2012

EXAMINING THE RELATIONSHIP BETWEEN TEAM COHESION AND SELF-PRESENTATION

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by
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A Thesis
Submitted to the Faculty of Graduate Studies
through the Faculty of Human Kinetics
in Partial Fulfillment of the Requirements for the
Degree of Masters of Human Kinetics at the
University of Windsor

Windsor, Ontario, Canada
2012

Examining the Relationship Between Team Cohesion and Self-presentation

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ABSTRACT

Within team sport, cohesion is not only associated with group level outcomes such as performance but also with individual outcomes, which may include a sense of protection and security. These benefits of group membership are related to reduced levels of anxiety associated with self-presentational concerns (Carron, Estabrooks, Horton, Prapavessis, & Hausenblas, 1999), which are inherent in sport competition (Leary, 1992). The purpose of this study was to examine how self-presentational concerns are predicted by perceptions of cohesion. It was hypothesized that high cohesion would be associated with low self-presentational concerns. A total of 163 competitive team sport athletes completed the Group Environment Questionnaire (GEQ: Carron, Widmeyer, & Brawley, 1985), Self-presentation in Sport Questionnaire (SPSQ; Wilson & Eklund, 1998), and the Sport Anxiety Scale (SAS; Smith, Smoll, & Shutz, 1990). Structural Equation Modeling determined that perceptions of cohesion (R= -.20) significantly predicted 4% of the variance of self-presentation in sport.

ACKNOWLEDGEMENTS

First and foremost, I'd like to thank my advisor, Dr. Krista Chandler. Krista, I cannot begin to express my thanks and appreciation for your guidance and support over the last two years. Your energy, enthusiasm, professionalism and warmth are inspiring. You have been instrumental in my academic development and personal growth and I am truly grateful for having the opportunity to work with you and learn from you.

I am also grateful to my committee members for their time and insightful suggestions. To my internal committee member, Dr. Todd Loughead, your expertise in cohesion has greatly contributed to this project. Thank you for your time, support and of course all the soccer chats. To both Todd and Krista, you have created a positive and supportive lab environment that is appreciated by the students. To my external committee member, Dr. Jill Singleton-Jackson, thank you for being a part of this project. Your comments and suggestions have been helpful and greatly appreciated.

To my family, AnneMarie, words are not enough to express my gratitude for your support, help, understanding and patience through this process. Of course, my parents, thank you for always supporting and encouraging me in whatever I have tried to accomplish. Your support and unconditional love means the world to me. Thank you to my brother, Ryan, for always being one of my biggest supporters in all domains of my life.

I would like to also thank the Sport and Exercise Psychology lab, both past and present, for all the help and support over the last two years. I will certainly remember all the laughter and good times and I feel very fortunate that I will be leaving with lifelong friends.

Lastly, I would like to express my thanks to Diane Dupuis, Cathy Greenwell and Pat McTaggart for all of their assistance during this process.

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Introduction

The impressions we make on people have important implications in a myriad of everyday situations, including the outcomes and rewards we attain, the perceptions others have of us and how they treat us and even the perception we have of ourselves (Leary & Kowalski, 1990). The majority of everyday behavior is constrained by self-presentational concerns (Goffman, 1959). Indeed, there are few situations in which people can afford to ignore how others perceive them (Leary, 1995). Self-presentation, also known as impression management, is the process of controlling how others perceive and evaluate us (Goffman, 1959; Schlenker, 1980). The term impression management appears to suggest pretense and the deliberate portrayal of false images; however, people tend to present images that are consistent with how they see themselves (Jones & Pittman, 1982; Schlenker, 1980). Self-presentation involves the selective presentation of particular characteristics of oneself that would make the desired impression on others (Leary, 1992). People engage in self-presentation for the ultimate goal of enhancing their well being. This is centered on conveying impressions that will maximize rewards (e.g., approval, friendship or power) or material outcomes (e.g., awards, money, contracts) (Baumeister, 1982; Leary, 1995; Schlenker, 1980), enhance or maintain self-esteem (Baumeister, 1982; Schlenker, 1980) and aid in identity development (Leary & Kowalski, 1990).

The degree of motivation that an individual has to self-present is affected by how relevant the image is to the attainment of one's goals, the value of these goals and the

discrepancy between the image one believes they have already made and the image they want to make (Leary & Kowalski, 1990; Schlenker, 1980). For instance, when athletes are dependent on powerful others (e.g., coaches, judges), impression motivation is heightened as the impressions they make on those powerful others are important to attaining their desired outcomes.

When people are motivated to create certain impressions, but doubt they are able to do so, social anxiety ensues (Leary, 1992; Schlenker & Leary, 1982). Both situational (e.g., importance of the event, group influence) and dispositional (e.g., personality traits, competitive trait anxiety) factors affect the level of impression motivation and/or the probability of making the desired impressions (Leary & Kowalski, 1990). One dispositional factor that affects self-presentational concerns in sport is competitive trait anxiety. Research has demonstrated that individual differences exist among those who are high and low in trait anxiety (e.g., Aoyagi, Burke, Hardy, & Hamstra, 2009; Brustad & Weiss, 1987; Carron & Prapavessis, 1997; Giacobbi & Weinberg, 2000; Gould, Horn, & Spearmann, 1983; Martens, Vealey, Burton, 1990). As such, the majority of research examining self-presentation in sport has controlled for situation specific differences in trait anxiety (e.g., Giacobbi & Weinberg, 2000; Gould, Horn, & Spearmann, 1983; Martens, Vealey, Burton, 1990; McGowan, Prapavessis, & Wesch, 2008). Therefore, levels of competitive trait anxiety were controlled for in this study.

Sport competition provides an environment that is prone to elicit real or imagined self-presentational concerns. Every time 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 & Collins, 1997; Leary, 1992; Wilson & Eklund, 1998). Indeed, research has demonstrated that the majority (67%) of stress sources are self-presentational in nature (James & Collins, 1997), and tend to be more task than social related. Of the eight stress dimensions noted by James and Collins, six are related to the task: 1) concerns about perceived readiness issues (e.g., not fit enough), 2) the nature of the competition (e.g., importance of competition), 3) environments demands (e.g., competitive venue), 4) not performing to 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, Martin, & Widmeyer, 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 & 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. As teammates become familiar with one another, others' impressions are less likely to be influenced by self-presentational behavior and the need to try to create a particular impression will be lessened (Leary, 1995). 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). Research has yet to examine this relationship, and therefore, it is currently not known how self-presentation is impacted in the team sport context.

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 & Carron, 1996). For example, groups serve to reduce self-presentational concerns in general social situations, thereby providing protection to individual group members (Carron & 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, Estabrooks, Horton, Prapavessis, & Hausenblas,

1999) resulting in reduced self-presentational concerns as more people are being scrutinized. Research supporting this mechanism is evident in that anxiety is reduced when performing in a group compared to when performing individually (Jackson & 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 sport, one advantage of groups is that 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, Tambor, Terdal, & Downs, 1995). Moreover, research has demonstrated that cohesion is associated with an improved sense of security (Pepitone & Reichling, 1955), increased support (Yalom, 1975) and reduced pressure (Prapavessis & Carron, 1996). Cohesion is one indicator of groupness. That is, the higher the cohesion, the stronger the group (Carron, Burke, & Prapavessis, 2004). Research conducted with military groups found that members of cohesive groups had lower levels of anxiety than less cohesive groups (Julian, Bishop, & Feilder, 1966). Given that groups influence its members and that this influence increases as perceptions of cohesion increases (Carron, Widmeyer, & Brawley, 1988), it is possible that levels of perceived cohesion affect self-presentation in group members.

The relationship between self-presentation and cohesion can be investigated using Carron's (1982) conceptual model of cohesion (see Figure 1). 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, Brawley, & Widmeyer, 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, Widmeyer, & Brawley, 1985). Specifically, ATG-T refers to the individual's feelings about their involvement in the team's goals and objectives. ATG-S refers to the individual's feelings about their acceptance and social relationships within the group. GI-T refers to the individual's perceptions of unity of the team as a whole, around the team's instrumental objectives. GI-S refers to the individual's perceptions of social unity of the team as a whole (Carron et al., 1985).

Perceptions of cohesion have been found to be related to individual behaviors that are associated with self-presentational concerns, including individual team member's experiences of competitive anxiety (Eys, Hardy, Carron, & Beauchamp, 2003; Prapavessis & Carron, 1996). More specifically, ATG-T was found to be negatively related to cognitive anxiety (Prapavessis & Carron, 1996) and both ATG-T and GI-T are positively related to facilitative interpretations of anxiety symptoms with GI-T having the stronger relationship (Eys et al., 2003). These findings point to the potential role that the task dimensions of cohesion may have in regards to self-presentational concerns. Additionally, the social dimensions of cohesion may also impact self-presentation, given

being with a best friend or a group of friends resulted in reduced self-presentational concerns (Carron & Prapavessis, 1997). To date, the majority of research on self-presentation in sport has been indirectly investigated through examining individual behaviors (e.g., competitive anxiety and self-handicapping) and sport-related phenomenon thought to result from self-presentational concerns. Additionally, perceptions of cohesion have been found to influence these same behaviors. 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 & 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.

Method

Participants

A total of 168 adult competitive team sport athletes from the University of Windsor participated in this study. The data was screened for accuracy of data entry,

missing values and multivariate normality. Missing data were less than 5% and deemed to be missing at random. Missing data points were replaced with the mean of the respective subscale for the individual participant. To have been included in the study, participants must have played on a competitive (e.g., club, varsity, regional, national or international level) interdependent sports team. A total of five cases were deleted of which four were deleted due to participation in a sport at the recreational level (i.e., intramurals) and one was deleted due to incomplete data resulting in a final sample of 163 participants. The participants included 91 males and 72 females, with a mean age of 20.57 years (SD = 2.31). Further, participants played a variety of interdependent team sports (see Table 1). The athletes had been on their current team for an average of 3.36 years (SD = 2.38) and involved in their sport on average for 10.95 years (SD = 4.86). Participants competed at club (n = 21), varsity (n = 72), regional (n = 21), provincial (n = 17), national (n = 12) and international (n = 3) levels.

Measures

Self-presentation. Self-presentation was measured using the Self-Presentation in Sport Questionnaire (SPSQ; Wilson & Eklund, 1998). The SPSQ is a 33-item measure consisting of four factors. Items are scored on a 5-point Likert scale, anchored at 1 (*never*) to 5 (*always*). The items are preceded by the stem "During competition I worry that other people may perceive me as…". The first factor represents concerns about performance composure inadequacies (SPSQ-PCI), and consists of 10 items, with a sample item reading, "appearing to not live up to my expectations". The second factor is concerns about appearing fatigued/lacking energy (SPSQ-FLE) and consists of 10 items

with a sample item reading, “appearing fatigued”. The third factor represents concerns about physical appearance (SPSQ-PA) and consists of six items, with a sample item reading, “appearing out of shape”. The last factor represents concerns about appearing athletically untalented (SPSQ- AUU) and consists of seven items with a sample item reading, “appearing athletically incompetent”. The SPSQ has demonstrated internal consistency with acceptable alpha levels (.90-.93) for all four factors (Wilson & Eklund, 1998).

