Influence of Outcome Expectancy on Optimism, Pessimism, Anxiety and Self-Confidence in Collegiate Football Players

Tiffany D. Watson
Georgia Southern University

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ABSTRACT

THE INFLUENCE OF OUTCOME EXPECTANCY ON OPTIMISM, PESSIMISM, ANXIETY AND SELF-CONFIDENCE IN COLLEGIATE FOOTBALL PLAYERS

May 2005

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B.A. UNIVERSITY OF RICHMOND
M.S. GEORGIA SOUTHERN UNIVERSITY

Directed by: Professor A. Barry Joyner

Expectations are instrumental in predicting performance quality (Solomon, 2002). According to the expectancy theory, what is expected to happen often does (Chase & Lirgg, 1997). Often, the underdog, or unexpected winner, will defeat the more likely winner creating questions as to the validity of the expectancy theory. Psychological variables related to expectations may contribute to the ability of the underdog to succeed in unexpected situations. Optimism refers to a positive expectation or perception of the future, and pessimism refers to a negative expectation or perception (Scheier & Carver, 1993). Anxiety, though often given a negative connotation, has shown facilitative effects on performance (Mellalieu, Hanton, & Jones, 2003). Whether anxiety is facilitative or debilitative to performance is based on the interpretation of anxiety, also termed direction. Individual levels of optimism and pessimism alter the interpretation of anxiety, with optimists experiencing less debilitative effects of anxiety (Wilson, Raglin, & Pritchard, 2002). Self-confidence is one of the strongest predictors of performance (Hardy, 1996; Jones, 1995). Self-confidence is related to optimism and pessimism by definition, as it refers to the belief or expectations about the ability to succeed in a future performance (Krane & Williams, 1992). Not only is self-confidence related to...
performance and the constructs of optimism and pessimism, but it also mediates anxiety interpretation (Jones & Hanton, 2001; Swain & Jones, 1996). The purpose of the present study was to determine whether differences in psychological variables such as optimism, pessimism, anxiety and self-confidence contribute to the success of the underdog in a competitive environment. In the current study, 15 male, Division I-AA collegiate football players from a southeastern university were tested over a three game trial period. Game conditions or outcome expectancies were determined by participant ratings on a 5-point Likert scale question. Response options ranged from strong underdog to strong favorite. Participant predictions defined one underdog (U), one favorite (F), and one evenly matched (E) condition. Participants were administered the instruments 2 days prior to each of the 3 competitions. State optimism and pessimism levels were assessed with the Optimism/Pessimism Scale (OPS; Dember, Martin, Hummer, Howe, & Melton, 1989). Trait anxiety levels were established with the Sport Competition Anxiety Test (SCAT; Martens, Vealey, & Burton, 1990). Finally, the Competitive State Anxiety Inventory-2 (CSAI-2; Martens, Burton, Vealey, Bump, & Smith, 1990) was administered to assess state cognitive and state somatic anxiety as well as state self-confidence. Directional scales were added to the SCAT and the CSAI-2 to determine participants’ interpretation of anxiety symptoms (Jones & Swain, 1992). Using ANOVA analysis, significant differences across game conditions were found for OPS-pessimism scores as well as state somatic anxiety scores. Consistent significant Pearson Correlations across all 3 weeks included: OPS-optimism and self-confidence directional scores \( r = .762, .760, .655 \), self-confidence total and self-confidence directional scores \( r = .659, .852, .871 \), state somatic anxiety directional and state cognitive anxiety directional scores \( r = .793, .875, .780 \). Support for the expectancy theory was found in the present study. Thus,
modification of expectations, more specifically altering pessimistic expectations may lead to higher performance quality. In addition, maintaining high levels of self-confidence may regulate the debilitative effects of anxiety and also contribute to more optimistic expectations.
THE INFLUENCE OF OUTCOME EXPECTANCY ON
OPTIMISM, PESSIMISM, ANXIETY, AND SELF-CONFIDENCE
IN COLLEGIATE FOOTBALL PLAYERS

A Thesis

Presented to

the College of Graduate Studies of

Georgia Southern University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Kinesiology

With an Emphasis in Sport Psychology

In the Jiann-Ping Hsu School of Public Health

by

Tiffany D. Watson

May 2005
The Influence of Outcome Expectancy on Optimism, Pessimism, Anxiety and Self-Confidence Among Collegiate Football Players

by

Tiffany D. Watson

Major Professor: A. Barry Joyner
Committee: Kevin L. Burke
Barry A. Munkasy

Electronic Version Approved:
May 2005
DEDICATION

For instilling in me the desire to strive for excellence both academically and personally.

For exposing me to the thrills of sport and the lessons to be learned from success and failure on the field and off.

And finally, for showing me the importance of passion, dedication and Faith in God, in family and in life.

I dedicate this thesis to the following:

My Parents, Lee and Gloria Watson

My Brother, Eric Watson.
ACKNOWLEDGEMENTS

To complete a thesis takes more than hard work and energy on the part of the student, but also the dedication and support of so many individuals. I want to first thank Dr. A. Barry Joyner, Thesis Director and Assistant Department Chair. Thank you for having the ability to see the possibilities in situations that often seemed impossible and providing guidance in so many aspects of the development, execution, and completion of this project. Your support and contribution to my growth as a student and a person are unmatched.

Dr. Kevin L. Burke, Major Advisor and Associate Professor in the Jiann-Ping Hsu School of Public Health, your expectations for excellence, and your passion for the field of Sport Psychology has left me with the enthusiasm and motivation to contribute further to the mental and physical enhancement of athletes and individuals alike. I hope to continue my education and one day provide my own students with the same ideals which you have instilled in me.

Dr. Barry A. Munkasy, Assistant Professor in the Jiann-Ping Hsu School of Public Health, thank you for serving on my thesis committee and providing knowledge and advice for the successful completion of my thesis. You drive students to think critically, pay attention to detail, ultimately emerge with a project they can reflect on and of which they can be proud.

I would further like to thank the students who participated in my study and provided the data which led to the completion of the project.
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The Influence of Outcome Expectancy on Optimism, Pessimism, Anxiety and Self-Confidence in Collegiate Football Players

Sport has become an essential aspect of the entertainment industry. Within entertainment, sport media thrives on highlighting the underdog. Reporters focus on those individuals and teams who succeed in the face of adversity, defeat the favorite or unexpectedly prevail (Butler, 1969). Whether it is an upset on Saturday afternoon football, or a 15-seed in the “Final Four” of “March Madness,” the story of underdog success usually monopolizes the content of sport, and often national television and print media. Spectators often have trouble identifying with the “top dog,” or the expected winner. Bandura’s (1993) social identity theory supports this supposition, suggesting it is difficult for some spectators to feel a connection with the superstars of today’s elite college and professional athletes (Markus, McGuire, Allison, & Eylon, 2003). Spectators like to think that even an unlikely winner may be successful, but what allows underdog athletes and teams to achieve success when the opposite outcome is more likely?

In competitive situations, expectations may drive performance quality. If a leader, whether a coach, manager, or teammate, offers an endorsement of team ability, an outcome difference may occur (Solomon, 2002). Referred to as the expectancy theory, or a self-fulfilling prophecy, what is expected to happen most often does (Chase & Lirgg, 1997; Solomon). For example, a high expectation level may result in greater effort. Therefore, as leaders it is important to set high, yet reasonable, expectations and goals that may push athletes to perform at a higher level (Chase & Lirgg; Solomon). Outside of sport, the validity of this theory is evidenced by the “placebo effect,” in which individuals taking medications, who are led to expect positive results from an intervention are more likely to experience positive effects of such treatment (Catanzaro, Wasch, Kirsch, &
Expectations have also been shown to influence the psychological constructs of optimism and pessimism (Porter, 2003). Optimism and pessimism are similar to outcome expectancy. Both terms relate to the interpretation and emotional state associated with situations and future experiences. Scheier and Carver (1993) define optimism as a positive expectancy for one’s future and pessimism as a negative expectancy for one’s future. Herein the terms optimism, pessimism and expectancy are linked. Pessimists visualize failure, while optimists visualize success (Bandura, 1993). Jackson, Weiss, Lundquist and Soderlind (2002) found that when assessed on the likelihood of reaching a goal, optimists had more positive expectancies of success than pessimists. In a study of the effects of optimism and pessimism on physical functions, Brenes, Rapp, Rajeski, and Miller (2002) found participants higher in pessimism scored significantly lower on all physical tasks.

Though optimism and pessimism are considered by many to share a dichotomous relationship, Brenes et al. (2002) research findings support the notion that the two may be separate constructs. For example, pessimism rather than optimism was found to be predictive of physical functions. Other related studies (Robinson-Whelan, Kim, McCallum, & Kiecolt-Glaser, 1997; Schultz, Bookwala, Knapp, Scheier, & Williamson, 1996) have noted similar implications of pessimism and not optimism on physical and mental well-being.

Optimism and pessimism may be related to anxiety (Johnson & Tversky, 1983). In a study of elite athletes, optimists exhibited lower levels of anxiety prior to competition (Wilson, Raglin & Pritchard, 2002). Historically, anxiety has been given a negative connotation. However, research on the relationship between anxiety and sport
The Influence

performance indicates a multidimensional point of view (Jones, Bray, Mace, McCrae, & Stockbridge, 2002; Mellalieu, Hanton & Jones, 2003). Anxiety is not only a psychological construct, but includes a physiological component as well. Psychological symptoms of anxiety, such as emotions, thoughts, and expectations are termed cognitive anxiety. The physiological symptoms, including uneasiness, “butterflies”, and perspiring is termed somatic anxiety (Mellalieu et al.). Research indicates that the effects of cognitive and somatic anxiety on performance are different (Jones, 1995; Jones et al; Martens, Burton, et al., 1990). Cognitive anxiety has shown to be a stronger predictor of subsequent performance than somatic anxiety, however both have predictive qualities. Anxiety may be beneficial to the level of performance displayed by an athlete (Mellalieu et al.). Termed “eustress” by some, or “facilitating anxiety,” by others, competitive anxiety sometimes offers positive effects (Mellalieu et al.). If a player is optimistic then the competition is perceived as a challenge, ability to cope is high, and anxiety helps facilitate success. However, anxiety may hinder performance, resulting in choking (Jones et al.). In this situation, the athlete views competition as a threat, and does not cope effectively with the anxiety of the competition, thus resulting in a poor performance. Jones found that participants with more negative expectations for achieving performance related goals had more debilitating interpretations of anxiety. In a study of elite and nonelite athletes, expectations for goal attainment were found to be a stronger predictor of directional anxiety scores than of anxiety intensity (Hanton, O’Brien, & Mellalieu, 2003). How the athlete evaluates, labels, and copes with the feelings of anxiety (i.e., optimistically or pessimistically) will influence the effect of the anxiety on performance (Hanton et al.; Mellalieu et al.).

