Spring 2005

Relationships of Career Decision-Making and Self-Esteem for College Students and Athletes

James B. Mize
Georgia Southern University

Follow this and additional works at: https://digitalcommons.georgiasouthern.edu/etd

Recommended Citation
https://digitalcommons.georgiasouthern.edu/etd/79

This thesis (open access) is brought to you for free and open access by the Graduate Studies, Jack N. Averitt College of at Digital Commons@Georgia Southern. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.
RELATIONSHIPS OF CAREER DECISION-MAKING AND SELF-ESTEEM FOR COLLEGE STUDENTS AND ATHLETES

by

JAMES B. MIZE

(Under the Direction of A. Barry Joyner)

ABSTRACT

This study examined relationships between career decision-making and self-esteem for freshman and sophomore athletes and non-athletes. Respondents included athletes and non-athletes from traditional four-year institutions and two-year junior colleges. Questionnaires administered to 107 male and female athletes and 136 male and female non-athletes in both class ranks indicated positive relationships with the Career Decision Profile Decidedness and Comfort scales for all female participants, male participants, non-athletes, and athletes. Women as a group scored higher for career maturity than men. Relationships were found with Rosenberg Self-Esteem Scale scores and the CDP Comfort scale for all participants and all male participants. Athletes scored higher than non-athletes for self-esteem, and freshmen athletes were found to be higher in self-esteem than sophomore athletes. Male participants also scored higher for self-esteem than female participants.

INDEX WORDS: Career decision-making, self-esteem, college athletes, career decidedness, career comfort, Career Decision Profile, Rosenberg Self-Esteem Scale
RELATIONSHIPS OF CAREER DECISION-MAKING AND SELF-ESTEEM
FOR COLLEGE STUDENTS AND ATHLETES

by

JAMES B. MIZE
B.S., Saint Louis University, 1998
M.S., Georgia Southern University, 2005

A Thesis Submitted to the Graduate Faculty of Georgia Southern University in Partial
Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

STATESBORO, GA
2005
RELATIONSHIPS OF CAREER DECISION-MAKING AND SELF-ESTEEM
FOR COLLEGE STUDENTS AND ATHLETES
by
JAMES B. MIZE

Major Professor: A. Barry Joyner
Committee: Daniel Czech
Drew Zwald

Electronic Version Approved:
May 2005
DEDICATION

This thesis is dedicated to my wife, Kenttra. Even though I am the one that did the work and typed all these words, I could not have completed this project without you. Your work ethic, diligence, and desire for success in all you do inspired me daily. Most of all, your patience, persistence, and continued love and support strengthened me and encouraged me to finally finish. I owe you so much for all that you’ve given me, and I only hope I can match that support for you in your law school studies. Thank you for not giving up on me, and for making me work hard and not letting me quit when it seemed like the best thing to do. It’s been a long road, but it’s finally over, and I am so happy to share this success with you. I love you with all my heart.
ACKNOWLEDGEMENTS

First, I would like to thank Ms. Rosalie Saputo for your editing assistance and overall support during this process. Your guidance has been extremely helpful and provided a very necessary boost when I was unsure of my writing abilities. Special thanks also goes to Joe Mannion; your humor and technical assistance has gone a long way in getting me through this process. Thanks for all the encouragement during “Grind Therapy” nights. Kevin Kelley, your statistical (and general) wisdom never ceased to amaze me, and I thank you so much for the analytical help you gave when I needed it most. Thanks for being such a great friend and intelligent voice.

Dr. Matt Warshauer, thank you for being such a great early influence when I was uncertain of my capabilities. Your guidance and leadership in St. Louis is greatly missed. Special thanks goes to Dr. Lawrence Jones for the use of your Career Decision Profile, which provided the heart of this entire research project. I appreciate your openness in the use of this wonderful construct, and I hope the results are useful to your endeavors. Another round of heartfelt thanks goes to all of the athletic directors, staff, and participants that made this research possible. Thanks also to the members of my committee, Dr. Kevin Burke, Dr. Barry Joyner, Dr. Daniel Czech, and Dr. Drew Zwald, who provided enough fear and inspiration to get this wonderful thing done.

Finally, my most important “Thank You’s” go to the three people that have had the most recent and longest impacts on my life. Vivian and Larry Kerley, thank you so much for all you have done for me in this process. From the technological assistance, the polite (and direct) reminders, and the constant editing, you have given so much of your
time, love, and energy to assist me with this research. Thank you for demonstrating an
additional work ethic that I needed to experience. I cannot adequately express the thanks
and love I have for you both to get me to this point. I can only promise that you both will
be in my heart forever, and that I owe you so much for your generosity.

To my mother, Barb Burke, I can only express my appreciation by saying, “It’s
finally over!” Thanks for encouraging me to keep working hard and not give up, and for
the emotional and financial support to help keep me going during my time in Statesboro. I
love you very much, and I appreciate all the sacrifices you made to help me get where I
am today.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGEMENTS</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>9</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>11</td>
</tr>
<tr>
<td>2. RELATIONSHIPS OF CAREER DECISION-MAKING AND SELF-ESTEEM FOR COLLEGE STUDENTS AND ATHLETES</td>
<td>12</td>
</tr>
<tr>
<td>3. METHODS</td>
<td>17</td>
</tr>
<tr>
<td>Participants</td>
<td>17</td>
</tr>
<tr>
<td>Instruments</td>
<td>17</td>
</tr>
<tr>
<td>Design and Procedures</td>
<td>18</td>
</tr>
<tr>
<td>4. RESULTS</td>
<td>20</td>
</tr>
<tr>
<td>Missing or Incomplete Data</td>
<td>20</td>
</tr>
<tr>
<td>Pearson Correlations and Regression Analyses Between Self-Esteem and Career Decision-Making</td>
<td>20</td>
</tr>
<tr>
<td>Differences Within Athletic Status and Gender for Career Decision-Making</td>
<td>21</td>
</tr>
<tr>
<td>Differences Within Athletic Status and Gender for Self-Esteem</td>
<td>22</td>
</tr>
<tr>
<td>Differences Within Class Rank for Career Decision-Making</td>
<td>22</td>
</tr>
<tr>
<td>5. DISCUSSION</td>
<td>23</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1: Frequencies and percentages of initial and revised participant demographic data ................................. 34