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, with a sample item reading “Our team is united in trying to reach its goals for performance”. The GI-S dimension consists of four items, with a sample item reading “Our team would like to spend time together in the off season”. ATG-T consists of four items, with a sample item reading, “I am happy with the amount of playing time I get”. The ATG-S dimension consists of five items with a sample item reading “Some of my best friends are on this team”. 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, Carron, & Widmeyer, 1988) validity.

Competitive trait anxiety. Individual differences in competitive trait anxiety were controlled for using the Sport Anxiety Questionnaire (SAS; Smith, Smoll, & Shutz, 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), with a sample item reading “My body feels tense”. The second factor is worry (7 items), with a sample item “I’m concerned about performing poorly”, and lastly concentration disruption (5 items), is represented by “’Negative thoughts disrupt my concentration”. 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 .74-.92) and good model fit (CFI= .80, RMSEA = .93) (Smith et al., 1990). Subsequent factor analyses on the SAS found three items (item 1, 14 and 20) to be problematic (Dunn, Causgrove Dunn, Wilson, & Syrotuik, 2000; Prapavessis, Maddison, & Fletcher, 2005). Comparing the original model minus the problematic items with alternative models, resulted in better indices of fit (CFI = .954, RMSEA = .081) and acceptable internal consistency (alpha values ranging from .71 to .86) with the original model (Smith, Cumming, & Smoll, 2006). 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).

Procedure

After receiving approval from the University of Windsor Research Ethics Board, participants were recruited through convenience sampling. Athletes were recruited through the University of Windsor, via postings and announcements in classes in the Department of Kinesiology. Those willing to participate were directed to an online questionnaire in which they viewed a welcome page (Appendix A) containing information regarding the purpose of the study, benefits for participating, estimated time

for completion and the investigator's name and contact information. A "click to participate" link directed participants willing to complete the study to a page containing the Letter of Information to Consent (Appendix B). Consent was obtained when participants clicked "I agree to participate (*continue survey*)." Completion of the questionnaire package containing demographics, the GEQ, SPSQ and the SAS took approximately 20 minutes.

Results

Preliminary analysis

Internal consistencies were calculated for each subscale. All scales demonstrated acceptable internal consistency with values greater than the recommended acceptable level of .70 (Nunnally & Bernstein, 1994), except the GI-S subscale of the GEQ and the Concentration Disruption scale of the SAS, which had Cronbach alpha values of .64 and .66, respectively (see Table 2). Bivariate correlations between variables indicated low to moderate correlations for the majority of variables (see Table 3). Positive correlations beyond .40 occurred between the SPSQ subscales (.44 - .67), the SPSQ-AAU and Worry subscales (.46), and the ATG-T and GI-T subscales (.62).

Structural equation modeling (SEM) was used for the main analysis. All SEM analyses were conducted with the maximum likelihood method of parameter estimation using AMOS 20.0 (Arbuckle, 2011) statistical software. Although the current sample size (N = 163) does not meet the standard minimum recommendation of 200 cases, it was deemed acceptable for SEM analysis based on the number of indicators per factor (NI/NF) ratio of 3.5. The recommended sample size for a NI/NF ratio of 3 to 4 is 100

cases (Marsh, Hau, Balla, & Grayson, 1998). High NI/NF ratios compensate for lower sample sizes (Marsh et al., 1998) and protects against non-convergence and improper solutions (Boomsma & Hoogland, 2001).

When assessing model fit, the following fit indices were examined: the Comparative Fit Index (CFI; Bentler, 1990), the Normative Fit Index (NFI; Bentler & Bonnet, 1980), the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973), the Root Mean Square Error of Approximation (RMSEA; Stieger & Lind, 1980) and the Standardized Root Mean Square Residual (SRMR; Bentler, 1995). Although commonly reported, the RMSEA fit index was not examined in the structural models given that with simple models and small degrees of freedom, the RMSEA can be artificially large and it is not recommended to be used with models that have small degrees of freedom (Kenny, Kaniskan, & McCoach, 2011). Models are deemed to have good fit with cut off values for the CFI, TLI, NFI above .90 and the RMSEA below .08 and SRMR equal to or below .08 (McDonald & Ho, 2002).

A confirmatory factor analysis (CFA) was conducted for each scale to determine if the items fit with their associated constructs. Model one for the GEQ measure, CFI = .85, TLI = .82, NFI = .77, RMSEA = .09, SRMR = .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 = .87, TLI = .85, NFI = .79, RMSEA = .09, SRMR = .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 = .90, TLI = .87, NFI = .81, RMSEA = .08, SRMR = .07.

A CFA determined that the original 33-item SPSQ demonstrated poor model fit, CFI = .75, TLI = .67, NFI = .74, RMSEA = .10, SRMR = .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 = .75, TLI = .74, NFI = .67, RMSEA .10, SRMR = .08, demonstrated inadequate fit. 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 = .89, TLI = .87, NFI = .82, RMSEA = .09, SRMR = .08. 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 = .91, TLI = .89, NFI = .83, RMSEA = .08, SRMR = .08.

The 21-item SAS measure, CFI = .79, TLI = .77, NFI = .70, RMSEA = .10, SRMR = .09, 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 = .84, TLI = .82, NFI = .75, RMSEA = .08, SRMR = .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 = .89, TLI = .87, NFI = .81, RMSEA = .08, SRMR = .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 = .90, TLI = .88, NFI = .813, RMSEA = .08, SRMR = .08.

As a result of changes to the subscales, new scale reliabilities were calculated and are presented in Table 3.

Primary Analysis

Measurement model. Prior to evaluating the structural model, a CFA was first conducted examining the fit of the subscales of the SPSQ, GEQ and SAS to their hypothesized constructs. All latent variables were allowed to correlate with each other and their variances were fixed at one. The CFA indicated poor fit for the model, CFI = .54, TLI = .38, NFI = .52, SRMR = .17. All factor loadings were significant except for the path from GI-S to cohesion. The cohesion subscale of GI-S was subsequently removed from the model and the measurement model was reanalyzed. The revised measurement model displayed adequate model fit, CFI = .91, TLI = .87, NFI =.85,

SRMR = .08. Given the improved fit, the revised measurement model was accepted and the GI-S subscale of the GEQ was omitted from the subsequent structural model.

Structural model. The structural model showed acceptable model fit, CFI =.91, TLI = .87, NFI = .85, SRMR = .08, and all regression paths were significant ($p < .05$). Multiple squared correlations indicate that 54% of the variance in self-presentation in sport is explained by the combined effects of trait sport anxiety and cohesion. Sport anxiety explained 50% of the variance of self-presentation with a standardized regression coefficient of .70. With respect to the path from cohesion to self-presentation, the standardized regression coefficient (-.20) was significant and in the hypothesized direction contributing 4% unique variance to self-presentation (see Figure 2).

Discussion

By nature, self-presentation is a social construct (Leary, 1995). Carron et al. (2004) suggested that "to ignore the influence of the [group] is to risk obtaining an incomplete picture of self-presentation" (p. 55). The purpose of this study was to determine if perceptions of cohesion predict self-presentational concerns in competitive team sport. Specifically, 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.

The results of the current study extend the generalizability of previous research on group influence and self-presentation from general social situations to a team sport context. The results are consistent with previous research demonstrating that anxiety,

stemming from self-presentational concerns, is reduced when others are present (e.g., Carron et al., 1999; Carron et al., 2004). Moreover, the current study supports previous research such that the most socially cohesive situation (i.e., being with a best friend) resulted in the strongest reduction in social anxiety, suggesting that social cohesion provides a source of protection (Carron et al., 1999; Carron & Prapavessis, 1997). The mechanisms most strongly associated with this reduction are diffusion of self-presentational evaluation and security offered by the presence of others (Carron et al., 1999).

The current finding that task and social cohesion are negatively related to self-presentational concerns in sport, explaining 4% of the variance is consistent with previous research examining task cohesion and competitive anxiety. Perceptions of task cohesion are associated with less cognitive anxiety (Prapavessis & Carron, 1996) and with more facilitative interpretations of cognitive anxiety (Eys et al., 2003) accounting for between 4-9% 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. A noted correlate of cohesion is personal factors (Carron, 1982), which includes individual cognitions, affect, and behavior. Team bonding satisfies individual members' needs (Carron & Brawley, 2000) and is associated with positive affect (Baumeister & Leary, 1995). Additionally, it is thought that the relationship between personal factors and cohesion is likely reciprocal (Carron, Shapcott, & Burke, 2008). In

line with Carron's (1982) suggestion that research should continue to explore the range of potential correlates and outcomes to cohesion, further examination of the relationship between individual cognitions and both task and social dimensions of cohesion is warranted. Self-presentation may be an individual factor that is influenced by cohesion but also may be related to other individual factors of cohesion such as satisfaction and performance. 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 & Collins, 1997; McGowan et al., 2008; Wilson & 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 is not only consistent with previous findings but also extends this research insofar as 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.

Being in a group context, such as a group of friends, reduces self-presentational concerns in physique salient situations (Carron et al., 1999; Carron & Prapavessis, 1997). Self-presentational concerns about physical appearance may be somewhat dependent on the type of sport as some sports are inherently more physique salient (e.g., dance, women's volleyball) than others (e.g., football, hockey, soccer). 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). Research has found that team building does have a positive impact on cohesion in sport teams (Martin, Carron, & Burke, 2009). Additionally, team building is also associated with enhanced cognitions (Martin et al., 2009), reduced stress and anxiety (Martin & Davids, 1995; Martin et al., 2009), and increased self-esteem (Martin & Davids, 1995). 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.

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. Another potential limitation to the current study is the possibility that some aspects of self-presentation in sport are not being measured with the SPSQ. Research has demonstrated that both task and social cohesion occurs in both interdependent and independent team sports (Carron, Coleman, Wheeler, & Stevens, 2002; Widmeyer & Williams, 1991). Additionally, research has found that self-presentational concerns are present for recreational and competitive level

athletes from both independent and interdependent sports (McGowan et al., 2008; Wilson & Eklund, 1998). Given only competitive interdependent team sports were assessed in the current study, this may limit the generalizability of the findings across recreational level and sport types.

Despite the noted limitations, they many times give rise to future research initiatives. As such, researchers may want to examine the relationship among task and social cohesion and self-presentation in independent sport teams. Individual performers (e.g., golf, track and field, swimming) tend to experience greater competitive anxiety than athletes competing in the team context (Martens et al., 1990). And although we may think of these independent sport athletes operating in isolation, research has demonstrated the development of both task and social cohesion in these sports (Carron et al., 2002). Additionally, it is the individual factors that are more highly associated with both social and task cohesion in independent sport teams than the group level factors of leadership, environmental or team factors (Widmeyer & Williams, 1991).

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 & Williams, 1991). In support of this, a meta-analysis by Martin et al. (2009) found team building to have a larger effect on individual team sports (e.g., gymnastics, swimming, track and field) than on interactive team sports. 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 & Prapavessis, 1997). As such, independent sport athletes may have a greater reduction in self-presentational concerns, when task and social cohesion is increased. Although previously included, independent sport athletes have been underrepresented in the self-presentation in sport research (e.g., McGowan et al., 2008; Wilson & Eklund, 1998), thus necessitating the need for further research examining the experiences of self-presentation in individual team sport athlete as well as the influence of both task and social dimensions of cohesion.

