Short Communication

Athletes' perfectionism and reasons for training: Perfectionistic concerns predict training for weight control

CrossMark

Daniel J. Madigan [a,*], Joachim Stoeber [b], Louis Passfield [a]

[a] School of Sport & Exercise Sciences, University of Kent, Chatham Maritime, Kent ME4 4AG, United Kingdom
[b] School of Psychology, University of Kent, Canterbury, Kent CT2 7NP, United Kingdom

ARTICLE INFO

ABSTRACT

Exercise and training for sports are associated with a number of psychological and health benefits. Research on exercise, however, suggests that such benefits depend on the reasons why individuals participate in sport. The present study investigated whether individual differences in perfectionism predicted different reasons for training and examined four dimensions of perfectionism (perfectionistic strivings, perfectionistic concerns, coach pressure to be perfect, parental pressure to be perfect) and three reasons for training (avoidance of negative affect, weight control, mood improvement) in 261 athletes (mean age 20.9 years). Regression analyses showed that perfectionistic concerns positively predicted avoidance of negative affect and weight control, whereas perfectionistic strivings positively predicted mood improvement. The findings suggest that individual differences in perfectionism help explain why athletes train for different reasons.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Exercise and training for sports are associated with a number of psychological and health benefits (e.g., reduced depression and stress; Craft & Landers, 1998). Exercise and training, however, may also have negative outcomes when individuals participate in sport for the "wrong" reasons. For example, exercising for appearance-related reasons has been associated with lower psychological well-being (e.g., lower self-esteem and higher anxiety; Maltby & Day, 2001). The same can be expected for certain reasons why athletes participate in training (cf. Ommundsen & Roberts, 1996). Consequently, research has sought to find factors that explain individual differences in reasons for training. One such factor may be perfectionism.

1.1. Perfectionism

Perfectionism is a multidimensional personality disposition characterized by striving for flawlessness and setting exceedingly high standards for performance accompanied by tendencies for overly critical evaluations of one's behavior (Flett & Hewitt, 2002). As such, certain dimensions of perfectionism have been associated with negative outcomes such as anxiety and depression (Flett &

Hewitt, 2002). In sport, perfectionism is usually conceptualized as comprising four dimensions: perfectionistic strivings, perfectionistic concerns, parental pressure to be perfect, and coach pressure to be perfect (Anshel & Eom, 2003; Dunn, Causgrove Dunn, et al., 2006). Perfectionistic strivings reflect athletes' self-oriented striving for perfection and setting of exceedingly high personal standards of performance. In contrast, perfectionistic concerns reflect athletes' concerns over making mistakes, feelings of discrepancy between one's expectations and performance, and negative reactions to imperfection. Parental pressure to be perfect reflects athletes' perceptions that their parents expect them to be perfect and criticize them if they fail to deliver. Coach pressure to be perfect is the same as parental pressure, except that it is the coach who is perceived as expecting perfection and being critical.

1.2. Perfectionism and reasons for training

Research on perfectionism in sport has produced evidence that athletes high in perfectionism approach training differently from those low in perfectionism. For example, perfectionistic runners may train harder and for longer than non-perfectionistic runners (Coen & Ogles, 1993). Moreover, studies have shown that perfectionism is associated with reasons for compulsive exercise (Taranis & Meyer, 2010). However, training is a goal-directed behavior that emphasizes athletic achievement and consists of regular competition against others, whereas compulsive exercise is a driven behavior that is not directed toward a

rational or reasonable goal. Hence, athletes' reasons for training may differ from their reasons for compulsive exercise. So far, however, no study has investigated the relationships between athletes' perfectionism and their reasons for training.

1.3. The present study

Against this background, the aim of the present study was to examine whether multidimensional perfectionism in sport (perfectionistic strivings, perfectionistic concerns, coach pressure to be perfect, parental pressure to be perfect) explains differences in athletes' reasons for training regarding avoidance of negative affect, weight control, and mood improvement (Plateau et al., 2014). Based on previous research on perfectionism and reasons for compulsive exercise (Taranis & Meyer, 2010), we expected perfectionism to explain individual differences in athletes' reasons for training. However, we had no specific hypotheses which perfectionism dimension would predict which reasons. Hence the study was largely exploratory.

2. Method

2.1. Participants and procedure

A sample of 261 athletes (192 male, 69 female) was recruited from sports academies, university teams, and local sports clubs in the south-east of England. Participants' mean age was 20.9 years ($SD = 6.3$; range: 16–45 years). Participants were involved in different sports (65 soccer, 56 rugby, 39 athletics, 24 cycling, 22 netball, 19 basketball, and 36 other sports [e.g., tennis, hockey]) training on average 9.9 h a week ($SD = 6.1$). Questionnaires were distributed during training in the presence of the first author (58%), or athletes completed an online version of the questionnaire (42%).