Self-confidence consistently emerges as one of the strongest predictors of
performance among sport psychology research (Hardy, 1996; Jones, 1995). In an examination of basketball players and perceived self-confidence in relation to performance, Parfitt and Pates (1999) found that greater self-confidence positively correlated with higher pass and assist percentages. Self-confidence, similar to optimism and pessimism, is related to outcome expectancy by definition. Self-confidence refers to a belief in one’s ability to reach a goal. In other words, it is an expectation that success is attainable (Krane & Williams, 1992). Often it is through social comparison that self-confidence of an athlete or team is determined. Athletes determine expectations for performance based on the appraisal of the opponents’ abilities and, by meeting those expectations, the level of self-confidence increases (Krane & Williams; Peres, Cury, Famose, & Sarrazin, 2002). Self-confidence is also a mediating factor in the interpretation of anxiety. Past research indicates that individuals with higher self-confidence tend to display a more facilitative interpretation of anxiety symptoms (Jones & Hanton, 2001; Swain & Jones, 1996). The added pride associated with an unexpected victory may boost self-confidence even more (Chase & Lirgg, 1997). By assessing the athletes’ initial appraisals of the opponents’ abilities, along with the expectation for success, the influence of outcome expectancy on self-confidence may be examined.

The purpose of the present study was to determine the role of outcome expectancy (i.e., underdog, favorite and evenly matched classification) on the psychological factors of optimism, pessimism, trait anxiety, state cognitive anxiety (intensity and direction), state somatic anxiety (intensity and direction) and self-confidence (intensity and direction) of collegiate football players.

The research questions examined included: (1) Would participants score
significantly different on state optimism, state pessimism, state cognitive anxiety, and state somatic anxiety in the underdog, favorite and evenly matched conditions? (2) Would participants show significant differences in directional scores of state somatic anxiety, state cognitive anxiety and self-confidence in the underdog, favorite and equal conditions? (3) What is the relationship between optimism, pessimism, trait anxiety, cognitive anxiety, somatic anxiety, and self-confidence among trial weeks?

Method

Participants

Participants included 18 male, intercollegiate football players from a Division I-AA university in the southeastern United States. The sample was chosen using a convenience sampling technique. The age of participants ranged from 18 to 23 years (M= 20.33 years, SD= 1.37 years). Both starters and non-starters were used for this study and there was positional variation (i.e., offense and special teams) as well as participants from various ethnic backgrounds. In total, 11 Caucasian, 5 African-American, and 2 participants who described themselves as “other” participated in the study. The breakdown by academic year was as follows: 1st year = 2, 2nd year= 6, 3rd year = 3, 4th year = 4, and other = 3. Data were collected at pre-practice meetings, by the experimenter, at a consistent time, on the same day each week of the data collection period.

Of the initial 18 participants, 15 completed all three trials of the current study. Age range of the final sample was 18-23 years (M= 20.40, SD= 1.30). Participants included 10 Caucasian, 3 African-American and 2 categorized as “other.” Academic year varied with one 1st year, six 2nd years, three 3rd years, two 4th years, and three other participants. IRB approval was requested and acquired. Participants gave informed
consent prior to completing any portion of the study.

**Instrumentation**

The Sport Competition Anxiety Test (SCAT; Martens, Burton, et al., 1990) was used to measure trait anxiety among participants. Consisting of 15 items, and 5 filler items, the SCAT assesses the degree to which symptoms of competitive anxiety are usually experienced. Responses are measured using a 3-point Likert scale with response options: *Often*, *Sometimes*, *Never*. Scores may range from 10 to 30. The upper end indicates higher levels of trait anxiety. The SCAT has been noted as a valid measure, correlating with various other measures of anxiety and related constructs ($r = .54 - .56$) (Cororan, 1989). Stability of the measure (alpha = .95), as well as internal reliability has been noted and is strong (alpha = .85).

The Optimism-Pessimism Scale (OPS; Dember et al., 1989), suggested to be a measure of state, rather than trait characteristics (Burke, Joyner, Czech, & Wilson, 2000), assesses a participant’s level of optimism and pessimism in an immediate situation. The test contains 56 questions, divided into two subscales, optimism and pessimism, as well as a set of neutral items. The two subscales consist of 18 items each, and 20 filler items create the neutral set. Participants respond according to a 4-point Likert-scale ranging from *strongly agree* to *strongly disagree*. Reliability scores for the measure of optimism and pessimism yielded alphas of .84 and .86. In assessing test-retest reliability, results were strong, with $r = .75$ for optimism and $r = .84$ for pessimism (Burke et al.)

At the end of the OPS scale, two questions were added. Participants were asked to assess the status of their team in the upcoming Saturday’s competition. A 5-point Likert scale ranging from *strong underdog* to *strong favorite* was utilized. Participants were also asked to record how many downs they expected to play in each of three positional
categories during the upcoming Saturday’s competition (i.e., offense, defense, and/or special teams). The positional differences and number of downs played allowed for demographic differentiation among participants for the purposes of data analysis.

The Competitive State Anxiety Inventory-2 (CSAI-2; Martens, Vealey, & Burton, 1990) has been used extensively to examine the relationship between anxiety and its various dimensions on performance. The 27-item questionnaire includes three subscales: somatic anxiety, cognitive anxiety, and self-confidence. The 27-items are divided into nine questions directed at each of the three scales and are based on a 4-point Likert scale. The range of answers progresses from “not at all” to “very much so.” Responses are summed for each anxiety scale separately, as well as for self-confidence. Based on a revised version of the CSAI-2 (Jones & Swain, 1992), a directional scale was added to the original version of the instrument. To assess the intensity of anxiety as well as the participants’ interpretation of that particular anxiety symptom, each question was followed by a scale ranging from –3 to + 3. The CSAI-2 has yielded controversial results in regards to its predictive validity on performance (Craft, Magyar, Becker, & Feltz, 2003; Hassmen, Raglin, & Lundqvist, 2004). While some findings suggest a negative correlation between cognitive anxiety and performance, and a positive linear relationship between self-confidence and performance, other research has found a weak relationship between these two variables and performance (Hassmen et. al.; Russell & Cox, 2000) The majority of findings demonstrate validity both internally and externally. The scale is also considered reliable (Craft et al.; Lane, Sewell, Terry, Bartram, & Nesti, 1999).

 Procedures

One game was chosen in which the participant team was considered less likely than the opponent to win (underdog), and one game in which the team was more likely to
win (favorite). As a control condition, one game was chosen in which the two teams were evenly matched. Outcome expectancy was determined by participants’ responses to the 5-point Likert scaled question regarding how the participant team felt they compared to that week’s competitor (1= strong underdog; 5= strong favorite). On the first Thursday of data collection participants were asked to complete the consent form, a demographic questionnaire (see Appendix B), the SCAT, the OPS, and the CSAI-2. For the subsequent Thursday collections, only the OPS and the CSAI-2 were administered. Completion of the three assessments took 25 minutes or less. The order in which the participants were asked to complete the tests was varied to avoid order effects. Trial weeks occurred consecutively during regular season competition. Data collection was completed in three weeks.

In week one’s game, the participant team faced a Division I-A opponent, historically a more competitive division than that of the participant team’s Division I-AA status. The opponent for week one also enjoyed a “top five” appearance in preseason rankings. The opponent was a state university and member of a highly competitive Division I-A athletic conference. The participant team had faced the week one opponent on two prior occasions in the programs’ histories and both have resulted in losses for the participant team. In addition, week one was the only away game during the three weeks of data collection and also marked the opening of the 2004 football season.

In week two, the participant team competed against a Division II university. Last season the opposing team held a season record of 1-9. The game was held on the participant team’s home field and was the first home game of the season.

In week three, the participant team competed against a conference rival. Both teams began the season with a “top ten” ranking in the Division I-AA polls. In previous
years, both programs have had successful records, with the week three opponent retaining the conference title in 2003. The record for the week three opponent in the previous year (2003) was 12-2, with one win coming against the participant team by less than a touchdown. The week three competition took place at the participant team’s home field.

Results

The weekly mean outcome expectancy was calculated by averaging participant ratings each week. The mean for week one corresponds with a strong to moderate underdog rating (M = 1.4, SD = .51). Week two outcome expectancy indicated a unanimous participant rating of strong favorite (M = 5.0, SD = 0). Week three outcome expectancy yielded a participant rating of evenly matched, with a slight trend toward moderate favorite (M = 3.6, SD = 1.16).

A repeated-measures ANOVA was used to assess whether a significant difference existed among participants across the three weeks of data collection (Underdog = U, Favorite = F and Evenly Matched = E). Optimism, pessimism, trait anxiety, state somatic anxiety, state cognitive anxiety and self-confidence were all analyzed. In addition, the directional scores, assessing the positive and/or negative effects of both trait and state anxiety scores, as well as self-confidence were examined. (See Table 1 for means and standard deviations on all measures over the three trial weeks). There were no significant differences found for optimism, cognitive state anxiety (intensity or direction), somatic anxiety direction, or self-confidence (intensity or direction).
Table 1  
*Means and Standard Deviations for Administered Inventories Across Weeks.*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
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<tbody>
<tr>
<td><strong>OPS-O</strong></td>
<td>56.29 (9.10)</td>
<td>56.43 (8.03)</td>
<td>55.21 (5.90)</td>
</tr>
<tr>
<td><strong>OPS-P</strong></td>
<td>35.57**a (5.84)</td>
<td>37.57 (7.46)</td>
<td>39.43 (7.46)</td>
</tr>
<tr>
<td><strong>CSAI-2 Cognitive</strong></td>
<td>19.70 (4.03)</td>
<td>17.23 (4.36)</td>
<td>15.85 (15.85)</td>
</tr>
<tr>
<td><strong>CSAI-2 CogDirect</strong></td>
<td>6.00 (11.68)</td>
<td>3.87 (12.81)</td>
<td>9.79 (9.96)</td>
</tr>
<tr>
<td><strong>CSAI-2 Somatic</strong></td>
<td>18.30** (4.35)</td>
<td>15.00 (4.57)</td>
<td>15.50 (4.74)</td>
</tr>
<tr>
<td><strong>CSAI-2 SomDirect</strong></td>
<td>6.75 (9.82)</td>
<td>3.84 (14.50)</td>
<td>8.92 (11.31)</td>
</tr>
<tr>
<td><strong>CSAI-2 Self-Conf.</strong></td>
<td>23.78 (4.92)</td>
<td>24.46 (6.80)</td>
<td>24.85 (6.45)</td>
</tr>
<tr>
<td><strong>CSAI-2 S-CDirect</strong></td>
<td>12.18 (8.00)</td>
<td>15.14 (8.76)</td>
<td>12.86 (8.53)</td>
</tr>
</tbody>
</table>

Means (and Standard Deviations) over time of the OPS and CSAI-2 subscales  
** indicates a significant difference between week 1 / week 2 for the Somatic Anxiety subscale of the CSAI-2  
*** indicates a significant difference between week 1 / week 2 and week 1 / week 3 data on the pessimism subscale of the OPS.