Future researchers may also consider the particular mechanisms responsible for the reduction in self-presentational concerns in sport. Previous research suggests that diffusion of evaluation and security are the two strongest mechanisms through which the presence of others reduces self-presentational concerns (Carron et al., 1999; Prapavessis & Carron, 1997). However, that research was conducted in general social situations and with females. As such, further research is needed to determine the mechanism responsible for the reduction in self-presentational concerns in sport with both male and female athletes.

Finally, researchers may want to 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. Different sports may, by nature, have different self-presentational concerns. For example, given the physique evaluative nature in sports such as swimming, women's volleyball, and gymnastics (Beals & Manore, 2002; Borgen & Corbin, 1987), self-presentational concerns about appearance may be

more salient in these sports when compared to less physique salient sports such as hockey, football, and soccer. Equivocal findings on gender differences in the trait competitive anxiety literature (e.g., Martens et al., 1990) suggests that it is not necessarily gender that accounts for the potentially heightened self-presentational concerns regarding appearance, but it may in fact be increased fear of negative evaluation of one's body associated with the type of sport.

The results of the present study support the hypothesized 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 security and protection. This study supports Prapavessis and Carron's (1996) suggestion that "improving the dynamics of the team could enhance the psychological state of the individual" (p.72).

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Table 1

Demographics for Sport Type

Sport	Frequency	Percent
Soccer	44	27.0
Hockey	42	25.8
Football	25	15.3
Volleyball	23	14.1
Basketball	11	6.7
Rugby	4	2.5
Baseball	2	1.2
Dance	2	1.2
Synchronized Figure Skating	2	1.2
Lacrosse	2	1.2
Softball / Fast pitch	2	1.2
Curling	1	.6
Ringette	1	.6
Broomball	1	.6
Paintball	1	.6
Total	163	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	5.61	2.12	.92	.87
Mental Composure	10.51	3.74	.90**	.86
Inadequacies				
Physical Appearance	8.62	3.21	.84	.86
Appearing Athletically	11.74	3.95	.88	.87
Untalented				
GEQ				
Individual Attractions to the	19.37	5.66	.64	.70
Group-Task				
Individual Attractions to the	33.09	8.74	.71	.71
Group-Social				
Group Integration-Task	30.93	8.57	.79	.79
SAS				
Somatic	14.58	4.55	.85	.84
Worry	13.05	3.86	.85	.83
Concentration Disruption	4.65	1.70	.70	.66

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	.48**	-								
3. Appearing Athletically Untalented	.44**	.56**	-							
4. Mental Composure Inadequacies	.51**	.40**	.67**	-						
5. Individual Attractions to the Group - Social	-.12	-.20**	-.11	-.03	-					
6. Individual Attractions to the Group - Task	-.13	-.29**	-.14	-.14	.40**	-				
7. Group Integration - Task	-.08	-.19*	-.03	.01	.39**	.62**	-			
8. Worry	.22**	.24**	.46**	.36**	-.06	-.10	.00	-		
9. Concentration Disruption	.32**	.29**	.26**	.26**	-.15	-.09	-.12*	.16*	-	
10. Somatic	.22**	.15	.26**	.31**	.05	.13	.14	.41**	.18*	-

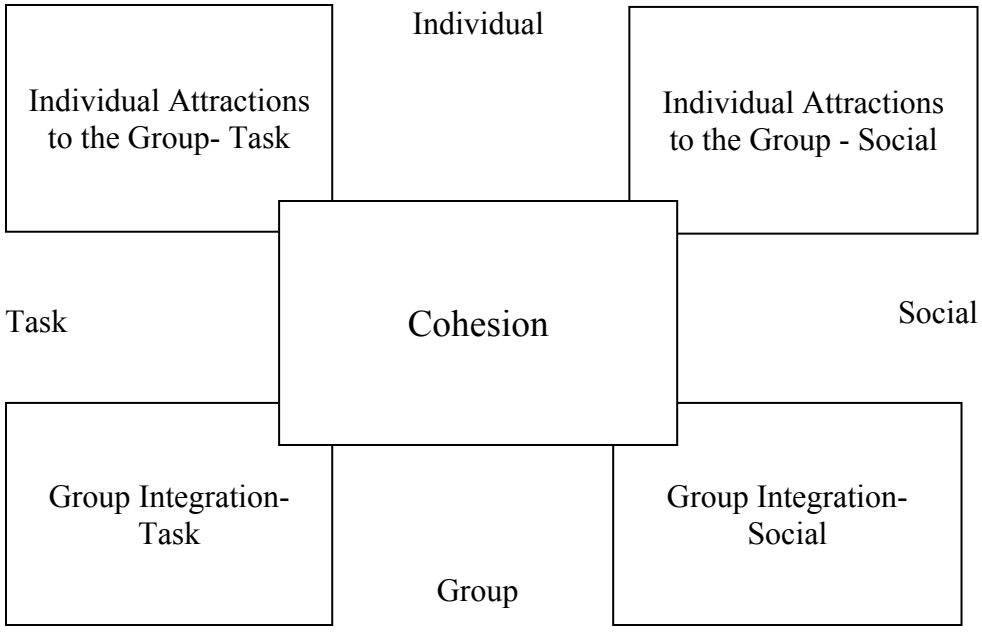
Table 4

Confirmatory Factor Analysis Models

Model	CFI	TLI	NFI	RMSEA	SRMR
SPSQ					
1	.75	.74	.67	.104	.086
2	.87	.85	.80	.094	.080
3	.89	.87	.82	.087	.083
4*	.91	.83	.89	.080	.076
GEQ					
1	.85	.82	.77	.089	.077
2	.87	.85	.80	.087	.069
3*	.90	.87	.81	.081	.065
SAS					
1	.79	.77	.70	.095	.085
2	.84	.82	.74	.084	.083
3	.89	.87	.80	.075	.082
4*	.90	.88	.81	.073	.077

Note. * Indicates best fitting model for the data.

Figure 1



Adapted from "The Development of an Instrument to Assess Cohesion in Sport Teams: The Group Environment Questionnaire", by A.V. Carron, W.N. Widmeyer, and L.R. Brawley, 1985, *Journal of Sport Psychology*, 7, p. 248.

Figure 2

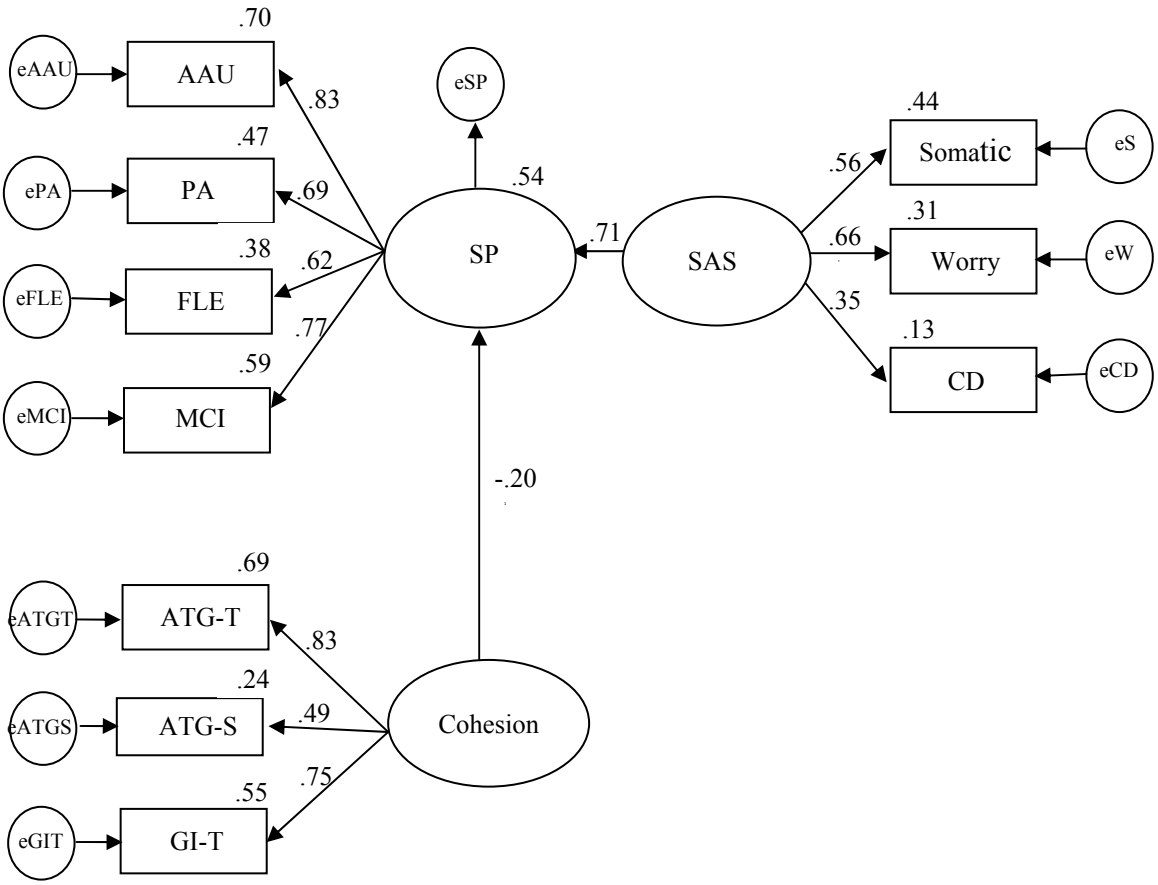


Figure 2. Structural Model with standardized path coefficients.

LITERATURE REVIEW

The purpose of the current thesis was to examine the relationship between self-presentation and team cohesion in sport, while controlling for trait anxiety. The review of literature will be divided into 3 parts (a) self-presentation, (b) cohesion, (c) cohesion and self-presentation.

Self-presentation

Self-presentation, also known as impression management, is the process of controlling how others perceive and evaluate us (Goffman, 1959; Schlenker, 1980). The majority of everyday behavior is constrained by self-presentational concerns regardless of the primary motivation for the behavior (Goffman, 1959). Seldom do people intentionally act in ways that will make them appear socially undesirable. Actions carry social meanings, which affect impressions that others form about the person, how they treat the person and even the views that person holds about themselves (Schlenker, 1980). Primarily, people engage in self-presentation to enhance their well-being, which is centered around three interrelated goals. The first goal is to convey impressions to others that will maximize rewards and minimize costs of social interaction (e.g., approval, friendship, power) or result in material outcomes (Baumeister, 1982; Leary, 1995; Schlenker, 1980). The second goal is to maintain or enhance self-esteem. Self-esteem can be affected by how others react to the individual as well as by the individual's self-evaluation of the impressions they made and their perceived reactions of others (Baumeister, 1982, Leary & Kowalski, 1990; Schlenker, 1980). The third goal is to aid in identity development (Schlenker, 1980).