Table 2: Correlation matrix for correlations between variables for gender, athletic status, and class rank ...................... 35

Table 3: Correlation matrix for correlations between variables for gender and athletic status .................................. 36

Table 4: Correlation matrix for correlations between variables for class rank and athletic status .............................. 37

Table 5: Correlation matrix for correlations between variables for class rank and athletic status for males ................... 38

Table 6: Correlation matrix for correlations between variables for class rank and athletic status for females .................. 39

Table 7: Means, standard deviations, and t-tests of demographic comparisons for self-esteem .................................. 40

Table 8: Means, standard deviations, and t-tests of demographic comparisons for career decision-making .................. 41
CHAPTER 1

INTRODUCTION

Purpose of the Study

A lack of career decision-making research regarding relationships to self-esteem for new or younger college student-athletes and non-athletes provides the impetus for this study. Most literature involves other factors influencing the way students decide on a career they would like to pursue. Little information is known regarding underclassmen’s responses to career decision-making and how their self-esteem is related to this process. Questions regarding men’s and women’s responses, athlete’s and non-athlete’s responses, freshmen and sophomore responses, and associations between any categories may be answered through this study.
CHAPTER 2

RELATIONSHIPS OF CAREER DECISION-MAKING AND SELF-ESTEEM

FOR COLLEGE STUDENTS AND ATHLETES

The career development needs of college student-athletes have been well documented within the last 20 years (Blann, 1985; Kornspan & Etzel, 2001; Smallman & Sowa, 1996). Much of the research has focused on relationships of career maturity, the readiness to make informed career decisions and cope with developmental tasks (Savickas, 1984), and athletic identity (Brown, Glastetter-Fender, & Shelton, 2000; Brown & Hartley, 1998; Murphy, Petitpas, & Brewer, 1996), professional sports expectations (Kennedy & Dimick, 1987), or competition level (Blann, 1985). All of these studies have suggested that student-athletes appear to be less career mature than non-athletes as a result of the effects of the variables mentioned.

While it is important to know what constructs affect a college athlete's career planning abilities, one concern that is not normally addressed is what the effect of these levels of career decision-making has on the individual's psychological well-being. Very few of these studies directly deal with the affective nature of career maturity or decision-making, and even fewer involve psychological aspects that can be affected (Kornspan & Etzel, 2001), namely self-esteem. In addition, the collective research generally fails to acknowledge the freshmen and sophomore athletes who are most at-risk with regard to both career decision-making and self-esteem issues. Blann's (1985) results found underclassmen (freshman and sophomores) to be the least career mature among all class levels, and also less career mature than non-athletes of the same class level.

Regarding self-esteem, Loeb & Magee's (1992) study on the transition of freshman and
sophomore college students found that self-esteem declined during the freshman year, but began to improve by the end of the sophomore year.

To understand the importance of career decision-making, the career development theory of Super (1957, 1963) must be examined. Super (1957) defined career development as a growth and learning process resulting in vocational behavior changes over time. This definition, combined with the analysis and validation of the longitudinal Career Pattern Study (Super et al., 1957), helped Super to propose the construct of career maturity, defined as the readiness to make informed career decisions and cope with developmental tasks (Savickas, 1984). In reaching various levels of career maturity, a person passed through life stages that were affected by developing interests and abilities. One task in particular, vocational specification, occurred during later adolescence from the ages of 18-21 years. While in specification, the person would narrow down possible vocational choices and take necessary action to attain that career. Failure to begin specification during this time may inhibit subsequent career development (Super, 1963).

College student-athletes have been found to be less career mature than non-athletes, and may be deficient in career planning before entering college (Kennedy & Dimick, 1987; Petitpas & Champagne, 1988). Kennedy and Dimick compared male revenue-producing athletes and a non-athlete control group from a midwestern university on career maturity and professional sport aspirations. Results suggested the athletes, especially freshmen, have less career maturity than non-athletes. The study also reported many of the athletes, namely African-American, had unrealistic expectations of future careers in professional sport. One important finding noted that the average scores for
career maturity among athletes were consistent with students at a ninth-grade level, indicating possible planning deficiencies early in the athletes’ adolescence.

Similar results were found in Blann’s (1985) study involving NCAA Division I and III student-athletes, varsity athletes, and non-athletes. Blann examined relationships between gender, class, competition level, and ability to create mature career plans. Freshman and sophomore male athletes in varsity and club sports were found to have less developed career plans than their non-athletic counterparts. Across all levels, women had no significant differences in career planning scores. These results differed from Kennedy and Dimick’s (1987) revenue-only study by including non-revenue athletes, suggesting non-revenue athletes may not be as deficient in career development as athletes in revenue-producing sports.

Smallman and Sowa (1996) examined male Division I student-athletes at a southeastern university, investigating differences in career maturity based on sport revenue status (revenue versus nonrevenue) and race (Caucasian versus minority). Results found that no group of student-athletes was more or less capable than another when making career-related decisions. It was determined that minority athletes needed more assistance in knowledge of career occupations than Caucasian athletes and may need further help beyond making an occupational choice, such as finding mentors or role models to provide more information.

One of the key aspects of Super's (1963) career development theory stated that the selection of a career is related to an attempt to satisfy the individual's current level of self-concept or reach a desired potential. As an individual decides upon a career, the person's self-concept will adapt to the needs of that desired career. A major component of
the self-concept is self-esteem, a personal belief regarding self-worth based on the person’s own belief system or generalized attributes that person has (Bandura, 1997).

Self-esteem may have an important role in the athletic endeavors of student-athletes; thus, the impact of self-esteem on college sports participants has been researched in numerous ways. The construct has been studied in reference to academic performance and role evaluation (Killeya, 2001), female identity development and life maturity (Young & Bursik, 2000), prevention of eating disorders (Abood & Black, 2000), perfectionism (Gotwals, Dunn, & Wayment, 2003), self-perception (Hayes, Crocker, & Kowalski, 1999), and sport preference (De Man & Blais, 1982). Taylor (1995) examined whether participation in college athletics enhanced self-esteem, finding that athletics were one of many experiences that had an effect. For athletes, seniors scored higher than freshmen on self-esteem, and sports positively impacted on self-esteem for senior athletes. Freshmen athletes also scored lower than non-athletes for self-esteem.

