SELF-PRESENTATION IN SPORT: INITIAL DEVELOPMENT OF A SCALE FOR MEASURING ATHLETES’ COMPETITIVE SELF-PRESENTATION CONCERNS

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Self-Presentation theory explains some of the underpinnings of anxiety/stress in competitive sport (Leary, 1992). James and Collins (1997) revealed that Competitive Self-Presentation Concerns (CSPC) are implicated in some competitive anxiety/stress experienced by athletes. Measures are therefore needed to assess athletes' CSPC. This study's aim was to develop such a tool. Four subscales were proposed and were supported by a confirmatory factor analysis (GFI = 0.92). These were as follows: concern over the impression made on others; fear of appearing incompetent; concern over current form, and fear of appearing unable to cope with pressure. The scale's temporal stability and internal consistency were acceptable - but limited convergent validity was demonstrated. Recommendations are made for the scale's application and further development.

Stress and anxiety are aspects of competitive sport which have long been of interest to sport psychology researchers and applied consultants. This issue remains on the contemporary agenda, for instance, the association between anxiety and performance was one of the three areas discussed by Hardy (1997) in his recent Coleman Roberts Griffiths Address, “Three Myths About Applied Consultancy Work”. Here, Hardy (1997) outlines the need to consider not just the

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debilitative effects, but also the facilitative effects, of anxiety for sports performance. From an applied perspective, the management of competitive stress and anxiety will be more effective if treatment and intervention strategies are directed at the source of this stress and anxiety (Martin & Mack, 1996). Recent studies have attempted to increase understanding of the sources of athletes’ competitive stress and anxiety, and to identify theoretical perspectives for investigating the underpinnings of competitive stress in sport. One such theoretical perspective is Self-Presentation (SP) Theory (James & Collins, 1997; Leary, 1992, 1995). Self-Presentation, also known as Impression Management, refers to the processes which we employ in our efforts to manage the impressions which are conveyed to others (Schlenker, 1980). Impression management pervades throughout all areas of our lives, and Leary (1992) proposes that people’s outcomes in life depend to some extent upon their conveying impressions which lead others to respond in desired ways. For example, when being interviewed for a job interviewees will strive to create a desired impression in order to demonstrate that they are a suitable candidate; they may arrive early for the interview, they may dress in a smart manner, and they may show interest and confidence by maintaining eye contact with the interviewer. By conveying desirable impressions, the interviewee is attempting to lead the interviewer into responding in the desired way - selecting them for the job. Whilst we are often conscious of the efforts we are making to impression manage, as in the above instance, equally often, we are unaware of the impression management connotations of our behaviors and public appearance (Leary, 1992).

Leary (1992) suggests that the nature of competitive sporting events makes impression management of paramount concern to athletes. For instance, the presence of significant others, such as squad selectors, who can mediate the athlete’s achievement of valued outcomes may heighten their motivation to impression manage. Consequently, Leary (1992) contends that the competitive stress which many athletes experience is largely attributable to the self-presentational implications of the competitive sporting experience rather than to the competitive experience itself. For example, the athlete may suffer stress due to feeling unable to create the impressions which would lead to the attainment of desired outcomes such as team selection. This perceived inability to create desired impressions is referred to as low self-presentational efficacy. Moreover, although it is possible to identify competitive sport stressors which do not have underlying self-presentational implications, for example, financial constraints (Gould, Jackson & Finch, 1993) it can be argued that a number of stressors which seem to have no immediate self-presentational implications may be ultimately underpinned by self-presentation concerns. For example, a member of a soccer team reduced to 10 players due to a poor refereeing decision may feel increased stress due to the anticipation of increased attacking from the opposition, and thus an increased probability of defeat.
Although the stress resulting from the referee’s decision is not caused directly by self-presentation concerns, it may be suggested that the increased probability of defeat has self-presentational implications in terms of presenting a favorable image of the team to significant others. Considering the continuing need to understand the roles and causes of stress and anxiety in athletic performance, as recommended by Wilson and Eklund (1998), there is clearly a need to conduct thorough and direct investigations of Leary’s (1992) proposals.

