***Research Article*** *http://dx.doi.org/10.4314/mejs.v8i1.5*

# Investigating the Relationship between Team Cohesion and Self-Presentation among Different Competitive Team Sports of Ethiopian Universities

**Tesfay Asgedom Haddera**
Department of Sport Sciences, Addis Ababa University, Addis Ababa, Ethiopia (asgedom.tesfay@gmail.com).

**ABSTRACT**

One of the most constantly studied constructs in team dynamic research is cohesiveness, because it's not only associated with group level outcomes such as performance but also with individuals outcomes. Self-presentation involves the selective presentation of particular characteristics of oneself that would make the desired impression on others. The main purpose of this paper is to investigate the relationship between self-presentation and team cohesion among different competitive team sports of Ethiopian Universities. It is the hypothesis that high cohesion would be associated with low self-presentational concerns. The sample consisted of 108 athletes (68 male, 40 female) from 11 different universities among 33, with the average of 20.94 ± 1.95 years of age, using random sampling technique. The data was obtained using Group Environmental Questionnaire (GEQ), Self-presentation in Sport Questionnaire (SPSQ) and the Sport Anxiety Scale (SAS) for team cohesion, self-presentation and competitive anxiety, respectively. The findings show that the task and social cohesion are negatively related to self-presentational concerns in sports, explaining 4% of variance, which means higher perceptions of cohesion, are associated with low self-presentational concerns.

**Keywords:** Team cohesion, Self-presentation, Competitive anxiety, Team sports, Ethiopia.

## 1. INTRODUCTION

Sport competition provides an environment that is prone to elicit real or imagined self-presentational concerns. Every time the athletes compete, they run the risk of poor performances and presenting undesirable images about their ability and competence to powerful others, such as judges, coaches, teammates and spectators (Leary, 1992). As such, Leary (1992) suggested that self-presentational concerns are salient in sport competition and may underpin a variety of issues in sport, including motivation, performance, sport choice, amount of effort, competitive anxiety and self-handicapping. The pervasiveness of social evaluation in sport has long been recognized (Vealey, 1990), and it has been argued that the major sources of perceived threat and stress in sport are the result of self-presentational concerns (James and Collins, 1997; Leary, 1992; Wilson and Eklund, 1998). Indeed, research has demonstrated that the majority (67%) of the stress-related sources is self-presentational in nature (James and Collins, 1997), and tends to be more task than social related. Of the eight stress dimensions noted by James and Collins (1997),

six are related to the task: 1) concerns about perceived readiness issues (e.g., not fit enough), 2) nature of the competition (e.g., importance of competition), 3) demand of the environment (e.g., competitive venue), 4) non-performance to the required standards (e.g., making mistakes), 5) competitive anxiety (e.g., anxious during competition), and 6) concerns about fatigue and injury. The remaining two types of stressors can be categorized as social, which include concerns about significant others (e.g., coach pressure), and social evaluation (e.g., afraid of what others may think). Additionally, cognitive components of competitive anxiety have a positive relationship with self-presentational concerns, such as, appearing untalented and lacking mental composure (McGowan et al., 2008), and poor performances in front of important others (Bray et al., 2000). Increasing the relevance of self-presentational factors of competition, resulting in heightened impression motivation, and increased risk of self-presentational failure, may be at least two of the mechanisms in which competitive stressors operate (James and Collins, 1997). Within team sports, the result of self-presentational concerns and impression motivation may be more complex than in individual sports (Leary, 1992). That is, the team context may serve to reduce self-presentation.

Contrastingly, however, it is possible that within the context of team sports, self-presentation may increase given the competition for desired rewards (e.g., team selection, starting positions) and necessary future interactions with important others upon whom the athlete is dependent (e.g., coaches and teammates). One way to approach self-presentation within team sport is examine the research on group membership. Central to team sports is that behavior occurs within a group context, in which the group influences its members and may serve as a source of protection (Prapavessis and Carron, 1996). For example, groups serve to reduce self-presentational concerns in general social situations, thereby providing protection to individual group members (Carron and Prapavessis, 1997). This source of protection may result from two mechanisms associated with the psychological benefits of group membership. The first mechanism, diffusion of evaluation, suggests that within a group, diffusion of evaluation occurs (Carron et al., 1999) resulting in reduced self-presentational concerns as more people are being scrutinized. Research supporting this mechanism is evident in that anxiety- it is reduced when performing in a group compared to when performing individually (Jackson and Latane, 1981); when in a team sport compared to an individual sport (Martens et al., 1990); and when in social and physique salient situations with a group (Carron et al.,1999). Within the sport, one advantage of the groups is that

