Self-determination and stage of readiness to change for exercise in young people

Amanda Daley1, Joan L. Duda2

1Primary Care & General Practice, Medical School, University of Birmingham, United Kingdom
2School of Sport & Exercise Sciences, University of Birmingham, United Kingdom

Introduction

Engaging in regular physical activity has well documented health benefits, but less than optimal participation rates are evident in most modern industrialised countries (Department of Health, 2004). Thus, it seems important for researchers and practitioners to address the question of why young adults do and do not engage in health promoting behaviour such as exercise, and to explore motivational factors that might discriminate between those who are active and inactive. Unfortunately, from the standpoint of motivational mechanisms, little is known about the exercise initiation and maintenance process (Marcus & Simkin, 1993). Biddle and Nigg (2000) in their review of several theories of exercise behaviour highlighted the need to conduct research on exercise motivation from a theoretical perspective. Grounded in Self Determination Theory (Deci & Ryan, 1985) and the Transtheoretical Model (Prochaska & DiClemente, 1983), the aim of this study was to examine the relationship of exercise regulations varying in self-determination and stage of readiness to change for exercise in University students.

Methods

The participant sample consisted of 418 (men = 149; women = 232) undergraduate University students aged 18-46 years. Participants completed the Behavioural Regulations in Exercise Questionnaire-2 and the visual analogue stage of change for exercise ladder. Participants also provided demographic information regarding their age, gender and degree programme. A cross-sectional survey design was used. Questionnaire booklets were distributed to volunteer students at the end of a lecture during November 2003. All data collections were completed over a 10-day period.

Results

As a limited number of participants reported being in the precontemplation stage (n = 19), their data were combined with those classified as contemplators (n = 68) to form a single stage that was labelled 'prepreparation. One discriminant function was significant for men (canonical r = .58; Wilk’s Lambda = .58, df < .01) accounting for 83.5% of the variance and was dominated by identified and intrinsic regulations and to a lesser degree external (negatively weighted) regulation. An examination of the group centroids indicated that men who reported they were at maintenance scored positively (.79), whereas, men who reported being at the prepreparation (1.02), preparation (-.63) or action (-.26) stages scored negatively on this discriminant function. Analyses also revealed one significant function for women (canonical r = 0.67; Wilks Lambda = 0.51, df = 15, p < .01). This function accounted for 93.3% of the between-groups variability. Identified and intrinsic regulations dominated the function followed by introjected regulation while amotivation loaded negatively on this function. The group centroid values indicated that women who reported being at maintenance (.98) and action (.46) scored positively, and women who reported being at the prepreparation (-1.43) and preparation (-.36) stages scored negatively on this function.

Discussion/Conclusion

As predicted, results revealed that, on the whole for both men and women, the use of more self-determined regulations distinguished between those who reported being at the later stages (maintenance & action) from those who were at the early stages of readiness to change for exercise (prepreparation & preparation). The present results are consistent with the theoretical tenets of SDT and findings from previous research (i.e. Mullen & Markland, 1997; Rogers et al, 2003; Wilson & Rodgers, 2004;) that found high levels of self-determination to be a prerequisite for participation in regular exercise and classification into one of the higher stages of readiness to change for exercise. It was interesting to note that identified, in contrast to intrinsic regulation, consistently loaded the strongest on the discriminant functions suggesting that exercise is a behaviour that tends not to be especially engaged in and maintained due to high levels of intrinsic interest alone. Such results pose an interesting dilemma in terms of potential strategies for promoting participation in exercise. The quandary exists because SDT suggests that intrinsic regulation (as the most self-determined regulation) is associated with more beneficial outcomes than identified regulation but in the case of physical activity but “the pursuit of the behaviour [exercise] itself fails to invoke uniformly high levels of intrinsic interest” (Wilson & Rodgers, 2004). Put in context, we should be cognizant of the point that, although some people do enjoy participating in exercise per se, a great deal of exercise behaviour is not intrinsically motivated (Ryan, et al., 1997). Rather, some people exercise because it is perceived to be good for them.

References
