

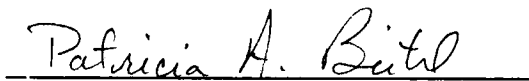
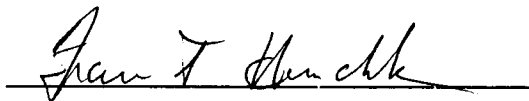
To the Graduate Council:

I am submitting herewith a thesis written by Stephanie M. Taylor entitled "State Anxiety and Self-Confidence Differences Between a Stressful Period Prior to Sport Performances and Academic Performances of Division I Track and Field Athletes". I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science with a major in Recreation and Leisure Studies.



Dr. Mary Dale Blanton,
Major Professor

We have read this thesis and
recommend its acceptance:



Accepted for the Council:



Associate Vice Chancellor
and Dean of The Graduate
School

STATE ANXIETY AND SELF-CONFIDENCE DIFFERENCES BETWEEN
A STRESSFUL PERIOD PRIOR TO SPORT PERFORMANCES
AND ACADEMIC PERFORMANCES OF DIVISION I
TRACK AND FIELD ATHLETES

A Thesis Presented
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ABSTRACT

The purpose of this study was to determine the state anxiety and self-confidence differences between a stressful period during sport performance and academic performance of Division I track and field athletes. Subjects comprised of 21 female track and field athletes and 30 male track and field athletes and ranged in age from 18 to 25.

The Competitive State Inventory-2 (CSAI-2) was used to measure state anxiety and self-confidence levels prior to a sport performance and academic performance (Martens, Burton, Vealey, Bump, & Smith, 1990). The CSAI-2 consisted of 27 items which respondents rate on a Likert - type scale ranging from 1, not at all, to 4, very much so. The CSAI-2 contains three subscales; i.e., cognitive anxiety, somatic anxiety, and selfconfidence. Reliability and validity .79 to .90 of the CSAI2 were rigorously tested by Martens et al. (1990) during scale development. The Modified CSAI-2 was developed to test academic performance of the Division I track and field athletes. Also, a demographic data was distributed for background information concerning previous sport experience.

The CSAI-2 was administered by the researcher and completed by the male athletes the morning of a home meet held in February.

The CSAI-2 for female athletes was administered by coaching

personnel the morning of an away meet. The revised version of the CSAI-2 was completed the morning of a test/mid-term. Sub-problem 1 was analyzed using a 2 x 2 (Gender x Test) multivariate repeated measures parametric statistic design to determine differences in terms of state anxiety and a 2 x 2 ANOVA parametric to measure self-confidence. Sub-problem 2 was analyzed by using a 2 x 2 (Success x Activity) MANOVA design to measure successful athletes in terms of state anxiety levels and a 2 x 2 ANOVA was used to measure self-confidence. Sub-problem 3 utilized a 2 x 3 (Event x Activity) MANOVA to evaluate differences in terms of state anxiety levels and a 2 x 2 ANOVA design to evaluate self-confidence.

Results of this study indicated that there was no multivariate difference between cognitive and somatic anxiety for gender, but there was a multivariate difference between cognitive and somatic anxiety for test. Overall, there were no multivariate differences between cognitive and somatic anxiety for the Test x Gender interaction. There was no univariate difference in self-confidence for gender or for test. There was no multivariate difference between cognitive and somatic anxiety for gender or for success. Likewise, there was no multivariate difference between cognitive and somatic anxiety for the Gender x Success interaction. There was no univariate difference in self-confidence for gender or for test. Overall, there

was no univariate difference in selfconfidence for the Gender x Success interaction. There was a multivariate difference between cognitive and somatic anxiety for gender. There was no significant difference between cognitive and somatic anxiety in event or for the Gender x Event interaction. There was no significant univariate difference in self-confidence for gender or for event. Overall, there was no significant univarite difference in self-confidence for Gender x Event interaction.

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CHAPTER 1

INTRODUCTION

The relationship between anxiety and athletic performance has been a widely investigated topic in the sport psychology literature (Krane & Williams, 1994). Also recent attention given this relationship has focused on the multidimensional theory of anxiety (Martens, Burton, Vealey, Bump & Smith, 1990). Other studies typically have found better athletic performance was associated with either lower levels of cognitive and somatic anxiety or higher levels of confidence (Martens et al., 1990). Studies comparing more and less successful athletes have also found that more successful athletes have fewer self-doubts, lower anxiety, and greater confidence (Krane & Williams, 1994).

Martens et. al (1990) state that sport competition trait anxiety differences between males and females have consistently been reported since the development of The Sport Competition Anxiety Test, with females tending to exhibit higher levels of competitive trait anxiety than males. Using a multidimensional model (Martens et al., 1990), sex differences in competitive state anxiety have also been explored. Findings to date suggest that females not only report higher levels of competitive state anxiety

prior to competition than males (Martens et al., 1990), but that they also conform to different temporal patterning of cognitive anxiety and somatic anxiety during the precompetition period (Jones & Swain, 1990).

Findings concerning the precompetition temporal patterning of the cognitive and somatic components of the CSAI-2 are different, but consistent within each factor. Cognitive anxiety tends to remain constant during the precompetition period, while somatic anxiety, tends to increase rapidly near the start of the event. Studies have shown that the patterning of self-confidence is generally less consistent during the precompetition period (Jones & Swain, 1990), but theoretical predictions suggest that neither cognitive anxiety nor self-confidence are likely to change unless expectations of success change during the precompetition period (Martens et al., 1990).

Participation in sport is positively associated with educational expectations, and that education expectations are highest among those participating in sport. Gender, race, and type of sport also influence intervening variables such as secondary school academic achievement, financial assistance, and intensity of involvement in athletics at the university level.

The purpose of this study was to determine the state anxiety and self-confidence differences during a stressful period prior to a sport or academic performance of Division

I track and field athletes. This study would be of interest to many in the field of sport psychology to review the athletes anxiety levels in a classroom setting and on the field.

PROBLEM STATEMENT

The purpose of study was to determine the state anxiety and self-confidence differences between a stressful period during sport performances and academic performances of Division I track and field athletes.

SUB-PROBLEMS

The sub-problems investigated in this study were:

1. Is there a comparative gender difference in terms of state anxiety and self-confidence in a stressful period of sport performance and academic performance?
 - a. Are there Gender x Test differences in cognitive state anxiety and/or somatic state anxiety prior to the activity?
 - b. Are there Gender x Test differences in self-confidence prior to the activity?
2. Do athletes who were more successful demonstrate lower state anxiety levels and self-confidence than less successful athletes?
 - a. Do athletes who were more successful demonstrate lower cognitive state anxiety and/or somatic anxiety than less successful athletes?
 - b. Do athletes who were more successful demonstrate lower self-confidence than less successful athletes?
3. Do state anxiety levels and self-confidence differ among athletes of different track and/or field events?
 - a. Do cognitive state anxiety and/or somatic state anxiety levels differ among athletes of different track and/or field events?
 - b. Does self-confidence differ among athletes of different track and/or field events?

Definitions of Terms

To facilitate a better understanding of this study, the following terms are defined.