Few of the self-esteem studies, however, examine the impact of career decision-making on self-esteem. Khan and Alvi (1983) studied the educational, social, and psychological correlates of career maturity, finding significant correlations between self-esteem and maturity scores. Higher career maturity scores suggested greater levels of self-esteem and higher internal locus of control for decisions. Crook, Healy, and O' Shea (1984) tested the link between work achievement and self-esteem, career maturity, and college achievement. In following Super's (1963) self-concept theory, they found self-esteem directly factoring into career maturity and work achievement, and partially influences college achievement through the maturation of career attitudes. Chiu (1990) studied self-esteem in relation to career goals for high school students. Using self- and
teacher reports, Chiu found that only men with post-graduation career goals had significantly high levels of self-esteem, as found through teacher evaluations. Bloor and Brook (1993) studied undergraduate students in regard to career maturity and psychological well-being. Their results indicated a strong link between greater career decidedness, greater life satisfaction, and higher self-esteem.

While the previous studies indicated a link between self-esteem and career decision-making, none utilized athletes in their sample. The present study researched the relationship between career decision-making and self-esteem for athletes and non-athletes. Prior research has also used either high school students (Chiu, 1990; Khan & Alvi, 1983) or older college students (Crook, Healy, & O'Shea, 1984); this study only examined freshman and sophomores, because past studies (Kennedy & Dimick, 1987; Petitpas & Champagne, 1988) noted that athletes may already fall behind non-athlete peers on career development when entering college.
CHAPTER 3

METHODS

Participants

The participants were 271 volunteers from two student populations. The first population consisted of 122 undergraduate student-athletes ($M = 19.11$ years, $SD = 1.08$) participating in NCAA Division II and III, NAIA, and NJCAA university athletics in three midwestern universities and three junior colleges. All participated in a variety of intercollegiate sports: men’s (n = 34) baseball, men’s (n = 9) and women’s (n = 13) basketball, men’s (n = 3) hockey, men’s (n = 24) soccer, women’s (n = 27) softball, women’s (n = 1) swimming, men’s (n = 5) tennis, men’s (n = 4) and women’s (n = 4) track. The second population, of non-athletes, consisted of 149 undergraduate freshman and sophomore psychology students ranging in age from 18 to 44 years ($M = 20.05$, $SD = 3.98$) from a midwestern junior college. Table 1 provides a summary of initial participant demographic data.

Instruments

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) is considered the most used, reliable, and valid measure for self-esteem (Robins, Hendin, & Trzesniewski, 2001). The RSES is a ten-item, four-point Likert-type scale measuring global self-worth, with “1” stating “strongly agree” and “4” stating “strongly disagree.” Items 3, 8, 9, and 10 are scored in reverse. RSES scores may range from 10 to 40, and a low score indicates higher self-esteem. Reliability for the RSES was found to be .88, while correlations to a single-item scale supported construct validity with a median score of .75 (Robins, Hendin, & Trzesniewski). A copy of the RSES is located in Appendix D.
The Career Decision Profile (CDP; Jones, 1989; Jones & Lohmann, 1998) measures the level of career decision a person has, how comfortable the decision was, and what potential reasons are for any indecision. The CDP is a 16-item, 8-point Likert scale inventory measuring from strongly disagree (1) to strongly agree (8). Six scales are contained within the CDP: decidedness (2 items), comfort (2 items), self-clarity (3 items), knowledge about occupations and training (3 items), decisiveness (3 items), and career choice importance (3 items). The decidedness and comfort scales are scored from 2 to 16, while the other scales are scored from 3 to 24. The sums of these four scales are subtracted from 27 to create similar scores across all scales. High scores in any of the scales represent a greater level of value or understanding on the part of the respondent. Consistency was provided as reliability coefficients ranged from .66 to .80 (Jones), and validity was supported by Heppner and Hendricks’ (1995) results showing pre- and post-test measures of the six scales significantly moving from low scores indicative of indecisiveness to higher scores reflecting greater comfort with decisions for an undecided college student. A copy of the CDP is located in Appendix D.

**Design and Procedure**

The athletes’ coaches were contacted to request the athletes’ participation in the study after the schools’ athletic directors granted consent. An explanatory letter (in Appendix E) was provided to the directors and coaches, concerning the nature of the study and any potential benefits the research may offer. Volunteers reviewed an instruction sheet, read an informed consent document, and completed a demographic questionnaire before beginning the surveys. Non-athletes recruited to participate received the instruments in the classroom before the start of an introductory psychology class.
Athletes answered the surveys immediately before or after practices, or during study hours. In addition, all participants listened to a statement concerning the nature of the scales, were given time to ask questions, and were allowed as much time as needed to complete all surveys.
CHAPTER 4

RESULTS

Pearson product moment correlations were performed to determine relationships between the RSES score and the scores of the decidedness and comfort scales of the CDP. An independent t-test was computed to measure differences in gender and athletic status for the scores of the CDP decidedness and comfort scales. A second independent t-test calculated differences in RSES scores by gender and athletic status. A third t-test measured differences in the scores of the two CDP scales for year in school. Alpha was set at .001 using the Bonferroni adjustment to protect for multiple comparisons and minimize the chance of Type I error.

Missing or Incomplete Data

Over one-tenth [28 (10.3%)] of the participants’ responses contained missing data on the RSES or either scale of the CDP and were omitted from the analysis. The final sample consisted of 243 participants. Revised participant demographic data can be found in Table 1.

Pearson correlations and Regression Analyses between Self-Esteem and Career Decision-Making

For the first hypothesis, means and standard deviations were calculated for average scores on the RSES and both CDP scales. Pearson product moment correlations were performed to determine relationships between self-esteem and measures of the CDP for gender and athletic status. Significant correlations were found with the CDP decidedness and comfort scales for all female participants \( r = .531, p < .001 \), all male participants \( r = .596, p < .001 \), all non-athletes \( r = .560, p < .001 \), all athletes
Correlations within CDP decidedness and comfort approached significance for freshman male athletes ($r = .493, p = .002$) and freshman female athletes ($r = .555, p = .004$).