A body of research is emerging which lends support to the suggestion that much of the stress experienced by athletes is largely attributable to self-presentational factors. Martin and Mack (1996) revealed that, for females, Social Physique Anxiety (SPA) and Physical Self Presentation Confidence (PSPC) are significant predictors of competitive trait anxiety (A-trait). SPA is anxiety resulting from the perception that others are negatively evaluating one’s physique (Hart, Leary & Rejeski, 1989) and PSPC refers to confidence in using or displaying one’s body in front of an audience (McAuley & Burman, 1993). Clearly, based on the previous discussion of the nature of self-presentation, these are constructs which carry self-presentational implications for the individual.

Using both multi and unidimensional measures of competitive A-trait, James and Collins (1995) have provided further evidence that a number of SP constructs are predictive of competitive A-trait. Their research revealed that females’ scores on the unidimensional Sport Competition Anxiety Test (Martens, Vealey & Burton, 1990) were predicted by Public Self Consciousness (Fenigstein, Scheier & Buss, 1975) and SPA. Scores on the worry dimension of the Sport Anxiety Scale (Smith, Smoll & Schultz, 1990) were predicted by Other Directedness (Briggs, Cheek & Buss, 1980) and Public Self Consciousness scores. Finally, females’ scores on the somatic dimension of the Sport Anxiety Scale were predicted by Other Directedness scores. For males, scores on the concentration disruption and worry dimensions of the Sport Anxiety Scale were predicted by, respectively, scores on the Other Directedness and Fear of Negative Evaluation (Leary, 1983) scales. Public Self Consciousness refers to the tendency to think about the external or public aspects of the self (Briggs, Cheek, & Buss, 1980) and Other Directedness refers to an orientation towards others, such as pleasing others or conforming to the social situation (Briggs, Cheek & Buss, 1980). Fear of Negative Evaluation refers to the degree to which people experience apprehension at the prospect of being negatively evaluated by others (Leary, 1983). Again, these are all constructs which represent a tendency towards concern over impression management. More recently, Wilson and Eklund (1998) have used structural equation modeling to examine the factors which predicted the sport-related self-presentational concerns of approximately 200 American University athletes. In support of Leary’s (1992) proposal, their results indicated a close association between the athletes’ competi-
tive A-trait and their tendency to perceive that competition carries threatening self-presentational implications. This was particularly the case for cognitive anxiety, suggesting, as has previous research (e.g., Parfitt, Jones & Hardy, 1990) that somatic and cognitive anxiety do not have similar antecedents. Whereas cognitive anxiety may result from the athlete’s expectations and related perceptions, somatic anxiety may, instead, represent conditioned responses to environmental stimuli, e.g., arriving at the competition venue (Parfitt et al., 1990).

A qualitative study undertaken by James and Collins (1997) indicated the importance of impression management in sport, revealing that the athletes in their study believed impression management to be instrumental in both career and identity development. During semi-structured interviews, athletes from a range of sports were asked to discuss the sources and underpinnings of their competitive stress. In line with Leary’s (1992) reasoning, the athletes suggested that impression management was a determinant of their competitive stress and, based on the athletes’ comments, the authors were able to identify the self-presentational factors underpinning these stressors. Forty-eight raw data themes were produced, from which eight general dimensions could be ascertained. The stressors cited are listed below. The percentage in parentheses which follows each stressor indicates how often self-presentational factors were thought, by the authors, to underpin each of the stressors. Significant other stressors (81.25%); competitive anxiety and doubts (59.3%); perceived readiness issues (45.5%); nature of competition (71.5%); not performing to the required standard (81.8%), and environmental demands (66.7%). These results clearly demonstrate that self-presentation concerns are implicated in the generation of athletes’ competitive stress. These initial studies indicate that self-presentation theory does appear to offer a suitable framework for investigating and understanding the basis of competitive stress in sport. It is evident that athletes’ competitive stress is underpinned not only by physique-related self-presentation concerns, but also by competitive, or athletic, self-presentation concerns. Such competitive or athletic self-presentation concerns, as revealed in James and Collins’ (1997) study, include worries about making mistakes and competing when training has not been going well. These self-presentation concerns are likely to represent a source of stress for the athlete as their self-presentational efficacy will be diminished, thus reducing the likelihood of conveying the desired image to the target of their impression management efforts. In addition, the athlete’s impression motivation is likely to increase in an attempt to reduce the discrepancy between the desired and actual images which are portrayed to significant others, and the anxiety which is experienced by this perceived discrepancy.