1. Academic is a college or university used for educational benefits for higher learning.
2. Activity is viewed as a sport.
3. Anxiety is viewed as feeling of nervousness and tension associated with activation or arousal of the organism (Gould & Krane, 1990).
4. Athlete is a student enrolled in a college or university who participates in the institution's athletic program.
5. Athletics is competition of student-athletes, as a team or as individuals, against another team or individual-athlete from an outside institution.
6. Cognitive Anxiety is operationalized as negative concerns about performance, inability to concentrate, and disrupted attention (Martens et al., 1990).
7. Self-Confidence is when a person believes in him/herself.
8. Somatic Anxiety is defined as perceptions of bodily symptoms of autonomic reactivity such as butterflies in the stomach, sweating, shakiness, and increased heart rate (Martens et al., 1990).
9. State Anxiety is a transitory state, or how one feels right now in specific situation. Consisting of

apprehension, tension, and heightened arousal (Martens et al., 1990).

10. Stress is defined as an imbalance between the perceived environmental demand and the perceived response capability of the organism (Martens et al., 1990).
11. Success is to achieve one's aim to prosper in athletes.

ASSUMPTIONS

The assumptions in this study were:

1. The Competitive State Anxiety Inventory - 2 is a valid and reliable measure of state anxiety and self-confidence for track and field athletes.
2. The subjects answered the questions in an honest manner.

LIMITATIONS

Limitations of this study were:

1. The subjects will be limited to female and male track and field athletes at a Division I university in the Southeastern part of the country, during Spring Term of the 1995-96 school year.
2. Ability of Instrument of CSAI-2 to measure anxiety of sport performances and academic performances of track and field athletes.

DELIMITATIONS

This study was delimited to the following parameters:

1. Track and field was the only sport represented.
2. NCAA Division I University.
3. Student athletes.

SIGNIFICANCE OF THE STUDY

Research with the CSAI-2 suggests that cognitive and somatic anxiety and self-confidence may differentially relate to selected variables such as gender of the athletes, competitive level, and performance (successful vs. less successful athletes). The relationship between task characteristics and anxiety is more tenuous. Although it has been commonly accepted that athletes participating in different types of sport skills would best perform with different optimal levels of anxiety, few studies have actually included athletes in a variety of sport skills to compare precompetitive anxiety levels. With the findings of this study and others, information can be provided to coaches, university officials, student-athletes, and administrators that may clarify why athletes have or may not have high or low anxiety levels in the classroom and on the field.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The purpose of this review was to determine the relationship between performance anxiety and sport of Division I University of Tennessee Track and Field Athletes. This chapter will review literature related to: (a) competitive state anxiety and selfconfidence, (b) gender role endorsement and competitive anxiety, (c) sport achievement orientation and competitive state anxiety, (d) cognitive anxiety, somatic anxiety, and confidence in track and field athletes, and (e) other literature on state anxiety.

COMPETITIVE STATE ANXIETY AND SELF-CONFIDENCE

Jones, Swain, & Cale (1990), investigated a situational antecedent of multidimensional competitive state anxiety and self-confidence in 125 elite intercollegiate middle-distance runners. Subjects, ages 18-30 included runners from various race meets during the 1988-1990 track season.

Instrumentation included the development of a 19 item prerace questionnaire (PRQ) from interviews with middle distance runners. The subjects were asked to comment on

the various situational variables that best described how they felt prior to their performance. Competitive State Inventory-2 (CSAI-2). The CSAI-2 measures precompetitive levels of anxiety and has been documented by Gould, D., Petlichkoff, L., Simons, J., & Vevera, M. (1987) & Martens, R., Burton, D., Vealey, R., Bump, L., & Smith, D. (1990) as being a valid multidimensional measure of competitive state anxiety. The CSAI-2 consists of 27 items, with 9 items in each of the 3 subscales of cognitive anxiety, somatic anxiety and self-confidence.

The procedures of the study included:

- (1) administering the PRQ and the CSAI-2 1 hour before athlete performance
- (2) collective data from a number of different meets
- (3) giving instruction regarding the completion of the above tests prior to the meet

The results of the study included:

- (1) support of the initial study of the CSAI-2
- (2) additional support that the CSAI-2 is a valid multidimensional measure of competitive state anxiety
- (3) 5 factors that might be characterized as representing different variables that contribute to performance expectations. These factors were: (a) perceived readiness, (26.29% of variance) runners physical and mental readiness, level of fatigue, how well training had progressed prior to event, and how well the runner perceived himself to be running at the time, b) attitude toward previous performance (13.47% of variance) included items concerning the athletes reactions to the previous race in terms of time and position expectations, (c) position goal (8.29% of variance) asked the athlete about the difficulty of the goal and his perception whether he could attain that goal, (d) coach influence (7.9% of variance) focused on the impact of the coach on both the previous race and athletes performance over past 4 weeks, (e) external

environment (7.4% of variance) focused on environmental factors such as weather and track conditions, and the final factor (5.7% of variance) was excluded because of the problems associated with the validity of one-item factor

- (4) Three of the five factors were found to be significant predictors of cognitive anxiety. They included: perceived readiness factor, attitude toward previous performance, and position goal
- (5) somatic anxiety was not significantly predicted by the five PRQ factors
- (6) support for the premise that performance expectancies prior to competition are more strongly related to cognitive anxiety than to somatic anxiety (Jones, Swain, & Cale, 1990)

The findings from this study, therefore, appear to have important implications at an applied level for coaches, sport psychology consultants, and athletes involved in middle-distance running. Favorable perceptions of readiness correspond to both levels of cognitive anxiety and greater self-confidence. Self-confidence is critical to successful performance. Coaches can help athletes become more self-confident by structuring training programs so that the athletes come to perceive themselves as being physically and mentally ready. Coaches can also use past performance as a means of decreasing cognitive anxiety by changing attitudes toward that performance. This may involve minimizing the importance of the last race if performance was disappointing, or stressing the recency of success if performance was satisfying.

GENDER ROLE ENDORSEMENT AND COMPETITIVE ANXIETY

Swain & Jones (1991) investigated the relationship between gender role endorsement and competitive trait and state anxiety. Subjects were 37 females and 60 males ranging in age from 20 to 21 years. Subjects competed during the 1989 season.

Martens, R. (1977) developed Sport Competition Anxiety Test (SCAT). SCAT comprised of a 15-item statement covering symptoms of anxiety. The Competitive State Inventory-2 (CSAI-2) developed by Martens, Burton, Vealey, Bump, & Smith (1990) measured precompetition levels of anxiety and self-confidence. The CSAI-2 is comprised of 27 items. The Bem Sex Role Inventory (BSRI) is a 60 item adjective checklist comprised of 20 masculine items, 20 feminine items and 20 unscored items.

The CSAI-2 was administered to the subjects five times during the precompetition period; i.e., one week, two days, two hours, and 30 minutes prior to the beginning of the meet. The coach or experimentor administered the questionnaires at all stages. Subjects were asked to respond to the questionnaires of how they felt about the start of the meet. Subjects responded to the SCAT and BSRI during the week of their scheduled event.