The ANOVA results for somatic anxiety were significant across the three weeks (p < .05). A dependent t-test indicated the location of the significance. Significant results were found for somatic anxiety between U and F. The mean score for somatic anxiety in U (M = 18.30, SD = 4.35) was significantly higher than F (M = 15.00, SD = 4.57).

Directional scores were calculated for participant somatic anxiety intensity across the three weeks as well. ANOVA results indicate there was not a significant difference in directional scores for somatic anxiety (p > .05) (See Table 1). Somatic anxiety was positive in direction for all three weeks, indicating a facilitative nature (see Table 1).
ANOVA analysis on the pessimism subscale of the OPS yielded a significant difference (p < .05). Results of the dependent t-tests revealed that U scores (M = 35.57, SD = 5.84) were significantly lower than F (M = 37.57, SD = 7.46) as well as E scores (M = 39.43, SD = 7.46).

Pearson correlations were calculated for all the measures and subscales therein to determine whether significant relationships existed among variables for each of the three weeks. Table 2 (U), Table 3 (F) and Table 4 (E) offer data including correlation coefficients and significance for the three trial weeks.

Table 2

*Week 1 Pearson Correlations of intensity and direction of the SCAT, OPS (optimism and pessimism subscales), and the CSAI-2 (cognitive, somatic and self-confidence subscales).*

<table>
<thead>
<tr>
<th>Measure</th>
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<tr>
<td>SCAT Directional</td>
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<td></td>
<td></td>
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<tr>
<td>SCAT Total</td>
<td>-.189</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Optimism Total</td>
<td>.578</td>
<td>-.754*</td>
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<td>Pessimism Total</td>
<td>-.119</td>
<td>.706*</td>
<td>-.517</td>
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<tr>
<td>CSAI-2 Cognitive</td>
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<td>.221</td>
<td>.001</td>
<td>.309</td>
<td></td>
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<tr>
<td>CSAI-2 CogDirectional</td>
<td>.812*</td>
<td>-.091</td>
<td>.280</td>
<td>-.099</td>
<td>.059</td>
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<td>CSAI-2 Somatic</td>
<td>.198</td>
<td>.561</td>
<td>-.223</td>
<td>.284</td>
<td>.630*</td>
<td>.215</td>
<td></td>
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<tr>
<td>CSAI-2 SomDirectional</td>
<td>.852*</td>
<td>-.015</td>
<td>.348</td>
<td>-.116</td>
<td>.031</td>
<td>.793*</td>
<td>.315</td>
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<tr>
<td>CSAI-2 SelfConf</td>
<td>.723*</td>
<td>-.140</td>
<td>.584</td>
<td>-.062</td>
<td>-.017</td>
<td>.647*</td>
<td>-.074</td>
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<td>CSAI-2 SC Directional</td>
<td>.682*</td>
<td>-.525</td>
<td>.762*</td>
<td>-.332</td>
<td>-.035</td>
<td>.575</td>
<td>-.047</td>
<td>.627*</td>
<td>.659*</td>
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</tbody>
</table>

* indicates a significant correlation, p-value set at .05
Table 3

**Week 2** Pearson Correlations of intensity and direction of the SCAT, OPS (optimism and pessimism subscales), and the CSAI-2 (cognitive, somatic and self-confidence subscales).

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tbody>
<tr>
<td>1. SCAT Directional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. SCAT Total</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Pessimism Total</td>
<td></td>
<td>.529</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. CSAI-2 Cognitive</td>
<td>.122</td>
<td>.135</td>
<td>.112</td>
<td>.211</td>
<td></td>
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<td></td>
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<tr>
<td>6. CSAI-2 CogDirectional</td>
<td>.537</td>
<td>.074</td>
<td>.085</td>
<td>.261</td>
<td>.248</td>
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<tr>
<td>7. CSAI-2 Somatic</td>
<td>.295</td>
<td>.583</td>
<td>.264</td>
<td>.197</td>
<td>.388</td>
<td>.096</td>
<td></td>
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<tr>
<td>8. CSAI-2 SC Directional</td>
<td>.448</td>
<td>.086</td>
<td>.005</td>
<td>.272</td>
<td>.220</td>
<td>.780*</td>
<td>-.001</td>
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<tr>
<td>9. CSAI-2 SC Cognitive</td>
<td>.314</td>
<td>-.462</td>
<td>.842*</td>
<td>-.572</td>
<td>-.287</td>
<td>-.08</td>
<td>-.373</td>
<td>-.205</td>
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<tr>
<td>10. CSAI-2 SC Emotional</td>
<td>.262</td>
<td>-.548</td>
<td>.760*</td>
<td>-.499</td>
<td>-.284</td>
<td>.192</td>
<td>-.570</td>
<td>.097</td>
<td>.852*</td>
</tr>
</tbody>
</table>

* indicates a significant correlation, p-value set at .05
Table 4

**Week 3** Pearson Correlations of intensity and direction of the SCAT, OPS (optimism and pessimism subscales), and the CSAI-2 (cognitive, somatic and self-confidence subscales).

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. SCAT Total</td>
<td>-0.189</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>3. Optimism Total</td>
<td>0.484</td>
<td>-0.406</td>
<td></td>
<td></td>
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<td>4. Pessimism Total</td>
<td>0.403</td>
<td>0.626</td>
<td>-0.299</td>
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<td></td>
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<tr>
<td>5. CSAI-2 Cognitive</td>
<td>0.028</td>
<td>0.330</td>
<td>-0.308</td>
<td>0.073</td>
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<tr>
<td>6. CSAI-2 CognitiveDir</td>
<td>-0.179</td>
<td>-0.085</td>
<td>0.206</td>
<td>-0.416</td>
<td>-0.450</td>
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<tr>
<td>7. CSAI-2 Somatic</td>
<td>-0.026</td>
<td>0.574</td>
<td>-0.093</td>
<td>0.059</td>
<td>0.629</td>
<td>-0.041</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. CSAI-2 SomaticDir</td>
<td>-0.017</td>
<td>0.209</td>
<td>-0.110</td>
<td>0.011</td>
<td>-0.281</td>
<td>0.780*</td>
<td>0.030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. CSAI-2 Self-Conf.</td>
<td>0.052</td>
<td>-0.036</td>
<td>0.428</td>
<td>-0.078</td>
<td>-0.421</td>
<td>0.552</td>
<td>-0.166</td>
<td>0.340</td>
<td></td>
</tr>
<tr>
<td>10. CSAI-2 SC Direction</td>
<td>0.193</td>
<td>-0.182</td>
<td>0.655</td>
<td>-0.110</td>
<td>-0.488</td>
<td>0.603</td>
<td>-0.224</td>
<td>0.519</td>
<td>0.871*</td>
</tr>
</tbody>
</table>

* indicates a significant correlation, p-value set at .05

Discussion

There were significant findings for the research question addressing the influence of outcome expectancy on pessimism scores between the underdog and favorite, as well as the underdog and evenly matched conditions. Outcome expectancy also significantly
affected somatic anxiety between the underdog and favorite conditions. The relationship among variables, specifically OPS-optimism and directional self-confidence, directional self-confidence and self-confidence intensity, directional somatic anxiety and directional cognitive anxiety, all showed strong, positive relationships in all three weeks.

The results indicated a significant difference for pessimism scores between trial weeks. A follow-up dependent t-test showed significant differences among pessimism scores between U and F, as well as U and E. The participants showed greater levels of pessimism before U game as compared to F (see Figure 1). According to the characteristics of the expectancy theory, this finding is consistent with past research (Chase & Lirgg, 1997; Solomon, 2002). In U, participant perceptions indicated underdog ratings. Thus, they viewed themselves as less likely to win than their opponent. F showed a participant game status rating of favorite. This rating indicates high expectancy for participant team success. If expectations for success are low, pessimism or a negative affective state has been found to be higher (Wilson et al., 2002). As indicated by the status ratings and the corresponding pessimism scores, the current study supported this finding. As expectancy became more positive, pessimism scores decreased. F, which held a favorite rating, resulted in less pessimistic perceptions by participants. Pessimism scores differed significantly from U to E, with OPS-pessimism subscale scores being higher in E, indicating lower pessimism (see Figure 1). The perception rating for E was evenly matched, with a slight trend toward moderate favorite. Again, supporting the aforementioned past research, as the perceived possibility of success becomes more likely, such as transition from the underdog to evenly matched perceptions of the current study; pessimism decreased (see Figure 1). Optimism, pessimism and expectations are often predictive of performance. By monitoring competitors’ perceptions of an upcoming
competition (expectations), the level of optimism and pessimism may be influenced, and potentially performance levels could be affected. If a team can develop high expectations, and learn to view themselves as the expected winner in an upcoming competition, then it is more likely their performance will reflect these high expectations through high performance quality (Bandura, 1993; Chase & Lirgg; Solomon).

![Figure 1](image)

*significant difference on OPS-pessimism between underdog condition and favorite condition; underdog condition and even condition

Optimism scores did not show a significant difference between trial weeks. This non-significant finding, along with the previous finding regarding pessimism, supports the argument that state optimism and pessimism may exhibit varying effects on performance (Brenes et al, 2002; Burke et al., 2000). Further, optimism and pessimism
may possess both state and trait components (Burke et al.). Were the constructs of optimism and pessimism part of an affective continuum, results for optimism should have been consistent with pessimism. As pessimism scores changed significantly, optimism scores would have in turn increased and/or decreased an equally significant amount. The absence of this effect leads to the conclusion that participants may have experienced optimistic and pessimistic feelings as separate dimensions. It should be noted, however, that participants were assessed regarding only state characteristics of optimism and pessimism. The separation of optimism and pessimism in the current study can be generalized to the state-like characteristics of optimism and pessimism, however, further research may warrant investigation into trait components of optimism and pessimism.

