Comparisons of Successful and Unsuccessful Competitors: A Reconsideration of Methodological Questions and Data

Steven R. Heyman
University of Wyoming

A series of articles have compared the psychological profiles of successful and unsuccessful athletes (Gould, Weiss, & Weinberg, 1981; Highlen & Bennett, 1979; Mahoney & Avener, 1977; Meyers, Cook, Cullen, & Liles, 1979). In some of these studies, psychological tests were administered to athletes prior to a competitive event, and following the competition the profiles of the successful and unsuccessful athletes were compared (Gould et al., 1981; Highlen & Bennett, 1979). In other studies measures of performance, such as ratings by coaches or rankings, were correlated with psychological test scores (Mahoney & Avener, 1977; Meyers et al., 1979). Tentative suggestions for interventions were advanced by these researchers based on the relationships found between the psychological test results and the performance criteria.

Although the studies cited were reasonably cautious about the interpretations of their findings, two major points suggest a reconsideration of these studies. First, the methodological procedures in these studies were exploratory and only a limited number of variables were considered. Factors not included in these studies may have contributed significantly to the performance measures. Second, although the studies were cautious in their conclusions and recommendations, they could be misunderstood by those grasping for variables that might relate to winning and by those who might mistake correlational data for causal relationships. At this point it is best to review the studies and the conclusions of the researchers before proceeding with a critique.

Mahoney and Avener (1977) found differences between successful and unsuccessful Olympic gymnastic contenders in dream frequency, self-verbalizations, certain forms of mental imagery, anxiety patterns, and methods of coping with competitive stress. Meyers et al. (1979) found successful competitors to be more self-confident, with thoughts of their sport more likely to pervade their daily thoughts and dreams, and to have imagery containing successful performances. Highlen and

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Requests for reprints should be sent to Steven R. Heyman, Department of Psychology, University of Wyoming, Box 3415 University Station, Laramie, WY 82071.
Bennett (1979) compared qualifiers and nonqualifiers for elite Canadian wrestling teams. They found qualifiers to be significantly higher on self-ratings of confidence, believing themselves closer to reaching their maximum athletic potential, seeing themselves as better able to block anxiety 1 hour prior to competition, and having fewer negative self-thoughts 1 hour prior to competition. In a discriminant analysis, using four variables (confidence, maximum potential, distracting responses to anxiety, and hours in training), 85% of the wrestlers were correctly categorized as to qualification or failure to qualify. Gould et al. (1981), comparing placers and nonplacers in a Big Ten Wrestling Tournament, found individuals who placed rating themselves significantly closer to reaching their maximum potential, being more self-confident, more frequently preparing for a meet by using attentional focusing, and seeing themselves as being more positively affected by being the underdog. In a discriminant analysis using 10 of 22 questionnaire variables, 95% of the placers and 97% of the nonplacers were correctly classified.

Gould et al. (1981) are the first to consider an important factor omitted in the previous studies: the past history of the athletes. They found that the 49 wrestlers had won an average of 58.8% of their matches prior to competition. They classified wrestlers as above or below this average and repeated the comparisons on psychological factors. Significant differences included the above-average group who believed they were closer to achieving their maximum potential, used greater attentional focusing, and had greater self-confidence. In a discriminant analysis using 10 of 22 questionnaire items, 85% of the above-average wrestlers and 95% of the below-average wrestlers were correctly classified.

Each of the studies reviewed, although cautiously, advanced suggestions for the psychological training of athletes, presumably to assist the athletes in resembling the more successful psychologically, and perhaps, therefore, in performance as well. Mahoney and Avener (1977) note:

> When systematically addressed via structured meditation exercises . . . these cognitive phenomena (dreams, fantasies) may also become a means to therapeutic improvement. The athlete can learn, for example, to monitor and modify specific performance-related images. Would training and practice in “internal” imagery improve athletic performance? (pp. 140-141)

Meyers et al. (1979) report:

> Better performers were more self-confident and revealed less self-doubt. Their sport was more likely to pervade their everyday thoughts and their dreams and imagery were more likely to contain successful performances. The champion athletes coped more easily with competitive mistakes and were able to control and effectively utilized the anxiety produced by competition. We concur with Mahoney and Avener (1977) that findings such as these should lead to therapeutic trials designed to improve athletic performance. (p. 366)

Highlen and Bennett (1979) note “interventions for improving concentration and for dealing with counterproductive anxiety could be devised and tested. Incorporation of such strategies into training programs, however, should await empirical verification of their efficacy” (p. 136). Gould et al. (1981) state “because self-confidence was consistently found to be one of the most important variables related to athlete success, it should be examined in more controlled field experiments . . . .