Self-presentation theory consists of two distinct processes; impression motivation and impression construction (see Figure 3). Impression motivation refers to the desire to

create certain images of one's self and impressions on others. This motivation may lead people to behave in certain ways to affect other's impressions. This overt behavior is known as impression construction (Leary & Kowalski, 1990). Although, self-presentational concerns are highly prevalent, the amount of attention one pays to what others think about them may change based on both situational and dispositional factors (Leary & Kowalski, 1990). People cannot direct their actions without some level of attention to both the self and others. These levels of impression monitoring vary along a continuum. At one extreme is impression oblivion in which the individual is not conscious at any level of what others think. At the other extreme is impression focus in which all thoughts are centered around the impressions others have of them (Leary, 1995; Schlenker & Leary, 1982a). Between these two extremes is preattentive screening and impression awareness. Preattentive screening occurs when people are not consciously aware of thinking about other's impressions, however, quickly become attuned to particularly bad or good appraisals. Impression awareness is the most deliberate state of impression monitoring in which people view themselves from the perspective of others (Leary, 1995; Schlenker & Leary, 1982b).

Impression Motivation

Three primary factors determine the degree of motivation an individual has to engage in impression management; the goal relevance of impressions, the value of the desired outcomes, and the discrepancy between current and desired image (Leary & Kowalski, 1990).

When the attainment of an individual's goals depends on the impressions they make, that individual will be more motivated to impression manage than if their impressions have little or no effect on their goals (Leary & Kowlaski, 1990). Relevance

of one's impressions on desired goals is affected by publicity, dependency and future interactions, of which publicity is suggested to be the most important, given that, public behaviors are more likely to affect achievement of one's goals than private behaviors (Leary & Kowalski, 1990; Schlenker, 1980; Schlenker & Leary, 1982b). Publicity takes into account both the likelihood that others will observe their behavior and the number of individuals that will observe or learn about the behavior secondhand. Generally, if the behavior is public and likely to affect one's image, the more motivated an individual will be to impression manage (Leary & Kowlaski, 1990; Ries & Gruzen, 1976). Dependency refers to how dependent an individual is on others to attain their desired outcomes. The more dependent one is the more important their impressions are and the more motivated the individual is to engage in impression management (Leary & Kowalski, 1990; Schlenker & Leary, 1982b). In business, research has found that impression management occurs more often in front of an employer than an employee's family and friends (Bohra & Pardey, 1984). Lastly, the more future contact with the individual one expects to have, the more likely that impression motivation will be increased (Leary & Kowalski, 1990).

Not only does motivation to impression manage increase when the value of the desired goal increases, but also when desired resources are scarce or when competition for outcomes increases (Leary & Kowalski, 1990; Schlenker & Leary, 1982b). Therefore, the more important the outcome of an athletic competition, the more likely impression motivation will be increased. Additionally, characteristics and status of the target can affect the value of the outcome, such that, motivation to impression manage is stronger when the target is considered powerful and of high status, attractive, likeable and socially desirable (Schlenker, 1980). For instance, in competitive sport, performance is judged by powerful others (e.g., judges, coaches, team selectors), whose opinions have

significant effect on the athlete's outcomes (e.g., medals, financial rewards, team selection) and future career prospects. Poor impression management can have detrimental effects on an athlete's status (James & Collins, 1997).

The degree to which there is a discrepancy between the perceived images that others hold of you and the image that you would like to portray affects an individual's motivation to manage their impressions (Leary & Kowalski, 1990; Schlenker, 1980). The larger the discrepancy, the stronger the motivation to impression manage. After failing an important task, people attempt to repair their image in others' eyes (Baumeister & Jones, 1978; Leary, 1995). An athlete, who has made a crucial mistake, may work harder as to not be seen as incompetent, and to amend the undesired image portrayed to others towards their desired image of appearing athletically competent.

Impression Construction

The content of an image an individual chooses to portray is influenced by the individual's self-concept and desired identity (personal factors) as well as role constraints, the targets values and the individual's current or potential social image (interpersonal factors)(Leary & Kowalski, 1990). Although there is the suggestion that self-presentation is inherently deceptive, research has found that typically most images people project are consistent with how they see themselves (Jones & Pittman, 1982; Schlenker, 1980). The impressions that people try to portray to others are shaped by the individual's self-concept. Impression management often involves attempts to publically project an individual's most valued attributes as determined by self-knowledge that the individual holds (Schlenker, 1980). The self-concept also acts to guide the self-beliefs that one holds about how successful they will be in projecting a certain image. People are more likely to present themselves more positively when they believe they will be

successful and are unlikely to be found out (Baumeister, 1982). Self-presentation often results from an interaction with the individual's self-concept and their desired identity images (Leary & Kowalski, 1990). Identity images shape people's self-presentations by guiding them to portray images in the direction of their desired identity but also away from their undesired identity images (Leary & Kowlaski, 1990). The role an individual has also guides one's impressions in a way that is consistent with characteristics one is expected to possess when in a given role. Presenting images that are inconsistent with that role may lead to loss of that role (Goffman, 1959). Research has found that the target's values are important in dictating the image that one projects, such that people project images that are in line with the perceived values of significant others (Reiz & Gruzen, 1976). Finally, how people think others currently see them and how they think that others may come to see them in the future also impacts impression management (Leary & Kowalski, 1990). People are more likely to portray images that are consistent with information if they know that others have knowledge of this information about them than if the knowledge is private (Schlenker, 1980). Not only does one's current image constrain behavior but can also induce people to portray particular images. For example, research has found that people who underplay accomplishments when this knowledge is public are liked better for their modesty (Schlenker & Leary, 1982a). Additionally, impressions people portray are influenced by the potential that in the future, certain information about them may become public.

Self-presentation and Social Anxiety

The two component theory of self-presentation was originally forwarded to explain social anxiety (Baumeister, 1982, Leary, 1983, Schlenker & Leary 1982b), which is defined as "anxiety resulting from the prospect or presence of interpersonal evaluation

in real or imagined social situations" (Schlenker & Leary, 1982b, p. 642). Concerns about the evaluation of others are central to social anxiety (Leary, 1983). From the self-presentational perspective, social anxiety is thought to arise when people are motivated to make a particular impression, but are uncertain they can do so (Schlenker & Leary, 1982b). Any situational or dispositional factor that affects one or both of these aspects will determine an individual's level of social anxiety (Leary, 1983; Leary & Kowalski, 1995). Anxiety can vary across situations but there are individual differences in the extent that people experience social anxiety (Schlenker & Leary, 1982b). One such factor associated with the individual differences is that of personality traits. Indeed, the tendency to experience social anxiety can be viewed as a dispositional trait (Crozier, 1979) that predisposes individuals to perceive situations as threatening and to experience social anxiety (Spielberger, 1966). People who are more concerned with approval by others or with avoiding disapproval tend to score higher in trait social anxiety (Leary & Kowalski, 1995). Self-presentation and general social anxiety research has demonstrated differences among individuals who are either high or low for trait anxiety. For instance, highly trait anxious individuals are more likely to be anxious about sport competition (Martin & Mack, 1996), to perceive the same feedback about themselves as being more negative, have more negative affective responses (Smith & Sarason, 1975) and have a more accurate memory for negative information about themselves (O'Banion & Arkowitz, 1977) than low anxious individuals.

Although the experience of anxiety is essentially the same, some people have a tendency to become socially anxious in certain types of social situations (Leary & Kowlaski, 1995), such as competition. The anxiety that ensues as a result of this situation is competitive anxiety. Given that previous self-presentation research has demonstrated

differences among those who are high and low in trait anxiety, researchers have controlled for the effects of dispositional levels of situation specific anxiety (e.g., Carron & Prapavessis, 1997; Gammage, Hall, & Martin Ginis, 2004; McGowan, Prapavessis, & Wesch, 2008).

Measurement

Currently there are three measures that assess self-presentation in sport. Two questionnaires assess self-presentational concerns salient to sport competition: The Self-Presentation Sport Questionnaire (SPSQ; Wilson & Eklund, 1998) and the Competitive Self-Presentation Concern Inventory (CSPCI; Williams, Hudson, & Lawson, 1999). Also the Impression Motivation in Sport Questionnaire – Team (IMSQ-T; Payne, 2011) assesses impression motivation of athletes in the team sport context.

The development of the SPSQ (Wilson & Eklund, 1998) began with 68 items that were derived from literature on sources of stress in sport, competitive anxiety and self-presentation. Using principle-axis factor analysis, the item pool was reduced to 33 items, which loaded onto four factors and accounted for 62.3% of the variability. The four factors representing self-presentational concerns were performance/composure inadequacy (SPSQ-PCI), appearing fatigued/lacking energy (SPSQ-FLE), appearing athletically untalented (SPSQ-AUU) and physical appearance (SPSQ-PA). Internal consistency was demonstrated with acceptable alpha coefficients and item total correlations for all four factors (SPSQ-PCI α = .93, .66-.79; SPSQ-FLE α = .93, .66-.79; SPSQ-AUU α = .90, .64-.78; SPSQ-PA α = .93, .64-.83).

Additional confirmatory factor analysis yielded a four factor model, with 21 items (McGowan et al., 2008). The four factors are consistent with Wilson and Eklund's (1998) original SPSQ, represented with AAU (6 items), PA (5 items), FLE (4 items),

however, the original SPSQ-PCI was renamed with mental composure inadequacies (MCI, 6 items). The reason for renaming the PCI subscale was that the authors believed that the items loading onto that factor better represented both theoretically and statistically, mental composure as opposed to just performance composure inadequacies. The 21-item version of the SPSQ was found to explain 61.38% of response variability, and confirmatory factor analysis demonstrated acceptable internal consistency (AAU α = .91; PA α = .89; FLE α = .89; and MCI α = .89) (McGowan et al., 2008). Additionally, the 21-Item questionnaire demonstrated better incremental fit indices (.93) and comparative fit indices (.92) than the original 33-Item questionnaire (IFI = .86; CFI = .86). Although initial evaluations are promising, additional analysis of the psychometric properties is required.

Williams et al. (1999) developed the CSPCI, based on James and Collins' (1997) qualitative findings from which they proposed a 16-item, four factor model. The factors included 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). Confirmatory factor analysis revealed acceptable goodness of fit (RMSA < 0.08, GFI and NNFI values close to 1and AGFRI = 0.39). Additionally, factor loading supported the four factor model with moderate to strong loadings ranging from 0.53-0.84. Adequate reliability of the subscales was demonstrated with Cronbach alpha values ranging from 0.66-0.84.

Given that groups differ from a collection of individuals and that individual behavior and performance is different in a group context (Carron & Hausenblas, 1998), Payne (2011) suggested the self-presentational motives, the strategies employed in impression management and the resulting social impact are different in team sport

compared to individual sport. Therefore, the IMSQ-T was developed to assess impression motivation, impression efficacy (e.g., confidence in their ability to achieve this impression) and associated affective responses for athletes competing in team sports. The IMSQ-T is a 22-item measure, consisting of five subscales; development of self, avoidance of impression-damaging reactions, avoidance of negative sporting outcomes, seeking esteem-enhancing reactions and development of a social identity. Confirmatory factor analysis demonstrated acceptable factor loadings ranging from .50-.79, and inter-factor correlations ranging from .20-.85. Initial internal consistency was demonstrated with Cronbach alphas ranging from .65-.82 for all five of the subscales (Payne, 2011).

Self-presentation in Sport

Leary (1992) suggested that self-presentational perspectives provide a theoretical basis for understanding a variety of issues in sport. Mere participation in a sporting event, presents a myriad of self-presentational risks. An athlete's skillfulness, fitness, and ability to handle pressure, are all on display to a diverse evaluative audience that includes significant others, squad selectors, coaches, teammates, opponents and spectators (Leary, 1992). Social evaluation is inherent in sporting competitions. Not only do athletes risk portraying negative images of their ability in competitive environments, but also their personally important goals are at stake (Wilson & Eklund, 1998). Leary (1992) suggested the choice of sport, the amount of effort (e.g., social facilitation or social loafing), competitive anxiety and self-handicapping in sport can all be affected by self-presentation.