the members are able to diffuse or share responsibility resulting in reduced evaluation and self-presentational concerns (Carron et al., 1999). The second mechanism for the reduction of self-presentational concerns in teams is increased security offered by groups. Research has found that perceptions of security in group situations result in a reduction of anxiety associated with self-presentational concerns (Carron et al., 1999) and the enhancement and/or maintenance of the self-esteem of individual group members (Leary et al., 1995). The relationship between self-presentation and cohesion can be investigated using Carron's (1982) conceptual linear model of cohesion. Cohesion is "a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (Carron et al., 1998, p. 213). This linear model includes four dimensions of cohesion: Group Integration-Task (GI-T), Group Integration-Social (GI-S), Individual Attractions to the Group – Task (ATG-T), and Individual Attractions to the Group-Social (ATG-S) (Carron et al., 1985). Specifically, ATG-T refers to the individual's feelings about their involvement in the team's goals and objectives.

However, research has yet to examine the relationship between cohesion and self-presentation in sport. Given the relationship between cohesion and group influence, it is possible that cohesion may directly affect the self-presentational concerns of individual team members. Group influence has been found to reduce the experience of social anxiety associated with self-presentation (Carron and Prapavessis, 1997). Specifically, being with a best friend and being with a group of friends resulted in less social anxiety than when alone. These findings suggest that high cohesion may induce an environment in which self-presentational concerns are reduced, as indicated by the psychological benefits afforded to group members. The purpose of this study was to determine if perceptions of cohesion predict self-presentational concerns in competitive team sport, while controlling for competitive trait anxiety. Specifically, it was hypothesized that higher perceptions of cohesion would be associated with lower self-presentational concerns.

## 2. METHODOLOGY

### 2.1. Participants

The total population size of the study consisted of 350 team sports athletes, by using random sampling technique, the researcher selected 108 athletes (68 male, 40 female) from 11 universities out of 33 during the Ethiopian Sports Festival which was held in 2014-15, in Adama

University. The distribution of the subjects according to the type of sports is as follows: Football (n=48), Volleyball (n=36), and basketball (n=24) (See Table 1). These athletes were on average 20.94 ± 1.95 years of age.

**2.2. Method**

The method of the study was descriptive correlation. The data was collected using properly structured questionnaires. The Statistics Package for Social Science (SPSS) version 18.0 was used to analyze the questionnaire data and descriptive statistics was conducted to report the frequencies, means score and standard deviations.

**2.3. Measures**

***2.3.1. Self-presentation***

**S**elf-presentation was measured using the Self-Presentation in Sport Questionnaire (SPSQ) (Wilson and Eklund, 1998). This SPSQ inventory consists of 33 items with 4 factors. Items are scored on a 5-point Likert scale, anchored at 1 (*never*) to 5 (*always*). The first factor represents concerns about performance composure inadequacies (SPSQ-PCI), and consists of 10 items. The second factor is concerns about appearing fatigued/lacking energy (SPSQ-FLE) and consists of 10 items. The third factor represents concerns about physical appearance (SPSQ-PA) and consists of six items .The last factor represents concerns about appearing athletically untalented (SPSQ- AUU) and consists of seven items. The SPSQ has demonstrated internal consistency with acceptable alpha levels (0.90-0.93) for all four factors (Wilson and Eklund, 1998).

***2.3.2. Cohesion***

Cohesion was measured using the Group Environment Questionnaire (GEQ) (Carron et al., 1985). The GEQ is an 18-item scale that assesses four dimensions of cohesion. All items are scored on a 9-point Likert scale, ranging from 1 (*strongly agree*) to 9 (*strongly disagree*). The GI-T dimension consists of four items, The GI-S dimension consists of four items. ATG-T consists of four items. The ATG-S dimension consists of five items. Research has shown that the GEQ is internally consistent (Carron et al., 1985) and exhibits content, factorial (Carron et al., 1985), predictive (Carron et al., 1988), and concurrent (Brawley et al., 1988) validity.