Wilson and Eklund (1998) have highlighted the need to investigate self-presentational concerns in areas other than those related to the athlete’s physique, and to develop tools for assessing these competitive self-presentation concerns.
This was also the premise for conducting the current study - to develop a valid and reliable scale which can be used to assess athletes’ competitive self-presentational concerns (CSPC). This is the first stage in the thorough and direct investigation of Leary’s (1992) application of a self-presentational framework to the competitive sporting experience for which Wilson and Eklund (1998) have called. With the use of appropriate instrumentation, the role of self-presentation in competitive sport can be more clearly understood, for instance, in relation to the competitive stress and anxiety which the athlete may experience. The results of empirical investigations can then be employed to make applied recommendations for managing competitive stress and anxiety which are based firmly within a theoretical framework. Hence the aim of the study reported here was to develop an instrument which will assess the athletes’ competitive or athletic, self-presentational concerns.

Since we embarked on the collection and analysis of data for this study, as part of their recent investigation into the predictors of competitive A-trait (as discussed previously), Wilson and Eklund (1998) have developed a measure of athletes’ SPC - the Self-Presentation in Sport Questionnaire (SPSQ). This is a four factor, 33 item measure; the four factors are as follows: SPC about performance/composure inadequacy (SPSQ-PCI); SPC about appearing fatigued/lacking energy (SPSQ-FLE); SPC about appearing athletically untalented (SPSQ-AAU), and, SPC about physical appearance (SPSQ-PA). Whilst reported levels of internal consistency were high, neither the test-retest reliability nor the convergent validity of the SPSQ was assessed. Research into self-presentational processes in sport and exercise is evidently still in its infancy, as is the development of instruments with which to explore these processes and their implications. Hence, whilst current research (i.e., Wilson & Eklund, 1998), although not comprehensive, documents the development of an existing measure of SPC in sport, we would nevertheless assert that the present study offers a worthwhile contribution to the relevant body of literature.

**METHOD**

**PARTICIPANTS**

A convenience sample of 224 volunteer undergraduate Sport Science students studying at a United Kingdom University participated in this study. The sample ranged in age from 18 to 45 years (mean age of 21 years) and comprised students from all three years of the degree course. One hundred and fifty participants identified themselves as male, 65 as female and 9 participants failed to indicate their sex. A wide range of sporting abilities was represented in this sample, from Club/University competitors to National standard athletes. Similarly, the participants competed in a range of individual and team sports. Details concerning competi-
tive level and sport played were not requested from participants, as the data were not analysed in relation to these factors. This general information about levels of competition and sports played was already known to the second author in her capacity as a lecturer on the degree course. One condition which was deemed necessary for participants’ inclusion in the study was that they currently engage in competitive sport at any level.

**PROCEDURE**

Groups of participants completed all measures prior to either a scheduled lecture or seminar. Instructions were, therefore, group-administered — but the second author was present to deal with any individual queries which arose. The measures which were completed by the participants were as follows: the 16 item Competitive Self-Presentation Concern Inventory (CSPCI), and, to assess the CSPCI’s convergent and discriminant validity, the Other Directedness scale (Briggs et al., 1980); Social Physique Anxiety Scale (SPAS: Hart, Leary & Rejeski, 1989), and the Physical Self Presentation Confidence subscale of the Physical Self Efficacy Scale (Ryckman et al., 1982). Physical Self Presentation Confidence (PSPC) is a measure of the individual’s confidence in the presentation of physical skills, and, as such, carries a self-presentational component.

To assess the temporal stability of the CSPCI, five weeks after their initial participation, a subset of the total sample, again selected on the basis of convenience, completed the CSPCI a second time. This subset, which totalled 141, comprised 47 females and 94 males and covered the same age range as the total sample.

