

AROUSAL AND ANXIETY IN SPORT

Burton (1988) 'Do Anxious Swimmers Swim Slower?' Re-examining the elusive anxiety-performance relationship. Journal of Sport and Exercise Psychology Vol 10

Method: Correlation Study

Aim: To examine the relationship between anxiety and performance in competitive swimmers, using a multi-dimensional approach.

Participants: In order to test all hypotheses, two separate samples were required. Sample 1 consisted of 15 male and 13 female collegiate swimmers aged 18-23. Sample 2 consisted of 31 male and 39 female collegiate swimmers mean age 17.4 years. All swimmers were volunteers and informed consent was gained.

Hypotheses:

- Cognitive anxiety is more consistently and strongly related to performance than is somatic anxiety.
- Somatic anxiety demonstrates an inverted- U relationship with performance, whereas self-confidence and performance exhibit a positive linear relationship and cognitive anxiety and performance exhibit a negative one.
- Short duration and high and low complexity events demonstrate stronger relationships between somatic anxiety and performance than do long duration or moderate complexity events.

Procedure: All participants completed the CSAI-2 which measures cognitive state anxiety, somatic state anxiety and self-confidence.

- Sample 1 completed the CSAI-2 three times during the swimming season – early, mid and late season.
- Sample 2 completed the CSAI-2 twice, firstly following a practice session 2 days prior to competition, and secondly, 1 hour prior to the swimmer's most important race of the competition.
- Performance was measured by comparing a swimmer's performance in each race with their previous Personal Best and subtracting the PB from their time in this competition. These figures were then adjusted so that comparisons could be made between races of different distances.

Results: Correlational analysis of results confirmed all three hypotheses. The general conclusions reached were:

- Cognitive anxiety has a more damaging effect on performance than somatic anxiety.
- The three dimensions of anxiety have different effects on performance.
- Somatic anxiety is more damaging to short duration and high and low complexity events than long duration or moderate complexity events.
- Anxious swimmers do swim slower.