Significant correlations were found with RSES scores and the CDP Comfort scale for all participants ($r = -.224, p < .001$) and all male participants ($r = -.274, p = .001$). No significant correlations were found for RSES scores and the CDP decidedness scale.

Correlations between RSES scores and the CDP comfort scale approached significance for non-athletes ($p = .007$), male athletes ($p = .002$), female participants ($p = .011$), all freshmen ($p = .01$), all sophomores ($p = .003$), and sophomore male athletes ($p = .01$). A correlational matrix of the intercorrelations between variables for the sample and means and standard deviations for all groups are presented in Tables 2-6.

**Differences within Athletic Status and Gender for Career Decision-Making**

Independent t-tests were calculated to determine athletic status and gender differences within the decidedness and comfort scales of the CDP. No significant effects were found for athletes ($p > .001$; $M = 11.12, SD = 4.12$) or non-athletes ($p > .001$; $M = 11.04, SD = 4.09$) on the decidedness scale. The comfort scale also failed to achieve significance for athletes ($p > .001$; $M = 11.02, SD = 3.67$) or non-athletes ($p > .001$; $M = 10.24, SD = 3.66$). No significance was found for either women ($p > .001$; $M = 11.44, SD = 4.30$) or men ($p > .001$; $M = 10.69, SD = 3.84$) on the decidedness scale. Similarly, results revealed a lack of significance on the comfort scale for women...
(\(p > .001; M = 10.70, SD = 3.80\)) and men (\(p > .001; M = 10.46, SD = 3.56\)). Full results are located in Table 7.

**Differences Within Athletic Status, Year, and Gender for Self-Esteem**

Independent t-tests were calculated to examine differences in athletic status, year in school, and gender scores for self-esteem. Significance was achieved for athletic status, with non-athletes (\(p < .001; M = 17.65, SD = 5.16\)) scoring higher than athletes (\(p < .001; M = 15.44, SD = 3.56\)) on self-esteem. Among subgroups, sophomore athletes (\(p = .001; M = 14.98, SD = 3.29\)) scored significantly better for self-esteem than sophomore non-athletes (\(p = .001; M = 17.37, SD = 4.70\)). The differences between female and male participants approached significance at the .001 level (\(p = .002\)). No significance was found for freshmen or sophomores as individual groups. All results are shown in Table 8.

**Differences Within Class Rank for Career Decision-Making**

T-tests were computed to analyze any effects among year in school and the decidedness and comfort scales of the CDP. No significant differences were found for freshmen or sophomores for CDP decidedness or comfort, \(p > .001\). Table 8 provides a summary of the responses.
CHAPTER 5
DISCUSSION

Partial support was obtained for the first hypothesis, that there would be a positive relationship between self-esteem and the two main scales of the CDP. As expected, all of the major groups (men and women, athletes and non-athletes) experienced higher levels of comfort with career decisions as decidedness increased, as supported by previous studies (Jones, 1998; Khan & Alvi, 1983; Super, 1963). Jones noted in his description of the profile within the relationship of scales that there was a positive relationship among college students for decidedness and comfort, and generally that as students have more decidedness, the more comfortable their decision is. Super noted in the Specification developmental task that the process of specification would result in confidence, and to a degree a level of comfort, within a specific preference. However, minimal overall support was found for the relationship between self-esteem and career decision-making, contradicting previous studies (Bloor & Brook, 1993; Khan & Alvi, 1983). Relationships were only found for the CDP comfort scale in relationship to self-esteem. Within these results, it can be inferred that while students may not have a clear decision about their careers, they feel comfortable about the past decisions they have made in learning about or moving toward a career choice.

Prior research has shown that a primary need for underclass college students is the choice of a major and career. Freshmen who participated in college testing identified uncertainty about their career choice, and institutions reported nearly half of entering freshmen expressed a need for help in identifying and choosing careers (Orndorff & Herr, 1996). With nearly 83% of the participants coming from junior-college institutions, 61%
of those being athletes, it follows that most of the respondents would not score highly on the decidedness scale, as many students at these institutions have enrolled to complete basic requirements before moving to a four-year institution (Laanan, 2000). It is possible, then, that these students would not have positive feelings of self-worth regarding a career decision because they would not express a positive or negative feeling toward something they have not decided on. This also follows for student-athletes, since many of them may be enrolled to raise their grade levels or attain other requirements as they tend to be deficient in career planning before college begins or as they enter four-year institutions (Blann, 1985; Kennedy & Dimick, 1987). This may also explain the low support from the CDP comfort scale correlations. Additional research is warranted to more accurately understand how the career decision-making ability of junior-college student-athletes is affected by a number of personality characteristics, including self-esteem.

Another possible explanation is that the scales of the CDP have been validated with very few psychological construct profiles. The CDP has been examined with other career indecision constructs and anxiety, identity, and self-efficacy, but not with self-esteem. Also, the profile has only been used in past research with traditional college student and high-school student samples. More studies are warranted to assess the strength of relationships with the CDP and other psychological variables, and with a greater variety of college student populations.

The results of the CDP for all participants may also not fully explain the answers. While the athletes in the current study scored highest for comfort and second highest for decidedness on the CDP, the results do not answer what the athletes were comfortable about or decided on. It only gives the degree of decidedness and comfort for a career
choice. The athletes may be responding to a future in sport, while the non-athletes may be answering for traditional careers. The CDP was designed primarily for career counselors to help explore clients’ indecision and create appropriate interventions to aid that client in decidedness and career choices (Jones, 1998), providing an explanation for why the profile does not address specific career answers.

No support was found for the second hypothesis regarding CDP scores for gender or athletic status. However, mean scores for these groups revealed that women scored highest for decidedness and scored higher for comfort than men, replicating previous research that women are generally more career mature than men (Kornspan & Etzel, 2001; Luzzo, 1995). For athletes, although mean scores indicated athletes scoring better on both CDP profiles, one explanation may lie in representation. Fewer athletes participated in the study than non-athletes, possibly inflating the power of the athletes’ scores. Another explanation is that again while the athletes in the current study scored highest for comfort and second highest for decidedness on the CDP, the results do not answer what the athletes were comfortable about.

