

Why we do – And why we don't!

THE reasons we are motivated to take part in sport and exercise, and the rewards we derive from our experience of physical activities, have long interested sport and exercise psychologists. In some respects the history of this particular research field mirrors occupational psychology's concern with work motivation (e.g. Steers & Porter, 1991). In both fields early interest tended to focus on content (i.e. listing or classifying motivators), while more recent attention has shifted to understanding the process of motivation as a whole (i.e. how personal and environmental factors play their part in determining the relationship between effort, performance, rewards and satisfaction, and thus future motivation).

In this article our aim is to reflect on the traditional concerns of participation motivation research, and to conclude with a consideration of some of the more recent integrative models, which attempt to represent participation motivation as a dynamic cognitive-behavioural process.

The beginnings of motivation To identify a definitive starting point is not easy, but certainly the mainstream work of McClelland (1961) and Atkinson (1957) on motivation has been applied in the context of competitive sport from the 1960s. The central tenet of the theory predicts that to be motivated to achieve, one's motive for success must be higher than one's motive to avoid failure.

The McClelland–Atkinson model describes how motives combine with contextual variables in arousing affective states, which in turn dictate approach or avoidance behaviours. Put simply, it is



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LOWRY on 'participation motivation' in sport and exercise.

predicted that those who strive for success and yet do not fear failure (a characteristic of high achievers in sport), will be drawn towards competition and difficult yet realisable challenges. By contrast, it is suggested that low achievers will avoid personal challenges, for example by only playing weaker opponents or setting unattainable goals where, because failure is a high possibility, it is not particularly threatening.

Although considerable work has been conducted within the McClelland–Atkinson tradition, the empirical research within sport has generally been inconclusive: research supports predictions about high achievers but has not always done so about low achievers (Roberts, 1993). Nevertheless, it has been suggested that the model may still be useful in helping predict long-term patterns of motivation (Cox, 1998), in this way possibly an effective tool for applied sport psychologists (rather than their trying to predict success *per se*).

The study of motivation changed significantly along with the development of social cognitive paradigms during the 1970s. Within sport and exercise psychology, Weiner's (1979) attribution model quickly rose to prominence (not surprisingly given its concern with competitive sport's twin imposters, winning and losing). Weiner's model provided a ready-made guide to the explanations that people associate with success and failure in competitive sport. The four main attribution elements within sport have been labelled ability, effort, task and luck, reflecting on three primary constructs, internal/external, stable/unstable and controllable/uncontrollable. In

particular, it has been suggested that it is the feelings associated with external or internal attributions and the expectancy of future success or failure that will be evident in achievement behaviours (Biddle, 1993).

By way of example, research has shown that successful performance in sport is more likely to be attributed to stable, internal factors (such as ability): most especially in sports involving interacting teams and where the attributions relate to team performance. However, there is not the same support for the prediction that failure will tend to be attributed to external factors (task difficulty or luck). In general, research interest in attribution theory waned during the early 1990s, with criticisms that a comprehensive model of motivation was needed that would consider the conceptual convergence between attribution and many related constructs.

Motivational constructs

Following from this early work, there has been a steady stream of research endeavouring to identify the psychological and structural factors that significantly influence initiating, continuing and discontinuing sport and exercise (see Cavill *et al.*, 2001). The key constructs that have consistently been shown to influence participation motivation in sport and exercise are described below. In some respects these constructs can be described as constituting the bedrock or 'content' on which any dynamic process model of participation must build.

Intrinsic motivation and perceived competence Research consistently indicates that if you are intrinsically

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motivated you are more likely to stick at exercise: extrinsic motives predict withdrawal (see Ryan *et al.*, 1997). More specifically, Harter (1981) suggests that perceptions of competence will influence initiation of participation and, more significantly, continuance (the 'success circle'). At the same time, primary research in sport and exercise settings does not reveal a strong relationship (see Roberts, 1993) although recent findings highlight the importance of gender differences and context. Males consistently rate themselves as higher in physical competence than females, a finding that is robust across different levels of involvement (Van Wersch, 1997). An individual may feel physically competent in one sport but not in another, suggesting that perceived physical competence is specific to a particular activity rather than to the general sporting context (Mullan *et al.*, 1999).

Self-efficacy Related research has revealed that participation in physical activity is positively correlated with self-efficacy (Bezjak & Lee, 1990) and that, in turn, self-efficacy is a significant predictor of exercise behaviour (McAuley, 1991). Recent research has shown how the influence on self-efficacy is mediated by variables such as gender and socio-economic status (SES). Men and those from a higher SES background have higher self-efficacy for physical activity compared with women or those from a low SES background (Allison *et al.*, 1999).