The results of this study included:

- (1) masculine males reported lowest levels of trait anxiety
- (2) the findings showed the four groups did not conform

to the same precompetition temporal patterning of state cognitive anxiety, somatic anxiety, and self-confidence

- (3) feminine females reported the highest levels of cognitive anxiety at both stages on the day of competition, (b) masculine males reported lowest levels at every stage of data collection
- (4) feminine males were significantly higher in cognitive anxiety than masculine males at every stage of testing, (b) the two groups revealed different temporal patterning, with masculine males remaining consistent throughout the precompetition period, (c) feminine females reported elevation in their cognitive anxiety at every stage of testing prior to one week before, (d) feminine females reported a continuing increase in cognitive anxiety as the competition approached while the masculine females cognitive anxiety tended to remain constant (Swain & Jones, 1991)

SPORT ACHIEVEMENT ORIENTATION AND COMPETITIVE STATE ANXIETY

Swain & Jones (1992) conducted a study investigating the temporal patterning of the multidimensional anxiety subcomponents mediated by the personality dimension of achievement orientation. Subjects' mean age was 21, included 60 male runners from various race meets during 1989 track season.

The Sport Orientation Questionnaire (SOQ) developed by Gill & Deeter (1988) measured sport achievement orientation. This questionnaire included 25 items and yielded three scores.

The procedures of this study included: administering the CSAI-2 at five stages during the precompetition period, collecting data from various competition meets, administering instructions regarding the competition of

the above tests prior to the meet, and responding to the SOQ during the week preceding the competition.

The results of this study were:

- (1) Analysis showed that the competitiveness dimension of the SOQ was the best predictor of each of the CSAI-2 subscales
- (2) high competitive athletes have lower levels of competitive state anxiety than do low competitive athletes
- (3) achievement orientation does mediate the predicted temporal patterning of the anxiety subcomponents; therefore, patterning did differ as a function of competitiveness

The findings of this study have implications for coaches. Relaxation and mental-preparation strategies need to be implemented and designed to meet the specific requirements of high and low athletes. In addition, in order to reduce precompetition anxiety levels, both coaches and educators need to deemphasize the importance of competition for low competitive athletes. Also in an emphasis on competitive situations, personal rather than interpersonal goals may be effective with all athletes in overcoming manifestations of competitive state anxiety (Swain & Jones, 1992).

COGNITIVE ANXIETY, SOMATIC ANXIETY, AND CONFIDENCE IN TRACK AND FIELD ATHLETES

Krane & Williams (1994) conducted a study to examine cognitive anxiety, somatic anxiety, and self-confidence

in male and female high school and college track and field athletes. Subjects comprised of 216 athletes competing at various relay track and field meets. Subjects ranged in age from 14 to 22 years.

A background questionnaire was utilized for demographic information concerning age, school, prior track and field experience, and events athletes were participating. The Performance which was defined as placement in an event was used to determine first through sixth place (placers) and below sixth place (non-placers). The complexity and duration consisted of running events of 400 meters or less (low complexity) and hurdle events (high complexity). Track events such as sprint, distance, and middle distance were categorized as duration.

The procedures in this study consisted of contacting the coaches of athletes competing in the meet through letter of purpose and procedures, the participation response card was to be returned after completion of the meet, instruction explained, administering CSAI-2 questionnaires by experimenter or trained assistants, and completion of CSAI-2 background questionnaire 10-20 minutes prior to each event.

The results of this study included:

- (1) male athletes showed lower somatic anxiety and higher self-confidence than female athletes, (b) no significant differences were found for cognitive anxiety
- (2) no significant differences in self-confidence between high school and college athletes
- (3) cognitive and somatic anxiety levels of less experienced

athletes showed the high school track and field athletes displayed high levels of cognitive and somatic anxiety

- (4) non-placers and high school showed the highest levels of cognitive anxiety
- (5) athletes showed significant differences for cognitive anxiety in open and hurdle running events, (b) hurdlers showed greater cognitive anxiety than runners in open events
- (6) athletes competing in sprint, middle-distance, and distance events showed no differences in anxiety and self-confidence levels, (b) results indicated better finishing place in middle running events was associated with lower somatic anxiety while distance runners and sprint performance was not significant with somatic anxiety (Krane & Williams, 1994).

OTHER LITERATURE ON STATE ANXIETY

Maynard, Smith and Warwick-Evans, (1995) in an effort to examine further the anxiety performance relationship in semi-professional soccer players. Subjects were comprised of players at first or second team level.

The Competitive State Inventory-2 (CSAI-2) Composite Version was administered 20 minutes before three soccer matches. The CSAI-2 was administered to the participants.

The study compared cognitive anxiety, somatic anxiety, self-confidence, intensity, direction scores, and the performance measures with the three treatment groups at the three stages of invention using eight 2-way analyses of variance (Group x Event) with repeated measures on the second factor (Maynard et al., 1995). Significance was indicated at the $p = .0063$ level. The factors that were

significant included: (a) cognitive anxiety intensity, (b) the treatment Group x Event interaction for cognitive anxiety direction, and (c) cognitive anxiety direction scores in all three groups prior to the commencement of the interactions. In the area of somatic anxiety intensity Group x Event interaction was significant in addition to Group x Event interaction for somatic anxiety direction. A significant effect was found in self-confidence intensity whereas in selfconfidence direction a significance was computed for the group.

One finding of interest was the relatively large increase in somatic anxiety direction scores within the DSA group as a consequence of a much smaller reduction in somatic anxiety intensity. In the DSA group, as a result of cognitive intervention the somatic anxiety decreased. This was interpreted as further support of previous research (Martens et al., 1990) that suggested a curvilinear relationship between performance and somatic anxiety intensity, with best performances being associated with moderate levels of somatic anxiety (Maynard et al., 1995). It was suggested that the stress management techniques may be more effective when relaxation strategies are matched to the precise mode of the anxiety response. Also, directional perceptions of the stress response may provide the best indication of which technique to apply. Lastly, reductions in state anxiety and increases in self-confidence

are perceived by individuals as facilitative to subsequent performance (Maynard et al., 1995).

Krane, Joyce, and Rafeld, (1994) conducted a study examining the relationship among personal factors, situational factors, and batting performances during a collegiate softball tournament. Subjects comprised of an NCAA Division I Women's Softball team with an average of 9.73 years of competitive softball experience.

Krane et al. (1994) developed Sport Anxiety Scale (SAS) used to measure trait cognitive anxiety, somatic anxiety, and concentration disruption. The SAS comprised of 22 items divided into three subscales. The Mental Readiness Form (MRF) developed by Murphy, Greenspan, Jowdy, & Tammen, (1989) measured competitive state cognitive and somatic anxiety.

The procedures of this study included explanation of the study rationale, completed informed consent form, demographic questionnaire, and SAS. Research has found relatively high correlations between the MRF cognitive and somatic anxiety items so a training session was implemented to provide specific instructions and practice with the correct use of the MRF.

The results in this study were trait anxiety subcomponents were significant predictors of cognitive and somatic anxiety, and situational factors were best predictors of cognitive and somatic anxiety. Somatic

anxiety differentially related to performance in situations of high versus low cognitive anxiety. The analysis indicated significantly higher cognitive anxiety in situations of high versus low and under high situations somatic anxiety was not significant related to the performance. Lastly, significant curvilinear relationship between somatic anxiety and performance was consistent.

Coaches and sport psychologists should learn the types of situations that are most likely to increase anxiety, and then teach athletes coping strategies. Athletes who develop strategies for coping with adversity have more successful performances (Krane et al., 1994).