**ITEM DEVELOPMENT**

In what we would consider to be the first comprehensive, direct attempt to discuss sport and exercise behavior from a self-presentational perspective, Leary (1992) identified a number of outcomes or goals which may influence the impression motivation of athletes. These are, to be perceived as physically attractive, fit and athletic, competent, and possessing the ability to cope with pressure. This suggests that the attainment of these goals is of concern to the athlete, and thus led us to postulate the existence of the following CSPC factors: concern over current form (CSPCI-FORM); fear of appearing incompetent (CSPCI-INCOMP); concern over others’ impressions (CSPCI-IMPRESS), and fear of appearing unable to cope with pressure (CSPCI-PRESS). Support for these factors has been provided by a recent qualitative study. Using the comments of athletes, James and Collins (1997) identified a number of raw data themes which reflected the CSPC previously discussed by Leary (1992) and from which items in the current scale were developed. Martens (1987) has suggested that sport psychologists should not ignore the value of methods of knowing other than orthodox science. In
such method, discussed by Dale (1996), is the phenomenological approach to understanding the athlete’s experience. Here, first-person accounts are employed to provide subjective analysis of the athlete’s own experience. Hence, our approach to item development was aligned with this philosophical perspective and based on themes generated by athletes themselves (James & Collins, 1997) - rather than by a panel of relevant experts. Dale (1996) goes on to quote Ravizza’s (1993) view that athletes are the real experts, lending further support to the approach adopted here. Some readers may experience concerns over the generalisability of the competitive self-presentational factors derived from a limited number of sources. However, the fact that James and Collins (1997) found little disparity between the comments of athletes from a wide range of sports (from soccer to dressage) should serve to alleviate any concerns of generalisability.

The 16 items which were identified are listed in Table 2, and were proposed to cluster into four different factors which are based on the outcomes of James & Collins’ (1997) research. The first factor (concern over others’ impressions: CSPCI-IMPRESS) was expected to comprise the following items: 1, 3, 4, 6, and 8. The second factor (fear of appearing incompetent: CSPCI-INCOMP) was expected to consist of items 2, 5, 7, and 9. Factor three (fear of appearing unable to cope with pressure: CSPCI-PRESS) was expected to load items 10, 11, and 12, whilst the fourth factor (concern over current form: CSPCI-FORM) was expected to load items 13, 14, 15, and 16. Three different stems (shown in Table 2) were constructed to invite responses to different groups of questions and a four point Likert scale, anchored with (1 = not at all) and (4 = very much so) was used to allow subjects to record their responses to each item.

RESULTS

MODEL TESTING: RATIONALE & STRATEGY

It was expected that a four-factor model would adequately explain the data and display acceptable convergent and divergent validity. Data were therefore subjected to confirmatory factor analysis (CFA) using LISREL 8.12 (Jöreskog & Sörbom, 1993a) statistical package. The PRELIS 2.12 (Jöreskog & Sörbom, 1993b) pre-processor package was used beforehand to check for homogeneity and to generate the required matrices to input into the LISREL program. This revealed that item 13 was outside the criteria for the homogeneity assumption, and, based on theoretical reasoning, was excluded from the subsequent CFA.

ASSESSMENT OF MODEL FIT

The criteria for the assessment of fit were as follows: Jöreskog & Sörbom (1981) recommended that the \( \chi^2 \) value be used as an index of goodness (or badness) of fit; they evaluated it in relation to its degrees of freedom. The \( \chi^2/df \) was initially used
to evaluate improved fit in re-specified measurement models and not as an index of fit, more recently it has been supposed that, by dividing the $c^2$ by the $df$, more information could be gained from the data. Bollen (1989), however, advises that this index should be used with caution.

The root mean square error of approximation (RMSEA) (Steiger, 1990) looks at the lack of fit of a model to the population covariance matrix due to the imprecision or error of approximation, inherent in the assessment of fit indices from sample values. Steiger (1990) suggested that a value under 0.05 would indicate a close fit, and 0.08 a reasonable fit.

The Goodness of Fit Index (GFI) (Jöreskog & Sörbom, 1981) shows the amount of observer variance and covariance accounted for by the model. It therefore indicates how well the model fits relative to no model at all. Its maximal value is 1.0. For figures above 0.9, the closer they are to 1.0, the better the fit. The GFI does not take into account the number of parameters used in the model. However, the main asset of this calculation is that it has a normed maximum which is unaffected by sample size and is easy to interpret. The AGFI is an averaged version of this index.

