Running head: PERSPECTIVES ON MOOD

Introduction to the Special Issue:

Perspectives on Mood in Sport and Exercise

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**Guest Editor** 

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The link between physical activity and mood is perhaps one of the most intuitively appealing relationships in the whole area of sport and exercise psychology. Failure to "get in the right mood" seems to be a common attribution for poor performance by athletes, while mood enhancement appears to be an important motive for participation among exercisers. However, intuitive appeal and empirical support is not the same thing, a distinction confirmed by the equivocal nature of research findings pertaining to mood and physical activity. Answers to the frequently investigated research questions, "Does exercise enhance mood?" and "Can mood predict athletic performance?" have been characterized by a cautious "yes" qualified by a substantial list of "if's" and "but's."

Since the pioneering research efforts of William Morgan and colleagues in the 1970's, efforts that still continue today, attitudes toward mood-performance relationships in sport have passed through periods of sustained credibility to increasingly skeptical scrutiny. Morgan demonstrated that the scores of athletes on the Profile of Mood States (POMS: McNair, Lorr, & Droppleman, 1971), particularly at an elite level, were characterized by the now famous iceberg profile, combining high vigor with low tension, depression, anger, fatigue and confusion. This finding subsequently led to the POMS being proclaimed in Psychology Today as the "test of champions" (Morgan, 1980).

The veracity of this claim and the significance of an iceberg mood profile have been challenged in more recent review articles (e.g., Renger, 1993; Rowley, Landers, Kyllo, & Etnier, 1995). Indeed, Renger (1993) went as far as calling for researchers to "abandon the POMS" (p.83) in research on successful and unsuccessful athletes. As the reader will discover, there is much support within these pages for the basic tenets of

Morgan's (1985) Mental Health Model and hopefully much information that moves beyond simply espousing the benefits of a particular mood profile.

This special issue of the <u>Journal of Applied Sport Psychology</u> is devoted to a range of theoretical, measurement, and empirical issues in the area of mood research. It brings together some of the most influential researchers in the field, who offer different perspectives on the extant literature. The special issue is intended to provide a valuable resource for researchers of mood in the sport and exercise environments, offering new theoretical perspectives, comprehensive reviews of the literature, normative data for sport and exercise, and a bibliography of the most recent publications in the area.

The special issue grew out of discussions that took place at the 1996 annual conference of the Association for the Advancement of Applied Sport Psychology, during a workshop on the use of the POMS in sport and exercise research. Hence, emphasis in the special issue is given to research where the POMS was used as the measure of mood. This is not to infer that the POMS is seen as a superior measure of mood responses to alternative measures such as the Positive and Negative Affect Scale (Watson, Clark, & Tellegen, 1988). Indeed, the theoretical paper by Lane and Terry stresses that the best choice of measure depends primarily on the exact nature of the research question, notwithstanding questions of psychometric integrity.

The opening article by LeUnes and Burger provides an overview of past research in the area and predictions of future research thrusts. The authors identify common research themes, frequently investigated groups of participants, and prominent researchers of mood in sport and exercise environments. They also discuss some of the

topical areas of investigation occupying the efforts of contemporary researchers and engage in some educated crystal ball gazing of where research efforts are heading.

The second article by Lane and Terry addresses some of the fundamental theoretical questions in mood-performance research. A legitimate criticism of this area of investigation has been that it is typically lacks a strong, or any, theoretical underpinning and in consequence developments have been data-driven rather than theory-driven. In particular the lack of clarity in defining the mood construct, especially its differentiation from related constructs such as affect and emotion, has resulted in conceptually confused and sometimes misguided research, perhaps helping to explain the equivocal nature of findings. The authors present a conceptual model to explain relationships between individual mood dimensions and athletic performance, which proposes a pivotal influence for the dimension of depressed mood.

The link between mood and sport performance also provides the focus for two further articles, a narrative review by Prapavessis and an empirical review by Beedie, Terry and Lane using meta-analysis techniques (Hedges & Olkin, 1985). In the first of these review articles, Prapavessis discusses some of the interpretative, conceptual and methodological issues in the area, to provide direction for future research. His critical review offers many suggestions for improving the research design of investigations into relationships between mood and performance. A major thrust of his argument is for idiographic approaches that account for individual differences in mood responses. Specifically, Prapavessis proposes the use of Hanin's Individual Zones of Optimal Functioning (IZOF) model (Hanin, 1995) to help gain insight into the impact of fluctuations in mood upon sport performance.

Next comes a meta-analysis paper by Beedie, Terry and Lane that investigates two of the most salient questions in the mood-performance literature, "Can mood predict the level at which an athlete competes?" and "Can mood predict the quality of an athlete's performance?" A previous meta-analysis of the mood literature (Rowley et al., 1995) came to the conclusion that the iceberg profile accounted for less than 1% of the variance in performance outcome. The re-evaluation of the literature by Beedie and colleagues supports Rowley et al.'s notion of minimal prediction of achievement level from mood but concludes that the prediction of performance from mood yields moderate effects when certain conditions are met.

In the next article of the special issue Berger and Motl review and synthesize the literature pertaining to relationships between exercise and mood alteration, an area of substantial relevance to the public health domain. Their review, which focuses specifically on studies using the POMS, provides supporting evidence of relationships between exercise and acute mood changes in normal populations and between exercise and chronic mood changes in clinical populations. The authors critically review evidence of the mood-enhancing properties of different exercise modalities and discuss the mechanisms that promote mood changes. Additionally, in the light of recent research, they discuss an exercise taxonomy, originally presented by Berger and Owen (1988), for predicting the types of exercise and training considerations that are likely to be associated with significant mood enhancement.

Given the persistent research interest in mood responses among sport and exercise participants, it is surprising that most researchers have continued to use the original tables of normative data established by McNair et al. in 1971, which were based on the

responses of psychiatric outpatients rather than athletes, as a point of comparison for their data. The paper by Terry and Lane provides extensive normative POMS data, based on the mood responses of more than 2,000 sport and exercise participants. Their data demonstrate quite clearly that the iceberg profile is the normal pattern of mood response for those involved in athletic pursuits.

The final contribution to the special edition by LeUnes, a bibliography of recent studies using the POMS or its derivatives, reflects the burgeoning literature in the field. A previous bibliography (LeUnes & Burger, 1998) cited 258 papers published during the period 1971-1998. The extent of the growth in research activity is illustrated by the fact that the present bibliography includes a further 57 papers, using the POMS as the measure of mood, published since 1997.

It is hoped that this special issue of <u>JASP</u> will fire the enthusiasm of investigators of mood in sport and exercise, acting as a catalyst for future research efforts. Doubtless it will cause some to challenge the views presented, perhaps it will provide direction to others who seek to tackle the partly answered and unanswered questions put forward. Mostly, it is intended to inform the efforts of young, aspiring researchers. They will, in the fullness of time and with due diligence, understand it all far better than we do.

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I sincerely appreciate the diligence and patience of the contributors to the special issue and gratefully acknowledge Bob Weinberg for his helpful comments on an earlier draft of this paper.

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