COMMENT

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With Regard to the Social Physique Anxiety Scale
(Conceptually Speaking)

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In recent years, self-presentational theoretical perspectives have enjoyed increased attention by sport and exercise psychology researchers. Much of the growth in interest can be traced to Journal of Sport & Exercise Psychology articles by Leary (1992) and Hart, Leary, and Rejeski (1989) outlining the premises of the underlying theory and a variety of relevant hypotheses about behavior in exercise and sport settings. These hypotheses have held up very well under empirical examination. It appears that the interest in self-presentational processes for explaining behavior in sport and exercise settings is merited.

The social physique anxiety construct has been central in a number of investigations testing self-presentational hypotheses. Unfortunately, the instrument developed to measure the construct, the Social Physique Anxiety Scale (SPAS, Hart et al., 1989), has exhibited troubled psychometric properties. In the most recent evaluation of the SPAS, Martin, Rejeski, Leary, McAuley, and Bane (1997) provided evidence for a unidimensional SPAS model using nine of the original 12 items. Their report contributes to the extant literature by presenting a conceptual argument for the reduced unidimensional model and by presenting results suggesting that their unidimensional model exhibits psychometric integrity. In making their argument, Martin et al. (1997) were critical of a previously reported investigation evaluating the factorial validity of the SPAS that I authored with Diane Stevens (nee Mack) and Elizabeth Hart (i.e., Eklund, Mack, & Hart, 1996). Unfortunately, the nature and the tone of Martin et al.’s (1997) criticism of our work is both curious and disappointing. Thus, the purpose of this commentary is to identify and respond to some troublesome aspects of Martin et al.’s (1997) critique, and to encourage careful consideration of the balance of their criticisms by sport and exercise psychology researchers. No study is beyond reproach, and certainly Martin et al. (1997) make several valid observations about our report. Careful consideration of the commentary in the two articles and of the literature cited therein, however, reveals many of their criticisms to be dubious.

The purpose of our investigation (Eklund et al., 1996) was to evaluate the comparative adequacy of three psychometric models for the 12 SPAS items that had been previously proposed by sport psychology researchers. The first of these models was the troubled unidimensional model originally proposed by Hart et al.

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(1989). The second and third models were multidimensional models based upon exploratory analyses of the SPAS featuring two first-order factors (characterized by Cramer-Hammann, Lutter, Cornelius, Piontek, & Hardy, 1993, as “Expectations of Negative Physique Evaluation” and “Physique Presentation Comfort”) and commentary by McAuley and Burman (1993). Specifically, McAuley and Burman (1993) indicated:

A further issue concerns whether indeed the SPA is a unidimensional construct representing social physique anxiety or whether it may be composed of more than one first-order factors underlying a single second-order factor. Some unpublished reports exist to support the proposition that two factors may underlie the SPA. (p. 1052)

On the basis of our double cross-validation analyses of data from two large samples (n = 340 in both instances), we concluded that the higher-order factor model (or the statistically equivalent correlated two-factor model) was the most adequate among the a priori specified models for the 12 SPAS items. Within this model, we noted that Factor 2 (Expectations of Negative Physique Evaluation) was conceptually consistent with the social physique anxiety construct. We also expressed concern about the conceptual nature of Factor 1 (Physique Presentation Comfort). We did not explicitly posit any unidimensional models based upon a reduced number of SPAS items or conduct any a posteriori analyses in this regard. We simply recommended further investigation to resolve the identified conceptual inconsistency, and we made recommendations for the use of the SPAS on the basis of our results. Martin et al. (1997) appear to believe that we should have gone further—or better yet, that we should have conducted a different investigation. In particular, Martin et al. (1997) took strong exception to our inclusion of the extant multidimensional models (including the “misdirected hierarchical model,” p. 361) in our analyses—apparently we were not supposed to take McAuley and Burman’s (1993) contentions seriously.

As a central criticism, Martin et al. (1997) argued that, conceptually speaking, the social physique anxiety construct is not multidimensional and that the face validity of the Physique Presentation Comfort factor is suspect in any event. Although unacknowledged by Martin et al. (1997), our report reveals that we agree that the multidimensional model is conceptually problematic. In fact, because the conceptual basis of the social physique anxiety construct was salient to us, the first issue that we addressed in discussing our findings was precisely on this point. We indicated:

Conceptually, however, there is a need for further investigation of the SPAS. Specifically, social physique anxiety was conceived as a “subtype of social anxiety that occurs as a result of the prospect or presence of interpersonal evaluation involving one’s physique” (Hart et al., 1989, p. 96). It appears that Factor 2 (expectations of negative physique evaluation) most closely approximates this conceptualization. Factor 1, on the other hand, deals with a related notion (physique presentation comfort), but one that arguably falls outside the purview of the construct conceptualization. (Eklund et al., 1996, p. 292)

Martin et al. (1997) also criticized our investigation by contending that a few questionable indicators among the 12 SPAS items likely compromised the fit of