As expected, men and athletes scored higher for self-esteem than women and non-athletes. Men scored an average of nearly two points higher than women on self-esteem. For career decidedness, this result is not surprising when one considers that men are more likely to be taught that their self-worth is based on their ability to succeed in a given career (Betz & Klein, 1996). Athletes also averaged over two points higher for self-esteem than non-athletes did. This replicated the work of Taylor (1995) and Young and Bursik (2000). Interestingly, within the athletic status group, sophomore athletes scored much lower for self-esteem than sophomore non-athletes and even freshman
athletes. Sophomores as a group also scored lower on self-esteem than freshmen. These findings replicate the work of Pascarella and Terenzini (1991), as cited in Taylor, and Loeb and Magee (1992), where a decrease in self-esteem is expected after the freshman year but rebounds during the later part of the sophomore year and continues to gain through senior year. A number of demands or changes for the older student-athlete may account for the drop in self-esteem. These may include, but are not limited to: increased schoolwork load and academic demands, a lack of rewards or accolades through the freshman year that students were used to in high school, higher athletic demands, or for many of the current participants, thoughts of moving beyond the junior college to a four-year institution (Loeb & Magee).

Although it is somewhat surprising that freshmen and sophomores’ mean scores were nearly the same on the two CDP variables, as a group underclassmen are still very uncertain about their educational and career plans. Past research has noted that freshmen and sophomores need more information about majors and careers than upperclass students, and their scores usually are comparable until the junior year, when greater decidedness begins to occur (Orndorff & Herr, 1996; Weissberg et al., 1982). However, those results apply to underclassmen at four-year universities and colleges only. Future research may wish to include a greater sample of underclass students from both junior colleges and four-year institutions to assess if both groups’ career needs are being met at their respective schools.

Much of the career decision literature and self-esteem literature has involved student-athletes or participants from four-year institutions. In this sample, nearly 83% of the total respondents came from junior colleges, and almost 61% of the athletes’
responses were from junior-college student-athletes. Only one study was found that used junior college athletes and examined various relationships to career maturity (Kornspan & Etzel, 2001). Those results indicated a possible lack of relationship between athletes competing within other junior colleges, other NCAA Divisions, other four-year schools, or other junior college athletes in other sports. The present research utilized a smaller number of junior college participants (n = 65) from three different locations, versus one location for the prior study. Future research may need to involve larger student-athlete samples from either all two-year or all four-year institutions, or a more representative sample from both types of schools to receive a greater data set and more detailed results.

It would also be useful to have participants complete the CDP Other Factors section or provide more detailed answers in a qualitative analysis. Prior studies have noted the greater assistance given to college career specialists when 15 to 20 minute interviews were given to college students. In combination with career and psychological profiles, interviews may help these students attain a greater understanding of the relationship of their career and personal needs (Luzzo, 1995).

Future studies may want to examine the prevalence of career planning availability for junior college athletes. According to the NCAA, approximately 2,000 junior college athletes annually transfer from junior colleges to the traditional college ranks (Blum & Lederman, 2003). Based on the numbers of athletes using junior colleges as a springboard to four-year institutions, it may be interesting to note the usage of the schools’ career assistance centers or the availability of these centers to the athletes. Career counselors may help student-athletes at these two-year schools become more confident and informed in making career decisions. The use of athlete-specific career programming, such as the
NCAA CHAMPS (Challenging Athletes Minds for Personal Success; Carr & Bauman, 1996; as cited in Kornspan & Etzel, 2001) program, offers athletes a chance to learn about valuable life-skills components and provides workshops and learning experiences related to careers. The athletes, then, can apply strategies and skills used in sport toward career opportunities.
REFERENCES


Career development: Self-concept theory (pp. 79-95). Princeton, NJ; College Entrance Examination Board.


Table 1

*Frequencies and Percentages of Initial and Revised Participant Demographic Data*

<table>
<thead>
<tr>
<th>Group</th>
<th>Initial</th>
<th>Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Athlete</td>
<td>122</td>
<td>45</td>
</tr>
<tr>
<td>Freshmen</td>
<td>61</td>
<td>50</td>
</tr>
<tr>
<td>Sophomore</td>
<td>61</td>
<td>50</td>
</tr>
<tr>
<td>Men</td>
<td>79</td>
<td>65</td>
</tr>
<tr>
<td>Women</td>
<td>43</td>
<td>35</td>
</tr>
<tr>
<td>Non-Athlete</td>
<td>149</td>
<td>55</td>
</tr>
<tr>
<td>Freshmen</td>
<td>69</td>
<td>46</td>
</tr>
<tr>
<td>Sophomore</td>
<td>76</td>
<td>51</td>
</tr>
<tr>
<td>Unknown</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Men</td>
<td>56</td>
<td>36</td>
</tr>
<tr>
<td>Women</td>
<td>93</td>
<td>62</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afr. American</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Caucasian</td>
<td>231</td>
<td>84</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Unknown</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Sport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseball</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>Basketball (M)</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Basketball (W)</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Soccer (M)</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>Softball</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Swimming (W)</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Tennis (M)</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Track/Field (M)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Track/Field(W)</td>
<td>2</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Hockey (M)</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 2

*Correlation Matrix for Correlations Between Variables for Gender, Athletic Status, and Class Rank*