Self-presentation and competitive anxiety. One of the most researched areas in sport psychology is competitive anxiety (Martens, Vealey, & Burton, 1990; Woodman & Hardy, 2001). Evaluative threat has been central to theories of competitive anxiety

(Vealey, 1990) and given that self-presentation's two component theory was originally forwarded to explain social anxiety (Baumeister, 1982; Leary, 1983), Leary (1992) proposed that competitive anxiety revolves around the self-presentational implications of sport competition. In an exploration of the sources of competitive stress and the underlying self-presentational motives, James and Collins (1997) conducted interviews with 20 elite athletes who ranged from club to international levels, in both individual and interdependent sports. Eight general sources of stress emerged including significant others, social evaluation and self-presentational concerns, competitive anxiety, perceived readiness issues, the nature of the competition, environmental demands, not performing to required standard and miscellaneous factors. Further, they identified that 67% of all stress sources were heightened by concerns about impression management. Participant responses suggested that the majority of competitive stressors tend to operate through two self-presentational mechanisms that either increase the importance of self-presentational factors of competition (e.g., publicity of performance, dependence on important others), thereby increasing impression motivation and/or by increasing the likelihood of self-presentational failure or poor performance (James & Collins, 1997). Recent research has demonstrated a positive relationship between experiences of cognitive anxiety and performance specific evaluative concerns, such as appearing untalented and lacking mental composure (McGowan et al., 2008), and performing poorly in front of significant others (Bray, Martin, &Widmeyer, 2000). Contrastingly, experiences of somatic anxiety are related to general evaluative concerns, such as one's appearance (Bray et al., 2000; McGowan et al., 2008). These findings support those of previous research that has found a relationship between competitive anxiety and fear of negative evaluation (Gould, Jackson, & Finch, 1993), and demonstrated larger correlations between self-

presentational concerns and cognitive aspects of anxiety than for somatic components (Wilson & Eklund, 1998). This is not surprising given that self-presentational concerns result from subjective perceptions of threat, which chiefly involve cognitive processes. Together these findings support Leary's (1992) contention that competitive stress is underpinned by physical, competitive and athletic presentational concerns.

Competitive anxiety is a situation specific form of social anxiety, which is influenced by both situational and dispositional factors. One dispositional factor specific to sport is competitive trait anxiety which may influence one's level of impression management and their tendency to experience anxiety (Leary & Kowalski, 1995). Individuals high in competitive trait anxiety tend to perceive situations as threatening (Martens et al., 1990). Research has shown that individuals high in competitive trait anxiety rate their ability lower (Gould, Horn, & Speermann, 1983), have lower self-esteem and worry more about performances (Brustad & Weiss, 1987), use more avoidant coping behaviors (Giacobbi & Weinberg, 2000) and are more likely to experience athlete burnout (Aoyagi, Burke, Hardy, & Hamstra, 2009). Research examining self-presentation and competitive state anxiety have controlled for individual differences in trait competition anxiety (McGowan et al., 2008).

Measurement of competitive trait anxiety. The Sport Competition Anxiety Test (SCAT: Martens, 1977), which consists of 10-items that measure trait anxiety and five distracter items. Research has found that the SCAT is internally consistent (alphas = .95-.97), and demonstrates content and concurrent validity (Martens et al., 1990). Given that anxiety is multidimensional (Leary, 1983) the SCAT has come under criticism for its unidimensional focus on somatic anxiety. As such Smith, Smoll and Shutz (1990) developed the Sport Anxiety Scale (SAS) as a multidimensional measure of competitive

trait anxiety. The SAS consists of 21-items measuring three subscales of trait anxiety: somatic anxiety (9 items), worry (7 items), and 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 .74-.92) and good model fit (CFI= .80, RMSEA = .93) (Smith et al., 1990). Subsequent factor analysis found that item 14, "I have lapses in concentration because of nerves," and item 20, "I'm concerned I won't be able to concentrate," on the concentration disruption scale actually loaded onto the worry subscale (Dunn, Causgrove Dunn, Wilson, & Syrotuik, 2000; Prapavessis, Maddison, & Fletcher, 2005) and item 1, "I feel nervous" on the somatic subscale is problematic and does not generalize across diverse samples (Prapavessis et al., 2005). Therefore it was suggested that item 1 be removed (Prapevessis et al., 2005) and the items 14 and 20 should be included in the worry subscale (Dunn et al., 2000). This resulted in internal consistencies ranging from .73-.88 (Dunn et al., 2000; Prapavessis et al., 2005). Further examination compared the original three factor SAS model with items 1, 14 and 20 removed with Prappavesis et al., (2005) model with item 1 removed and items 14 and 20 under the worry subscale (Smith, Cumming, & Smoll, 2006). The results indicated better model fit of the original worry subscale (CFI = .954, RMSEA = .081) compared to the worry subscale with items 14 and 20 added (CFI = .916, RMSEA = 0.90) (Smith, Cumming, et al., 2006). Therefore, Smith, Cumming, et al. (2006) suggest that a revised scoring system be used which maintains the original three scale minus items 1, 14, and 20. This scoring system resulted in alpha coefficients of .85 for somatic anxiety, .82 for worry and .71 for concentration disruption.

Given the problems with the SAS, Smith, Smoll, Cumming, and Grossbard (2006) suggested that the measure may not be as psychometrically sounds as first thought. Additionally, acceptable levels of reliability and validity have not been replicated in younger populations (e.g. Smith, Smoll, & Barnett, 2005). As such, Smith, Smoll, et al. (2006), developed the Sport Anxiety Scale- 2 (SAS-2) to assess competitive trait anxiety across different age groups. The SAS-2 is a 15-item measure that contains the original three factors: somatic, cognitive, and concentration disruption, with five items per factor. The authors found that with a college sample, the SAS-2 had acceptable internal consistency (alphas = .89-.91) and fit indices (CFI=.95, RMSEA=.065). Additionally the SAS-2 was found to be highly correlated with the SAS suggesting that the SAS-2 is an acceptable replacement for the original (Smith, Smoll, et al., 2006). However, replication of the psychometric properties of the SAS-2 for adults has not been examined as further validation of the SAS-3 has mainly been done with youth populations.

Self-presentation and self-handicapping. Berglas and Jones (1978) defined self-handicapping "strategies as any action or choice of performance setting that enhances the opportunity to externalize (or excuse) failure and to internalize (reasonably accept credit for) success (p.406). By proactively establishing handicaps, it allows the individual to attribute failure to things other than their ability or competence (Higgins, 1990). Two types of self-handicapping include self-reported and behavior forms (Leary & Sheppard, 1986). Self-reported handicaps are verbal claims of physical (e.g., illness) or psychological (e.g., anxiety) states that might interfere with performance. Alternatively, behavioral handicaps refer to overt, deliberate actions (e.g., withholding effort) that may decrease the chance of success (Leary & Sheppard, 1996). Self-handicapping has been typically measured with the Self-Handicapping Scale (SHS; Jones

& Rhodewalt, 1982), comprised of two subscales: Excuse making, which refers to the tendency to proactively advance impediments that may impact performance and; Effort expended, which refers to tendency to express lack of effort or motivation in preparation to competition. Scores on the SHS are positively correlated with self-presentational concerns in athletes (Hudson, Williams, & Stacy, 1998; Prapavessis & Grove, 1994).

Self-handicapping may be more likely to occur in situations that involve social evaluation and threat to one's public image, such as in the competitive sporting environment. Schlenker and Leary (1982a) suggested that self-handicapping is more likely to occur when self-presentational difficulties threaten the individual's self-esteem, on personally important dimensions and when no other alternative explanation is available. Although clinical research has reliably shown that self-handicapping is a personality trait (Jones & Rhodewelt, 1982), Self (1990) suggested that self-handicapping must be viewed in a social context in which there are threats to self-esteem. For example, previous research has identified the importance of the event, strongly felt cohesion among teammates, or to live up to performance expectations to be related to the use of self-handicapping (Carron, Prapavessis, & Grove, 1994; Hausenblas & Carron, 1996). Athletes high in the trait of self-handicapping are more likely to experience competitive anxiety, rely on emotion-based coping strategies (e.g. denial/avoidance), and perceive lower levels of team cohesion (Carron et al., 1994), spend less time practicing (Rhodewalt, Saltzman & Wittmer, 1984) and reduce effort (Deppe & Harackiewicz, 1996; Rhodewalt et al., 1984) than those low in trait for self-handicapping. Research has shown that environments in which athletes expect their performances to be compared to others, particularly in competition, the tendency to self-handicap increases (Sheppard & Arkin, 1991). Self-handicapping may be a strategy to maintain one's public image,

suggesting a self-presentational motive for engaging in self-handicapping behaviors (Berglas & Jones, 1978; Kolditz & Arkin, 1982). Indeed, research has found a positive correlation between self-handicapping and impression management (Hudson et al., 1998).

Cohesion

In one of the earliest definitions, group cohesion was defined as 'the total field of forces which act on members to remain in a group' (Festinger, Schachter, & Back, 1950, p. 164). Of importance in this definition is the one-dimensional emphasis on individual attractiveness to the group. However, other researchers have defined cohesion as a group's resistance to disruptive forces (Gross & Martin, 1952). Both definitions of cohesion are not without criticism. Carron (1982) suggested that cohesion centered only on attraction is an under representation and fails to explain cohesiveness in groups that lack interpersonal attraction. The definition of cohesion has evolved to include aspects of individual attraction and the group's goals and objectives. As such, cohesion is defined as "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, Brawley, & Widmeyer, 1998, p. 213). Central to this definition is four main characteristics of cohesion. First, cohesion is multidimensional, meaning that there are numerous factors that influence group unity, which can vary across groups. Second, cohesion does not remain stable, but is dynamic in nature. Cohesion can change over time and the factors that are important at one point in time may not be important at another. Third, cohesion is instrumental in nature. Groups come together for a purpose. Typically sports teams come together for task-oriented reasons. Fourth, cohesion has an affective component, which involves satisfaction and positive

social relationships between members (Carron & Hausenblas, 1998; Carron, Shapcott, & Burke, 2008).

Conceptual Model and the Measurement of Cohesion

The conceptualization of cohesion revolves around the group members' perceptions of the group as a whole and their personal attractiveness to the group, both of which can be focused on task or social dimensions (Carron et al., 1998). Therefore, group cohesiveness is represented by four constructs: 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) (see Figure 2). Individual attractions to the group represent the perceptions of motives that work to keep the individual in the group and encompass the feelings they have for the group, and their involvement with other group members. Contrastingly, group integration refers to the degree of unification of the group and reflects perceptions of closeness, similarity and bonding (Carron, Widmeyer, & Brawley, 1985). More specifically, ATG-T refers to the individual team member's feelings about their involvement in the team's goals and objectives. ATG-S refers to individual team member's feelings about their acceptance and social relationships within the group. GI-T refers to individual team member's perceptions of the unity of the team as a whole, around the team's instrumental objectives. GI-S refers to individual team member's perceptions of social unity of the team as a whole.

