

Overtraining and Burnout in Young English Athletes

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ABSTRACT

The purpose of this thesis was to investigate overtraining (OT) and burnout (BO) in young athletes. Very little data on the incidence of OT in young athletes is available, hence the purpose of the 1st study was to investigate the prevalence and symptomology of NFOR (non-functional overreaching) and OT in young English athletes practicing different sports and competing across all competitive levels. Data from 376 young athletes (age 15.00 ± 1.97 y) indicated that 29 % had experienced at least one episode of NFOR/OT, and that NFOR/OT was significantly higher at national and international competitive levels ($p < 0.01$). Presenting symptomology was similar to that reported in adults, with both training and non-training stressors identified as important associates: losses of appetite during periods of hard training, frequent injuries and feelings of a lack of recovery from training, combined with apathy, feeling intimidated by opponents, and being “moody” were the most frequently reported physical and psychological symptoms, respectively. Training load, the commonly believed cause of NFOR/OT, had no significant association with NFOR/OT incidence; however competitive level and gender were significant predictors of NFOR/OT, albeit of a small explained variance (~4%). This study demonstrated that NFOR/OT is evident in young athletes and that the associated factors are multifactorial. The 2nd study monitored prospectively, 4 national-level female swimmers during an 11-month competitive season. Two swimmers (16.00 ± 1.41 y) were diagnosed as OT based on performance decrements (mean decrement of 9 %). One of the OT swimmers (OT2) presented with the classical psychophysiological profile, i.e. high monthly training volumes, low IgA concentration, depressed maximal lactates and high self-reported distress. Conversely the other OT swimmer (OT1) only presented with high Training Distress Scale (TDS) scores. These

findings show that both, OT is a complex problem to diagnose and that it's approach needs to be individualized. The 3rd study investigated the acute psycho-physiological responses to a 6-day training camp in 4 young female swimmers (15.00 ± 1.21 y), of which one was OT and another burnt out (OT1 swimmer from study 2). Both mal-adapted athletes showed performance decrements of ~8 % that lasted for more than 6 months. The OT swimmer, unlike her BO friend, showed a depressed IgA concentration, an unresponsive cortisol, reduced maximal lactate production, and high psychological distress, measured by the TDS. Both swimmers reported slower reaction times on the Stroop test, with the BO swimmer evidencing the worst performance. Finally, the BO swimmer reported very high scores on the Athlete Burnout Questionnaire (ABQ; reduced sense of accomplishment = 4.3; emotional/physical exhaustion = 2.6; sport devaluation = 3.7). This study showed that the psychophysiological profile of an OT swimmer may differ considerably from a BO athlete, with the ABQ being potentially the most efficient tool to diagnose BO. Once more, the individuality of the profiles reinforces the importance of investigating this phenomenon on a case by case basis. The final study used Interpretative Phenomenological Analysis to investigate the psychosocial nature of OT and BO in a 15 year-old female swimmer (OT1 and BO from studies 2 and 3, respectively) and revealed how multiple sources of training and non-training stressors all combined to negatively affect the athlete. The swimmer revealed a past in which she experienced rapid success at an early age and a training mentality of "the more, the better" which was promoted by parents, coaches and herself. Her strong unidimensional identity – centred on swimming – provided few recreational or social opportunities outside the sport. She also reported communication difficulties with her coaches, unwelcome changes in coaching staff, periods of separation from her family, and an over-involved mother. The findings of this thesis suggest that NFOR/OT and BO are issues that many young athletes have to contend with during their sporting careers. The

multifactorial nature of these conditions mean that any screening, prevention or recovery interventions must address the problem from a holistic standpoint and as such, Ken Wilber's (1998) Integral Model is proposed as a suitable framework through which this condition may be investigated in young athletes.

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