Goal orientation In recent years a great

deal of attention has been placed on this particular psychological construct (e.g. White & Duda, 1994). Those with a high 'task orientation' tend to participate for reasons of skill development, skill mastery, affiliation and fitness. In contrast, those with a high 'ego orientation' tend to cite motives such as social status and recognition. Recent research continues to explore the relationship between goal orientation and participation through modelling the influence of goal orientations on intentions and perceived competence (see Wang & Biddle, 2000).

Affect Generally, the sport and exercise literature suggests on the one hand a positive relationship between participation and affect in terms of contentment, satisfaction and enjoyment, and on the other hand increased negative affect (depression, anxiety, tension) associated with withdrawal from activity. However, the causal nature of this relationship is as yet unclear with recent studies exploring the mediating role played by factors such as self-efficacy (Rudolf & Butki, 1998) and intrinsic motivation (Frederick *et al.*, 1996).

Significant others The social influence of family and important others (e.g. work colleagues, health professionals, friends) has the strongest source of influence on exercise adherence in adults (Carron *et al.*, 1996), with peer influence being particularly important in adolescence (Horn & Amorose, 1998). During early to middle childhood, parents also seem to influence participation and adherence to physical activity programmes.

Health and fitness Numerous studies consistently point to the significance of health-related motives (e.g. Buonamano *et al.*, 1995), and most especially as we grow older. For example, Weiss and Chaumeton (1992) suggest that 'fun' is the most important motive for children and older adults, whereas health and fitness occupies pole position for young and middle-aged adults.

Integrative models

While each of these factors is significant, it is understanding how they act in concert to determine participation and non-participation that remains the challenge. This is especially true as research reveals that we will cite numerous factors as influencing our involvement in sport and exercise, and that the significance of each factor will ebb and flow over time.

Within exercise psychology Sonstroem's (1988) 'psychological model for physical activity participation' was an early but still significant attempt to consider why we engage in any form of physical activity. He suggests that our involvement increases ability, which in turn raises self-esteem, creating a cycle of activity. Within sport psychology one of the earliest models to address sport motivation in a holistic fashion was the 'model of youth sport withdrawal' (Gould, 1987). Intrapersonal, motivational and situational influences associated specifically with competitive sport were initially considered, and it was found that factors affecting withdrawal included conflicts of interest, lack of playing time, lack of success, lack of skill improvement, stress, lack of fun, dislike of coach, boredom and injury. These factors were later incorporated into a three-component attrition model in order to explain the process of withdrawal.

More recently Scanlan *et al.* (1993) have continued to develop and refine their 'sport commitment model', based on underlying principles of social exchange. They proposed that the influence of associated costs and benefits upon participation is mediated by the variable of commitment. The model has been extended to consider longitudinal evidence (Carpenter & Coleman, 1998), and thereby has the potential to introduce a dynamic so often absent from earlier work.

Of the various models that attempt to consolidate existing research, Weiss and Chaumeton's (1992) 'motivational orientation model' has enjoyed considerable prominence. Employing a social cognitive

approach, the model outlines how personal, social and contextual factors interact to determine an individual's predisposition towards exercise participation. As its name reveals, the model deals primarily with psychological orientations towards physical activity; and while this focus is important, it should not detract attention from other significant factors (including barriers to participation, social context and social support, individual differences, activity history, self-efficacy, perceived intrinsic and extrinsic rewards, competence, self-esteem and equity).

This research suggests that each of these constructs needs to be accommodated in a truly integrative model of participation motivation. Following from Weiss and Chaumeton's model, but based loosely on Vroom and Yetton's (1973) process model of work motivation, Kremer and Busby's (1998) dynamic model reflects a cognitive-behavioural process that leads sequentially from predisposition and decision making to participation, evaluation and finally commitment to future action. A key difference between this model and others is the temporal component, which suggests

a number of possible routes to explain changes in participation motivation during the course of involvement in physical activity. As yet the model is untested, but early results from both qualitative and quantitative studies would tend to support its predictions (Busby, 1999; Lowry, 2001)

Into the mainstream

Our understanding of participation motivation has progressed slowly, from early endeavours to identify individual factors responsible for motivation, to an examination of the influence of attributions on subsequent sports involvement, to piecemeal observations of factors affecting

participation, and finally towards the development of integrative cognitive-behavioural process models. These integrative models are still in their infancy, but they do represent an attempt to bring the sport and exercise psychology literature yet closer to the heart of mainstream psychology. This is a trend surely to be encouraged.

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