**CONFIRMATORY FACTOR ANALYSIS (CFA)**

After the initial inspection of the preliminary statistics (PRELIS2) the skewness of the data was found to range from -1.682 to 0.417 and the kurtosis from -1.200 to 2.791. On examination of which factors were highly skewed it was decided that item 13 should be discarded from the analysis. The other items were then all within an acceptable range (Jöreskog & Sörbom, 1981).

### TABLE 1

**GOODNESS OF FIT INDICES (GFI) FOR A FOUR FACTOR MODEL INVESTIGATING CSPC**

<table>
<thead>
<tr>
<th></th>
<th>$c^2$</th>
<th>$df$</th>
<th>RMSEA</th>
<th>GFI</th>
<th>AGFI</th>
<th>NNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Factor Model</td>
<td>136.73</td>
<td>84</td>
<td>0.053*</td>
<td>0.92*</td>
<td>0.89</td>
<td>0.93*</td>
</tr>
</tbody>
</table>

* * Acceptable significance levels

RMSEA - Root Mean Square Error of Approximation
GFI - Goodness of Fit Index
AGFI - Averaged Goodness of Fit Index
NNFI - Non Normed Fit Index

The first testing of the four factor model found the fit to be an acceptable one (see Table 1). The $c^2$ value was too large relative to its degrees of freedom (i.e., when $c^2$ was divided by the degrees of freedom the ratio approached 2, larger than the desired level of zero). A Root Mean Square Error of Approximation (RMSEA) of less than 0.08 was found, representing an acceptable error of approximation. Goodness of Fit Index (GFI) and Non Normed Fit Index (NNFI) were at an ac-
ceptable level with values close to 1.0 but the Averaged Goodness of Fit Index (AGFI) at 0.89 is slightly low (Benter & Bouett, 1980).

The fit was acceptable in a few of the Goodness of Fit statistical tests, therefore the model was accepted as a reasonable fit. As hypothesised, a four factor solution was revealed. The 15 items loaded onto their proposed factors, with item factor loadings and standard errors, are shown in Table 2. These indicate moderate to strong loadings for all items, with the exception of item 5. T-values (not included here to save space but available from the first author on request) were also high, ranging from 2.33 to 13.29.

**TABLE 2**

<table>
<thead>
<tr>
<th>Item and Item Stems</th>
<th>Factor 1 (CSPCI-IMPRESS)</th>
<th>Factor 2 (CSPCI-INCOMP)</th>
<th>Factor 3 (CSPCI-PRESS)</th>
<th>Factor 4 (CSPCI-FORM)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When competing I am concerned with...</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 pleasing others</td>
<td>0.55 (.06)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 impressing others</td>
<td>0.64 (.06)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 what others will think of my performance</td>
<td>0.58 (.05)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 meeting others’ expectations</td>
<td>0.62 (.06)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 proving myself to others</td>
<td>0.78 (.06)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 others seeing me make mistakes</td>
<td></td>
<td>0.59 (.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 performing to an adequate standard</td>
<td></td>
<td>0.12 (.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 people thinking that I am incompetent</td>
<td></td>
<td>0.73 (.07)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 embarrassing myself in front of others</td>
<td></td>
<td>0.75 (.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>When competing I do not want...</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 others to think that I am nervous about competing</td>
<td></td>
<td></td>
<td>0.83 (.06)</td>
<td></td>
</tr>
<tr>
<td>11 to seem unable to cope with pressure</td>
<td></td>
<td></td>
<td>0.79 (.06)</td>
<td></td>
</tr>
<tr>
<td>12 to show others that I am nervous</td>
<td></td>
<td></td>
<td>0.84 (.06)</td>
<td></td>
</tr>
<tr>
<td><strong>I do not wish to perform in front of others when...</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Training hasn’t been going well”</td>
<td></td>
<td></td>
<td>0.53 (.12)</td>
<td></td>
</tr>
<tr>
<td>14 I am not 100% fit</td>
<td></td>
<td></td>
<td>0.53 (.12)</td>
<td></td>
</tr>
<tr>
<td>15 recent competitions have gone badly</td>
<td></td>
<td></td>
<td>0.61 (.08)</td>
<td></td>
</tr>
<tr>
<td>16 I feel insufficiently prepared</td>
<td></td>
<td></td>
<td>0.62 (.08)</td>
<td></td>
</tr>
<tr>
<td><strong>Alpha</strong></td>
<td>0.83</td>
<td>0.66</td>
<td>0.84</td>
<td>0.79</td>
</tr>
</tbody>
</table>

* No figures available as not included in CFA.