Based on the aforementioned conceptual model, Carron et al. (1985) developed the Group Environment Questionnaire (GEQ) to assess cohesion in sport teams. The GEQ consists of 18 items that assesses the four dimensions of team cohesion. All items are scored on a 9-point Likert scale, anchored at 1 (*strongly agree*) to 9 (*strongly disagree*). Higher scores on the GEQ represent higher perceptions of cohesion.

However, 12 of the items are negatively worded and are reverse scored. The GI-T scale consists of four items, with a sample item of, "Our team is united in trying to reach its goals for performance." The GI-S scale consists of four items, with a sample item of "Our team would like to spend time together in the off-season." ATG-T scale consists of four items and an example item is, "I'm not happy with the amount of playing time I get." Lastly, the ATG-S scale consists of five items with a sample item of "Some of my best friends are on this team." Subsequent research has found the GEQ demonstrates content validity (Carron et al., 1985) and is internally consistent (Carron et al., 1985; Patterson, Carron, & Loughead, 2005). Specifically, Patterson et al. reported acceptable Cronbach alphas for all four subscales ranging from .70-.76. Brawley, Carron and Widmeyer (1987) provided evidence of concurrent validity for the GEQ. More specifically, they found that the Group dimensions of the GEQ were correlated with the group perceptions measure on the Sport Cohesiveness Questionnaire (SCQ; Martens, Landers, & Loy, 1971) and the social dimensions of the GEQ were correlated to the individual attractions measure on the SCQ (Brawley et al., 1987). Additionally, they found that the Task dimensions (group and individual attractions) correlated with the three Team Climate Questionnaire's (TCQ; Grand & Carron, 1982) measures of role involvement (Brawley et al., 1987). Researchers (Brawley et al., 1987) have also provided support for the predictive validity of the GEQ, such that the task scales of the GEQ successfully predicted athletes' membership to individual or team sports, correctly classifying 74% of athletes.

Despite the GEQ being the most widely used measures of cohesion, there has been a number of studies that have not demonstrated acceptable Cronbach's alpha for one or more scales (e.g., Westre & Weiss, 1991). As indicated by Eys, Carron, Bray and

Brawley (2007), the mix of both positively and negatively worded items may be the underlying cause of the variability in internal consistency across studies. Although the use of both positively and negatively worded items may allow researchers to reduce the response acquiescence (Nunnally, 1978), the use of negation to reverse items may result in misreading (Spector, 1992) and misinterpretation (Barnette, 2000) of the statement ultimately reducing internal consistency. Therefore Eys et al. (2007) examined if positively worded items would affect internal consistency using two independent samples participating in interactive and coactive sports. They used both the original GEQ and the modified GEQ in which the negatively worded items were modified so that all items where phrased positively. In both samples, the positively worded scale produced significantly higher Cronbach alpha values on all scales except ATG-T (Eys et al., 2007). Eys et al. (2007) suggested that the ATG-T dimension was unchanged because in the original scale all items in this dimension were negatively worded, therefore in the modified scale, all items were positively worded maintaining unification within the dimension. Overall, studies examining the reliability and validity have shown the GEQ to be a strong and psychometrically sound measure of cohesion in teams.

Conceptual Framework for the Study of Cohesion

Carron (1982) forwarded a linear conceptual model for cohesiveness in sport teams consisting of antecedents (inputs), consequences (outputs) and throughputs (see Figure 4). Antecedent factors that influence cohesion fall in four general categories; environmental factors, personal factors, leadership factors and team factors. It is important to note, that although these categories are presented as independent, they have reciprocal relationships with cohesion and are intertwined in actual groups (Carron & Hausenblas, 1998).

Antecedents of cohesion. Carron (1982) originally identified two environmental factors; contractual responsibility and organizational orientation. Contractual responsibility refers to the rules surrounding eligibility and transfers, geographical restrictions and contractual obligations present in both amateur and professional sports. Organizational orientation refers to the goals of the organization and the strategies employed to attain these goals. Additionally, the age, gender and maturity level of the organization's participants will affect the perceptions of cohesion. More recent research has identified additional environmental factors that affect perceptions of cohesion. For instance, Brawley, Carron, and Widmeyer (1988) found that elite and intramural athletes on high cohesive teams viewed their team to be more resilient to disruptive events at both an individual and team level. Additionally, research has found that cohesion is decreased when group size increases (Widmeyer, Brawley, & Carron, 1990), and when level of competition increases (Granito & Rainey, 1988).

As indicated by Carron (1982), it is inconceivable to list all potential factors associated with cohesion, however previous research has shown a relationship between cohesion and individual attributes, motivation, affect, and behavior (Carron & Hausenblas, 1998; Loughead & Hardy, 2006; Prapavessis & Carron, 1996). The third component of factors includes those related to leadership. Specifically, leader behavior and leadership style has been associated with cohesion (Schriesheim, 1980). Research has found that athletes who perceive their coaches to provide training and instruction, democratic behavior, social support and positive feedback perceived higher levels of task cohesion (Pease & Kuzub, 1994; Westre & Weiss, 1991). Additionally, athlete leaders display leadership behaviors to a different extent than coaches (Loughead & Hardy,

2005) and the leadership behaviors of both formal and informal athlete leaders impact team members' perceptions on cohesion (Spalding, 2010; Vincer & Loughead, 2010).

The previously mentioned categories all contribute to the most specific category of antecedents, team factors. Team factors include, but are not limited to, group norms, roles, team stability and collective efficacy, which are thought to influence cohesion (Carron, 1982; Carron, Hausenblas, & Eys, 2005). Research has demonstrated that perceptions of cohesion are positively related to conformity to group norms (Prapavessis & Carron, 1997; Patterson et al., 2005), role clarity and role acceptance (Brawley et al., 1987) and a negative relationship with role ambiguity (Eys & Carron, 2001).

Consequences of cohesion. As proposed in Carron's (1982) conceptual framework of cohesion, the consequences of cohesion are divided into group (e.g., team stability, team performance) and individual (e.g., individual performance and individual satisfaction) outcomes. A variety of outcomes have been examined including, but not limited to, performance (Carron, Coleman, Wheeler, & Stevens, 2002), athlete satisfaction (Widmeyer & Williams, 1991), adherence (Carron et al., 1988), intention to return (Spink, 1995), and collective efficacy (Spink, 1990). Of these outcomes, performance and athlete satisfaction has been the most comprehensively studied. In a meta-analysis, Carron et al. (2002) found that there is a moderate to strong effect size (ES= .66) in the cohesion-performance relationship. More specifically, social cohesion (ES= .70) was found to have a stronger effect than task cohesion (ES=.61). In an examination of cohesion and athlete satisfaction, Widmeyer and Williams found member satisfaction to be significantly correlated with all four dimensions of cohesion.

Cohesion and Self-Presentation

Groups exert influence on their members, which increases as cohesion increases (Carron et al., 1988). To be considered a group, there must be:

> Two or more individuals who possess a common identity, have common goals and objectives, share a common fate, exhibit structured patterns of interaction and modes of communication, hold common perceptions about group structure, are personally and instrumentally interdependent, reciprocate interpersonal attraction, and consider themselves to be a group. (Carron & Hausenblas, 1998, pp. 13–14)

Carron, Burke and Prapavessis (2004) suggested that cohesion may be an indicator of "groupness". That is, higher cohesion represents a stronger group. Also, it has been suggested that groups afford both psychological benefits and costs for individual group members (Carron et al., 1994). In regards to psychological benefits, research has demonstrated that increased cohesion is associated with perceptions of more acceptance and support from other group members (e.g., Yalom, 1975), increased self-esteem and reduced anxiety (e.g., Julian, Bishop, & Feilder, 1966), more confidence that the group can withstand the negative effects of disruptive events (Brawley et al., 1988), and increased readiness to diffuse the responsibility for failure across all group members (Brawley et al., 1987; Schlenker & Miller, 1977). For example, Schlenker and Miller found that perceptions of cohesion mediate the attributions made in regards to responsibility for group failure. Members of highly cohesive groups rated their responsibility as equal as the average group member, whereas in low cohesive groups members rated their responsibility as less than the average group member (Schlenker & Miller, 1997). This appears to be particularly evident when the group suffers a loss (Brawley et al., 1987).

Membership in groups can also involve psychological costs. Research has shown that in cohesive groups, members have a greater tendency to make sacrifices for the group (e.g., Zander, 1982), to feel greater responsibility for the group and its members (e.g., Sagi, Olmstead, & Atelesek, 1955), and to conform to group norms and expectations (e.g., Schachter, 1951). Also, group members have fewer tendencies to take advantage of their fellow group members than in low cohesive groups (e.g., Braver, 1975). The benefits afforded by membership in highly cohesive teams appear to provide an atmosphere that reduces the evaluative threat for the individual as responsibility is diffused across the group (Carron et al., 1994; Martens et al., 1990). On the other hand, as suggested by the psychological costs of membership in highly cohesive groups, this may provide an atmosphere where evaluative threat and threat to self-esteem is increased. That is, in highly cohesive groups there is increased pressure to carry out group responsibilities and satisfy the expectations of teammates and failure to do so would put self-esteem under threat (Carron et al., 1994; Martens et al., 1990).

Membership in a group has been found to affect a number of individual behaviors. More specifically, social loafing, which is the tendency to reduce individual effort in a group (Latane, 1981), is reduced in highly cohesive groups, regardless of whether or not individual contributions are identifiable (Williams & Widmeyer, 1991). Additionally, groups influence social facilitation, which is the increase in performance simply due to the presence of others (Allport, 1924) and conformity to a group's norms, which refers to the individual's compliance to commonly accepted group standards. In regards to social facilitation, for well learned tasks the presence of the group increases performance. Also, perceptions of social and task cohesion have been found to be related to perceived conformity of teammates to team norms (Colman & Carron, 2001; Prapavessis & Carron,

1997). Furthermore, groups influence individual member's level of anxiety and their use of self-handicapping behaviors, both of which are underpinned by self-presentational concerns. Group influence serves to reduce social anxiety associated with self-presentation (Carron, Estabrooks, Horton, Prapavessis, & Hausenblas, 1999; Carron & Prapavessis, 1997). When compared to being alone, being with a best friend and being with a group of friends resulted in less social anxiety (Carron & Prapavessis, 1997). Additionally, in both a general social situation (e.g., a party) and a physique salient social situation (e.g., the beach) being with a group of friends resulted in reduced social anxiety compared to being alone. The only exception was being a female with a group of male friends at the beach, which was as anxiety provoking as being alone (Carron et al., 1999). Although, those who were high in social physique anxiety experienced more social anxiety across all three groups, than those low in social physique anxiety, there was no interaction between the trait of social physique anxiety and the social conditions (Carron & Prapavessis, 1997). Social anxiety research has shown that those who are high or moderate in trait anxiety not only perceive the same feedback as being more negative, and indicated more negative affective responses (Smith & Sarason, 1975) but also are more accurate in remembering negative information about themselves (O' Banion & Arkowitz, 1977) than those low in trait anxiety. As such, even though their results did not support this, based on research in general anxiety, the authors suggest that an interaction between trait anxiety and group influence is probable. For instance, the benefits of group influence in reducing anxiety should be more strongly felt for individuals who are high in social physique anxiety, than those who are low in social physique anxiety (Carron & Prapavessis, 1997).