Somatic anxiety scores yielded significant differences between U and F (See Figure 2). Participants had significantly greater amounts of somatic anxiety prior to U than prior to F. By definition of the underdog status, participants had low expectations for success in U. This finding supports the research that a more pessimistic expectancy for success will result in higher levels of anxiety (more specifically, somatic anxiety) (Krane & Williams, 1992). Reasons for this relationship may be that physiological symptoms of anxiety increase when the threat of failure increases. For example, pessimistic attitudes lead to greater health risks and illness including: indigestion, depression, and irritable bowel syndrome (Cheng & Furnham, 2003; Johnson & Endler, 2002). These same symptoms are characteristic of somatic anxiety. Hassmen, Raglin, & Lundquist (2004) found that among elite golfers, state somatic anxiety showed a positive relationship with performance outcome. Also, the symptoms associated with a difficult challenge may be indicative of somatic anxiety symptoms. In support of this assumption, the findings for F reveal more positive participant expectancy and lower anxiety (See Figure 2). The
decrease in anxiety levels with a more positive expectancy for success further illustrates a relationship between the affective characterization of expectancy (i.e., more or less positive) and the intensity of somatic anxiety symptoms.

Figure 2  
* Significant difference on somatic anxiety between underdog and favorite condition

Somatic anxiety has been shown to be mediated by environmental factors related to competition (Hanton et al., 2003; Jones, 1995). Bray, Jones and Owen (2002) in their examination of regular season home and away competitions found a significant difference in levels of anxiety due to competition location. Participants demonstrated lower levels of anxiety prior to home than to away games. In the current study,
environmental factors related to the underdog were: it was the only away game assessed, took place in a much larger venue, in front of a much larger crowd, and was the season opening game for the participant team. The extremity of these environmental circumstances may have lead to the existence of an anxiety effect prior to competition.

Although data collection took place 48 hours prior to competition, research has shown that somatic anxiety tends to remain stable all the way to the onset of competition (Martens, Vealey, & Burton., 1990). In addition, the level of perceived control the athlete exhibits may alter the level of anxiety experienced, and the direction of that anxiety as it affects performance (Hanton et al., 2003). Though support was found for the influence of expectancy on somatic anxiety, future research may want to further consider environmental factors and perceived control as a mediator in the effect of expectations on somatic anxiety.

There were three significant correlations that appeared consistent across all three weeks. These were optimism and self-confidence directional scores (r = .762, .760, .655), self-confidence total and self-confidence directional scores (r = .659, .852, .871) and cognitive directional and somatic anxiety directional scores of the CSAI-2 (r = .793, .875, .780). The correlation between OPS-optimism and directional self-confidence scores was positive. The relationship of optimism and self-confidence, similar to the conclusions drawn from the OPS-optimism and directional SCAT scores, follows the findings of Seligman’s (1990) literature on explanatory style. A more optimistic individual, should, and according to the present data, displayed a more positive interpretation of self-confidence. Because optimism is an interpretation of information and behavior, it is reasonable that, although self-confidence totals were not significantly correlated with optimism scores, there were directional correlations.
The correlations between somatic and cognitive directional scores are consistently positive and significant across the three data collections. This finding may dispute past research which indicates a separation between physiological (somatic) and psychological (cognitive) anxiety (Craft et al., 2004; Martens, Vealey, et al., 1990). Previous findings indicated that somatic and cognitive anxiety exhibit different effects on performance and are interpreted differently by individuals in anxiety provoking situations (Thomas, Maynard, & Hanton, 2004). However, the strong positive relationship between somatic and cognitive anxiety interpretation found in the present study suggested that the level of facilitative and/or debilitative interpretation increase and decrease consistently for the two types of anxiety. This finding may suggest that athletes do not differentiate physical and mental anxiety when determining the effect of the symptoms on performance (i.e. whether they are beneficial or detrimental to performance level).

**Underdog Condition**

During U, the SCAT total scores were significantly, negatively (r = -0.754) correlated with OPS-optimism scores. This finding suggests participants who are more optimistic tend to experience lower levels of anxiety prior to competition. Though no performance measures were assessed, the findings of the present study would indicate that anxiety may be a negative influence on optimism. Research has indicated that anxiety can be interpreted as facilitative or debilitative to performance (Edwards & Hardy, 1996; Jones & Swain, 1992). Therefore, participants may exhibit high levels of anxiety, but view this anxiety as beneficial to performance (i.e., view it optimistically). To assess this dimension of anxiety, data were analyzed for the relationship between OPS-optimism and the directional SCAT. Though the correlation between the directional SCAT and levels of optimism was not significant, a trend existed in the relationship
across the three weeks (r = .484, .578, .591). These moderate, positive correlations suggest a relationship between the scores on the two measures. Seligman (1990) explains optimism as indicative of a positive explanatory style. According to this framework, optimists see the good in situations and view obstacles as able to be overcome. Downfalls are temporary and success is possible. An optimist can therefore be compared with an individual who viewed anxiety as facilitative. If the two terms, optimism and facilitative interpretation can be viewed as sharing definitive characteristics, then, perhaps the initial negative correlation between SCAT total and OPS-optimism can serve as an indication that anxiety is considered debilitative to performance. Greater levels of anxiety indicate a lower level of positive, optimistic, facilitative interpretation qualities.

SCAT total scores were significantly, yet positively (r = .706) correlated with pessimism scores of the OPS. Participants who were more pessimistic tended to exhibit more trait anxiety symptoms. An individual who is pessimistic expects to perform poorly and therefore induces more stress and anxiety as a result of the low level of expected success (Martin-Krumm, Sarrazin, Peterson, & Famose, 2003). Anxiety then becomes the result of pessimism. The opposite may also be true. An individual who tends to experience symptoms of anxiety prior to competition interprets that anxiety negatively. These findings, like the previously mentioned optimism and SCAT directional scores, are consistent with the literature on explanatory style as well as findings concerning facilitative and debilitative anxiety (Jones et al., 2002; Mellalieu et al., 2003; Seligman, 1990). Athletes view anxiety as either beneficial to performance levels and the likelihood of success or detrimental to performance and a hindrance to success (Edwards & Hardy, 1996; Jones & Swain, 1992; Mellalieu et al.). If an athlete elicits a facilitative interpretation of anxiety, it follows that he/she is most likely optimistic. In the present
The Influence study, as in past studies, those individuals who interpreted anxiety as facilitative and beneficial were more optimistic about the likelihood of success (Martin-Krumm et al.). If athletes can be taught to channel the effects (both physical and mental) of anxiety or adopt an optimistic explanatory style to interpret anxiety, then perhaps optimistic expectations will lead to improved performance (Chase & Lirgg 1997; Solomon, 2002).

Favorite Condition

Pearson correlations revealed a significant, positive correlation between OPS-optimism scores and self-confidence (r = .842). This relationship suggests that as optimism increases, self-confidence increases as well. As an athlete becomes more confident in the possibility of success, optimism in turn increases. This may result in or be a result of improved performance quality. The pattern is often cyclical with an increase in one leading to an increase in the other two. Thus if improvement in one area (optimism, performance, or self-confidence) can be achieved, it may in turn affect the others in a facilitative manner. Consistent with U results, F results also showed a significant relationship between optimism and self-confidence directional scores (r = .760), as well as self-confidence total and self-confidence directional scores (r = .852). As mentioned previously, OPS-optimism and directional self-confidence share a positive relationship with an increase in one suggesting an increase in the other. As self-confidence increases, the interpretation of that self-confidence (self-confidence directional) also increases significantly. This interpretation can be linked to the increased optimism that results from increase in self-confidence intensity. A highly confident athlete is typically optimistic about succeeding (Covassin & Pero, 2004). In perceiving success, it is helpful to view the effects of self-confidence on performance as facilitative.
**Evenly-Matched Condition**

No unique correlations existed for E, only those that were consistent across the three weeks. Correlations in E revealed a strong positive relationship between OPS-optimism and self-confidence direction, self-confidence direction and self-confidence intensity, and state somatic anxiety direction and state cognitive anxiety direction.

Future studies exploring expectations, psychological constructs and performance should consider increasing sample size. The study began with eighteen participants, including all accessible players who were in uniform for the week’s game. In F, however, some players who had met the criteria for the previous week were not in uniform for the F game. One other participant had a conflict and could not be at the meeting during the time of data collection. In E, one more participant was absent at data collection. In some instances, portions of the instruments used for measurement were left incomplete, forcing these data to be omitted from final data analysis. Though the sample size suggests limited generalizability, the novelty of the study in terms of subject matter lends itself to further investigation.

Data were collected consistently on Thursday afternoon, less than 48 hours prior to the beginning of a game. Research findings suggest that directional measures do not change within a time to competition from 24 hours to 1 hour prior to competition (Wiggins, 1998). In addition, research on anxiety intensity and direction for varying time to competition intervals noted that intensity scores of anxiety do not change significantly as long as expectations remain the same (Thomas et al., 2004). State measure data has been found to change as frequently as every 15 minutes up to the start of competition. It is possible that data collected 48 hours prior to competition may not yield extremely strong predictive power about participants’ feelings immediately prior to game time.
However, seeing that significance is present, even 48 hours in advance, may serve as an indication that the tested constructs may only increase in the degree of difference as proximity to competition decreases. Constructs that showed no significance may be more sensitive closer to game time, and so this should be considered in future research as well.

Inconsistency in the correlation data across weeks, especially the large reduction in significance after the underdog competition, may be a result of order effects in instrumentation administration. The SCAT was given in U and then not again for the following two collection weeks. Significant correlations resulted between the SCAT total and the SCAT directional and several other measures (optimism, pessimism, cognitive directional, somatic directional, and self-confidence) for U and were not significant in F or E. The loss of significant correlations in the second two weeks may be a result of the absence of this trait measure. In the future, it may be beneficial to administer the SCAT in a separate session and not immediately prior to the collection of data from the other measures.

The implications of expectations and the influence of these expectations on the performance of athletes could provide practical information for coaches and practitioners. Coaches and practitioners could attempt to modify negative thought processes through self-talk and reframing of negative perceptions. Through such interventions, athletes may learn to view underdog status as a challenge, rather than a threat and performance quality may increase. Expectations can be mediated by motivation levels (Locke & Latham, 1990). Even if the expectations are low, by setting goals, and maintaining a high desire to achieve, successful outcomes may be possible. Future studies may find it interesting to collect coaches’ perspectives on the game status of the competition. Research indicates expectations of the coach are equally as influential as that of the athletes’ themselves.
The indication that self-confidence is a mediating factor in the effect of anxiety on performance, as well as levels of optimism, leads to a focus on maintaining and increasing levels of self-confidence among athletes. In doing so, the negative effects of anxiety may decrease, optimistic perceptions may increase, and performance levels may be enhanced. The inevitable existence of expectations in the face of competition leads to the need to control perceptions of such expectations and learn to moderate them to positively affect performance.
References


APPENDICES
APPENDIX A

Research Questions, Limitations, Delimitations, Assumptions, and Operational Definitions
**Research questions:**

(1) Will participants score significantly different on optimism in the underdog, favorite and even conditions?