**INTERNAL CONSISTENCY**

Cronbach’s α was used to assess the internal consistency of each of the four subscales. As Table 2 illustrates, these values range from 0.66 to 0.84. For scales which will be used in basic research, Nunnally (1978) advocates an alpha value of 0.6, thus the α values obtained here indicate adequate reliability of the CSPCI subscales.
Correlations Among the Subscales

Pearson’s correlation coefficients were used to determine correlations between the four CSPCI subscales, identified by the CFA. As is indicated in Table 3, correlations between subscales were all significant at the 1% level. However, only the association between CSPCI-IMPRESS and CSPCI-INCOMP can be described as moderate with the remainder indicating, at best, low correlations between subscales (Munro, 1993). The shared variance between the two most highly associated subscales (CSPCI-PRESS and CSPCI-FORM) was 34% whilst in all other cases the shared variance between subscales was less than 10%.

<table>
<thead>
<tr>
<th></th>
<th>1 (CSPCI-IMPRESS)</th>
<th>2 (CSPCI-INCOMP)</th>
<th>3 (CSPCI-PRESS)</th>
<th>4 (CSPCI-FORM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (CSPCI-IMPRESS)</td>
<td>-</td>
<td>0.59**</td>
<td>0.24**</td>
<td>0.20**</td>
</tr>
<tr>
<td>2 (CSPCI-INCOMP)</td>
<td></td>
<td>-</td>
<td>0.23**</td>
<td>0.28**</td>
</tr>
<tr>
<td>3 (CSPCI-PRESS)</td>
<td></td>
<td></td>
<td>-</td>
<td>0.21**</td>
</tr>
<tr>
<td>4 (CSPCI-FORM)</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

** p < .01

Convergent/Discriminant Validity

Evidence for the convergent and discriminant validity of the CSPCI was sought by determining the associations between subscales of the CSPCI and scores on the Social Physique Anxiety Scale, Other Directedness Scale and the Physical Self Presentation Confidence subscale of the Physical Self Efficacy Scale. The independence of the CSPCI subscales, indicated by a shared variance of less than 10% between all but one pair of the subscales, supports the validity of separate treatment of the four CSPCI subscales.

It was hypothesised that, as the CSPCI measures self-presentational concerns which are conceptually distinct from physique-related self-presentational concerns, no associations would be revealed between Social Physique Anxiety scores and scores on any of the CSPCI subscales. The Pearson coefficients listed in Table 3 indicate that, although no significant association was revealed between Social Physique Anxiety and CSPCI-PRESS, scores on the remaining subscales were significantly associated with Social Physique Anxiety scores (at either the 5% or 1% level). However, in accordance with Munro’s (1993) criteria, these coefficients indicate little, if any, association between these variables. These results can be taken as support for the discriminant validity of the CSPCI. It was expected that, as an indication of the CSPCI’s convergent validity, positive correlations would be revealed between Other Directedness scores and scores on all four of the CSPCI subscales. Coefficients between these measures were all positive and significant at the 1% level (see Table 4). Again however, using Munro’s
(1993) criteria, these coefficients point at best to a low correlation between the variables.

<table>
<thead>
<tr>
<th>CSPCI Subscale</th>
<th>SPA</th>
<th>OD</th>
<th>PSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSPCI-IMPRESS</td>
<td>0.140*</td>
<td>0.366**</td>
<td>-0.146*</td>
</tr>
<tr>
<td>CSPCI-INCOMP</td>
<td>0.300*</td>
<td>0.349**</td>
<td>-0.292**</td>
</tr>
<tr>
<td>CSPCI-PRESS</td>
<td>0.020</td>
<td>0.204**</td>
<td>0.075</td>
</tr>
<tr>
<td>CSPCI-FORM</td>
<td>0.180**</td>
<td>0.2143**</td>
<td>-0.101</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01

Finally, negative associations were predicted between Physical Self Presentation Confidence scores and all four of the CSPCI subscales, and, with the exception of CSPCI-PRESS, Table 4 demonstrates that this was the case. These coefficients though, whilst statistically significant, once more revealed at best low associations between these two variables.