CHAPTER 3

METHODOLOGY

The problem was to determine state anxiety and self-confidence differences between stressful periods during sport performance and academic performance of Division I University of Tennessee Track and Field athletes.

The procedures used in this study are identified in this chapter as: (a) the population and sample, (b) the instrumentation, (c) administration of the instrument and (d) data analysis.

POPULATION AND SAMPLE

The students selected by the investigator were 21 women and 30 men track and field athletes of one Division I university in the Southeastern part of the country. The athletes ranged in age from 18 to 25 years old. Coaches of the respective teams were informed of the study and signed informed consent statements (Appendix A).

INSTRUMENTATION

The instruments used in this study were: (a) a questionnaire designed to measure state anxiety and

self-confidence (Martens, Burton, Vealey, Bump, & Smith, 1990), (b) modified version of the CSAI-2 for the exam evaluation, and (c) additional demographic data for background information concerning previous sport experience (Appendix B,C).

Competitive State Anxiety Inventory - 2. State cognitive and somatic anxiety were measured with the Competitive State Anxiety Inventory - 2 (CSAI-2). This questionnaire consists of 27 items which respondents rate on a Likert-type scale ranging from 1, not at all, to 4, very much so. The CSAI-2 contains three subscales; i.e., cognitive anxiety, somatic anxiety, and self-confidence. Each subscale consists of nine items; hence, the lowest possible score was nine and the highest possible was 36 for each subscale. Reliability and validity .79 to .90 of the CSAI-2 were rigorously tested by Martens et al. (1990) during scale development (Appendix B).

Modified CSAI-2. This instrument was modified to include: (1) I am concerned about this test/mid-term, (2) I am concerned that I may not do as well on this test/mid-term as I could, (10) I am concerned about making a low grade on test/mid-term, (16) I am concerned about performing poorly academically, (18) I'm confident about performing well academically, and (22) I'm concerned that others will

be disappointed with my academic performance (Appendix C).

Demographic Data. Background information concerning previous experience, years of participation in track and field, and other information were obtained through a set of demographic questions developed for the purposes of this study (Appendix B).

ADMINISTRATION OF THE INSTRUMENT

Permission to approach the athletes was obtained from the head coach approximately one month prior to the beginning of pre-season practices. The rationale and procedures for this study were explained to the athletes at a team meeting during pre-season training. The athletes were told that participation was voluntary and that all information was confidential.

The CSAI-2 was administered by the researcher and was completed by the male athletes the morning of a home meet held in February. The CSAI-2 was administered for female athletes by the coaching personnel the morning of an away meet. The revised version of the CSAI-2 was completed the morning of a test or mid-term. The Demographic Data was completed at a team meeting during pre-season training.

ANALYSIS OF DATA

Sub-problem 1 were analyzed by 2 x 2 (Gender x Test) multivariate parametric statistic design to measure gender differences in terms of state anxiety and a 2 x 2 univariate parametric to measure self-confidence. Sub-problem 2 was analyzed by using a 2 x 2 (Success x Activity) multivariate parametric design to measure successful athletes in terms of state anxiety levels and a one-way parametric was used to measure self-confidence. Sub-problem 3 analyzed by 2 x 3 (Event x Activity) parametric design was used to measure different track and/or field events in terms of state anxiety levels and a one-way parametric design to measure self-confidence.

CHAPTER 4

RESULTS AND DISCUSSION

The purpose of this study was to determine the state anxiety and self-confidence differences between a stressful period prior to sport performances and academic performances of Division I track and field athletes. The data were grouped into the following sets: (a) demographic description, (b) research question 1A, (c) research question 1B, (d) research question 2A, (e) research question 2B, (f) research question 3A, and (g) research question 3B.

DEMOGRAPHIC DESCRIPTION

At the time of the sport performances and academic testing, there were only 21 females and 30 males in the study. The racial composition of the 21 female subjects was 62% African-American and 38% Caucasian. Forty-six percent of the males were African-American and 54% were Caucasian. Attendance at the university, in terms of academic level, 33% of female athletes were in their freshman and sophomore years, 27% of males were in their freshman year, 33% of the male athletes were sophomores, 24% of female athletes were in their third year, 27% of male athletes were in their third year, 10% of the female

athletes were in their senior year, and 13% of male athletes were in their senior year.

The data indicated that 26% of the student-athlete females were classified as freshmen, 21% as sophomores, 42% as juniors, and 11% as seniors whereas 13% of the student-athlete males were classified as freshmen, 31% as sophomores, 38% as juniors, and 18% as seniors.

In terms of years of eligibility on the team, 22% of the females were eligible the 1st year, 44% in the 2nd year, 22% in the 3rd year, and 11% in the 4th year. Twenty-seven percent of the males were eligible the 1st year, 40% the 2nd year, 20% the 3rd year, and 13% the 4th year.

Athletes both male and female received special recognition in either high school and/or college (Appendix D). There was a variety of different majors reported by a majority of the athletes (Appendix E). All but 6 athletes reported their G.P.A. The mean GPA was 3.1.

RESEARCH QUESTION 1A

The first research question (Chapter 1, p 3) was designed to determine if there were any Gender and/or Test differences in cognitive state anxiety and/or somatic state anxiety prior to sport competition and/or academic test activities. A 2 x 2 (Gender x Test) repeated measures design

MANOVA was used with subjects nested in gender.

Results

A 2 x 2 (Gender x Test) RMD MANOVA, based on the Wilk's Lambda technique, was used to evaluate Research Question 1A (Chapter 1, p 3). There was no multivariate difference between cognitive and somatic anxiety for gender ($F = 1.856$, $p = .4607$), however, there was a multivariate difference between cognitive and somatic anxiety for test ($F = 11.554$, $p = .0001$). There were no multivariate differences between cognitive and somatic anxiety for the Test x Gender interaction ($F = .5254$, $p = .5931$). Descriptive Statistics were calculated for the Gender x Test design (Table 1).

Cognitive Anxiety. The 2 x 2 (Gender x Test) RMD ANOVA (Table 2) for cognitive state anxiety did not show a significant univariate difference ($F = 3.61$, $p = .1978$) between genders, nor for the Gender x Test interaction ($F = .02$, $p = .8826$). However, there was a univariate difference for the main effect test ($F = 20.54$, $p = .0001$). The athletes had greater cognitive anxiety prior to their academic exam testing than prior to their sport competition (Table 2).