<table>
<thead>
<tr>
<th>Group</th>
<th>Scale</th>
<th>$M$</th>
<th>$SD$</th>
<th>RSES</th>
<th>DEC</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>RSES</td>
<td>16.68</td>
<td>4.65</td>
<td>---</td>
<td>-.123</td>
<td>-.224**</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>11.07</td>
<td>4.09</td>
<td>---</td>
<td>-.560**</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.58</td>
<td>3.68</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Men</td>
<td>RSES</td>
<td>15.72</td>
<td>4.63</td>
<td>---</td>
<td>-.196</td>
<td>-.274**</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>10.69</td>
<td>3.84</td>
<td>---</td>
<td>-.596**</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.46</td>
<td>3.56</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Women</td>
<td>RSES</td>
<td>17.58</td>
<td>4.50</td>
<td>---</td>
<td>-.102</td>
<td>-.202</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>11.44</td>
<td>4.30</td>
<td>---</td>
<td>-.531**</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.70</td>
<td>3.80</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Athletes</td>
<td>RSES</td>
<td>15.45</td>
<td>3.56</td>
<td>---</td>
<td>-.081</td>
<td>-.210*</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>11.12</td>
<td>4.12</td>
<td>---</td>
<td>-.563**</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>11.02</td>
<td>3.67</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Non-Athletes</td>
<td>RSES</td>
<td>17.65</td>
<td>5.16</td>
<td>---</td>
<td>-.152</td>
<td>-.210*</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>11.04</td>
<td>4.09</td>
<td>---</td>
<td>-.560**</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.24</td>
<td>3.66</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Freshmen</td>
<td>RSES</td>
<td>17.00</td>
<td>4.95</td>
<td>---</td>
<td>-.068</td>
<td>-.210*</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>11.11</td>
<td>3.93</td>
<td>---</td>
<td>-.597**</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.75</td>
<td>3.77</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Sophomores</td>
<td>RSES</td>
<td>16.36</td>
<td>4.32</td>
<td>---</td>
<td>-.185</td>
<td>-.251*</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>11.04</td>
<td>4.27</td>
<td>---</td>
<td>-.526**</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.42</td>
<td>3.59</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

*Note.* RSES = Rosenberg Self-Esteem scale mean scores. DEC = CDP Decidedness scale mean scores. COM = CDP Comfort scale mean scores.

*p<.01

**p<.001
Table 3

*Correlation Matrix for Correlations Between Variables for Gender and Athletic Status*

<table>
<thead>
<tr>
<th>Group</th>
<th>Scale</th>
<th>$M$</th>
<th>$SD$</th>
<th>RSES</th>
<th>DEC</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSES</td>
<td>14.50</td>
<td>3.21</td>
<td>---</td>
<td>-.232</td>
<td>-.350**</td>
</tr>
<tr>
<td>Athlete</td>
<td>DEC</td>
<td>10.88</td>
<td>3.71</td>
<td>---</td>
<td>.614**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>11.12</td>
<td>3.48</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSES</td>
<td>17.41</td>
<td>5.69</td>
<td>---</td>
<td>-.165</td>
<td>-.137</td>
</tr>
<tr>
<td>Non-Athlete</td>
<td>DEC</td>
<td>10.43</td>
<td>4.03</td>
<td>---</td>
<td>.579**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>9.55</td>
<td>3.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSES</td>
<td>17.10</td>
<td>3.57</td>
<td>---</td>
<td>.026</td>
<td>-.021</td>
</tr>
<tr>
<td>Athlete</td>
<td>DEC</td>
<td>11.54</td>
<td>4.78</td>
<td>---</td>
<td>.515**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.85</td>
<td>4.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSES</td>
<td>17.79</td>
<td>4.86</td>
<td>---</td>
<td>-.153</td>
<td>-.268*</td>
</tr>
<tr>
<td>Non-Athlete</td>
<td>DEC</td>
<td>11.39</td>
<td>4.10</td>
<td>---</td>
<td>.540**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.63</td>
<td>3.72</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* RSES = Rosenberg Self-Esteem scale mean scores. DEC = CDP Decidedness scale mean scores. COM = CDP Comfort scale mean scores

*p < .01

**p < .001
Table 4

Correlation Matrix for Correlations Between Variables for Class Rank and Athletic Status

<table>
<thead>
<tr>
<th>Group</th>
<th>Scale</th>
<th>$M$</th>
<th>$SD$</th>
<th>RSES</th>
<th>DEC</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>RSES</td>
<td>15.87</td>
<td>3.77</td>
<td>---</td>
<td>.047</td>
<td>-.145</td>
</tr>
<tr>
<td>Athlete</td>
<td>DEC</td>
<td>11.27</td>
<td>3.95</td>
<td>---</td>
<td>.503**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.89</td>
<td>3.98</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSES</td>
<td>17.95</td>
<td>5.62</td>
<td>---</td>
<td>-.127</td>
<td>-.256</td>
</tr>
<tr>
<td>Non-Athlete</td>
<td>DEC</td>
<td>10.98</td>
<td>3.94</td>
<td>---</td>
<td>.685**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.62</td>
<td>3.62</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>RSES</td>
<td>14.98</td>
<td>3.29</td>
<td>---</td>
<td>.026</td>
<td>-.021</td>
</tr>
<tr>
<td>Athlete</td>
<td>DEC</td>
<td>10.96</td>
<td>4.33</td>
<td>---</td>
<td>.515**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>11.16</td>
<td>3.32</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSES</td>
<td>17.37</td>
<td>4.70</td>
<td>---</td>
<td>-.179</td>
<td>-.176</td>
</tr>
<tr>
<td>Non-Athlete</td>
<td>DEC</td>
<td>11.10</td>
<td>4.25</td>
<td>---</td>
<td>.462**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>9.89</td>
<td>3.70</td>
<td>---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. RSES = Rosenberg Self-Esteem scale mean scores. DEC = CDP Decidedness scale mean scores. COM = CDP Comfort scale mean scores.

* $p < .01$

** $p < .001$
## Table 5

*Correlation Matrix for Correlations Within Variables for Class Rank and Athletic Status for Males*

<table>
<thead>
<tr>
<th>Group</th>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>RSES</th>
<th>DEC</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fr. Male</td>
<td>RSES</td>
<td>14.76</td>
<td>3.22</td>
<td>---</td>
<td>-.201</td>
<td>-.311</td>
</tr>
<tr>
<td>Athlete</td>
<td>DEC</td>
<td>10.24</td>
<td>3.89</td>
<td></td>
<td>.493*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.74</td>
<td>3.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RSES</td>
<td>18.71</td>
<td>6.72</td>
<td>---</td>
<td>-.217</td>
<td>-.244</td>
</tr>
<tr>
<td>Non-Athlete</td>
<td>DEC</td>
<td>10.19</td>
<td>3.84</td>
<td></td>
<td>.803*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>9.48</td>
<td>3.60</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| So. Male    | RSES  | 14.24 | 3.23| ---   | -.245| -.397*|
| Athlete     | DEC   | 11.53 | 3.46|       | .786**|      |
|             | COM   | 11.50 | 2.96|       |     |      |
|             | RSES  | 16.43 | 4.68| ---   | -.109| -.021|
| Non-Athlete | DEC   | 10.61 | 4.23|       | .425 |      |
|             | COM   | 9.61  | 3.48|       |     |      |

*Note.* RSES = Rosenberg Self-Esteem scale mean scores. DEC = CDP Decidedness scale mean scores. COM = CDP Comfort scale mean scores.