(2) Will participants score significantly different on pessimism in the underdog, favorite and even conditions?

(3) Will participants score significantly different on state cognitive anxiety in the underdog, favorite and even conditions?

(4) Will participants score significantly difference on the directional cognitive anxiety scale for the underdog, favorite and even conditions?

(5) Will participants score significantly different on state somatic anxiety in the underdog, favorite and even conditions?

(6) Will participants score significantly different on the directional somatic anxiety scale in the underdog, favorite and even conditions?

(7) Will participants score significantly different on self-confidence in the underdog, favorite and even conditions?

(8) Will participants score significantly different on the directional self-confidence scale in the underdog, favorite and even conditions?

(9) What is the relationship between optimism, pessimism, trait anxiety, state cognitive anxiety (intensity and direction), state somatic anxiety (intensity and direction), and self-confidence (intensity and direction) among trial weeks?

**Limitations:**

1) Sampling technique - The sample chosen was based on convenience. This limited the randomization of the selection process and ultimately the generalizability of the findings.
3) Time of data collection - Though the day of the week will remain consistent, if the measures were not administered at similar times for all the selected competitions this could alter the consistency of the findings.

Delimitations:

1) Ability Level - The ability level of all the participants was limited to intercollegiate status. This was in order to maintain consistency in the stressors and lifestyle of all participants.

2) Sport Type - Only football players were targeted for the purposes of the present study. This too was in order to maintain a consistency in the effects of social factors associated with a team dynamic.

3) Gender - Only male athletes were selected for participation

Definitions:

Favorite - The game, during which participants perceive their team as a moderate to strong favorite in the week’s competition. A favorite categorization corresponded with a score of 4 or higher on the Likert-scaled question regarding game status.

Underdog - The game, during which participants perceive their team as a moderate to strong underdog in the week’s competition. An underdog categorization corresponded with a score of 2 or lower on the Likert-scaled question regarding game status.

Evenly Matched - The game, during which participants perceive their team as a moderate to strong underdog in the week’s competition. An evenly matched categorization corresponded with a score greater than 2 and less than 4 on the Likert-scaled question regarding game status.
Assumptions:

1) Participant Integrity - It was assumed that participants are honest in their responses to the measurement scales.

2) Participant Effort - The use of self-report questionnaires required the assumption of optimal effort in completion of the assessments.

3) Participant Awareness - It was also assumed that the participants were aware of the team’s game status/outcome expectancy at the time of the assessment.
APPENDIX B

Instrumentation
SCAT
ILLINOIS COMPETITION QUESTIONNAIRE

Form A

Directions: Below are some statements about how persons feel when they compete in sports and games. Read each statement and decide if you HARDLY-EVER, or SOMETIMES, or OFTEN feel this way when you compete in sports and games. If your choice is HARDLY-EVER, circle the letter A, if your choice is SOMETIMES, circle the letter B, and if your choice is OFTEN, circle the letter C. There are no right or wrong answers. Do not spend too much time on any one statement. Remember to choose the word that describes how you usually feel when competing in sports and games.

After answering each question please rate the degree to which you perceive the statement to be helpful in your performance (facilitative) or hurtful to your performance (debilitative). To rate the question circle the number that corresponds with your perception, for example a +3 is very helpful and a -3 is very hurtful.

<table>
<thead>
<tr>
<th></th>
<th>Hardly Ever</th>
<th>Sometimes</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Competing against others is socially enjoyable.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>2. Before I compete I feel uneasy.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>3. Before I compete I worry about not performing well.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>4. I am a good sportsman when I compete.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>5. Before I compete, I worry about making mistakes</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
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<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>Question</td>
<td>Hardly Ever</td>
<td>Sometimes</td>
<td>Often</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>6. Before I compete I am calm.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
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<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>7. Setting a goal is important when competing.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>8. Before I compete I get a queasy feeling in my stomach.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>9. Just before competing, I notice my heart beats faster than usual.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>10. I like to compete in games that demand a lot of physical energy.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>11. Before I compete I feel relaxed.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>12. Before I compete I am nervous.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>13. Team sports are more exciting than individual.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>Question</td>
<td>Hardly Ever</td>
<td>Sometimes</td>
<td>Often</td>
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<td>------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>14. I get nervous wanting to start the game.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>15. Before I compete I usually get uptight:</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
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</tbody>
</table>
### OPS

**Subject Number:** _______

**INSTRUCTIONS:** The 56 statements printed below represent individual differences in viewpoint. Using the scale shown below, please respond with your own point of view to all of the statements: for example, if you strongly agree with a statement then circle 1 (S.A.). Do not spend a lot of time thinking about each one; just indicate your first impression. Remember, respond to these statements according to how you feel about them right now.

1 - Strongly Agree  
2 - Agree  
3 - Disagree  
4 - Strongly Disagree

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1. I like people I get to know.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. It is best not to set your hopes too high since you will probably be disappointed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. There is so much to be done and so little time to do it in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>4. I have a tendency to make mountains out of molehills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Rarely do I expect good things to happen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Everything changes so quickly these days that I often have trouble deciding which are the right rules to follow.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. All in all, the world is a good place.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. When it comes to my future plans and ambitions in life, I expect more to go wrong than right.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. My hardest battles are with myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. I believe there is not much hope for the human race.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Statement</td>
<td>SA</td>
<td>A</td>
<td>D</td>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>11. It does not take me long to shake off a bad mood.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. If you hope and wish for something long and hard enough, you will eventually get it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. People get ahead by using &quot;pull&quot; and not because of what they know.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. Even when things in my life are going okay, I expect them to get worse soon.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. With enough faith, you can do almost anything.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. I enjoy myself most when I am alone, away from other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. When I undertake something new, I expect to succeed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>18. Honesty is the best policy in all cases.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>19. I generally look at the brighter side of life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>20. If I make a decision on my own, I can pretty much count on the fact that it will turn out to be a poor one.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>21. I generally make light of my problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22. It is always a good thing to be frank.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
1 - Strongly Agree
2 - Agree
3 - Disagree
4 - Strongly Disagree

23. Where there's a will, there's a way.  1  2  3  4

24. I have a tendency to blow up problems so they seem worse than they really are.  1  2  3  4

25. All in all, it is better to be humble and honest than important and dishonest.  1  2  3  4

26. As time goes on, things will most likely get worse.  1  2  3  4

27. It is the slow, steady worker who usually accomplishes the most in the end.  1  2  3  4

28. When I go to a party I expect to have fun.  1  2  3  4

29. Times are getting better.  1  2  3  4

30. Everyone should have an equal chance and an equal say.  1  2  3  4

31. Better to expect defeat: then it doesn't hit so hard when it comes.  1  2  3  4

32. It is wise to flatter important people.  1  2  3  4

33. I expect to achieve most of the things I want to in life.  1  2  3  4

34. It seems the cards of life are stacked against me.  1  2  3  4

35. What is lacking in the world today is the old kind of friendship that lasted for a lifetime.  1  2  3  4
<p>| | | | | |</p>
<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>36. When the weatherman predicts 50% chance of rain, you might just as well count on seeing rain.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37. Before an interview, I am usually confident that things will go well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38. Sometimes I feel down, but I bounce right back again.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. The future seems too uncertain for people to make serious plans.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. When I have undertaken a task, I find it difficult to set it aside even for a short time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41. Tenderness is more important than love.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. When gambling, I expect to lose.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>43. Anybody who is willing to work hard has a good chance for success.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44. The future looks very dismal.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>45. If I had to choose between happiness and greatness, I'd choose greatness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>46. Minor setbacks are something I usually ignore.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47. In general, things turn out all right in the end.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>48. It is better to be a dead hero than a live coward.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
1 - Strongly Agree  
2 - Agree  
3 - Disagree  
4 - Strongly Disagree

49. Give me 50/50 odds and I will choose the wrong answer every time.  
   SA   A   D   SD
   1   2   3   4

50. It is hard to get ahead without cutting corners here and there.  
   1   2   3   4

51. If I were in competition and contestants were narrowed down to myself and one other person, I would expect to be runner-up.  
   1   2   3   4

52. April showers bring May flowers.  
   1   2   3   4

53. I can be comfortable with nearly all kinds of people.  
   1   2   3   4

54. The worst defeats come after the best victories.  
   1   2   3   4

55. In the history of the human race, there have probably been just a handful of really great thinkers.  
   1   2   3   4

56. Every cloud has a silver lining.  
   1   2   3   4

In this Saturday’s Game I feel Georgia Southern is (circle one):

A Strong Underdog  A Moderate Underdog  Evenly Matched  A Moderate Favorite  A Strong Favorite
   1   2   3   4   5

For this Saturday’s game, please estimate the number of times you expect to be on the field for:
Offense _______
Defense _______
Special Teams _______
CSAI-2
ILLINOIS SELF-EVALUATION QUESTIONNAIRE

Subject Number: _______

Directions: A number of statements that athletes have used to describe their feelings before competition are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel right now - at this moment. There are no right or wrong answers. Do not spend too much time on any one statement, but choose the answer which describes your feelings right now.

After answering each question please rate the degree to which you perceive the statement to be helpful in your performance (facilitative) or hurtful to your performance (debilitative). To rate the question circle the number that corresponds with your perception, for example a +3 is very helpful and a -3 is very hurtful.

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Somewhat</th>
<th>Moderately</th>
<th>Very Much So</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am concerned about this competition</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3 -2 -1 0 1 2 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I feel nervous</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3 -2 -1 0 1 2 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I feel at ease</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3 -2 -1 0 1 2 3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. I have self-doubts</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3 -2 -1 0 1 2 3</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. I feel jittery</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3 -2 -1 0 1 2 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I feel comfortable</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question rating:</td>
<td>-3 -2 -1 0 1 2 3</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
7. I am concerned that I may not do as well in this competition as I could. 