Somatic Anxiety. The 2 x 2 (Gender x Test) RMD ANOVA (Table 3) for somatic state anxiety did not show a significant univariate difference ($F = .02$, $p = .8962$) between genders. But the analysis did show a univariate difference between the two test conditions ($F = 14.45$,

Table 1
Gender x Test Descriptive Statistics for
Cognitive and Somatic State Anxiety

Gender	Test	Cognitive	Somatic
FEMALES	Sport Competition	M = 17.48 S = 4.33 N = 21	M = 15.10 S = 4.25 N = 21
	Academic Exam	M = 21.48 S = 4.90 N = 21	M = 18.52 S = 3.59 N = 21
FEMALES		M = 19.48 S = 4.99 N = 42	M = 16.81 S = 4.26 N = 42
MALES	Sport Competition	M = 19.20 S = 3.76 N = 30	M = 17.77 S = 3.33 N = 30
	Academic Exam	M = 23.12 S = 3.87 N = 26	M = 19.69 S = 2.96 N = 26
MALES		M = 21.02 S = 4.26 N = 56	M = 18.66 S = 3.28 N = 56
TEST	Sport Competition	M = 18.49 S = 4.06 N = 51	M = 16.67 S = 3.93 N = 51
	Academic Exam	M = 22.38 S = 4.39 N = 47	M = 19.17 S = 3.27 N = 47

Table 2

Gender x Test ANOVA for Cognitive State Anxiety

SV	DF	MS	F	P
Between				
Gender	1	73.65	3.61	.1978
S(Gender)	2	20.39		
Within				
Test	1	357.10	20.54	.0001
Gender x Test	1	.38	.02	.8826
Error	92	17.38		

Table 3

Gender x Test ANOVA for Somatic State Anxiety

SV	DF	MS	F	P
Between				
Gender	1	.20	.02	.8962
S(Gender)	2	9.06		
Within				
Test	1	179.32	14.45	.0003
Gender x Test	1	11.13	.90	.3462
Error	92	12.41		

$p = .0003$). There was a higher level of somatic anxiety prior to their academic test than before their sport competition. Overall, there was no significant Gender x Test interaction ($F = .90$, $p = .3462$).

Discussion

There were no multivariate differences between cognitive and somatic anxiety for both genders in the sport competition nor for the academic performance. Both male and female athletes had lower anxiety levels in sport competition than academic performance. There was a multivariate difference between cognitive and somatic anxiety for test between both male and female athletes.

RESEARCH QUESTION 1B

This research question (Chapter 1, p 3) was designed to determine if there were Gender and/or Test differences in self-confidence prior to sport competition and/or academic test activities. A 2 x 2 (Gender x Test) repeated measures design ANOVA was used with subjects nested in gender. Descriptive statistics were calculated for the Gender x Test design (Table 4).

Results

A 2 x 2 (Gender x Test) ANOVA (Table 5) was used to evaluate Research Question 1A (Chapter 1, p 3). There was no univariate difference in self-confidence for gender

Table 4
Gender x Test Descriptive Statistics
for Self-Confidence

Gender	Test	Self-Confidence
FEMALES	Sport Competition	M = 26.95 S = 5.25 N = 21
	Academic Exam	M = 24.10 S = 4.22 N = 21
FEMALES		M = 25.53 S = 4.92 N = 42
MALES	Sport Competition	M = 25.60 S = 4.55 N = 30
	Academic Exam	M = 25.85 S = 2.83 N = 26
MALES		M = 25.71 S = 3.82 N = 56
TEST	Sport Competition	M = 26.16 S = 4.85 N = 51
	Academic Exam	M = 25.06 S = 3.58 N = 47

Table 5

Gender x Test ANOVA for Self-Confidence

SV	DF	MS	F	P
Between				
Gender	1	20.41	1.21	.3867
S(Gender)	2	16.93		
Within				
Test	1	42.87	2.36	.1282
Gender x Test	1	54.64	3.00	.0864
Error	92	18.19		

($\underline{F}$ = 1.21, p .3867), nor for test ($\underline{F}$ = 2.36, p = .1282). Likewise, there was no univariate difference in self-confidence for the Gender x Test interaction ($\underline{F}$ = 3.00, p = .0864).

Discussion

In this data group the statistical difference was not significant. There were no univariate differences between the female and male athletes.

RESEARCH QUESTION 2A

The second research question (Chapter 1, p 3) was designed to determine if there were any Gender and/or Success differences in cognitive state anxiety and/or somatic anxiety prior to sport competition and/or academic test activities. A 2 x 2 (Gender x Success) MANOVA was used.

Results

A 2 x 2 (Gender x Success) MANOVA, based on the Wilk's Lambda technique, was used to evaluate Research Question 2A (Chapter 1, p 3). There was no multivariate difference between cognitive and somatic anxiety for gender ($\underline{F}$ = 1.616, p = .2128), nor for success (F = 1.287, p = .2885). Likewise, there was no multivariate difference between cognitive and somatic anxiety for the Gender x Success interaction ($\underline{F}$ = 1.191, p = .3157). Descriptive Statistics

were calculated for the Gender x Success design (Table 6).

Cognitive Anxiety. The 2 x 2 (Gender x Success) ANOVA (Table 7) for cognitive state anxiety did not show a significant univariate difference ($F = 2.43$, $p = .1274$) between genders, nor for success ($F = 1.24$, $p = .2719$). Likewise, there was no univariate difference for the Gender x Success interaction ($F = .07$, $p = .7882$).

Somatic Anxiety. The 2 x 2 (Gender x Success) ANOVA (Table 8) for somatic state anxiety did not induce a significant univariate difference ($F = 2.57$, $p = .1171$) between genders, nor did it show a significant univariate difference for success ($F = 1.42$, $p = .1212$). Overall, there was no univariate difference in somatic state anxiety for the Gender x Success interaction ($F = 1.42$, $p = .2417$).

Discussion

Studies comparing more and less successful athletes have also found that more successful athletes have fewer self doubts, lower anxiety levels, and greater confidence (Krane & Williams, 1994). This research question revealed that there were no significant differences between cognitive and somatic anxiety for either gender and/or test.

RESEARCH QUESTION 2B

This research question (Chapter 1, p 3) was designed to

Table 6

Gender x Success Descriptive Statistics for
Cognitive and Somatic State Anxiety

Gender	Success	Cognitive	Somatic
FEMALES	LO	M = 16.77 S = 4.07 N = 13	M = 14.23 S = 3.27 N = 13
	HIGH	M = 18.00 S = 6.04 N = 5	M = 15.22 S = 3.99 N = 5
FEMALES		M = 17.11 S = 4.54 N = 18	M = 15.22 S = 3.96 N = 18
MALES	LO	M = 18.65 S = 3.82 N = 17	M = 17.82 S = 3.96 N = 17
	HIGH	M = 20.67 S = 3.08 N = 6	M = 18.33 S = 1.51 N = 6
MALES		M = 19.17 S = 3.69 N = 23	M = 17.96 S = 3.46 N = 23
SUCCESS	LO	M = 17.83 S = 3.97 N = 30	M = 16.27 S = 4.04 N = 30
	HIGH	M = 19.45 S = 4.61 N = 11	M = 18.09 S = 3.30 N = 11

Table 7

Gender x Success ANOVA for Cognitive State Anxiety

SV	DF	MS	F	P
Between				
Gender	1	41.11	2.43	.1274
Success	1	21.03	1.24	.2719
Gender x Success	1	1.24	.07	.7882
Error	37	16.91		

Table 8

Gender x Success ANOVA for Somatic State Anxiety

SV	DF	MS	F	P
Between				
Gender	1	33.89	2.57	.1171
Success	1	33.12	2.52	.1212
Gender x Success	1	18.63	1.42	.2417
Error	37	13.16		

determine if there were Gender and/or Success differences in self-confidence prior to sport competition and/or academic test activities. A 2 x 2 (Gender x Success) ANOVA was used. Descriptive Statistics were calculated for the Gender x Success interaction (Table 9).