**Test-Retest Reliability**

Intraclass correlation coefficients were calculated to assess the temporal stability of the CSPCI. The coefficients which were obtained for both individual items and CSPCI subscales are listed in Table 5. For individual items, these ranged from 0.43 to 0.77 with an average coefficient of 0.55. With the exception of item 15 intraclass correlations were all at least 0.50, indicating moderate to high item stability. Intraclass correlations for the CSPCI subscales revealed coefficients ranging from 0.65 to 0.86, with an average of 0.75, again indicating moderate to high temporal stability of the four CSPCI subscales.

**Discussion**

The purpose of the current study was to develop a sport-specific measure of competitive self-presentational concerns. Based on the work of James and Collins...
(1997) and Leary (1992), 16 items were composed and a four-factor structure was proposed. A CFA largely supported this four-factor solution. Based on the model testing strategy employed, one item was excluded from the final model, resulting in a four factor, 15 item final solution. In accordance with expectations, items converged onto the four subscales: concern over others' impressions: CSPCI-IMPRESS (five items); fear of appearing incompetent: CSPCI-INCOMP (four items); fear of appearing unable to cope with pressure: CSPCI-PRESS (three items), and concern over current form: CSPCI-FORM (three items). Whilst 15 items loaded onto their hypothesised factors, one item (item 13: “I do not wish to perform in front of others when training hasn't been going well”) violated normality assumptions and was eliminated from subsequent analyses. We have found it difficult to explain why item 13 did not fit the proposed factor structure. One tentative suggestion is that items 14, 15 and 16 (see Table 1) make more explicit reference to competition factors than does item 13. However, all four of these items are likely to result in lowered self-presentational efficacy as they reflect situations in which athletes are unable to demonstrate their true competence level, and may underachieve.

Support for the construct validity of the CSPCI was offered also by the intercorrelations among its four subscales. Although these were statistically significant, all but one were classified as low and, in all but one case, the shared variance between any two subscales was less than 10%. These results signify the relative independence of the different subscales of the CSPCI (Riemer & Chelladurai, 1988). Comparing the CSPCI with the recently developed Self Presentation in Sport Questionnaire (Wilson & Eklund, 1998), it appears that the two measures are tapping into similar CSPC with, respectively, the following subscales: CSPCI-INCOMP and CSPCI-PRESS, and, SPSQ-PCI and SPSQ-AAU.

The internal consistency of the scales was adequate, as demonstrated by reliability estimates which exceeded the adopted criterion level of 0.6. Intraclass correlation coefficients illustrated also that the CSPCI has acceptable temporal stability. Whilst three of the fifteen item coefficients were below 0.50, the remainder could be classified as moderate to high. The stability of the four subscales was more encouraging, indicated by moderate to high correlation coefficients, which ranged from 0.62 to 0.86.

To examine the CSPCI’s convergent and discriminant validity, correlations were computed between its different subscales and existing trait measures which tap into the individual’s self-presentation concerns. As expected, scores on the CSPCI subscales demonstrated little association with scores obtained on the Social Phystique Anxiety Scale. This lends support for the proposal that physique-related self-presentation concerns are conceptually distinct from competition-related self-presentation concerns, hence, these constructs require separate assessment and consideration. Less evidence was presented for the CSPCI’s convergent
validity. Although the associations between Other Directedness and CSPCI subscale scores were positive and significant, as predicted, the strength of these associations could be classified only as low. Similarly, whilst the proposed negative association between Physical Self Presentation Confidence and CSPCI subscale scores was upheld for three of the subscales, these significant associations could still be classified only as low. In contrast to expectations, no association was revealed between CSPCI-PRESS scores and scores on the Physical Self Presentation Confidence. This is particularly surprising as the two scales contain items which even share similar wording. It is clear, therefore, that future research should seek to establish the convergent validity of the CSPCI. The lack of convergence demonstrated here may be attributed to the comparison measures which were employed. Whilst they do tap into self-presentational concerns, these measures do not tap into specific concerns in competitive sport - hence the rationale for developing the current instrument. The recently developed Self Presentation in Sport Questionnaire (Wilson & Eklund, 1998) may prove useful here. This is a sport-specific measure of self-presentational concerns and will, therefore, offer a more suitable comparison measure for future studies which examine the convergent validity of the CSPCI. It may be that we need to combine these two scales to produce a measure which comprehensively assesses the key self-presentational concerns of the competitive athlete. Again, this is an issue for subsequent studies to address. Another limitation of this study is the fact that a convenience, rather than a truly random, sample was used. Future research should seek to establish further the validity and reliability of the CSPCI with random samples drawn from the athletic population.