***2.3.3. Competitive trait anxiety***

Individual differences in competitive trait anxiety were controlled for using the Sport Anxiety Questionnaire (SAS) (Smith et al., 1990). The SAS consists of 21-items measuring three factors of trait anxiety. Items are preceded with the stem, "How you usually feel prior to, or during

competition." The first factor is somatic anxiety (9 items), the second factor is worry (7 items), and lastly concentration disruption (5 items). All items are scored on a four point Likert scale anchored at 1 (*not at all*) to 4 (*very much*). The SAS has demonstrated acceptable internal consistency (alphas ranging from 0.74-0.92) and good model fit (CFI= 0.80, RMSEA =0.93) (Smith et al., 1990). Comparing the original model minus the problematic items with alternative models, resulted in better indices of fit (CFI = 0.954, RMSEA = 0.081) and acceptable internal consistency (alpha values ranging from 0.71 to 0.86) with the original model. Therefore, it is suggested that a revised scoring of the original SAS, excluding the three items (item 1, 14 and 20) be used (Smith et al., 2006).

**2.4. Procedures**

Collections of data for the study were obtained during the time of tournaments. The researcher has asked permission in advance and informed the coaches about the purpose of the study and the questionnaires were completed by players of different sport types before the game, parallel with suggestions from Crafts et al. (2003) and with no change in the team's routine. It was also confidentially guaranteed.

## 3. RESULTS

All scales demonstrated acceptable internal consistency with values greater than the recommended acceptable level of 0.70 (Nunnally and Bernstein, 1994), except the GI-S subscale of the GEQ and the Concentration Disruption scale of the SAS, which had Cronbach alpha values of 0.61 and 0.64, respectively (See Table 2).In addition Internal consistencies were calculated for each subscale. Bivariate correlations between variables indicated low to moderate correlations for the majority of variables (See Table 3). Positive correlations beyond 0.40 occurred between the SPSQ subscales (0.42 -0.64), the SPSQ-AAU and Worry subscales (0.43), and the ATG-T and GI-T subscales (0.60).

Fit indices were investigated while assessing model fit: the Tucker-Lewis Index (TLI) (Tucker and Lewis, 1973), the Comparative Fit Index (CFI) (Bentler, 1990), the Root Mean Square Error of Approximation (RMSEA) (Stieger and Lind, 1980), the Standardized Root Mean Square Residual (SRMR) (Bentler, 1995) and the Normative Fit Index (NFI) (Bentler and Bonnet, 1980). The RMSEA can be artificially large and it is not recommended to be used with models that have small degrees of freedom (Kenny et al., 2011). Models are deemed to have good fit

with cut off values for the CFI, TLI, NFI above 0.90 and the RMSEA below .08 and SRMR equal to or below 0.08 (McDonald and Ho, 2002).

To determine if the items fit with their associated constructs, a confirmatory factor analysis (CFA) was conducted for each scale. Model one for the GEQ measure, CFI =0.81, TLI = 0.84, NFI = 0.73, RMSEA = 0.085, SRMR = 0.08, demonstrated inadequate model fit. Analysis of the estimates indicated the item 2 ("I am not happy with the amount of playing time I get") did not significantly predict its construct of ATG-T. For model two, this item was deleted, which although still below recommended cut offs, improved the model fit, CFI = 0.85, TLI = 0.83, NFI = 0.73, RMSEA = 0.09, SRMR = 0.07. Based on the modification indices, the error variance for items 13 ("Our team members rarely party together) and 17 ("Members of our team do not stick together outside of practice and games") were correlated in model three. This resulted in an adequate model fit, CFI = 0.86, TLI = 0.85, NFI = 0.79, RMSEA = 0.08, SRMR = 0.07.