Cohesion and competitive anxiety. Research has found that perceptions of cohesion are related to the level of competitive anxiety felt by the group's members (Eyes, Hardy, Carron, & Beauchamp, 2003; Prapavessis & Carron, 1996). More specifically, it is the task dimensions of cohesion (ATG-T and GI-T) that are related to athletes' experiences of anxiety (Eyes et al., 2003; Prapavessis & Carron, 1996). This relationship may be mediated by psychological costs, in that psychological costs were found to be negatively associated with ATG-T and self-confidence, and positively associated with perceptions of cognitive and somatic anxiety (Prapavessis & Carron, 1996). Additionally, ATG-T was negatively associated with cognitive and somatic anxiety and positively associated with self-confidence (Prapavessis & Carron, 1996). The task dimensions of cohesion are also related to how athletes interpret their anxiety symptoms (Eys et al., 2003). That is, higher perceptions of ATG-T and GI-T are associated with facilitative interpretations of cognitive anxiety symptoms, and GI-T is also associated with facilitative interpretations of somatic anxiety, compared to the debilitative interpretations associated with low perceptions of cohesion (Eys et al., 2003). Although the results from Prapavessis and Carron (1996) provide support for the notion that higher cohesion results in reduced pressure to carry out group responsibilities and satisfy teammates' expectations, they are contradictory to the notion that higher perceptions of team cohesion would result in greater pressure on the individual as predicted by the psychological costs of group membership (e.g., less tendency to take advantage of the group, greater responsibility for the group).

From a self-presentational view, Carron and Prapavessis (1997) forwarded four possible reasons for the group's influence on the reduction of anxiety levels: (1) Anonymity, which refers to individuals becoming lost in the crowd; (2) Diffusion of

evaluation or responsibly, which refers to attention diffused across group members; (3) Distraction, which refers to distraction of focus away from the self and (4) Security, which refers to a psychological protection (e.g., self-esteem) that groups may afford its members. Subsequent research found that diffusion of responsibility was the most important factor in relieving social anxiety, followed by security, distraction and anonymity (Carron, et al., 1999; Sardoni & Carron, 2000). The group context serves to reduce anxiety for individual group members. Moreover, it appears that the degree of cohesion is related to the extent that anxiety is reduced (Carron et al.1999). Overall, research findings demonstrate that the experience of competitive anxiety will be different among members of high cohesive teams compared to less cohesive teams (Eys et al., 2003; Prapavessis & Carron, 1996). This may be due to a reduction in self-presentational concerns associated with sport competition.

Cohesion and self-handicapping. The use of self-handicaps in sport is not surprising given that sport participation involves both a social context with the corresponding evaluative threats. Similar to competitive anxiety, it has been suggested that the psychological benefits afforded by groups may lead to a reduction in self-handicapping behaviors. That is, the threat to an individual's self-esteem may be reduced by membership in a cohesive group (Carron et al., 1994). However, consideration of the psychological costs of group membership may support an increase in self-handicapping behavior in cohesive groups (Carron et al., 1994). Similar to a group's effect on experiences of competitive anxiety, task dimensions of cohesion are associated with the tendency to self-handicap (Carron et al., 1994; Hausenblas & Carron, 1996). Research has indicated that the task dimensions (ATG-T and GI-T) of cohesion were negatively related to the trait of excuse making (Carron et al., 1994). That is, athletes high in the

trait of excuse making, held lower perceptions of ATG-T and GI-T dimensions of cohesion. Additionally, when perceptions of social cohesion (GI-S) were high, those high in the trait for excuse making reported disruptions in their preparation prior to competition significantly more so than those low in the trait (Carron et al., 1994; Hausenblas & Carron, 1996). However, this was not the case when social cohesion was low, such that there were no differences among those high or low in the trait of excuse making (Carron et al., 1994). This supports the finding that cohesion acts a moderator between the trait of self-handicapping in the form of excuse making and the use of self-handicapping strategies in both male and female athletes. Research in competitive anxiety and self-handicapping, given the underlying threats to self-esteem, may be indirect investigations of the influence of perceived cohesion on self-presentational concerns.

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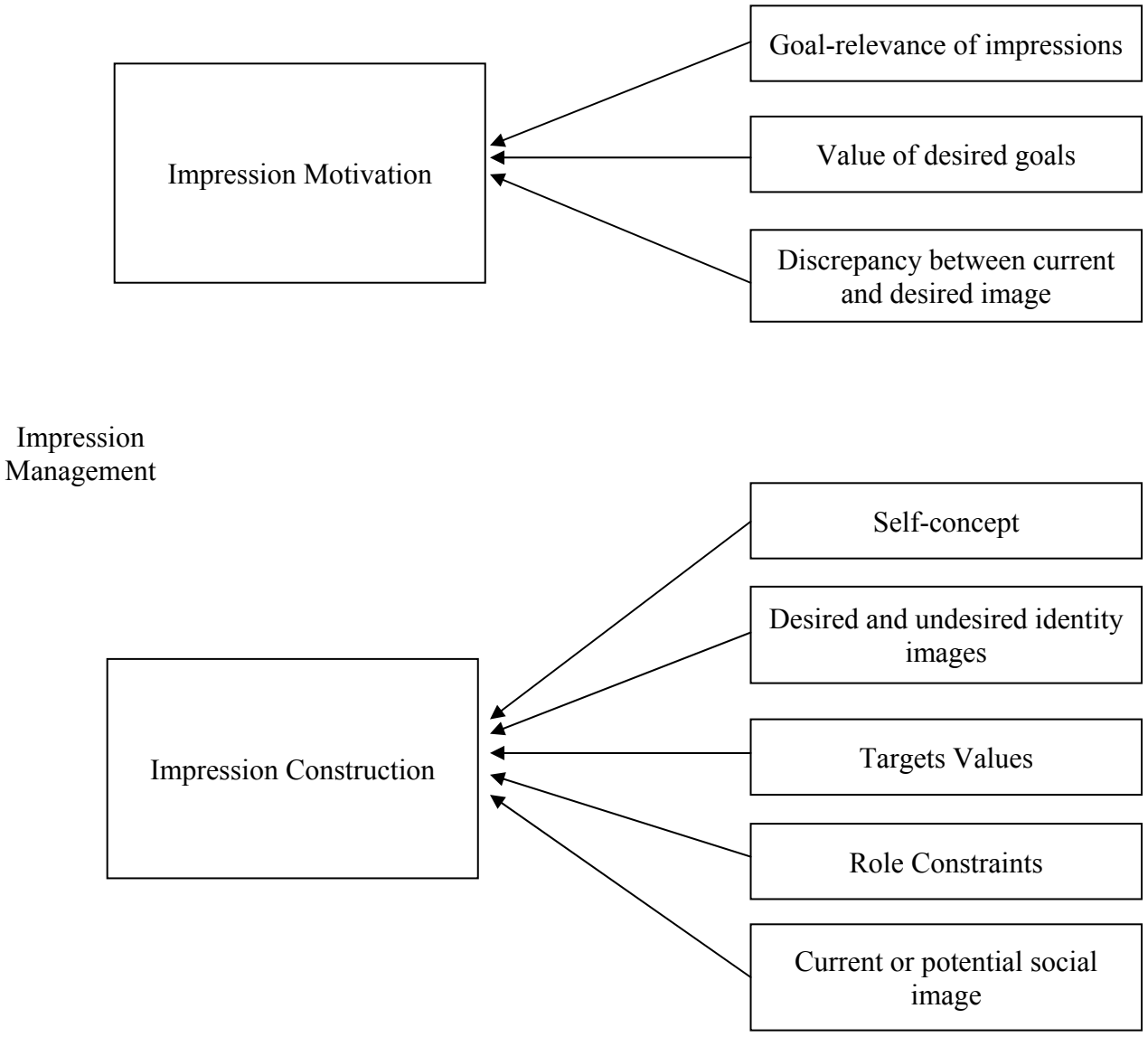
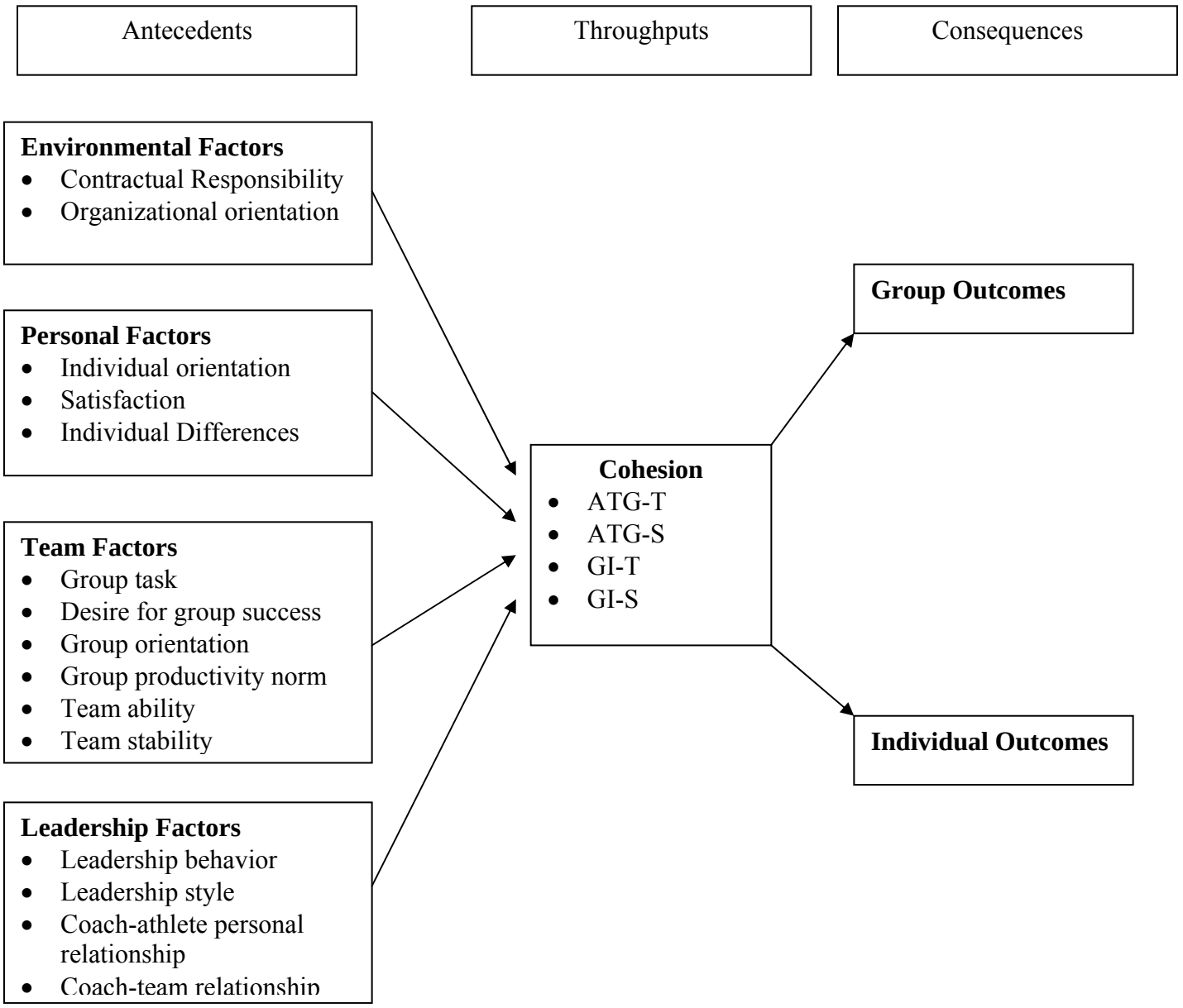
Figures

Figure 3



Adapted from "Who Cares What Other People Think? Self-presentation in Exercise and Sport," by K.A., Martin Ginis, K.A., M. Lindwall, and H. Prapavessis, 2007, In, G. Tenebaum, & R.C. Eklund (Eds.), *Handbook of sports psychology* (3rd ed., pp. 136-153). Hoboken, NJ; John Wiley & Sons, Inc.