One worthwhile line of future inquiry would be to explore any possible mediating effect of the three different item stems which are used in the CSPCI. Two subscales share the same item stem (CSPCI-IMPRESS and CSPCI-INCOMP) whilst items on the remaining two subscales (CSPCI-PRESS and CSPCI-FORM) are prefaced by different item stems. The loading of these items onto their proposed factors could be an artefact of these different item stems rather than a reflection of the fact that these items represent distinct underlying self-presentational concerns. This does seem unlikely, as the remaining two factors share the same item stem-yet items have loaded uniquely onto their proposed factors. Nevertheless, future studies would do well to investigate this issue.

Further validation notwithstanding (for instance the veracity of item 5), we would suggest that the CSPCI can be employed in future research which seeks to explore the validity of Leary’s (1992) claim that, if framed within self-presentation theory, the competitive stress and anxiety experienced by athletes could be better understood than at present. If this proves to be the case, then this will allow researchers and practitioners to understand the underpinnings of competitive stress and anxiety. Consequently, this will lead to the identification of suitable stress
management strategies which are embedded in a self-presentation theory framework. These may not always rest with the athlete, but with modifying behavior and outlook of significant others around the athlete, for instance, the coach and fellow team-mates, to diminish the self-presentational implications of the athlete’s competitive experience.

From an applied perspective, the CSPCI can be used to identify athletes who are at risk of engaging in behaviors which may be detrimental to both health and performance. For instance, self-handicapping - which occurs when the performer constructs impediments to performance as a means of protecting their self-esteem (Berglas & Jones, 1978). Lack of training prior to an important event is an example of a self-handicapping strategy which is likely to hinder subsequent performance, whereas the consumption of excessive alcohol prior to competition is a self-handicapping strategy which may also be detrimental to the athlete’s health. Should the individual fail, they can then attribute the outcome to the self-imposed handicap. Conversely, should the athlete succeed in spite of this obstacle, then this further emphasises their competence and ability. Research into self-handicapping has revealed that this behavior appears to meet self-presentational objectives (e.g., Shepperd & Arkin, 1989). Thus self-handicapping may represent not only a means of protecting and manipulating one’s perceptions about oneself but also others’ perceptions about oneself. It appears that athletes who are high in self-presentational concern may demonstrate a tendency to self-handicap, which can involve the adoption of behaviors which are detrimental to both athletic performance and general health. Preliminary research conducted by Hudson, Williams and Stacey (1998) has revealed significant associations between self-handicapping and self-presentational concerns in a sample of competitive middle-distance runners. However, the research body which examines this phenomenon, its psychological correlates (e.g., goal orientation) and consequences for performance, is limited at present. Future research must explore this issue in greater depth. The use of the CSPCI can only aid in this research.

It is clear from this study that the CSPCI requires further development, in particular, studies are needed which examine its convergent validity with a randomly-selected sample from the athletic population. Indeed, Riemer and Chelladurai (1998) remind us of Cronbach and Meehl’s (1955) claim that the development of a scale is never complete, it is continuous. Future studies should seek to confirm and extend the results which have been obtained here, and test the use of the CSPCI for explaining the athlete’s competitive stress and anxiety responses within a self-presentation theory framework. Considering the emerging research body (e.g. James & Collins, 1997; Wilson & Eklund, 1998) which has employed this theoretical perspective, it seems a promising direction to take if we are to gain further insight into maximising the athlete’s competitive experience.