The original 33-item SPSQ demonstrated poor model fit according to CFA determination, CFI = 0.75, TLI = 0.67, NFI = 0.74, RMSEA = 0.10, SRMR = 0.09. Recent factor analysis indicated that a revised 21-item version indicated better model fit then the original SPSQ (McGowan et al., 2008). Therefore, the 21-item version was analyzed. In model one, the measure, CFI = 0.73, TLI = 0.72, NFI = 0.65, RMSEA 0.10, SRMR = 0.08, demonstrated inadequate fit. In model three for the 21-item SPSQ, item 26 ("appearing to lack energy") was deleted, given that this item appeared to cross load onto MCI, PA, and AAU subscales. This resulted in adequate model fit, CFI = 0.91, TLI = 0.89, NFI = 0.83, RMSEA = 0.08, SRMR = 0.08. Based on analysis of the modification indices, the error variances between items 3 ("appearing flabby") and 7 ("appearing untoned") were correlated in model two resulting in improved model fit, CFI = 0.87, TLI = 0.85, NFI = 0.80, RMSEA = 0.09, SRMR = 0.08.

An examination of the modification indices showed that item 3 ("I have self-doubts") cross loaded onto the Somatic and Concentration Disruption subscales. Therefore, in model three, item 3 was deleted, resulting in adequate model fit, CFI = 0.90, TLI = 0.88, NFI = 0.813, RMSEA = 0.08, SRMR = 0.08. The 21-item SAS measure, CFI = 0.77, TLI = 0.75, NFI = 0.68, RMSEA = 0.091, SRMR = 0.083, demonstrated inadequate model fit. Modification indices indicated that the error terms of items 11 ("my heart races") and 21 ("my heart pounds before competition") were correlated which resulted in model two demonstrating improved but inadequate model fit, CFI = 0.82, TLI = 0.80, NFI = 0.71, RMSEA = 0.08, SRMR = 0.08. Previous factor analysis has

found that concentration disruption subscale items 14 ("I have lapses in concentration because of nerves") and 20 ("I'm concerned I won't be able to concentrate") load onto the worry subscale (Dunn et al., 2000; Prapavessis et al., 2005) and that item 1 ("I feel nervous") does not generalize across populations (Prapavessis et al., 2005). Based on comparative models, it is recommended that the SAS should retain its original three subscales with items 1, 14, and 20 removed (Smith et al., 2006). With those items deleted the resulting model improved although fit indices were still inadequate, CFI = 0.87, TLI = 0.85, NFI = 0.80, RMSEA = 0.08, SRMR = 0.08. As a result of changes to the subscales, new scale reliabilities were calculated and are presented in table 3.

Table 1. Demographics for sport type.

| ***Sport type*** | ***Frequency*** | ***Percent*** |
|---|---|---|
| Football | 48 | 44.45 |
| Volleyball | 36 | 33.33 |
| Basketball | 24 | 22.22 |
| *Total* | *108* | *100* |

Table 2. Descriptive Statistics and Cronbach's Alpha for the Self-presentation in Sport Questionnaire, the Group Environment Questionnaire and the Sport Anxiety Scale.

| ***Variable*** | ***M*** | ***SD*** | ***Reliability**** | ***Reliability*** |
|---|---|---|---|---|
| **SPSQ** | | | | |
| Fatigued / Lacking Energy | 5.35 | 2.01 | .89 | .83 |
| Mental Composure | 9.85 | 3.45 | .85** | .79 |
| Physical Appearance | 8.31 | 3.01 | .81 | .83 |
| Appearing Athletically Untalented | 10.85 | 3.45 | .86 | .82 |
| **GEQ** | | | | |
| ATG – Task | 18.75 | 5.33 | .61 | .68 |
| ATG – Social | 22.96 | 8.21 | .69 | .69 |
| GI –Task | 29.75 | 8.05 | .71 | .71 |
| **SAS** | | | | |
| Somatic | 13.88 | 4.15 | .81 | .79 |
| Worry | 12.65 | 3.96 | .81 | .76 |
| Concentration Disruption | 4.25 | 1.55 | .68 | .64 |

***Note.*** * α prior to CFAs; ** original subscale was Performance Composure Inadequacies.

Table 3. Bivariate Correlations among Self-presentation, Cohesion and Sport Anxiety.

