknowledging that behavioural change is demanding and challenging from the participants perspective (Deci & Ryan, 2002). *Structure* and *involvement* are complimentary sociocontextual components of the SDT framework that have received substantially less research attention in applications of the theory to exercise. Authority figures that provide unambiguous yet realistic

feedback regarding behaviour-outcome contingencies (i.e., *structure*) whilst engaging with individuals authentically in terms of supporting their well-being (i.e., *involvement*) are more likely to foster adaptive motivational resources than forestall the satisfaction of basic psychological needs or encourage controlling forms of behavioural regulation.

In comparison to other aspects of the SDT framework, the research focus on manipulating sociocontextual variables within the framework forwarded by Deci and Ryan (2002) has been limited. A handful of studies have examined the importance of perceived *autonomy support* for exercise in adults with equivocal results. For example, cross sectional studies have indicated that exercisers who report more autonomy support from friends (Wilson & Rodgers, 2004) or exercise class leaders (Edmunds, Ntoumanis, & Duda, 2006) display a profile of more self-determined regulation for exercise participation. Conversely, longitudinal studies employing multilevel modeling analyses indicated that perceived autonomy support from exercise advisors within a physician-based referral scheme (Edmunds et al., 2007) and exercise class leaders (Edmunds et al., 2008) show no meaningful relationship with the basic needs theorized to be linked with adaptive sociocontextual supports within SDT (Deci & Ryan, 2002). Given this mixed albeit limited evidence base, it seems that clarification of the role played by, and sources of, perceived *autonomy support* remains an important research initiative to consider within future applications of SDT to exercise.

Complimenting this line of research has been a handful of studies that have attempted to assess one (Vansteenkiste et al., 2004) or more (Edmunds et al., 2008) aspects of the socioenvironmental context housed within SDT using more sophisticated experimental designs. Extrapolating from Thompson and Wankel's (1980) initial work, recent studies have examined the tenets of SDT by focusing their efforts on intervention effects stemming from manipulating autonomy supportive versus controlling interpersonal styles largely within structured exercise contexts (Edmunds et al., 2008; Levy & Cardinal, 2004; Vansteenkiste et al., 2004). Consistent with studies that have examined the predictive effects of *autonomy support* alone in exercise, the results of these investigations provided mixed support for SDT-based propositions. Specifically, Levy and Cardinal (2004) demonstrated that the use of an SDT-based intervention (i.e., mail-based pamphlet) compared with an informational approach did not elicit meaningful differences in exercise behaviour across a 2-month period. In contrast, Vansteenkiste et al. (2004) provide compelling evidence supporting the use of autonomy supportive interpersonal styles (as opposed to controlling styles) when teaching novel exercises in young students which was linked with greater effort expended, more self-determined regulation, greater persistence behaviour across 4-months, and future enrolment in exercise-related clubs. Only one study by Edmunds et al. (2008) has used an experimental design to investigate changes in *autonomy support*, *structure*, and *involvement* alongside other motivational processes and consequences proposed within the SDT framework as a result of varying instructional style in group based exercise classes. Edmunds et al. (2008) reported that females exposed to an instructional style based on SDT principles reported linear increases in *structure* and *involvement*, relatedness and competence need fulfillment, positive affect, and greater adherence to a 10-week programme of structured exercise.

### Future Considerations for Advancing Self-Determination Theory Research in Exercise Science

The surge of interest amongst exercise scientists in SDT over the last decade is not surprising given the importance of physical activities such as exercise to longevity and well-being in conjunction with the prevalence of sedentary lifestyles evident in population-health reports (Gilmour, 2007). Although research embracing SDT in exercise science is limited in scope and quality compared to applications of the theory in other life domains, the available data are largely in line with many of Deci and Ryan's (2002) assertions. Consequently, SDT offers a foundation for examining a range of motivational phenomena integral to understanding exercise behaviour. Given that applied domains such as exercise provide fruitful grounds for testing and refining SDT (Ryan, 1995), a number of areas could benefit from careful attention in future applications of SDT to unravel the challenges inherent in understanding exercise motivation.

The first area worthy of sustained attention concerns unresolved conceptual and measurement issues within the exercise science literature that stem directly from applications of SDT to the study of motivated behaviour. For example, there is limited evidence attesting to the merits of "inner resources" (p. 21) proposed by Deci and Ryan (2002) within COT for understanding exercise motivation, the utility of OIT's integrated regulation for sustaining or changing exercise behaviour, the contributions of each basic psychological need proposed within BNT to markers of eudaimonic well-being, and the unique contribution of exercise compared with other life contexts to the functional significance of external or interpersonal events articulated within CET. Attempts to advance our understanding in these areas should proceed with careful attention to measurement issues that can plague theoretical development (Messick, 1995). Limited evidence is available, for example, concerning the merits of new instruments designed to assess fulfillment of competence, autonomy, and relatedness needs via exercise (Vlachopoulos & Michailidou, 2006; Wilson et al., 2006). Considering the importance of understanding the role played by basic psychological needs to the evidence-base concerning SDT, it would seem prudent for exercise scientists to continue to develop programmes of research that inform the development of theory through application of sound measurement principles using a construct validation approach (Messick, 1995).