Question rating: -3 -2 -1 0 1 2 3

8. My body feels tense. 

Question rating: -3 -2 -1 0 1 2 3


Question rating: -3 -2 -1 0 1 2 3

10. I am concerned about losing. 

Question rating: -3 -2 -1 0 1 2 3

11. I feel tense in my stomach. 

Question rating: -3 -2 -1 0 1 2 3

12. I feel secure. 

Question rating: -3 -2 -1 0 1 2 3

13. I am concerned about choking under pressure. 

Question rating: -3 -2 -1 0 1 2 3


Question rating: -3 -2 -1 0 1 2 3

15. I'm confident I can meet the challenge. 

Question rating: -3 -2 -1 0 1 2 3
16. I'm concerned about performing poorly

Question rating: 

17. My heart is racing

Question rating: 

18. I'm confident about performing well

Question rating: 

19. I'm concerned about reaching my goal

Question rating: 

20. I feel my stomach sinking

Question rating: 

21. I feel mentally relaxed

Question rating: 

22. I'm concerned that others will be disappointed with my performance

Question rating: 

23. My hands are clammy

Question rating: 
24. I'm confident because I
mentally picture myself
reaching my goal..................................1 .....................2 ..................... 3 ..................... 4
Question rating: -3 -2 -1 0 1 2 3

25. I'm concerned I won't be
able to concentrate ...............................1 .....................2 ..................... 3 ..................... 4
Question rating: -3 -2 -1 0 1 2 3

26. My body feels tight..............................1 .....................2 ..................... 3 ..................... 4
Question rating: -3 -2 -1 0 1 2 3

27. I'm confident of coming
through under pressure.........................1 .....................2 ..................... 3 ..................... 4
Question rating: -3 -2 -1 0 1 2 3
APPENDIX C

Extended Review of Literature
Limited experimental research was found on the influence of outcome expectancy, specifically underdog, favorite and evenly matched perceptions, and the psychological effect in a competitive sport situation. With the label of underdog, favorite or evenly matched, come inherent pressures and anxieties that may alter the psychological mindset of an athlete prior to competition. Individual expectations, as well as those from a coach or teammate, can lead to increased anxiety. If great importance is placed on a competition, an individual may feel increased anxiety, both cognitively (thoughts and feelings) and somatically (physiological). These feelings of anxiety can been viewed either optimistically, as motivation and challenge, or pessimistically, enhancing stress and leading to mentally and physically debilitating effects (Mellalieu et al., 2003). If an individual is pessimistic about the outcome of a situation, his/her self-confidence may suffer, furthering the self-fulfilling aspect of the perception. As self-confidence is affected and an optimistic or pessimistic perception is employed, an overall mood will be induced within an individual.

**Optimism and Pessimism**

Optimism and pessimism are constructs that relate to an individual’s perception of a situation. The optimist usually sees the positive aspects of a situation, and exhibits hope, joy and motivation. On the other hand, the pessimist is biased toward the negative aspects of a situation and is more prone to dejection, fear of failure and depression (Scheier, Carver, & Bridges, 1994). When confronted with failure, pessimists often attribute the failure to personal character flaws or low skill level. In the eyes of the pessimist, these viewpoints lead to subsequent failure and may eventually result in discontinuation of the activity (Seligman, 1990).

Sanna (1998) introduced the idea of “defensive optimists and pessimists.” The
defensive pessimist sets goals below the level of expectations in order to perform better than expected. If the pessimist does not expect to perform well, then a moderate performance can be seen more positively. Defensive optimists employ after the fact assessment that includes potential outcomes that could have occurred, but were avoided, to see the best in the given outcome. Unrealistic optimism is also a variation of the general construct of optimism. Unrealistic optimism refers to the tendency of individuals to be overly positive about future outcomes (Wicker, Turner, Reed, McCann, & Do, 2004.) This deviation from logical assessment of future success may vary as the event approaches. For example, in a study of students’ motivation in the classroom, expectations for success became more realistic as the event approached. However, if the motivation to achieve the goal remained high, the achievement level was maintained, although expectancy might have declined (Wicker et al.). Illusions of success are often enough to propel performance levels in a positive direction. Catina and Iso-Ahola (2004) explored the role of optimism and positive illusions of success among power-lifting competitors. The results of their study showed that positive illusions increased motivation, perceptions of success, perceptions of control and actual success.

In addition to variations in perceptions, optimists and pessimists exhibit differences in coping styles. Given a difficult or uncertain situation, the optimist will most likely focus on the problem itself; working to resolve the issue and find a suitable solution (Czech, Burke, Joyner & Hardy, 1998). The pessimist assesses the situation from an emotional perspective and attributes the hardship to a personality shortcoming, rather than an external circumstance. The way an individual assesses a situation, defined by Seligman (1990) as “explanatory style,” is influential in the classification of that individual as optimistic or pessimistic. The two types of explanatory styles are global and
specific. Global is more conducive of the pessimist, inferring that hardships are permanent and internalized. The optimist has a more specific style of explaining hardships, and they are referred to as fleeting, and external, out of the control of the individual or team (Seligman, 1990). This way of associating with difficulty lends itself to efficacy in the ability to change situations for the better, as would be the case for the optimist, or feel that the situation is permanent and inevitably destructive as with the pessimist.

The type of explanatory style and adoption of an optimistic or pessimistic coping style can have effects on other aspects of one’s mental and physical well-being. The umbrella of research which relates dispositions of optimism and/or pessimism to overall mental health has been called positive psychology (Kelley, 2004). Positive psychology strives to increase the positive aspects of mental functioning rather than trying to mend dysfunctional cognitive processes (Seligman & Csikszentmihalyi, 2000). The ideals of positive psychology relate to research examining the role of optimism in overcoming mental and physical health problems. Leonard, Witter and Torres-Harding (2003) studied a group of individuals suffering from chronic fatigue syndrome. After assessing levels of optimism, coping strategies and social support systems, he found that participants with greater levels of optimism and a greater social support reported high scores on the positive mental composite inventory. Optimism has been related to medication adherence among patients with illnesses ranging from diabetes to adolescents with chronic disease (Kyngas, Duffy, & Kroll, 2000; Mann, 1999).

Additional influences of optimism on levels of stress, self-esteem and burnout were examined among a sample of women in executive positions. The findings of this study show that optimism is a mediator of stress and burnout, decreasing the ill-effects of
such psychological symptoms and boosting self-esteem (Fry, 1995). Ratelle, Vallerand, Chantel, and Provencher (2004) examine the components of the cognitive adaptation theory. This theory posits that positive self perceptions, perceptions of control, and optimism are directly related to positive mental health. In comparison with a population of “normal” individuals, those with mental health problems such as depression, neuroticism and anxiety demonstrated lower perceptions of control, as well as less optimism about life events (Ratelle et al.). Taylor and Brown (1988) first proposed the ideals of this theory as they explored the benefit of optimism and positive affect on general mental well-being and life satisfaction. In the face of threatening events, including cancer, heart disease and HIV, those individuals with an optimistic attitude and positive illusions were more likely to effectively cope and learn from failures (Catina & Iso-Ahola, 2004; Taylor & Armor, 1996; Taylor, Collins, Skokan, & Aspinwall, 1989). In relationship to performance variable, those individuals with greater optimism were more persistent in completing a task and showed less detrimental effects to self-efficacy (Taylor & Brown).

In contrast to the noted benefits of an optimistic disposition, Tennen and Affleck (1987) highlight the negative side of optimism. Their research refers to the tendency of an optimist to view him/herself as an “illusion of invulnerability.” This construct is described as an unrealistic view that negative events will not happen. Maintaining this optimistic outlook may result in lack of preparation in times of difficulty as well as failure to take appropriate steps to avoid defeat.

Anxiety and Performance

The development of the relationship between anxiety and performance levels has gone through several revisions, and remains a prevalent research topic. Several models
exist to explain the relationship, and while they all possess positive characteristics, the discussion over which model is most successful has yet to be unanimously determined.

The drive theory posits that performance is derived from the product of habit and drive; drive often referred to as arousal. Spence and Spence (1966) define habit as the tendency, in an instance of demand, to portray a correct or incorrect response to the stressor or stimuli. According to this theory, the relationship between anxiety and performance is linear. As a skill becomes a dominant motor behavior or a habit, then greater the levels of arousal will increase the accuracy of performance in a given skill. As an individual becomes more consistent and well-trained in a skill, arousal becomes a catalyst for performance. The argument to Spence and Spence’s theory comes in the evidence of decreased performance in times of over-arousal. Often athletes perform more poorly when their arousal levels exceed a certain optimal range. A loss of focus, performance anxiety, and disorientation all have been recorded as results of over-arousal prior to performance. These negative responses dispute the simple linear relationship of arousal to levels of performance suggested by the drive theory.

In response to doubts of the linear performance/anxiety relationship, the inverted-U hypothesis (Sonstroem & Bernardo, 1982) offers an alternative interpretation. This hypothesis supports the theory that performance increases with arousal to a certain point of optimal arousal, and then begins to decline as arousal levels exceed the optimal range (Hassmen et al., 2004). Given this interpretation, individuals possess a range during which performance will be at its highest level and if arousal is increased from that point, performance levels will begin to deteriorate. Evidence for this U-shaped activation and performance relationship exists not only in sport, but in areas such as test taking as well (Munz, Costello & Korabik, 1975). Optimal levels of arousal are dependent on various
aspects of the skill being performed. This is where the difficulty of consistently applying the inverted-U hypothesis exists. It is important to consider individual personality differences, coping skills, explanatory styles, and various task characteristics when attempting to utilize the inverted-U hypothesis framework (Hassmen et al.; Raglin, 2001).

The Multidimensional Anxiety Theory suggests that anxiety consists of physiological (somatic) and psychological (cognitive) components (Martens et al., 1990). Cognitive anxiety is defined as the mental symptoms of anxiety caused by negative expectations for success and negative self-perceptions (Martens et al.). Somatic anxiety, as defined by Martens et al., comprises the physiological elements stemming from affective arousal. According to the multidimensional theory, somatic anxiety continues to show an inverted-U relationship with performance, with extreme high and low arousal levels proving detrimental to performance. Cognitive anxiety reveals a linear relationship with levels of performance (Craft et al., 2003). Adding to the dimensionality of anxiety suggested by Martens et al. (1990) research has indicated the existence of a directional facet of anxiety (Jones, 1995). Anxiety, though often thought of only in the negative aspects of the concept, have been found to have both adaptive and maladaptive effects on performance (Krane & Williams, 1992; Peres et al., 2002). Often termed activation, positive anxiety could increase motivation, focus and enjoyment in an individual. The same level of activation, viewed negatively, may bring about fear, physiological discomfort and distress. The perception of anxiety dictates how the existing anxiety will be interpreted (Mellalieu et al., 2003). This personal perception is directly related to optimism and pessimism. In an examination of elite swimmers, those who had a positive perception (optimistic) of perceived outcome in a competitive situation viewed their anxiety as more facilitative, than those whose anxiety was viewed with a negative
affective (pessimistic) mindset (Jones et al., 2002). Athletes may perceive anxiety as either facilitative or debilitative to performance. Therefore, the traditionally negative interpretation of anxiety may not hold true in all situations. Past research indicates that directional perceptions are mediated by skill level, time to competition, sport type and self-confidence (Thomas et al., 2004).