| | ***Variable*** | ***1*** | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** | ***8*** | ***9*** | ***10*** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Fatigue/ Lacking Energy | - | | | | | | | | | |
| 2 | Physical Appearance | .44** | - | | | | | | | | |
| 3 | Appearing Athletically Untalented | .42** | .53** | - | | | | | | | |
| 4 | Mental Composure Inadequacies | .49** | .37** | .64** | - | | | | | | |
| 5 | ATG – Social | -.10 | -.18** | -.08 | -.04 | - | | | | | |
| 6 | ATG – Task | -.11 | -.26** | -.11 | -.11 | .37** | - | | | | |
| 7 | GI - Task | -.06 | -.17* | -.01 | .02 | .36** | .60** | - | | | |
| 8 | Worry | .18** | .21** | .43** | .38** | -.05 | -.08 | .00 | - | | |
| 9 | Concentration Disruption | .30** | .26** | .23** | .23** | -.12 | -.06 | -.11* | .13* | - | |
| 10 | Somatic | .19** | .12 | .23** | .23** | .06 | .10 | .12 | .39** | .15* | - |

Table 4. Confirmatory Factor Analysis Models.

| **Model** | **CFI** | **TLI** | **NFI** | **RMSEA** | **SRMR** |
|---|---|---|---|---|---|
| **SPSQ** | | | | | |
| 1 | .73 | .72 | .65 | .100 | .082 |
| 2 | .84 | .82 | .78 | .091 | .079 |
| 3 | .87 | .85 | .80 | .084 | .081 |
| 4* | .88 | .80 | .87 | .078 | .074 |
| **GEQ** | | | | | |
| 1 | .81 | .84 | .73 | .085 | .073 |
| 2 | .85 | .83 | .76 | .083 | .069 |
| 3* | .86 | .85 | .81 | .081 | .063 |
| **SAS** | | | | | |
| 1 | .77 | .75 | .68 | .091 | ,083 |
| 2 | .82 | .80 | .71 | .080 | .080 |
| 3 | .87 | .85 | .79 | .071 | .080 |
| 4* | .88 | .86 | .80 | .070 | .074 |

***Note***. *Indicates best fitting model for the data

## 4. DISCUSSION

The purpose of this study was to investigate the relationship between self-presentation and team cohesion among different competitive team sports of Ethiopian universities. It was hypothesized

that higher perceptions of cohesion would be associated with lower self-presentational concerns. The results support this hypothesis, demonstrating that task and social cohesion have a significant, albeit small negative relationship with self-presentation in sport explaining 4% of the variance. Cohesion appears to reduce competitive anxiety by minimizing pressure to carry out group responsibilities and providing a source of protection to team members. Furthermore, the current finding extends our understanding of the impact of task and social cohesion, a group level construct, on individual factors and outcomes. The current finding, that task and social cohesion are negatively related to self-presentational concerns in sport, explaining 4% of the variance.

Furthering the knowledge about the correlates of cohesion is necessary in order to further understand the impact of team dynamics on individual outcomes. To date, the majority of research examining self-presentation in sport has primarily focused on the relationship between self-presentation and competitive anxiety (e.g., James and Collins, 1997; McGowan et al., 2008; Wilson and Eklund, 1998). This has emanated from Leary's (1992) contention that competitive anxiety is the result of self-presentational concerns in sport competition. The current study, finding a negative relationship between self-presentation and task and social cohesion suggesting that both types of cohesion may be correlates of self-presentational concerns in sport competition. Additionally, James and Collins (1997) identified that the majority (67%) of stress in sport is underpinned by self-presentational concerns, which indicates that self-presentational concerns are broader than those centered on the task itself and include social related concerns. With the exception of SPSQ-PA, the SPSQ assesses only task aspects of competitive sport, such as appearing athletically incompetent, fatigued or unfocused. However, certain sources of self-presentational concerns, related to both task and social factors (e.g., significant others, the nature of the competition, and environmental demands) are not assessed with the SPSQ. This may be limiting as the nature of the competition (e.g., importance and difficulty) may influence the level of self-presentational concerns and therefore may have affected the present results. Self-presentation theory indicates that self-presentational motivation increases as the importance or value of the outcome increases (Leary & Kowalski, 1990).

Sporting events such as playoffs or championship games may have more important self-presentational implications, as the outcome of the competition may be more important than regular season games. The current sample included sports at varying points throughout their

season, which may lead to different self-presentational concerns. Additionally, cohesion is a dynamic process that can change over time (Carron et al., 1998). Given that time of season was not controlled for, it is possible that this factor may have impacted the relationship between self-presentation and cohesion. The majority of participants (88%) in the current study participated in team sports that do not emphasize the physique, and as such concerns about appearance may not be important to those athletes. In physique salient sports, individuals may have concerns about appearance in addition to those task evaluative concerns. As a result, it is possible that a stronger relationship between task and social cohesion and self-presentation may emerge in physique salient sports. From an applied perspective, the current study provides further credence to the process of team building, which refers to programs aimed at promoting increased cohesiveness and team effectiveness (Newman, 1984).