A second area worthy of further inquiry concerns practical questions arising from professionals interested in changing or sustaining exercise participation in diverse settings (e.g., rehabilitation, worksite health promotion, etc.). For example, it seems reasonable for a health professional to ponder: "What is the best way to motivate initial and sustained exercise participation in a sedentary client?" Progress toward addressing this question could benefit from exercise scientists affording greater attention to sampling and design considerations in future studies. Research in other life domains has moved beyond the convenience sampling techniques commonly found in the exercise science literature toward utilising more sophisticated longitudinal designs and accompanying data analytic techniques to elucidate temporal changes in motivational process that could inform such an interesting practical question. Increased attention to the use of longitudinal designs (Edmunds et al., 2007; Wilson et al., 2003), intervention-based research (Levy & Cardinal, 2004), and the application of multi-

level modeling to assess the direction and magnitude of change in motivational processes across time (Edmunds et al., 2008) have been forthcoming and represent important first steps to addressing practical questions of importance to health promoters. Future work examining the processes of change experienced by initiates as they incorporate exercise into their daily lifestyle would prove useful in this area and take us closer to understanding the integral role played by SDT-based constructs.

A final area ripe for additional inquiry concerns aligning SDT with other conceptual and theoretical models prominent in the exercise motivation literature in programmes of research designed to synthesise the knowledge-base concerning exercise motivation. Emerging lines of research have integrated SDT with stages of behavioural change from the Transtheoretical Model (Mullan & Markland, 1997), beliefs and intentions from the Theory of Planned Behaviour (Hagger & Chatzisarantis, 2007), and goal orientations from Achievement Goal Theory (Wang & Biddle, 2007). Such hybrid approaches hold considerable potential for moulding our understanding of motivated behaviour in exercise settings and offer grounds for further theoretical refinement within the SDT-approach using inductive evidence. Future research would do well to clearly justify the amalgamation of SDT with other theoretical frameworks to prevent obfuscating the literature in this area.

### Conclusion

A growing body of research has embraced the perspective advocated by Deci and Ryan (1985, 2002) within SDT for examining issues pertaining to motivated behaviour in exercise. It appears that the available evidence suggests that greater interest was focussed initially on CET and more recently on OIT and BNT with less empirical attention afforded the COT subcomponent of SDT. Ryan (1995) articulated that testing claims put forth under the rubric of SDT in applied domains such as exercise represent fertile ground for refining the theory and hold considerable potential for addressing social problems. Scholars interested in the promotion of exercise as an important component of health-enhancing physical activity have embraced Ryan's (1995) dictum with fervour and the mosaic of evidence evaluating SDT-based claims is largely supportive of Deci and Ryan's (2002) contentions. The motivational dynamics of exercise initiation and persistence pose a considerable public health challenge in many countries including Canada (Gilmour, 2007). It seems reasonable to suggest at this stage that SDT represents one viable platform from which a broad array of initiation and adherence issues within exercise can be understood and as such the future of SDT as a framework for investigating exercise motivation appears promising.

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### Résumé

La compréhension des facteurs qui motivent l'activité physique favorisant la santé a beaucoup de mérite si l'on tient compte du rôle que joue ce genre de mode de vie dans la lutte contre la maladie et la promotion d'une certaine qualité de vie. L'objectif de la présente communication consiste à fournir un aperçu de la recherche portant sur les questions de participation à une activité d'exercice du point de vue de la théorie de l'autodétermination

(Théorie de l'autodétermination; Deci et Ryan, 2002). Les éléments de preuve soutenant l'application de la théorie de l'autodétermination à l'étude des facteurs motivationnels à l'égard de l'exercice découlent de trois questions principales: a) La qualité de la motivation qui dirige le comportement face à l'exercice a-t-elle de l'importance? b) Dans quelle mesure les besoins psychologiques fondamentaux en contexte d'exercice comptent-ils? c) Les variables contextuelles peuvent-elles être manipulées en vue de créer des environnements adaptés à l'exercice? Les données disponibles appuient bon nombre des propositions invoquées dans la théorie de l'autodétermination de Deci et Ryan (2002). Sont proposés d'autres sujets utiles à la recherche qui porte sur la motivation à faire de l'exercice en fonction des preuves à l'appui en vue d'aborder les problèmes non résolus et de contribuer au développement de la théorie de l'autodétermination.

**Mots-clés :** comportement à l'égard de l'exercice, motivation, besoins psychologiques fondamentaux, intégration organisationnelle

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