Results

A 2 x 2 (Gender x Success) ANOVA (Table 10) was used to evaluate Research Question 2B (Chapter 1, p 3). There was no univariate difference in self-confidence for gender ($F = .40$, $p = .5285$), nor for test ($F = .29$, $p = .5951$). Overall, there was no univariate difference in self-confidence for Gender x Success interaction ($F = 1.41$, $p = .2427$).

Discussion

There was no significant difference in either gender or test for self-confidence levels for success. Overall, there were no significant difference in self-confidence for Gender x Success interaction.

RESEARCH QUESTION 3A

The third research question (Chapter 1, p 3) was designed to determine if there were any Gender and/or Sport Event differences in cognitive and/or somatic state anxiety prior to sport competition. A 2 x 3 (Gender x Event) MANOVA was used to evaluate the data in relation to this research

Table 9
Gender x Success Descriptive Statistics
for Self-Confidence

Gender	Success	Self-Confidence
FEMALES	LO	M = 26.85 S = 4.86 N = 13
	HIGH	M = 24.20 S = 5.63 N = 5
FEMALES		M = 26.11 S = 5.06 N = 18
MALES	LO	M = 26.00 S = 3.94 N = 17
	HIGH	M = 27.00 S = 2.68 N = 6
MALES		M = 26.85 S = 4.86 N = 13
SUCCESS	LO	M = 26.37 S = 4.30 N = 30
	HIGH	M = 25.73 S = 4.29 N = 11

Table 10

Gender x Success ANOVA for Self-Confidence

SV	DF	MS	F	P
Between				
Gender	1	7.60	.40	.5285
Success	1	5.39	.29	.5951
Gender x Success	1	26.46	1.41	.2427
Error	37	18.77		

question.

Results

A 2 x 3 (Gender x Event) MANOVA, based on the Wilk's Lambda technique was used to evaluate the data in relation to Research Question 3A (Chapter 1, p 3). There was a significant multivariate difference between cognitive and somatic anxiety for gender ($F = 3.387, p = .0443$). There was no significant multivariate difference between cognitive and somatic anxiety in event ($F = .614, p = .6538$), nor was there a significant multivariate difference between cognitive and somatic anxiety for the Gender x Event interaction ($F = .244, p = .9125$). Descriptive Statistics were calculated for the Gender x Event design (Table 11).

Cognitive Anxiety. The 2 x 3 (Gender x Event) ANOVA (Table 12) for cognitive state anxiety did not show a significant univariate difference ($F = 1.50, p = .2277$) between genders, nor for the event ($F = .17, p = .8467$). Likewise, there was no significant univariate difference for the Gender x Event interaction ($F = .38, p = .8467$).

Somatic Anxiety. The 2 x 3 (Gender x Event) ANOVA (Table 13) produced a significant univariate difference between genders ($F = 6.94, p = .0120$). The male athletes had greater somatic anxiety than the females (Table 11). There was no significant univariate difference in event ($F = .93, p = .4016$), nor for the Gender x Event interaction ($F = .37, p = .6899$).

Table 11

Gender x Event Descriptive Statistics for
Cognitive and Somatic State Anxiety

Gender	Event	Cognitive	Somatic
FEMALES	Sprint	M = 17.22	M = 15.89
		S = 4.87	S = 4.86
		N = 9	N = 9
FEMALES	Distance	M = 18.80	M = 15.80
		S = 4.49	S = 3.51
		N = 5	N = 5
FEMALES	Field Event	M = 16.25	M = 13.50
		S = 3.10	S = 1.30
		N = 4	N = 4
FEMALES		M = 17.44	M = 15.33
		S = 4.30	S = 3.83
		N = 7	N = 7
MALES	Sprint	M = 19.14	M = 19.14
		S = 3.80	S = 5.05
		N = 7	N = 7
MALES	Distance	M = 18.83	M = 17.50
		S = 4.62	S = 2.52
		N = 6	N = 6
MALES	Field Event	M = 19.36	M = 17.79
		S = 4.05	S = 2.52
		N = 14	N = 14
MALES		M = 19.19	M = 18.07
		S = 3.96	S = 3.33
		N = 27	N = 27
EVENTS	Sprint	M = 18.06	M = 17.31
		S = 4.40	S = 5.06
		N = 16	N = 16
EVENTS	Distance	M = 18.82	M = 16.73
		S = 4.33	S = 2.37
		N = 11	N = 11
EVENTS	Field Event	M = 18.67	M = 16.83
		S = 4.00	S = 3.22
		N = 18	N = 18

Table 12

Gender x Event ANOVA for Cognitive State Anxiety

SV	DF	MS	F	P
Between				
Gender	1	27.19	1.50	.2277
Event	2	3.02	.17	.8467
Gender x Event	2	6.94	.38	.6842
Error	39	18.10		

Table 13

Gender x Event ANOVA for Somatic State Anxiety

SV	DF	MS	F	P
Between				
Gender	1	26.31	6.94	.0120
Event	2	12.20	.93	.4016
Gender x Event	2	4.89	.37	.6899
Error	39	13.06		

Discussion

There was a significant multivariate difference between cognitive and somatic anxiety for both genders in sport competition, but not for cognitive and somatic anxiety in event. There was no significant multivariate difference between cognitive and somatic anxiety for the Gender x Event interaction.

RESEARCH QUESTION 3B

This research question (Chapter 1, p 3) was designed to determine if there were Gender and/or Event differences in self-confidence prior to sport competition. A 2 x 3 (Gender x Event) ANOVA was used with repeated measures on the second factor. Descriptive Statistics were calculated for the Gender x Event (Table 14).

Results

A 2 x 3 (Gender x Event) ANOVA (Table 15) was used to evaluate Research Question 3B (Chapter 1, p 3). There was no significant univariate difference in self-confidence for gender ($F = .99$, $p = .3268$), nor for event ($F = .11$, $p = .8982$). Overall, there was no significant univariate difference in self-confidence for the Gender x Event interaction ($F = .44$, $p = .6486$). The male athletes mean score for gender x event is 25.48, SD = 4.76, N= 27, while

Table 14
Gender x Event Descriptive Statistics
for Self-Confidence

Gender	Event	Self-Confidence
FEMALES	Sprint	M = 28.33
		S = 4.36
		N = 9
FEMALES	Distance	M = 25.80
		S = 4.55
		N = 5
FEMALES	Field Event	M = 26.75
		S = 8.69
		N = 4
FEMALES		M = 27.28
		S = 5.33
		N = 18
MALES	Sprint	M = 24.57
		S = 3.69
		N = 7
MALES	Distance	M = 25.33
		S = 4.18
		N = 6
MALES	Field Event	M = 26.00
		S = 5.62
		N = 14
MALES		M = 25.48
		S = 4.76
		N = 27
EVENTS	Sprint	M = 26.69
		S = 4.39
		N = 16
EVENTS	Distance	M = 25.55
		S = 4.13
		N = 11
EVENTS	Field Event	M = 26.17
		S = 6.13
		N = 18

Table 15

Gender x Event ANOVA for Self-Confidence

SV	DF	MS	F	P
Between				
Gender	1	26.31	.99	.3268
Event	2	2.87	.11	.8982
Gender x Event	2	11.68	.44	.6486
Error	39	26.68		

the female mean score was 27.28, SD = 5.33, N = 18 (Table 14).

