Cohesiveness, coach's interpersonal style and psychological needs: Their effects on self-determination and athletes' subjective well-being

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ABSTRACT

Goal: The goal of this study was to test the impact of cohesiveness and coaches' controlling interpersonal style on athletes' perceptions of autonomy, competence and relatedness. A contextual motivation sequence [Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 29 (pp. 271–360). New York: Academic Press.] was tested whereby social factors supporting the satisfaction of basic needs would increase the level of sport self-determination, which in turn, should predict subjective well-being in athletes.
Method: The proposed sequence was tested with 197 basketball players using structural equation modeling. The hypothesized model was supported.
Results: Perceptions of cohesiveness positively predicted the satisfaction of the basic needs. Perceptions of coaches' controlling interpersonal style negatively impacted feelings of autonomy. In turn, psychological needs predicted self-determination in sports ensuing greater sport satisfaction and positive emotions in sports. Tests of indirect effects also supported the mediating role of psychological needs and self-determination.
Conclusion: Results are discussed in light of the different types of motivational antecedents and their influence on the psychological needs.

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Participating in sports has been found to provide a number of opportunities ranging from physical activity, personal and social development, as well as psychological well-being (Moore & Werch, 2005). Different social factors susceptible to encourage the motivation to participate in sports activities have been identified. Parents have been shown to play an important role. As well, the coach's approach has a direct impact on athletes' motivation. A social factor that has been less studied pertains to the team dimension. With respect to team sport, an athlete's feeling that he and his team are aiming to reach the same goals, and the feeling that they are united and cohesive in this endeavour would appear to be an important determinant of motivation. Thus, the main purpose of this study will be to test a new motivational determinant, namely, team cohesiveness, and its role in the sequence whereby social factors impact psychological need satisfaction, self-determination, and subjective well-being (Vallerand, 1997). More

specifically, the role of cohesiveness and the coach's interpersonal style were tested to predict the three psychological needs in a sample of basketball players. Fulfillment of the psychological needs should lead to more self-determination in sports, which in turn should predict subjective well-being in the sport domain.

Motivational determinants

Research indicates that when social factors are respectful of one's autonomy, self-determination ensues. When social factors undermine autonomy, lower levels of self-determination are expected. More specifically, it has been shown that individuals in supervisory positions (e.g. teachers, coaches, parents) can affect their subordinates' self-determined motivation (Deci & Ryan, 1987; Grolnick, 2003; Reeves, 2002).

In the context of sports, one important social factor pertains to the coach's interpersonal relationship with the athlete (Vallerand & Losier, 1999; Vallerand & Rousseau, 2001). According to Cognitive Evaluation Theory (Deci & Ryan, 1987), coaches' behaviors can be perceived in light of two interacting styles: a controlling style and

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an autonomy-supportive style. Coaches who use a controlling style will interact with their athletes in a highly directive manner and will tend to coerce their athletes to behave in a way that they think is right. By contrast, coaches who value and exhibit autonomy-supportive behaviors value the players' input and will allow their athletes to make choices within reasonable limits. Research in the sport domain reveals that athletes who feel that their coaches are controlling tend to report less intrinsic motivation and identified regulation, and more external regulation and amotivation than those who feel that their coaches are autonomy-supportive (Pelletier, Fortier, Vallerand, & Brière, 2001; Pelletier et al., 1995). Thus, the impact of coaches' interpersonal behaviors on athletes' motivation is well supported by research results. However, the impact of social factors, and more particularly, the interpersonal style on all three needs measured simultaneously is still scarce.

Another social factor which shows promise within a motivational contextual sequence is the intra group dynamic, and more specifically, team cohesiveness. Recent work from Ntoumanis et al. show that the peer motivational climate within sports activities does play an important role on affective and behavioral responses in these young athletes (Ntoumanis & Vazou, 2005; Ntoumanis, Vazou, & Duda, 2007; Vazou, Ntoumanis, & Duda, 2006). Moreover, team cohesiveness has been largely used as a sport-related concept to study intra group dynamic. It has been defined as "the dynamic process reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of members' affective needs" (Carron, Brawley, & Widmeyer, 1998, p. 213). In the context of sports, high levels of team cohesiveness have been associated with more favorable attitudes toward exercise and positive affect (Courneya, 1995), better performance (Carron, Colman, Wheeler, & Stevens, 2002), and greater persistence and attendance (Spink, 1995). Williams and Widmeyer (1991) further showed that high levels of task cohesion amongst teams of elite national collegiate female golfers predicted enhanced motivation. However, no study has empirically examined the role of intra group dynamic in predicting perceptions of autonomy, competence, and importantly, relatedness. Given that peer relationships within a team is instrumental in allowing a team to attain important goals while satisfying the team members' affective needs, it is anticipated to act as a key predictor in the proposed motivational sequence.