* $p < .01$

** $p < .001$
Table 6

*Correlation Matrix for Correlations Within Variables for Class Rank and Athletic Status*

*for Females*

<table>
<thead>
<tr>
<th>Group</th>
<th>Scale</th>
<th>$M$</th>
<th>$SD$</th>
<th>RSES</th>
<th>DEC</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fr. Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athlete</td>
<td>RSES</td>
<td>17.59</td>
<td>3.97</td>
<td>---</td>
<td>.076</td>
<td>-.014</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>12.86</td>
<td>3.58</td>
<td>---</td>
<td>.555*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>11.14</td>
<td>4.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Athlete</td>
<td>RSES</td>
<td>17.60</td>
<td>5.08</td>
<td>---</td>
<td>-.058</td>
<td>-.245</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>11.36</td>
<td>3.97</td>
<td>---</td>
<td>.622**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>11.16</td>
<td>3.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>So. Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athlete</td>
<td>RSES</td>
<td>16.47</td>
<td>2.96</td>
<td>---</td>
<td>-.144</td>
<td>-.073</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>9.82</td>
<td>5.65</td>
<td>---</td>
<td>.514</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.47</td>
<td>3.97</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Athlete</td>
<td>RSES</td>
<td>18.00</td>
<td>4.67</td>
<td>---</td>
<td>-.257</td>
<td>-.289</td>
</tr>
<tr>
<td></td>
<td>DEC</td>
<td>11.43</td>
<td>4.29</td>
<td>---</td>
<td>.481**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td>10.07</td>
<td>3.87</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* RSES = Rosenberg Self-Esteem scale mean scores. DEC = CDP Decidedness scale mean scores. COM = CDP Comfort scale mean scores.

*p < .01

**p < .001
Table 7

*Means, Standard Deviations, and t-Tests of Demographic Comparisons for Self-Esteem*

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSES</td>
<td></td>
<td></td>
<td>Female</td>
<td>17.58</td>
<td>4.50</td>
</tr>
<tr>
<td>Athletes</td>
<td></td>
<td></td>
<td>Female</td>
<td>17.58</td>
<td>4.50</td>
</tr>
<tr>
<td>Non-Athletes</td>
<td></td>
<td></td>
<td>Female</td>
<td>17.58</td>
<td>4.50</td>
</tr>
<tr>
<td>Freshmen A</td>
<td>15.44</td>
<td>3.56</td>
<td>Female</td>
<td>15.44</td>
<td>3.56</td>
</tr>
<tr>
<td>Freshmen NA</td>
<td>15.88</td>
<td>3.77</td>
<td>Female</td>
<td>15.88</td>
<td>3.77</td>
</tr>
<tr>
<td>Soph. A</td>
<td>14.98</td>
<td>3.29</td>
<td>Female</td>
<td>14.98</td>
<td>3.29</td>
</tr>
</tbody>
</table>

*A = Athlete, NA = Non-Athlete.
*p < .05.
**p < .01.
***p < .001.*
Table 8

Means, Standard Deviations, and t-Tests of Demographic Comparisons for Career Decision-Making

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>t</td>
</tr>
<tr>
<td>CDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decidedness</td>
<td>Female</td>
<td>11.44</td>
<td>4.30</td>
<td>10.69</td>
<td>3.84</td>
</tr>
<tr>
<td>Athlete</td>
<td>Non-Athlete</td>
<td>11.12</td>
<td>4.12</td>
<td>11.04</td>
<td>4.09</td>
</tr>
<tr>
<td>Freshmen</td>
<td>Sophomore</td>
<td>11.11</td>
<td>3.93</td>
<td>11.04</td>
<td>4.27</td>
</tr>
<tr>
<td>Comfort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>10.70</td>
<td>3.80</td>
<td>10.46</td>
<td>3.56</td>
<td>.50</td>
</tr>
<tr>
<td>Athlete</td>
<td>Non-Athlete</td>
<td>11.02</td>
<td>3.67</td>
<td>10.24</td>
<td>3.66</td>
</tr>
<tr>
<td>Freshmen</td>
<td>Sophomore</td>
<td>10.75</td>
<td>3.77</td>
<td>10.42</td>
<td>3.59</td>
</tr>
</tbody>
</table>

*p < .05.

**p < .01.

***p < .001.
Appendix A

Hypotheses and Definitions
Research Hypotheses

1) There is a positive relationship shown between the decidedness and comfort scales of the CDP and self-esteem for men and women, athletes and non-athletes.

2) Women and non-athletes will score significantly higher on the decidedness and comfort scales of the CDP than men and athletes.

3) Men and athletes will report significantly higher levels of self-esteem than women and non-athletes.

4) Sophomores will have significantly higher scores on all CDP scales than freshmen.

Definitions

1) Career decision-making process: For this study, the development, exploration, and specification of vocational options during late adolescence and early adulthood (as measured by the Career Decision Profile (Jones, 1989).

2) Career Decision Profile (CDP): A 16-item inventory measuring career decision status, comprised of decidedness, comfort, and reasons dimensions. Six scales make up the CDP: decidedness, comfort, self-clarity, knowledge about occupations, decisiveness, and career importance.

3) Decidedness: Subscale of the CDP that refers to how decided individuals perceive themselves to be.

4) Comfort: Subscale of the CDP that refers to the level or feeling of satisfaction one experiences based on career choice(s).

5) Self-clarity: Subscale of the CDP that determines how clear people think they are on their career choice(s).
6) Knowledge about occupations & training: Subscale of the CDP that refers to how much information the individual needs about career choices.

7) Decisiveness: Subscale of the CDP that determines the level of difficulty the person has in making decisions.

8) Career choice importance: Subscale of the CDP that refers to the significance of the career to the individual at that time.