Discussion

There was no statistical univariate difference in either gender or event for self-confidence levels for either male or female prior to sport competition. There was no significant univariate difference in self-confidence for the Gender x Event interaction.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

It was the purpose of this study to determine the state anxiety and self-confidence differences between a stressful period prior to sport performance and academic performance of Division I track and field athletes.

Sub-problems included:

1. Are there comparative gender differences in terms of state anxiety and self-confidence in a stressful period of sport performance and academic performance?
 - A. Are there Gender x Test differences in cognitive state anxiety and/or somatic state anxiety prior to the activity?
 - B. Are there Gender x Test differences in self-confidence prior to the activity?
2. Do athletes who were more successful demonstrate lower state anxiety levels and self-confidence than less successful athletes?
 - A. Do athletes who were more successful demonstrate lower cognitive state anxiety and/or somatic anxiety than less successful athletes?
 - B. Do athletes who were more successful demonstrate lower self-confidence than less successful athletes?
3. Do state anxiety levels and self-confidence differ among athletes of different track and/or field events?
 - A. Do cognitive state anxiety and/or somatic state anxiety levels differ among athletes of different track and/or field events?
 - B. Do self-confidence differ among athletes of

different track and/or field events?

For this study, 21 females and 30 male track and field student-athletes completed CSAI -2 questionnaire with demographic data and the modified CSAI-2 questionnaire prior to a track meet and a test/mid-term exam. Statistical tests used to analyze data included 2 x 2 (Gender x Test) multivariate parametric statistic design to measure gender differences in terms of state anxiety and a 2 x 2 univariate parametric to measure self-confidence. A 2 x 2 (Success x Activity) multivariate parametric design to measure successful athletes in terms of state anxiety levels and a one-way parametric to measure selfconfidence. A 2 x 3 (Event x Activity) parametric design was used to measure different track and/or field events in terms of state anxiety levels and a one-way parametric design to measure self-confidence.

CONCLUSIONS

Based on the results found in this study, the following conclusions have been drawn by the investigator:

1. There was no multivariate difference between cognitive and somatic anxiety for gender or for test. Hence, no differences were found between both male and female track and field athletes in gender or test.

2. There were no multivariate differences between cognitive and somatic anxiety for the Test x Gender interaction. This includes no significant difference between both male and female track and field athletes in Test x Gender.
3. There was no univariate difference in self-confidence for gender or academic performance. Therefore, no profound difference between both male and female track and field athletes was found for gender or academic performance.
4. There was no univariate difference in self-confidence for Gender x Test interaction. This includes no significant difference between female and male track and field athletes for Gender x Test.
5. There was no multivariate difference between cognitive and somatic anxiety for gender or success. This resulting in no difference between female and male track and field athletes for gender or success.
6. There was no mutivariate difference between cognitive and somatic anxiety for Gender x Success interaction. Hence, no significant difference between female and male track and field athletes for Gender x Success.
7. There was no univariate difference in

self-confidence for gender or for test. This includes no main difference found between female and male track and field athletes for gender or for test.

8. There was no univariate difference in self-confidence for Gender x Success interaction. Therefore no significant difference between female and male track and field athletes for Gender x Success interaction was found.
9. There was a significant multivariate difference between cognitive and somatic anxiety for gender. This includes a significant difference between female and male athletes for gender. This could be due to the small number of respondents.
10. There was no significant multivariate difference between cognitive and somatic anxiety in event. Therefore, no profound difference was found between female and male athletes in event.
11. There was no significant multivariate difference between cognitive and somatic anxiety for Gender x Event interaction. This includes no significant difference between female and male track and field athletes for Gender x Event.
12. There was no significant univariate difference in self-confidence for gender or for event and no difference was found in female and male athletes

for gender or for event.

13. There was no significant univariate difference in self-confidence for Gender x Event interaction. There was no significant difference in female and male track and field athletes for Gender x Event.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made for further research in the area of state anxiety and self-confidence differences between a stressful period prior to a sport performance and academic performance of Division I track and field athletes. Further studies should be conducted to:

1. Survey a wider variety of individual and team sports.
Literature is primarily confined to only track and field and additional research would document differences occurring among other individual and team sports.
2. Develop a different instrument for measuring state anxiety levels and self-confidence.
A different instrument would see if there was similarity or contrast in results based on reliability of the instrument.
3. Tighter control of administration of the questionnaires.
The researcher would control the administering and collection of data prior to each event and academic testing to avoid any mishaps.

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APPENDICES

APPENDIX A

LETTER TO COACHES

February 12, 1996

Dear Coach:

The purpose of this letter is to request the cooperation of the NCAA Division I Women's track and field coaches and their athletes to participate in a study examining state anxiety and self-confidence differences between stressful periods during sport performance and academic performance of track and field athletes.

Participation in the study would involve a maximum time commitment of approximately 30 minutes for the athletes to complete 2 questionnaires (enclosed) regarding state anxiety and levels of self-confidence between sport performance and academic performance of the athletes. Individual consent by the athletes to participate in the study will be requested at the time the questionnaires are to be administered. Each player will: (a) be informed that participation is entirely voluntary and there will be no coercion of any kind to obtain cooperation, (b) have the right to withdraw consent and terminate participation at any time during the project, and (c) will be informed of the procedures that will be used in the project and understand what will be required. All responses will remain completely confidential. Your name and the name of your school will remain confidential.

If you would be willing for your athletes to participate, please complete the questions at the bottom of this letter, and return in the enclosed, self addressed stamped envelope at your earliest convenience. Also, please keep the enclosed copy of the letter for your files.

At the conclusion of the study, I will send you a summary of the results. Thank you for considering my request, I am looking forward to working with you.

Sincerely,

Stephanie M. Taylor
M.S. Candidate

I agree to allow my athletes to be contacted as potential participants in the study.

Coach's Signature _____ Date _____

of team members _____ Phone Number _____

February 12, 1996

Dear Coach:

The purpose of this letter is to request the cooperation of the NCAA Division I Men's track and field coaches and their athletes to participate in a study examining state anxiety and self-confidence differences between stressful periods during sport performance and academic performance of track and field athletes.

Participation in the study would involve a maximum time commitment of approximately 30 minutes for the athletes to complete 2 questionnaires (enclosed) regarding state anxiety and levels of self-confidence between sport performance and academic performance of the athletes. Individual consent by the athletes to participate in the study will be requested at the time the questionnaires are to be administered. Each player will: (a) be informed that participation is entirely voluntary and there will be no coercion of any kind to obtain cooperation, (b) have the right to withdraw consent and terminate participation at any time during the project, and (c) will be informed of the procedures that will be used in the project and understand what will be required. All responses will remain completely confidential. Your name and the name of your school will remain confidential.

If you would be willing for your athletes to participate, please complete the questions at the bottom of this letter, and return in the enclosed, self addressed stamped envelope at your earliest convenience. Also, please keep the enclosed copy of the letter for your files.

At the conclusion of the study, I will send you a summary of the results. Thank you for considering my request, I am looking forward to working with you.

Sincerely,

Stephanie M. Taylor
M.S. Candidate

I agree to allow my athletes to be contacted as potential participants in the study.