Anxiety in sport has been a widely researched topic, especially in reference to variables that may intensify or lessen the effects of the anxiety. More recently, findings have focused on the multi-dimensionality of anxiety. Evidence exists in support of the existence of both cognitive and somatic anxiety, as well as trait and state dimensions (Jones, 1995; Jones & Hanton, 1996; Jones, Smith, & Holmes, 2004; Jones & Swain, 1992). Trait anxiety is a predisposed tendency to experience anxious thoughts, feelings, or physical responses to a competitive situation. State anxiety is a more immediate feeling of anxiety at the time of competition (Craft et al., 2003). Researchers of trait anxiety and performance suggest that the direction of trait anxiety interpretation is a function of personality (Eysenck, 2000; Weinberger, & Schwartz, 1990). Eysenck further explains that the way in which information from several different sources is perceived and interpreted is the driving force behind how anxiety is experienced. The processing of cognitive, behavioral, physiological and situational information is mediated by state anxiety (Jones et al., 2004). Levels of state anxiety may vary within a short time period. When tested an hour before a game, an individual may show low levels of state anxiety, yet when tested ten minutes before the game, the same individual could be highly anxious. Typically, individuals with high trait anxiety are more prone to demonstrating symptoms of state anxiety (Hassman et al., 2004). Controversy exists as to the interdependency of the two types of anxiety. Evidence of differing levels of mental and
physiological symptoms prior to competition suggest some differential components of anxiety (Jones).

Regardless of the type of anxiety, the situational factors surrounding a contest can determine the intensity and directional effects of anxiety on an individual’s ability to perform at an optimal level. Other psychological factors, such as perfectionism and positive perceptions of the future have also yielded strong correlations with anxiety (Hunter & O’Connor, 2003). Perfectionism, like anxiety can be both adaptive and maladaptive dependent on the situation and the ability to cope with the effects of the perfectionist tendencies (Flett & Hewitt, 2005). Individuals may move from motivational perfectionism, in which challenging goals are set and determination is at a peak, to debilitating perfectionism, where self-efficacy, desire and optimism decrease. These individuals may eventually experience anxiety or even depressed mood-states (Hall, Kerr & Matthews, 1998).

**Self-Confidence and Performance**

Self-confidence refers to the belief in the ability to perform at a level necessary for success, “a level of assurance” (Williams, 2001). A plethora of research shows the relationship between confidence and performance (Martens et al., 1990; Tavani & Losh, 2003; Taylor, 1987; Tuckman, 2003). Self-confidence has been found predictive not only of sport performance, but also of academic, work-related and social achievement (Tavani & Losh; Taylor). Butt, Weinberg, and Horn (2003) tested a sample of elite field hockey players and examined, among other variables, their level of self-confidence. A strong positive correlation was found between self-confidence and performance level in practice and competition. Pickens and Rotella (1996) found that in a laboratory simulated putting study, participant confidence in the ability to make a putt resulted in a greater success
percentage.

Self-confidence interacts with anxiety, self-handicapping and sport specific variables as it affects performance levels (Ryska, 2002; Taylor, 1987). In its relationship with anxiety, self-confidence is a mediating factor and together both self-confidence and anxiety can affect performance (Voight, Callahan, & Ryska, 2000.)

In addition to the aforementioned relationship between self-confidence and performance, Tavani and Losh (2003) found that outcome expectancies were the strongest predictor of resulting performance level. Self-confidence is used in some research as a term synonymous with outcome expectancy. For example, in his study of youth sport participation, Tuckman (2003) referred to differing levels of self-confidence in terms of more or less positive outcome expectancy. Similar to expectancy theory, explanatory style, or even optimism/pessimism, perceptions regarding a situation can influence its outcome (Seligman, 1990; Solomon, 2002). Thus, as self-confidence levels increase, an athlete begins to believe that he/she will succeed, in other words, expectations become more positive and these positive expectations may thus be predictive of reality.

Research findings indicate the relevance of optimism/pessimism, anxiety, and self-confidence to multiple aspects of psychological functioning and physical performance. Just as in motor skills, problem solving or social contexts, a definitive relationship has yet to be found between the four psychological variables and sport. There is evidence of correlation between anxiety and performance, between optimism and pessimism and levels of anxiety, as well as optimism and pessimism and performance. Through additional research and hypothesis testing these potential relationships may be further understood.
References


APPENDIX D

Informed Consent
CONSENT TO PARTICIPATE IN A RESEARCH PROJECT

1. Title of Project: The Influence of Outcome Expectancy on Anxiety, Optimism, and Self-Confidence Among Collegiate Football Players.

   Investigator’s Name  Tiffany Watson  Phone: 912-536-9180

   Participant’s Name
   Date:_____________________

   Data Collection Location   X  Georgia Southern University Campus

   _____ Other

2. I hereby authorize Tiffany Watson or Dr. Barry Joyner to perform the following research procedures:

   Over three consecutive weeks, I will be asked to complete four self-report questionnaires assessing anxiety, self-confidence, optimism, mood and general demographic information. The procedure will take no more than 25 minutes to complete each time.

3. The procedures and/or investigations listed in paragraph 2 have been explained to me by Tiffany Watson.

4. The benefits from participation in this investigation have been explained to me.

5. I understand that Tiffany Watson and/or Dr. Barry Joyner will answer any inquires I may have at anytime concerning these procedures and/or investigations.

6. I understand that all data concerning myself will be kept confidential and available only upon my written request to Tiffany Watson. I further understand that in the event of publication, no association will be made between the reported data and myself.

7. I understand that I may terminate participation in this study at anytime without prejudice to future care and that owing to the scientific nature of the study, Tiffany Watson or Dr. Barry Joyner may in his/her absolute discretion terminate the procedures at any time.

8. I understand if at anytime, before, during or after data collection, I feel stress from participating in this research study I may seek help from the University Counseling Center (681-5541).
9. If I have any questions about this research project, I may call Tiffany Watson at 912-536-9180 or Dr. Barry Joyner at 912-681-0775. If I have any questions or concerns about my rights as a research participant in this study, they should be directed to the IRB Coordinator at the Office of Research Services and Sponsored Programs at (912) 681-5465.

Participant’s Name (print) __________________________ Signature __________________________ Date

Principal Investigator (print) __________________________ Signature __________________________ Date
APPENDIX E

IRB Forms
**IRB COVER SHEET**

<table>
<thead>
<tr>
<th>Reason for Submission:</th>
<th>TO BE COMPLETED BY IRB STAFF:</th>
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<tbody>
<tr>
<td>☑ New Project</td>
<td>IRB #:</td>
</tr>
<tr>
<td>☐ Responding to Comment</td>
<td>DATE STAMP:</td>
</tr>
<tr>
<td>☐ Reconsideration</td>
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<td>☐ Disapproval Resubmission</td>
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<td>☐ Modification</td>
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<td>☐ Renewal</td>
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<td>☐ Adverse Event</td>
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<tr>
<th>PART A – PROTOCOL/INVESTIGATOR/COORDINATOR INFORMATION</th>
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<tbody>
<tr>
<td><strong>Title of Study:</strong> The Influence of Outcome Expectancy on Anxiety, Optimism, Self-Confidence and Mood: The Underdog Effect.</td>
</tr>
<tr>
<td><strong>Principal Investigator (name):</strong> Tiffany Watson</td>
</tr>
<tr>
<td><strong>Title of Principal Investigator:</strong> Student</td>
</tr>
<tr>
<td><strong>Student</strong></td>
</tr>
</tbody>
</table>
| **Address of Principal Investigator:** 324 Woodland Drive  
 Statesboro, GA 30458 |
| **GSU College/School:** Graduate College  
 **GSU Department:** Public Health |
| **Phone number:** 912-536-9180  
 **e-mail address:** tdw1227@comcast.net |

**FAX NUMBER(s) WHERE THE APPROVAL LETTER SHOULD BE SENT:**

**NOTE: HARD COPIES ARE NOT SENT UNLESS THERE IS NO FAX NUMBER LISTED**

<table>
<thead>
<tr>
<th>Co-Investigators (names, phone numbers, e-mail addresses):</th>
</tr>
</thead>
</table>
| Faculty Advisor or Study Coordinator’s Name: Dr. Barry Joyner  
 **Address:** PO Box 8076  
 **Phone number:** 681-0775  
 **e-mail address:** joyner@georgiasouthern.edu |

Has the primary investigator and all personnel gone through human subject training?

☐ Yes  ☐ No

**PART B – LEVEL OF RISK/TYPE OF REVIEW REQUESTED**

<table>
<thead>
<tr>
<th>Level of Risk:</th>
<th>☑ Minimal  ☐ Moderate  ☐ High</th>
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<tbody>
<tr>
<td><strong>Type of Review Requested:</strong></td>
<td>☐ Full Board  ☐ Expedite  ☑ Exempt</td>
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</tbody>
</table>

If exempt, please fill out and attach the Exempt Status Questionnaire.

**PART C – RECRUITMENT INFORMATION**
Will data be collected on site or is this a study from another location?

☐ On Site

☐ Another location - Approval from remote location to collect data should be attached

Number of subjects to be enrolled at this site:

Please note: the IRB considers a subject to be enrolled if s/he signs an informed consent document. If a higher number of subjects must be enrolled for screening in order to hit a targeted number of subjects completing the study, please indicate the higher number and the permission to collect at the location.

Are any of the following being used as screening/inclusion or exclusion criteria (check all that apply)?  ☐ Race  ☐ Color  ☐ Sex  ☐ Sexual orientation  ☐ National origin  ☐ Religion  ☐ Age  ☐ Veteran status  ☐ Political affiliation  ☐ Disability

Age Range all Subjects: 18-25

Duration of Study Per Subject: 1 hour, 15 minutes

Duration of Study (entire study): Three (3) Weeks

PART D – PROJECT INFORMATION

What are the anticipated start and end dates?

a. Start date: August, 2004  b. End date: September, 2004

Are Recruitment Incentives Being Used: ☐ Yes  ☒ No

Is this a class project?  ☐ Yes  ☐ No

Is this either a thesis or a dissertation?  ☒ Yes  ☐ No
Are there any grants or sources of support for this project?

☐ Yes**  ☑ No  **If yes, please complete part E

PART E – SOURCE OF SUPPORT

Indicate all applicable sources of support and the sponsor:

☐ Federal*/State/Other Government Agency – Sponsor: __________
☐ Commercial – Sponsor: _____________
☐ Non-Profit Organization/Foundation – Sponsor: ___________
☐ GSU Funding Source: ___________
☐ Other (specify) – Sponsor: ___________
☐ No support

*If federal funding, please provide a copy of the entire grant application.

