Research Inadequacies in Sport Psychology

The authors of this paper suggest that research in sport psychology has been limited by a number of methodological flaws. They note that many of the questionnaires utilized by researchers in our field have been developed using deterministic methods and may not possess adequate reliability and validity. The Rasch model is presented as an alternative to deterministic procedures for test development, and the application of Rasch techniques is explained using sample items from Spielberger's STAI. The authors also comment on the use of inadequate sampling procedures by sport psychology researchers, the need for standardization of terminology and treatments, the benefits of combining quantitative and qualitative methods, and the advantages of using single-subject designs to study sport-related phenomena. Although many of these issues have been discussed elsewhere, Tenenbaum and Bar-Eli contend that this paper both discusses them in an integrated fashion and focuses specifically on their manifestations within the sport domain.


Abbreviated POMS

Grove and Prapavessis provide preliminary data on the reliability and validity of a 40-item mood state inventory based on the POMS (McNair et al., 1971). Selected items were retained for the traditional subscales of tension, depression, anger, vigor, fatigue, and confusion, and additional items were added to assess emotions associated with self-esteem. The inventory was then administered to 45 netball players after competition, and the psychometric properties of items and subscales were evaluated. In general, the correlations among items and subscales were appropriate, and the internal consistency of subscales was adequate (range = .66-.95; mean = .80). All subscales except fatigue also showed significant differences in the expected direction when compared across winning and losing outcomes. The authors conclude that this inventory may be particularly useful when economy of assessment is important, and they make suggestions for modifications to the individual subscales based on the item analysis results.


How Athletes Cope With Stress

Although coping processes are recognized as important mediators of stress responses among athletes, research on coping in sport has been limited by the absence of appropriate assessment tools. In this study, Crocker used a sport-oriented modification of the Ways of Coping Checklist (WCC; Folkman & Lazarus, 1985) to examine how athletes cope with stress. Modifications to the WCC included deletion of 4 original items, addition of 6 new items, and rewriting
of items to correspond to a Grade 5 reading level. The inventory was then administered to 237 competitive athletes (118 women and 119 men) who were instructed to indicate how frequently they used the various coping strategies. Factor analysis of responses indicated that athletes used eight general methods of coping with sport-related stress: active coping, problem focus, social support, positive reappraisal, wishful thinking, self-control, detachment, and self-blame. The author concludes that his modification of the WCC is an advance in the measurement of coping processes among athletes, but that further scale development is warranted to reflect theoretically and functionally distinct ways of coping in sport.


### Intrinsic Motivation in Physical Education

An intrinsic motivational orientation is generally regarded as an important, if not essential, aspect of learning and performance. Given the role of intrinsic motivation in achievement, the development of reliable and valid scales of intrinsic motivation has been a major research goal. The purpose of this research was to examine the merits of Harter's (1980) Intrinsic Versus Extrinsic Orientation in the Classroom Scale for physical education settings. Subjects were 122 British school children with an average age of 12.3 years. The wording of Harter's scale was modified to make it appropriate for use in physical education and sport contexts. In their study, Biddle and Brooke did not find the same five-factor structure that Harter uncovered for academic motivation. However, the internal reliability of items on each of Harter's original subscales was adequate. Furthermore, relatively high correlations existed between scores on three of the subscales with a measure of endurance run performance, thus indicating construct validity for the measure. The researchers addressed differences in physical education programs in American and British schools as one reason for the mixed findings.


### Perceptions of Challenge and the Physically Disabled

Scant research attention has been devoted to the psychological correlates of sport and physical activity participation for the physically disabled. The purpose of this research was to assess relationships among cognitive appraisal processes, affective outcomes, and participatory behavior for 55 adults with physical disabilities. Cognitive appraisal variables included motives for involvement, task value, self-confidence, and perceived control. Affective characteristics included both positive and negative affective outcomes. The researchers found that appraisals related to motives for engaging in physical activity, including health and fitness, skill learning, demonstrating competence, and seeking social approval, were all related to pleasurable aspects of physical activity. Furthermore, higher task importance and greater effort were also related to positive affective experiences. The authors concluded that subjective appraisal processes are very