2.2. Measures

2.2.1. Perfectionism in sport

To measure perfectionism in sport, we used the Multidimensional Inventory of Perfectionism in Sport (MIPS; Stoeber, Otto, & Stoll, 2006). The MIPS comprises four subscales: Striving for Perfection capturing perfectionistic strivings (5 items; "I strive to be as perfect as possible"), Negative Reactions to Imperfection capturing perfectionistic concerns (5 items; "I feel extremely stressed if everything does not go perfectly"), Parental Pressure to be Perfect (8 items; "My parents expect my performance to be perfect"), and Coach Pressure to be Perfect (8 items; "My coach expects my performance to be perfect"). All subscales have demonstrated reliability and validity in previous studies (e.g. Madigan, Stoeber, & Passfield, 2016; Stoeber, Stoll, Salmi, & Tiikkaja, 2009). Participants indicated to what degree each statement characterized their attitudes in their sport on a scale from 1 (strongly disagree) to 5 (strongly agree).

2.2.2. Reasons for training

To measure reasons for training, we used Plateau et al.'s (2014) version of the Compulsive Exercise Test (CET) capturing avoidance of negative affect (6 items; "If I cannot exercise I feel angry and/or frustrated"), weight control (4 items; "I exercise to burn calories and lose weight"), and mood improvement (5 items; "Exercise improves my mood"). To adapt the CET to the training domain, we contextualized the items by changing all instances of "exercise" to "train"/"training" (e.g., "If I cannot exercise I feel angry and/or frustrated" to "If I cannot train I feel angry and/or frustrated"; see Supplementary Material). In addition, instructions told participants that the statements concerned their experience in training. Participants indicated to what degree each reason applied to them on a scale from 0 (never true) to 5 (always true).

2.3. Data screening

We computed scale scores by averaging responses across items and using ipsatized item replacement of missing data (Graham, Cumsille, & Elek-Fisk, 2003). All scores showed acceptable reliability (see Cronbach's alphas in Table 1). Because multivariate outliers can severely distort the results of correlation and regression analyses, we inspected the scores for multivariate outliers but no participant showed a Mahalanobis distance larger than the critical value of $\chi^2(9) = 27.88$, $p < .001$ (Tabachnick & Fidell, 2007).

3. Results

First, we calculated descriptive statistics (Table 1). Then, we examined the correlations of perfectionism with reasons for training (see again Table 1). The four perfectionism dimensions displayed a differential pattern of significant correlations. Perfectionistic strivings, perfectionistic concerns, and coach pressure to be perfect all showed positive correlations with avoidance of negative affect whereas only perfectionistic strivings and perfectionistic concerns showed positive correlations with weight control and mood improvement. Parental pressure to be perfect showed no significant correlations with reasons for training.

Next, we examined the unique relationships of the four dimensions by computing a series of regression analyses (Table 2). In Step 1, we entered age and gender as control variables because they showed significant correlations with perfectionism and reasons for training (see Table 1). In Step 2, we entered the four perfectionism dimensions. In both steps, predictors were entered simultaneously. Results showed that perfectionism explained significant variance in all three reasons for training with perfectionistic strivings and perfectionistic concerns making different predictions. Whereas coach pressure and parental pressure did not have any unique effects, perfectionistic strivings and concerns did and made different predictions: Perfectionistic concerns positively predicted avoidance of negative affect and weight control, and perfectionistic strivings positively predicted mood improvement.

4. Discussion

4.1. The present study

This is the first study examining athletes' perfectionism and their reasons for training, and we found that perfectionism showed positive relationships with reasons for training as was expected from research on perfectionism and reasons for compulsive exercise (Taranis & Meyer, 2010). When unique relationships were examined, however, not all perfectionism dimensions showed the same relationships. Whereas perfectionistic concerns showed positive relationships with avoidance of negative affect and weight control, perfectionistic strivings showed a positive relationship with mood improvement.

The present findings are important because they suggest that training for the "wrong" reasons could lead to detrimental outcomes such as attenuating the health benefits associated with sport. The present findings therefore add to the literature that suggests perfectionism may have serious implications for athletes' well-being (e.g., Madigan, Stoeber, & Passfield, 2015). Moreover, the findings suggest that perfectionism plays a role in both non-athletes' reasons for compulsive exercise and in athletes' reasons for training.

Our finding for avoidance of negative affect replicates Taranis and Meyer (2010) that perfectionistic self-criticism (a proxy for perfectionistic concerns) positively correlated with avoidance and rule-driven behavior. It may be that perfectionistic concerns are associated with behavior that is guided by specific rules that, when transgressed, result in negative emotions (Shafran, Cooper, & Fairburn, 2002). Consequently, athletes with perfectionistic concerns may be more inclined to train to avoid the experience of negative affect.