PART F: CONFLICT OF INTEREST

Does the principal investigator or any co-investigator (or any member of their immediate family):

a. own or control any equity interest in any drug, device or technology, or materials involved in this research study?  ☐ Yes*  ☑ No

b. have a financial interest in any listed source of external support?  ☐ Yes*  ☑ No

c. function as an advisor, employee, officer, director, or consultant for any listed commercial source of external support?  ☐ Yes*  ☑ No

*If yes, please attach detailed information to permit the IRB to determine if such involvement should be disclosed to potential research subjects.

PART G: ADDITIONAL APPROVALS REQUIRED
1. Has this protocol been previously reviewed by a scientific review committee?
   □ Yes (Please attach an approval letter)  ☑ No (Indicate the reason)

   New Project

2. Does this protocol involve the exposure of human subjects to ionizing radiation (excluding the use of standard diagnostic or treatment procedures, performed in a routine clinical manner and frequency)?

   □ Yes *  ☑ No

   *If yes, the protocol must be reviewed and approved by GSU’s biohazard committee.

PART H: CREDENTIALING – DEPARTMENT/DIVISION CHAIR APPROVAL

FOR RESEARCH PROCEDURES CONDUCTED WITHIN A GEORGIA SOUTHERN UNIVERSITY FACILITY: I have reviewed this human subject research proposal and have determined that the listed investigators are members or associates of the university whose job descriptions and/or competencies qualify them to perform the procedures outlined in the research proposal.

___________________________                       ___________________________
Department/Division Chair                             Date

CERTIFICATION OF INVESTIGATOR RESPONSIBILITIES

By signing below I agree/certify that:

1. I have reviewed this protocol submission in its entirety and I state that I am fully cognizant of, and in agreement with, all submitted statements and that all statements are truthful.

2. This application, if funded by an extramural source, accurately reflects all procedures involving human participants described in the proposal to the funding agency previously noted.

3. I will conduct this research study in strict accordance with all submitted statements except where a change may be necessary to eliminate an apparent immediate hazard to a given research subject.
   a. I will notify the IRB promptly of any change in the research procedures necessitated in the interest of the safety of a given research subject.
   b. I will request and obtain IRB approval of any proposed modification to the research protocol or informed consent document(s) prior to implementing such modifications.

4. I will ensure that all co-investigators, and other personnel assisting in the conduct of this research study have been provided a copy of the entire current version of the research protocol and are fully informed of the current (a) study procedures (including procedure modifications); (b) informed consent requirements and process; (c) anonymity and/or confidentiality assurances promised when securing informed consent (d) potential risks associated with the study participation and the steps to be taken to prevent or minimize these potential risks; (e) adverse event reporting requirements; (f) data and record-keeping requirements; and (g) the current IRB approval status of the research study.

5. I will not enroll any individual into this research study: (a) until such time that the conduct of the study has been approved in writing by the IRB; (b) during any period wherein IRB renewal approval of this research study has lapsed; (c) during any period wherein IRB approval of the research study or research study enrollment has been suspended, or wherein the sponsor has suspended research study enrollment; or (d)
following termination of IRB approval of the research study or following sponsor/principal investigator termination of research study enrollment.

6. I will respond promptly to all requests for information or materials solicited by the IRB or IRB Office.

7. I will submit the research study in a timely manner for IRB renewal approval.

8. I will not enroll any individual into this research study until such time that I obtain his/her written informed consent, or, if applicable, the written informed consent of his/her authorized representative (i.e., unless the IRB has granted a waiver of the requirement to obtain written informed consent).

9. I will employ and oversee an informed consent process that ensures that potential research subjects understand fully the purpose of the research study, the nature of the research procedures they are being asked to undergo, the potential risks of these research procedures, and their rights as a research study volunteer.

10. I will ensure that research subjects are kept fully informed of any new information that may affect their willingness to continue to participate in the research study.

11. I will maintain adequate, current, and accurate records of research data, outcomes, and adverse events to permit an ongoing assessment of the risks/benefit ratio of research study participation.

12. I am cognizant of, and will comply with, current federal regulations and IRB requirements governing human subject research including adverse event reporting requirements.

13. I will notify the IRB within 24 hours regarding any unexpected study results or adverse events that injure or cause harm to human participants.

14. I will make a reasonable effort to ensure that subjects who have suffered an adverse event associated with research participation receive adequate care to correct or alleviate the consequences of the adverse event to the extent possible.

15. I will notify the IRB prior to any change made to this protocol or consent form (if applicable).

16. I will notify the IRB office within 30 days of a change in the PI or the closure of the study.

____________________________          ____________________________       _____________
Principal Investigator Name (typed)   Principal Investigator Signature Date

Faculty Advisor Name (typed)            ____________________________        ______________
Faculty Advisor Signature* Date

*Faculty signature indicates that he/she has reviewed the application and attests to its completeness and accuracy
This questionnaire should be completed if you feel that your research satisfies the federal guidelines that would make it exempt from full or expedited IRB review (that is, if you have checked the box on the IRB Cover Sheet requesting an Exempt review). Please note that you must also complete the IRB Cover Sheet, including its Certification of Investigator Responsibilities, and provide a summary of the research protocol. If the IRB decides that the investigation is exempt from full or expedited review, it will not be necessary for you to complete the IRB’s Application for the Use of Human Subjects.

Please attach an IRB Cover Sheet to the top of this form and submit to the IRB Office. Also attach a brief summary of the research protocol.

I will be ____ collecting, ____ receiving these samples OR, ____ sending these samples or data outside of GSU. (Check all that apply)

Title of Study: The Influence of Outcome Expectancy on Anxiety, Optimism, and Self-Confidence Among Collegiate Football Players

Does the study meet the following criteria?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>Does the research involve the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens?</td>
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<tr>
<td>Existing Data: means that all the data, documents, records, or specimens are in existence prior to IRB Review. Specimens obtained prospectively from future discarded clinical samples do not qualify for exempt review.</td>
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<tr>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Does the research involve the use of educational tests, survey procedures, interview procedures or observation of public behavior and is the data/information recorded in a manner so that human subjects cannot be identified, directly or through identifiers linked to the subjects such that any disclosure of the human subjects’ responses outside the research could not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability or reputation 45CFR46.101(b)(2)</td>
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<tr>
<td>YES</td>
<td>NO</td>
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<tr>
<td>Are the samples or data being collected by a third party and stored in a facility that will not break the code, even upon the request of a family member/ or medical emergency?</td>
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Please answer the following two questions to the best of your ability.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tr>
<td>Is the probability of the harm or discomfort anticipated in the proposed research greater than that encountered ordinarily in daily life or during the performance of routine physical or psychological examinations or tests?</td>
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<tr>
<td>YES</td>
<td>NO</td>
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<tr>
<td>Is the magnitude of the harm or discomfort greater than that encountered ordinarily in daily life, or during the performance of routine physical or psychological examinations or tests?</td>
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</table>

Does this study involve any of the following?

<table>
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<tr>
<th>YES</th>
<th>NO</th>
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<tr>
<td>Non-hereditary genetic research in which samples are linked/coded or identifiable</td>
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<tr>
<td>Hereditary genetic research</td>
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<tr>
<td>Prisoners, Fetuses, Pregnant Women, Cognitively/Mentally Impaired, Students/Employees/ Under 18 years of age (Circle all that apply)</td>
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<tr>
<td>Human in-vitro fertilization (any fertilization of human ova which occurs outside the body of a female)</td>
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<tr>
<td>Surveys or interviews given to minors</td>
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<tr>
<td>Any procedures that may cause a subject either physical or psychological discomfort or is perceived as harassment above and beyond what the person would experience in daily life</td>
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<tr>
<td>Deception</td>
<td></td>
</tr>
<tr>
<td>Observation of minors if the investigator participates in the activities being observed unless there is a federal statute covering the activity</td>
<td></td>
</tr>
<tr>
<td>The study of a rare trait/disorder such that there is some risk of exposing the identity of sample donors or the research poses risk of community or cultural harm</td>
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</table>

1. How do you plan to access the targeted subject population? I have contacted the coaches of the players I am planning to use as participants in the present research study. They have permitted me access to the players, and in addition I will supply a consent form to each player prior to collection of data.
2. Please provide a brief summary of the study and a description of the research protocol (chronologically progressed) on an attached sheet.

The present study is aimed at exploring the effect of expectations on the psychological profile of an athlete. By administering three questionnaires (attached) prior to competition, the effect of the outcome prediction on anxiety, optimism, self-confidence and mood will be assessed. A sample (25) of Georgia Southern Football players will serve as participants in the study. During each week of the first three games of the regular season the principle investigator will administer the questionnaires to the participants. The measures being utilized include the Profile of Mood States, the Competitive State Anxiety Inventory-2, which assesses cognitive and physiological anxiety as well as self-confidence, and the last instrument is the Optimism and Pessimism Scale. The same group of participants will complete the three psychological questionnaires in each of the three conditions. Examples of all three questionnaires are attached. The participants will use the last four digits as their social security number as subject numbers in order to both maintain anonymity and confidentiality of results, as well as be sure their results are grouped correctly from week to week. The differences in each of the factors will be analyzed on whether the upcoming game predicted GSU as the favorite, the underdog, or equally matched. SPSS statistical software will be used to analyze the results. Completion of the questionnaires will take place at the same time each week and will take no more than 25 minutes per session. At the conclusion of my research the data will be kept on file by the department in the case of future research in a similar area. Upon completion of data collection, all subject numbers will be detached from the questionnaires and will be discarded by the research team. Results will remain secure and anonymous to all parties, in present or future studies interested in the data.

4. What kind of human samples (e.g. tissue, blood) or data will be obtained?
Psychological, Self-report data.

5. Informed Consent

Exempt research is not subject to federal regulations contained in 45 CFR 46, which include requirements for informed consent. Therefore, if the research is eligible for exemption, then “technically” informed consent is not required. It is up to the investigator to decide whether or not consent should be obtained and documented. Often the investigator will provide a letter of explanation or even a consent form. Again, this is not required, but may be the appropriate thing to do to ensure the rights and welfare of the subjects.

If you plan to provide a Consent Form or letter, please submit it along with this form. Attached

If a questionnaire or interview will be done, please attach a copy of the questions. Attached

<table>
<thead>
<tr>
<th>Principal Investigator (printed)</th>
<th>Principal Investigator (Signature)</th>
<th>Date</th>
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For Use by IRB Office Only

Exempt Status Approved
Date

Yes No IRB Chair/Vice Chair

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