Psychological needs

Based on self-determination theory, three basic psychological needs appear relevant: autonomy, competence, and relatedness (Deci & Ryan, 1985, 1991; Ryan & Deci, 2002). The need for autonomy refers to the desire to be self-initiating in the regulation of one's actions and to be the origin of one's behaviors (de Charms, 1968; Deci & Ryan, 1985). The need for competence implies that individuals want to interact effectively with their environment in order to feel competent in producing desired outcomes and preventing undesired ones (Connell & Wellbourn, 1991). Finally, the need for relatedness pertains to the desire to feel connected with significant others (Baumeister & Leary, 1995; Richer & Vallerand, 1998). This particular need has received increasing attention over the past few years. Theorists propose that individuals develop most optimally within an environment that fosters a friendly and warm atmosphere (Deci & Ryan, 1991; Grolnick, 2003). Satisfaction of this need has been shown to be essential in ensuring psychological well-being (Sheldon, Elliot, Kim, & Kasser, 2001). To the extent that social factors foster perceptions of competence, autonomy, and relatedness in individuals, self-determined forms of motivation (i.e., intrinsic motivation as well as identified and integrated regulations) tend to be enhanced, whereas non-self-determined

types of motivation (i.e., introjected and external regulation, and amotivation) tend to be diminished (see Vallerand, 1997). A number of studies have provided support for the relationship between social factors and self-determination in sports (see Vallerand, 1997, for a review). As well, research results support the link between social factors, psychological needs, and self-determined motivation in sports, and more specifically with respect to perceptions of autonomy (Thompson & Wankel, 1980) and competence (Vallerand & Reid, 1984; Williams & Gill, 1995).

To this date, only a handful of studies have simultaneously tested the complete motivational sequence described in Vallerand's (1997) hierarchical model of intrinsic and extrinsic motivation. These studies have investigated how social factors predicted all three psychological needs, which in turn predicted self-determination, ensuing a number of outcomes (Hollembeak & Amorose, 2005; Ntoumanis, 2001; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002). Results from these recent studies support the mediating role of the three psychological needs between social factors and self-determination (Ntoumanis, 2001; Sarrazin et al., 2002). For instance, a study from Sarrazin et al. (2002) revealed that a task-involving climate (i.e., one in which the goal emphasized by the instructor is to master tasks, to solve problems, or to make progress accomplishing a task), in contrast to an ego-involved climate (i.e., one that encourages accomplishing a task to demonstrate one's ability), was the best predictor of perceptions of relatedness. Perceptions of autonomy and competence were also accounted for by a task-involving climate but to a lesser degree. Together, these findings support the link between a coach's interpersonal approach and the three psychological needs. Yet, social factors such as team cohesiveness, which pertain to the intra group and interpersonal dynamics taking place among athletes, have received less attention. While results from some studies support the link between team cohesion and motivation (Williams & Widmeyer, 1991), none have tested the link between team cohesiveness and basic need satisfaction and self-determined motivation.

Notwithstanding the importance of past findings, research investigating the impact of intra group dynamic on the psychological needs is warranted. Similarly, there is a need to further understand the social factors that predict perceptions of relatedness (Deci & Ryan, 1991; Grolnick, 2003). Therefore, its role within team sports should be understood more thoroughly.

Subjective well-being in sports

Several authors posit that self-determined motivation plays a crucial role in the well-being of individuals (Ryan & Deci, 2001; Vallerand, 1997; Vallerand & Losier, 1999). According to Ryan and Deci (2001), hedonic well-being refers to happiness, pleasure, and positive affect. In the sports domain, hedonic well-being can be viewed as an immediate consequence, and one that is easily reported and identified by athletes. In the present study, a measure of positive affect and satisfaction in sports was chosen to assess athletes' general affective feeling of well-being.

The present study

The main objective of this study was to examine the link between team cohesiveness, the coach's interpersonal style, and the three basic psychological needs. Second, a test of a full contextual motivation sequence was conducted as proposed in the hierarchical model (Vallerand, 1997). Accordingly, we tested the impact of social factors on perceptions of need satisfaction, which in turn, will affect self-determined motivation, ensuing various psychological consequences (i.e., positive emotions and satisfaction in sports). Within this sequence, need satisfaction and self-