

Abstract

# Orthorexia Nervosa in UK Cyclists: Associations with Excessive Exercise and Perfectionism<sup>†</sup>

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**Abstract:** Background and objectives: Research about exercise addiction, perfectionism and orthorexia within endurance sports is emerging. Endurance sports athletes might have a higher risk of exercise addiction and eating disorders. Cycling is a popular endurance sport, but research in this population is lacking. The present study aimed to explore the relationship between exercise addiction, perfectionism, and orthorexia within cycling. Methods: A cross-sectional survey was applied, including validated questionnaires assessing the cognitions, behaviors, and feelings related to an extreme focus on healthy eating (Eating Habits Questionnaire; EHQ), compulsion to exercise (CET-A Questionnaire), and perfectionistic tendencies (Multidimensional Perfectionism Questionnaire). Demographic information such as age, training hours, gender, and competition level were also collected. Results: Sixty-one male ( $n = 5$ ; 8.2%) and female (54; 88.5%) cyclists with a mean age of  $32 \pm 7$  years completed the survey. Higher scores in orthorexia were significantly associated with higher exercise addiction ( $\beta = 0.41$ ;  $p < 0.001$ ) and total perfectionism scores ( $\beta = 0.38$ ;  $p < 0.01$ ). Higher orthorexia was also associated with higher scores for self-oriented perfectionism ( $\beta = 0.34$ ,  $p < 0.05$ ) and higher weight control ( $\beta = 0.39$ ,  $p < 0.01$ ). Higher EHQ-Knowledge was associated with higher self-oriented ( $\beta = 0.33$ ,  $p < 0.05$ ) and other-oriented perfectionism ( $\beta = 0.30$ ,  $p < 0.05$ ) and higher EHQ-Problems and EHQ-Feelings were associated with higher weight control ( $\beta = 0.39$ ,  $p < 0.01$  and  $\beta = 0.41$ ,  $p < 0.01$  respectively). Cyclists who trained 16–20 h per week had significantly lower scores on total perfectionism and socially prescribed perfectionism than those who trained 6–10 h per week ( $p < 0.05$ ). No other significant effects of training hours on exercise addiction or orthorexia were observed. Discussion: The potential risk of an individual developing orthorexia may be significantly predicted by high levels of exercise addiction and perfectionism within the cycling population. The high levels of self-oriented perfectionism observed highlight a potential predisposition or susceptibility within certain populations to the adoption of maladaptive behaviours in relation to diet. Further research is needed to explore the role of perfectionism and exercise addiction as risk factors for orthorexia in amateur and professional cyclists.



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