Team building may impact an individual's self-presentational concerns directly through its impact on individual cognitions or indirectly by increasing task and social cohesion thereby resulting in reduced self-presentational concerns. Additionally, team building is also associated with enhanced cognitions (Martin et al., 2009), reduced stress and anxiety (Martin and Davids, 1995; Martin et al., 2009), and increased self-esteem (Martin and Davids, 1995). The current study is not without its limitations. The use of self-report measures can lead to social desirability. Competitive athletes may not want to admit to having self-presentational concerns during competition for fear of being negatively evaluated. However, in attempts to minimize this limitation, athletes completed the questionnaire package online and independently, ensuring anonymity. Results of the current study as well as the findings from cohesion-anxiety research suggest that group level team building may enhance individual outcomes. Individual team sports tend to have fewer natural opportunities to develop task and social cohesiveness and therefore it has been suggested that team building may potentially impact individual sport competitors even more than in interdependent team sports (Carron et al., 2002; Widmeyer and Williams, 1991). The beneficial impact of both task and social cohesion may be most strongly felt by those with the highest levels of self-presentational concerns (Carron and Prapavessis, 1997). As such, independent sport athletes may have a greater reduction in self-presentational concerns, when task and social cohesion is increased.

## 5. CONCLUSION

Results from this study have several important implications. Different sports may, by nature, have different self-presentational concerns. Interested researchers on the topic may examine if sport type mediates the relationship between task and social cohesion and self-presentational concerns, thus providing a more complete picture of this relationship in sport. The results of the present study support the relationship between task and social cohesion and self-presentation in sport. That is, higher perceptions of cohesion are associated with lower self-presentational concerns. This relationship may arise due to the influence that the team environment has on individual team members; providing a source of safety.

## 6. ACKNOWLEDGEMENTS

I would like to extend my appreciation to coaches and players for their efforts and supports in caring out this work. To my beloved wife, Saba Tesfaye, words are not enough to express my gratitude for her support, help, understanding, and patience through this process.

## 7. REFERENCE

Brawley, L.R., Carron, A.V & Widmeyer, W.N. 1987. Assessing the cohesion of teams: Validity of the group environment questionnaire. *Journal of Sport Psychology,* **9**:275-294.

Bray, S.R, Martin, K.A & Widmeyer, W.N. 2000. The relationship between evaluative concerns and sport competition state anxiety among youth skiers. *Journal of Sports Sciences,* **18**:353-361.

Brawley, L.R., Carron, A.V & Widmeyer, W.N. 1988. Exploring the relationship between cohesion and group resistance to disruption. *Journal of Sport & Exercise Psychology*, **10**:199-213.

Carron, A.V. 1982. Cohesiveness in sports groups: Interpretations and considerations. *Journal of Sport Psychology,* **4**:123-138.

Carron, A.V., Brawley, L.R & Widmeyer, W.N. 1998. The measurement of cohesiveness in sports groups. *In*: J.L. Duda (Ed.), Advances in sport and exercise psychology measurement (2nd ed., pp. 213-216). Morgantown, WV: Fitness Information Technology.

Carron, A. V., Widmeyer, W. N & Brawley, L. R. 1985. The development of an instrument to assess cohesion in sport teams: The group environment questionnaire. *Journal of Sport Psychology*, **7(3)**:244-266.

Carron, A.V., Burke, S. M & Prapavessis, H. 2004. Self-presentation and group influence. *Journal of Applied Sport Psychology*, **16**:41-58. doi: 10.1080/10413200490260044.

Carron, A.V., Hausenblas, H.A & Eys, M.A. 2005. Group dynamics in sport. 3rd edition, Morgantown, WV: Fitness Information Technology.

Carron, A.V & Prapavessis, H. 1997. Self presentation and group influence. *Small Group Research*, **28**:500-516. doi: 10.1177/1046496497284002

Carron, A.V., Prapavessis, H & Grove, J.R. 1994. Group effects and self handicapping. *Journal of Sport and Exercise Psychology*, **16**: 246-257.