Figure 4



Note: ATG-T = individual Attractions to the Group-Task; ATG-S = Attractions to the Group- Social; GI-T = Group Integration – Task; GI-S = Group Integration Social. Adapted from "Cohesiveness in Sport Groups: Interpretations and Considerations", by A.V. Carron, 1982, *Journal of Sport Psychology*, 4, p.131.

Appendix A

Welcome

Welcome to the study being conducted by Alison Divine and Dr. Krista Chandler, from the faculty of Human Kinetics at the University of Windsor.

The purpose of the study is to examine the relationship between self-presentation and cohesion.

If you volunteer to participate in this study, you will be asked to complete an online questionnaire package, which will take approximately 20 minutes.

Why does your participation matter?

The proposed research will contribute to the sport and exercise psychology field through broadening researcher's understanding of how cohesion in team sports affects individual team members.

What do you get out of participation?

1. Participation may offer you insight into the self-presentational concerns you may have within sport
2. Upon completion of the project the results will be made available to you, which will further your understanding of the relationship between team cohesion and self-presentation
3. You will have the choice of entering into a draw for a chance to **win a $500 gift card to Best Buy!**

Thank you for your participation in this research.
Alison Divine
Department of Human Kinetics
University of Windsor

Appendix B

LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **Examining the Relationship Between Cohesion and Self-Presentation in Sport**

You are asked to participate in a research study conducted by Alison Divine, a masters' student in Human Kinetics under the advisements of Dr. Krista Chandler from the Department of Kinesiology at the University of Windsor.**[**

If you have any questions or concerns about the research, please feel to contact either Alison Divine at 519-253-3000 ext. 4997 or via email at divine@uwindsor.ca, or Dr. Krista Chandler at 519-253-3000 ext. 2446 or via email at chandler@uwindsor.ca

PURPOSE OF THE STUDY

To examine how perceptions of cohesion in sport teams affects self-presentational concerns of individual team members

PROCEDURES

If you volunteer to participate in this study, you will be asked to complete an anonymous online survey, including demographic information and a questionnaire package with questions relating to your perceptions of cohesion and self-presentational concerns. You will not be identifiable from the data you provide. The process should take approximately 20 minutes.

POTENTIAL RISKS AND DISCOMFORTS

There are no known risks associated with this research.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Participants may benefit from their involvement in this study through increased exposure to research. Additionally, participants will also have an improved understanding about their self-presentational concerns within the sporting environment. This study will contribute to the existing body of knowledge on the effects of cohesion on individual team members, as well as, on self-presentational concerns within sport.

PAYMENT FOR PARTICIPATION

Upon completion of the survey you will be given the option to enter into a draw for a $500 gift card to Best Buy. Should you choose to participate in the draw, you will be redirected to a page unrelated to your survey responses; at this point you will enter your contact information.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Anonymity will be ensured, as no

names will be asked on the questionnaire. All collected information will be kept confidential and separate from your survey responses and destroyed after the draw has been complete. In accordance with suggestions from the American Psychological Association, data will be terminated after remaining in the computer file for five years post publication.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time by closing the web browser, without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. If you decide to withdraw from the study, your data will not be considered a part of the study. However, once you have submitted the completed questionnaire by clicking the submit button it is not possible to withdraw because the surveys are anonymous. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

The results will be posted on the University of Windsor's Research Ethics Board website. If you have any additional concerns or questions, you can call the investigators at the numbers above.

Web address: http://www.uwindsor.ca/reb
Date when results are available: May, 2012

SUBSEQUENT USE OF DATA

This data will not be used in subsequent studies.

RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

_____ _____

Signature of Investigator Date

I understand the information provided for the study **"Examining the Relationship Between Team Cohesion and Self-Presentation"** described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. Please print a copy of this consent form for your records.

PRINT THIS DOCUMENT FOR YOUR RECORDS
"I agree to participate (click next to continue to the survey)."
"I do not wish to participate (close browser to exit the survey)."

Appendix C

Demographics

Gender:

Age

Team sport you play (e.g., soccer, hockey, volleyball, basketball, etc…)_____

Current level of competition (e.g. recreational, intramural, club, varsity, provincial, etc..)

in which your team competes:_____

Highest level of competition you have competed in your sport in the last two years:

_____

How long have you been on your current team: _____years

Appendix D

Self-Presentation in Sport Questionnaire (SPSQ)

Instructions: During competition I worry that other people may perceive me as _____ (circle the number that best represents your answer)

		Never				Always
1.	Appearing to not to live up to my expectations	1	2	3	4	5
2.	Appearing exhausted	1	2	3	4	5
3.	Appearing flabby	1	2	3	4	5
4.	Appearing untalented	1	2	3	4	5
5.	Appearing unable to handle pressures	1	2	3	4	5
6.	Appearing fatigued	1	2	3	4	5
7.	Appearing physically untoned	1	2	3	4	5
8.	Appearing athletically incompetent	1	2	3	4	5
9.	Appearing to not perform up to my potential	1	2	3	4	5
10.	Appearing tired	1	2	3	4	5
11.	Appearing ugly or unpleasant in my uniform	1	2	3	4	5
12.	Appearing unathletic	1	2	3	4	5
13.	Appearing not physically and mentally ready	1	2	3	4	5
14.	Appearing lethargic	1	2	3	4	5
15.	Appearing physically unattractive	1	2	3	4	5
16.	Appearing under skilled	1	2	3	4	5
17.	Appearing to lose composure	1	2	3	4	5
18.	Appearing unenergized	1	2	3	4	5
19.	Appearing too small or too big in my uniform	1	2	3	4	5
20.	Appearing to lack balance	1	2	3	4	5
21.	Appearing not to perform or execute perfectly	1	2	3	4	5
22.	Appearing distressed	1	2	3	4	5
23.	Appearing out of shape	1	2	3	4	5
24.	Appearing to lack ability	1	2	3	4	5
25.	Appearing to choke under pressure	1	2	3	4	5
26.	Appearing to lack energy	1	2	3	4	5
27.	Appearing unqualified	1	2	3	4	5
28.	Appearing unfocused	1	2	3	4	5
29.	Appearing under activated	1	2	3	4	5
30.	Appearing nervous under pressure	1	2	3	4	5
31.	Appearing not energised	1	2	3	4	5
32.	Appearing to lack necessary focus	1	2	3	4	5
33.	Appearing weary	1	2	3	4	5

Appendix E

Group Environment Questionnaire (GEQ)

Name: _____ Team: _____ Date: _____

This questionnaire is designed to assess your perceptions of your team. There are no wrong or right answers, so please give your immediate reaction. Some of the questions may seem repetitive, but please answer ALL questions. Your personal responses will be kept in strictest confidence.

The following statements are designed to assess your feelings about YOUR PERSONAL INVOLVEMENT with this team. Please CIRCLE a number from 1 to 9 to indicate your level of agreement with each of these statements.

1. I do not enjoy being a part of the social activities of this team.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

2. I'm not happy with the amount of playing time I get.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

3. I am not going to miss the members of this team when the season ends.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

4. I'm unhappy with my team's level of desire to win.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

5. Some of my best friends are on this team.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

6. This team does not give me enough opportunities to improve my personal performance.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

7. I enjoy other parties rather than team parties.

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

8. I do not like the style of play on this team.

1	2	3	4	5	6	7	8	9

Strongly Disagree — Strongly Agree

9. For me, this team is one of the most important social groups to which I belong.

1 2 3 4 5 6 7 8 9
Strongly Disagree — Strongly Agree

The following statements are designed to assess your perceptions of YOUR TEAM AS A WHOLE. Please CIRCLE a number from 1 to 9 to indicate your level of agreement with each of these statements.

10. Our team is united in trying to reach its goals for performance.

1 2 3 4 5 6 7 8 9
Strongly Disagree — Strongly Agree

11. Members of our team would rather go out on their own than get together as a team.

1 2 3 4 5 6 7 8 9
Strongly Disagree — Strongly Agree

12. We all take responsibility for any loss or poor performance by our team.

1 2 3 4 5 6 7 8 9
Strongly Disagree — Strongly Agree

13. Our team members rarely party together.

1 2 3 4 5 6 7 8 9
Strongly Disagree — Strongly Agree

14. Our team members have conflicting aspirations for the team's performance.

1 2 3 4 5 6 7 8 9
Strongly Disagree — Strongly Agree

15. Our team would like to spend time together in the off season.

1 2 3 4 5 6 7 8 9
Strongly Disagree — Strongly Agree

16. If members of our team have problems in practice, everyone wants to help them so we can get back together again.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

17. Members of our team do not stick together outside of practice and games.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly Agree

18. Our team members do not communicate freely about each athlete's responsibilities during competition or practice.

1	2	3	4	5	6	7	8	9	
Strongly Disagree									Strongly

Appendix F

The Sport Anxiety Scale (SAS)

A number of statements which athletes have used to describe their thoughts and feelings before or during competition are listed below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you **usually feel** prior to or during competition. Some athletes feel they should not admit to feelings of nervousness or worry, but such reactions are actually quite common, even to professional athletes. To help us better understand reactions to competition, we ask you to share your true reactions with us. There are, therefore, no right or wrong answers. Do not spend too much time on any one statement, but circle the answer which best described how you commonly react.

		How you usually feel prior to, or during competition			
		Not at all	Somewhat	Moderately	Very much
1.	I feel nervous	1	2	3	4
2.	I find myself thinking about unrelated things	1	2	3	4
3.	I have self-doubts	1	2	3	4
4.	My body feels tense	1	2	3	4
5.	I am concerned about not doing well	1	2	3	4
6.	My mind wanders during competition	1	2	3	4
7.	I don't pay attention to what's going on	1	2	3	4
8.	I feel tense in my stomach	1	2	3	4
9.	"Negative" thoughts disrupt my concentration	1	2	3	4
10.	I'm concerned about "choking"	1	2	3	4
11.	My heart races	1	2	3	4
12.	I feel my stomach sinking	1	2	3	4
13.	I'm concerned about performing poorly	1	2	3	4
14.	I have lapses in concentration because of nerves	1	2	3	4
15.	I sometimes find myself trembling	1	2	3	4
16.	I'm worried about reaching my goal	1	2	3	4
17.	My body feels tight	1	2	3	4
18.	I'm concerned others will be disappointed	1	2	3	4
19.	My stomach gets upset	1	2	3	4
20.	I'm concerned I won't be able to concentrate	1	2	3	4
21.	My heart pounds before competition	1	2	3	4

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