Coach's Signature _____ Date _____

of team members _____ Phone Number _____

APPENDIX B

CSAI-2 QUESTIONNAIRE

Demographic Questionnaire

Sex 1Female _____ 2Male _____
 Race _____ Nationality _____
 Event(s) _____

Including this year, how many years have you participated in track and field at the University of Tennessee? _____
 other college(s)/university(s)? _____

Including this year, how many total years you participated in competitive track and field events? _____

How many 1st, 2nd, 3rd, 4th place(s) have you won in the last 4 years? _____

List any special recognition you have received because of your track and field performances (e.g. All-American, All area teams)
 College _____ High School _____

What is your major? _____
 What is your overall G.P.A.? _____

What is your academic level? _____
 Current year of eligibility? _____

Directions: A number of statements which 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. All responses will remain completely confidential.

	Not At All	Somewhat	Moderately So	Very Much So
1. I am concerned about this competition	1	2	3	4
2. I feel nervous	1	2	3	4
3. I feel at ease	1	2	3	4
4. I have self-doubts	1	2	3	4
5. I feel jittery	1	2	3	4
6. I feel comfortable	1	2	3	4
7. I am concerned that I may not do as well in this competition as I should	1	2	3	4
8. My body feels tense	1	2	3	4
9. I feel self-confident	1	2	3	4
10. I am concerned about losing	1	2	3	4
11. I feel tense in my stomach	1	2	3	4
12. I feel secure	1	2	3	4
13. I am concerned about choking under pressure	1	2	3	4
14. My body feels relaxed	1	2	3	4
15. I'm confident I can meet the challenge	1	2	3	4
16. I'm concerned about performing poorly	1	2	3	4
17. My heart is racing	1	2	3	4
18. I'm confident about performing well	1	2	3	4
19. I'm worried about reaching my goal	1	2	3	4
20. I feel my stomach sinking	1	2	3	4
21. I feel mentally relaxed	1	2	3	4
22. I'm concerned that others will be disappointed with my performance	1	2	3	4
23. My hands are clammy	1	2	3	4
24. I'm confident because I mentally picture myself reaching my goal	1	2	3	4
25. I'm concerned I won't be able to concentrate	1	2	3	4
26. My body feels tight	1	2	3	4
27. I'm confident of coming through under pressure	1	2	3	4

APPENDIX C

MODIFIED CSAI-2 QUESTIONNAIRE

Directions: A number of statements which athletes have used to describe their feelings before a stressful event 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 spent too much time on any one statement, but choose the answer which describes your feeling right now. All responses will remain completely confidential.

	Not At All	Somewhat	Moderately So	Very Much So
1. I am concerned about this test/mid-term.....	1.....	2.....	3.....	4.....
2. I feel nervous.....	1.....	2.....	3.....	4.....
3. I feel at ease.....	1.....	2.....	3.....	4.....
4. I have self-doubts.....	1.....	2.....	3.....	4.....
5. I feel stressed.....	1.....	2.....	3.....	4.....
6. I feel comfortable.....	1.....	2.....	3.....	4.....
7. I am concerned that I may not do as well on this test/mid-term as I could.....	1.....	2.....	3.....	4.....
8. My body feels tense.....	1.....	2.....	3.....	4.....
9. I feel self-confident.....	1.....	2.....	3.....	4.....
10. I am concerned about making a low grade on this test/mid-term.....	1.....	2.....	3.....	4.....
11. I feel tense in my stomach.....	1.....	2.....	3.....	4.....
12. I feel secure.....	1.....	2.....	3.....	4.....
13. I am concerned about choking under pressure.....	1.....	2.....	3.....	4.....
14. My body feels relaxed.....	1.....	2.....	3.....	4.....
15. I'm confident I can meet the challenge.....	1.....	2.....	3.....	4.....
16. I'm concerned about performing poorly academically.....	1.....	2.....	3.....	4.....
17. My heart is racing.....	1.....	2.....	3.....	4.....
18. I'm confident about performing well academically.....	1.....	2.....	3.....	4.....
19. I'm worried about reaching my goal.....	1.....	2.....	3.....	4.....
20. I feel my stomach sinking.....	1.....	2.....	3.....	4.....
21. I feel mentally relaxed.....	1.....	2.....	3.....	4.....
22. I'm concerned that others will be diappointed with my academic performance.....	1.....	2.....	3.....	4.....
23. My hands are clammy.....	1.....	2.....	3.....	4.....
24. I'm confident because I mentally picture myself reaching my goal.....	1.....	2.....	3.....	4.....
25. I'm concerned I won't be able to concentrate.....	1.....	2.....	3.....	4.....
26. My body feels tight.....	1.....	2.....	3.....	4.....
27. I'm confident of coming through under pressure.....	1.....	2.....	3.....	4.....

APPENDIX D

COMPLETE LISTING OF RECOGNITION

SPECIAL RECOGNITION OF TRACK AND FIELD PERFORMANCES

COLLEGE

All Sec 4x400 relay outdoor
USA Mobil Honor Role '95
All American
Most Outstanding Freshman
All Sec
#1 in nation Junior College
#1 in state
#1 in conference
All Conference
Anchor 4x500 at Penn 15:25
Split 3:50
'95 indoor All American
'95 outdoor All American
Academic All Sec
3 x All American
3 x Academic All American
JUCO All American
Johnson County C.C.

HIGH-SCHOOL

1993 Best of Preps
91-94 State Champion
'93 State record
All State
All City
Mile city record
All American Footlocker
Coersion Award
State Champion 3yrs.
All District
All Regional
All Georgia
AAAA Region Champ
Runner-Up Star Champ
Junior Outstanding Athlete
CIF 100m State Champion
Pacific League 100,200
'91,'93 Best time in Nation
'93,'94 800 State Champ
Optimist Honorary
Sport Illustrated Faces
'92 Richmond Scholar
Gatorade Air of Champions
All KIL
All KIL Hurdler of yr.
Two time Kansas State

APPENDIX E

COMPLETE LISTING OF ATHLETES MAJORS

COMPLETE LISTING OF ATHLETES MAJORS

Animal Science
Biology (2)
Biology/Pre-Dental (2)
Broadcasting
Chemical Engineering
Criminal Justice (4)
Elementary Education
Engineering (3)
Exercise Science
Family Study
History
Kinesiology
Nursing
Political Science (3)
Psychology (5)
Pre-Med (2)
Pre-Teaching
Recreation (2)
Social Work (3)
Speech Communication (2)
Speech Education
Speech Pathology (2)
Sport Management (2)
Undecided (7)
Wildlife Management

VITA

Stephanie M. Taylor was born in Knoxville, Tennessee on July 4, 1971. She attended elementary and high school in Knoxville, Tennessee, and was graduated from Rule High School in 1989. Miss Stephanie M. Taylor attended Tennessee State University, Nashville (1989-1994) and graduated with a Bachelor of Science degree in Health, Physical Education, and Recreation. She was a member of Alpha Kappa Alpha Sorority, Inc. She worked for Knoxville-City Parks and Recreation Department as an Assistant Recreation Specialist. Miss Stephanie M. Taylor pursued her graduate studies in Recreation and Leisure Studies at The University of Tennessee, Knoxville (1995-1996). In May 1996, she received a Master of Science degree in Recreation and Leisure Studies with a concentration of Recreation.