Carron, A. V., Widmeyer, W. N & Brawley, L. R. 1988. Group cohesion and individual adherence to physical activity. *Journal of Sport & Exercise Psychology*, **10**:119-126.

Carron, A.V., Estabrooks, P.A., Horton, H., Prapavessis, H & Hausenblas, H.A. 1999. Reductions in social anxiety associated with group membership: Distraction, anonymity, security, or diffusion of evaluation? *Group Dynamics*, **3**:1-9. doi: 10.1177/1046496497284002.

Carron, A.V., Shapcott, K.M & Burke, S.M. 2008. Group cohesion in sport and exercise: past, present and future. *In*: M.R. Beauchamp, & M.A. Eys (Eds.), *Group dynamics in exercise and sport psychology: Contemporary themes* (pp. 117-139), New York: Routledge.

Carron, A.V., Coleman, M.M., Wheeler, J & Stevens, D. 2002. Cohesion and performance in sport: A meta analysis. *Journal of Sport & Exercise Psychology*, **24**: 168-188.

Dunn, J.G.H., Causgrove Dunn, J., Wilson, P & Syrotuik, D.G. 2000. Reexamining the factorial composition and factor structure of the Sport Anxiety Scale. *Journalof Sport & Exercise Psychology*, **22**:183-193.

James, B & Collins, D. 1997. Self-presentational sources of competitive stress during performance. *Journal of Sport & Exercise Psychology*, **19**:17-35.

Latane, B. (1981). The psychology of social impact. *American Psychologist*, **36**:343-356, doi: 10.1037/0003-066X.36.4.343.

Leary, M.R. 1995. *Self-Presentation: Impression Management and Interpersonal Behavior*. Dubuque: WCB Brown and Benchmark.

Leary, M.R & Kowalski, R.M. 1990. Impression management: A literature review and two component model. *Psychological Bulletin*, **107**:34-47. doi: 10.1037/0033-2909.107.1.34

Leary, M.R. 1992. Self-presentational processes in exercise and sport. *Journal of Sport & Exercise Psychology,* **14**:339-351.

Leary, M.R. 1995. Self-presentation: Impression management and interpersonal behavior. Dubuque: WCB Brown and Benchmark.

Martens, R., Vealey, R.S & Burton, D. 1990. *Competitive anxiety in sport*. Champaign, IL: Human Kinetics.

McGowan, E., Prapavessis, H & Wesch, N. 2008. Self-presentational concerns and competitive anxiety. *Journal of Sport & Exercise Psychology,* **30**:383-400.

Prapavessis, H & Carron, A.V. 1996. The effect of group cohesion on competitive state anxiety. *Journal of Sport & Exercise Psychology,* **18**:64-74.

Prapavessis, H., Maddison, R.M & Fletcher, R. 2005. Further examination of the factor integrity of the Sport Anxiety Scale. *Journal of Sport & Exercise Psychology*, **27**:252-260.

Smith, R.E., Cumming, S.P & Smoll, F.L. 2006. Factorial integrity of the Sport Anxiety Scale: A methodological note and revised scoring recommendations. *Journal of Sport & Exercise Psychology,* **28**:109-112.

Smith, R.E., Smoll, F.L & Schutz, R.W. 1990. Measurement and correlates of sport specific cognitive and somatic trait anxiety: The Sport Anxiety Scale. *Anxiety Research,* **2**:263-280.

Vealey. R.S. 1990. Advancements in competitive anxiety research: Use of the Sport Competition Anxiety Test and Competitive State Anxiety Inventory-2. *Anxiety Research,* **2**:243-261.

Williams, M., Hudson, J & Lawson, R.J. 1999. Self-presentation in sport: Initial development of a scale for measuring athletes' competitive self-presentational concerns. *Social Behavior and Personality*, **27**:487-502. doi:10.2224/sbp.1999.27.5.487

Wilson, P & Eklund, R.C. 1998. The relationship between competitive anxiety and self-presentational concerns. *Journal of Sport & Exercise Psychology,* **20**: 81-97.

Widmeyer, W.N & Williams, J.M. 1991. Predicting cohesion in co-acting sports. *Small Group Research,* **22**:548-570.