

## WEIGHT LOSS, MOOD RESPONSES, EATING ATTITUDES AND BEHAVIOURAL REGULATION AMONG PROFESSIONAL JOCKEYS

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Rapid weight loss (RWL) strategies used by athletes, such as fasting and saunas, have been shown to be associated with pathogenic eating behaviours, with attendant risks to health and well being. Athletes in sports with strict weight regulations, where RWL strategies are normative behaviour, appear to be particularly at risk. For example, Landers et al. (2001) found that RWL strategies used regularly by high school wrestlers were associated with negative cognitive and affective outcomes. Similarly, Terry et al. (1999) found that lightweight rowers reported more negative eating attitudes and mood disturbance (depression, confusion and tension) than their heavyweight counterparts. To date, no published studies have investigated the effects of RWL strategies commonly used by professional jockeys. The present study assessed the effects of weight loss on mood responses, eating attitudes and the behavioural regulations underlying weight loss. It was hypothesized (a) that jockeys would report more disturbed mood when riding at their lightest weight compared to their optimal and *relaxed* (out of competition) weight; (b) that riding at the lightest weight would be associated with more negative eating attitudes; and (c) that given the proposed internalisation by jockeys of the need to constantly control their weight, there would be no difference in behavioural regulation across the three different weights.

Volunteer participants were 41 male, flat and jump jockeys ( $M = 30.87 \pm 7.01$  years) representing 21.03% of the total population of licensed professionals in the United Kingdom. The Profile of Mood States-Adolescents (POMS-A: 1999, Terry et al.), the Eating Attitudes Test (EAT: 1979, Garner and Garfinkel) and an adapted version of the Treatment Self-Regulation Questionnaire (TSRQ: 1995, Ryan et al.) were completed by jockeys on three occasions, corresponding with their lightest riding weight, optimal riding weight and relaxed weight.

Assumptions underlying multivariate analysis were verified. A single-factor, repeated measures MANOVA showed significant differences on POMS-A subscales, EAT scores and identified regulation from the TSRQ across the three weights (Pillai's Trace = 1.21,  $F_{20, 144} = 11.13$ ,  $P < .001$ ,  $\eta^2 = .61$ ). Significant mood effects were evident for anger ( $\eta^2 = .39$ ), depression ( $\eta^2 = .32$ ), vigour ( $\eta^2 = .30$ ), confusion ( $\eta^2 = .12$ ) and tension ( $\eta^2 = .09$ ). Differences were most evident between the lightest and relaxed weights. Hence, consistent with the findings of Landers et al. (2001), situations requiring RWL impacted negatively on mood responses. Similarly, eating attitudes were more negative when jockeys were at their lightest weight compared to the other two weights ( $\eta^2 = .21$ ), although mean EAT scores did not reach the threshold associated with eating disorders. Differences in identified regulation across the three weights suggested that jockeys appear to accept the need for strict weight management routines during competition (lightest and optimal weight) significantly more than when they are out of competition ( $\eta^2 = .76$ ). This runs counter to the research hypothesis and suggests that jockeys may be aware of the potentially deleterious behaviours associated with repeated weight cycling. Collectively, the present findings emphasise a need for education programmes designed to encourage safe weight management practices among professional jockeys. Also, given the association between mood and performance in sport (see Beedie et al., 2000) jockeys may benefit from mood management strategies to assist them during periods of rapid weight loss.

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