Coach Effectiveness Is a Hit

A field experiment was conducted on factors affecting performance anxiety in 152 child athletes. Head coaches underwent Coach Effectiveness Training (CET) prior to the competitive season in an effort to foster positive coach–athlete relationships, reduce evaluation apprehension, and enhance team cohesion. The effects of CET were assessed by separating the players into experimental and control groups and by measuring pre- and postseason perceptions of coach behavior, attitudes towards coaches, and participation/anxiety levels. Results indicated that trained coaches were evaluated more positively, their players reported having more fun, and their teams exhibited a higher level of interpersonal attraction. Consistent with theory-driven predictions, the CET program also significantly reduced the children's trait anxiety over the course of the season. There was no difference in the win–loss record of the teams coached by experimental and control coaches. The findings are discussed in relation to the importance of the coach's role in helping to reduce anxiety and the need for an extension of this research to other age groups.


Hot Under the Collar

An initial study assessed the effects of temperature on arousal, cognitive state, and hostile affect. Participants were involved in a video game, with manipulations occurring for frustration level (low vs. moderate) and temperature (comfortable, warm, or hot). Results suggested that hot temperature influenced aggression through physiological arousal, increased feelings of hostility, and hostile cognitions. A second study was then undertaken that included brief (one-minute) exercise as a treatment. Physiological and perceived arousal, hostility, and affect were measured. Perceived arousal increased as a result of brief exercise and decreased after exercise. The exercise condition had a large influence on blood pressure, which increased with exercise and then decreased with rest. Heart rate also increased immediately after exercise and decreased after rest, and feelings of hostility were significantly affected by exercise. Hostility increased from baseline to postexercise and then decreased, but it did not return to the baseline level. Hot temperatures also appeared to increase hostility and decrease general positive affect. The authors concluded that both hot temperatures and exercise increase hostile affect, cognitions, and arousal, and they suggested that hostility and arousal may increase aggression. These findings are discussed in relation to the effectiveness of a general theoretical model for understanding and investigating temperature effects and the need for more detailed studies to test specific theories of the temperature–aggression relations.

**Mood, Immunity, and Overtraining**

Five well-trained men from the Australian Army underwent 10 days of twice-daily intensive interval training, followed by 5 days of active recovery. On the mornings of the 1st and 6th days of training, the day following the training period (Day 11), and the day following the active recovery period (Day 16), the participants completed an abbreviated Profile of Mood States questionnaire and provided venous blood samples. On Days 1, 11, and 16, running performance was assessed using a timed treadmill test to exhaustion. The data demonstrated that the participants were under significant physiological stress during the training period. There was a significant decline in performance from Day 1 to Day 11 accompanied by lowered glucose levels. Subjects had increasing difficulty in completing the prescribed exercise and reported a variety of symptoms related to fatigue (e.g., emotionality, concentration difficulties, sleep problems, and appetite changes). The mood states questionnaire revealed a significant increase in fatigue and total mood disturbance as the training sessions continued. Mood and performance measures moved toward baseline after the recovery period, but failed to reach initial levels. Significant decreases in natural killer cell activity were apparent after 5 days of intensive training and were still present after the recovery period. The authors suggested that psychological monitoring of overtraining may be useful, and that the relationship between psychological and physiological variables may lead to early diagnosis and treatment.


**Gymnasts’ Moods During Competition and Training**

Six A-level (trained 20 hours per week) female gymnasts and 8 B-level (trained 12–15 hours per week) female gymnasts completed the Telic State Measure and the Stress Arousal Checklist immediately before and after performances during two training sessions and two competitions. During training and competition, the A-level gymnasts reported similar levels of felt arousal, preferred arousal, arousal discrepancy, and effort. The less successful B-level gymnasts, however, reported higher levels of felt arousal and arousal discrepancy (between preferred and felt arousal) before competition than before training, and similarly had higher levels of effort during competition than during training. The level-B gymnasts also reported higher levels of precompetition felt arousal than did level-A gymnasts. The authors suggested that the B-level gymnasts may benefit from increasing arousal prior to training and maintaining the desired arousal level during training, as well as reducing precompetition arousal. The B-level gymnasts were found to be more serious than the A-level gymnasts before and after training. If the less serious approach of A-level gymnasts is more effective for training, then B-level coaches might encourage a more playful approach to training.