9) Career maturity: One’s personal readiness to make appropriate career decisions and cope with affiliated development tasks (Savickas, 1984).

10) Self-esteem: Judgments of self-worth based on personal competence or possession of qualities that are universally associated with positive or negative values (as measured by the RSES (Rosenberg, 1965).
Appendix B

Assumptions, Limitations, Delimitations, and Significance of Study
Assumptions

1) Participants answered truthfully to all questions on the assessments.
2) Participants understood all aspects of the questionnaires.
3) The Rosenberg Self-Esteem Scale was a valid measurement of personal self-esteem.
4) The Career Decision Profile was a valid measure of personal career beliefs.

Limitations

1) Participants were not randomly selected.
2) The Career Decision Profile was not validated with college athletes.
3) Participants were drawn from only one region of the United States.

Delimitations

1) The research was delimited to college students.
2) College students were delimited to only freshmen and sophomores.
3) Athletes were delimited to volunteers from public junior-college and private universities in the Midwest.

Significance of Study

Many studies suggest that student-athletes appear to be less career mature than non-athletes. One concern that is not normally addressed is what effect the levels of career decision-making have on the athlete's psychological well-being. Very few studies were found that directly deal with the affective nature of career maturity or decision-making, and the psychological aspects that can be affected (Kornspan & Etzel, 2001), namely self-esteem. In addition, the collective research generally seems to fail to
acknowledge the group of athletes that are most at-risk with regard to both career decision-making and self-esteem issues: freshmen and sophomores.

Results of this study may help counseling departments or university career centers find more appropriate means to raise the collective self-esteem levels of students and athletes fearful or uncertain about careers and futures after graduation. A major aim of this study was to determine if stronger decisions related to a career correlate to higher self-esteem, especially for athletes.

Results may assist in determining various programs that students can utilize to make the transition to college from high school less psychologically stressful and more academically beneficial. Pancer, Hunsberger, Pratt, and Alisat (2000) found that students who had poor adjustment to universities through the second semester of the freshman year experienced high stress levels even before the beginning of the first semester. This came from simplistic expectations of university life, lack of informed discussions with parents concerning life at college, or not having enough information from knowledgeable sources at the university. Regarding athletes, Nelson (1982) found that freshman student-athletes participating in career counseling sessions had higher grades, fewer changes in academic major, and greater school satisfaction than athletes not in the program.
Appendix C

Extended Literature Review
Career Decision-Making

Much of the literature concerning career decision-making stems from the work of Super (1957), who defined career development as the growth and learning process resulting in vocational behavior changes over time. Super’s work created substantial interest in understanding how people prepare for a career and how counselors can help them with that preparation. His research of career development led Super and his colleagues to present the Career Pattern Study (CPS; Super et al., 1957), a landmark longitudinal study of vocational behavior and development with adolescent and young adult males. This study's focus concentrated on individual participant differences in coping with crystallization and specification tasks, identifying behavior responses and attitudes toward these tasks. Super (1963) then proposed a theory of vocational development, outlining five main developmental tasks at various life stages: crystallization, specification, implementation, stabilization, and consolidation. Super also included some of the attitudinal and social changes that would go with these tasks.

One of the tasks in particular, the specification of a vocation, was expected to occur in the mid- to late-adolescent years, approximately from the ages of 18 to 21 years. During this time, the adolescent was expected to start making general job ideas or choices more specific and begin to take the steps necessary for commitment to the job. While the individuals may not be completely decided about what they want to do, they are supposed to have a more definite idea of their goals, such as a college sophomore deciding on a major. Krieshok (1998) found in related review that many studies in the career decision-making literature show substantial agreement with Super in creating three main themes: individuals vary in the degree of decidedness, decidedness only comes with time and
planning, and that indecision does not always disappear even though a decision may have been made.

Career maturity, the readiness to make informed career decisions and cope with developmental tasks (Savickas, 1984), was an integral part of Super's research and carried an important role in the decision-making process. This readiness normally falls in with the implementation task, considered in the years from 18 to 25, though one's maturity may occur at different time periods in life (Super, 1963). Much of the literature regarding college student and student-athlete career development has resulted from the concept of career maturity.

Tillar and Hutchins’ (1979) study concerning the effectiveness of a career exploration program for college freshmen noted that adolescents are not generally exposed to jobs that generate enough interest to gather more information. This minimal exposure can lead to inadequate levels of awareness that are needed to make informed, well-planned decisions regarding a future profession. This information resulted in a study combining self-appraisals of career needs and interviews with alumni in the students’ fields of interest. Results indicated that freshmen participating in the exploration program showed significantly greater career decision-making and exhibited greater understanding of personal values as relating to career choices compared to another freshman control group (Tillar & Hutchins).

A study of career selection determinants by Keller, Piotrowski, and Rabold (1990) yielded contrasting results. An examination of responses from 409 undergraduates on a career choice and information process instrument showed that a large majority (72%) had specified a particular career choice, including a majority of freshmen and sophomores.
However, 45% of participants indicated that this decision was based on personality fit rather than knowledge of occupation (an understanding of the job requirements).

Petitpas and Champagne (1988) commented on the importance of career planning in the lives of college athletes and created a four- to five-year model that athletes could use to enhance professional development and prepare for life after college. From this model the exploration of career ideas and possibilities is essential for any career maturation but may not fit into the rigorous environment of collegiate athletics based on the time, energy, and conformity that athletics demand of the student-athlete.

Murphy, Petitpas, and Brewer (1996) examined relationships between identity foreclosure and career maturity in Division I college athletes from various sports, and found that as foreclosure and athletic identity grew, maturity level tended to lessen. Female athletes, however, scored higher on maturity levels than male athletes but similarly in terms of athletic identity. One alarming result was that approximately 65% of all respondents scored within ranges that indicated impaired career decision-making, though no statement was made concerning class breakdowns for this statistic. While both variables hindered career decision-making, failing to explore other possibilities and identifying only as an athlete were considered distinct and separate processes.

Brown and Hartley (1998) examined male football and basketball players regarding athletic identity and career maturity similarly to Murphy, Petitpas, and Brewer (1996), but used both Division I and II schools. Results indicated that maturity was not significantly affected by either identity level or level of competition. However, athletes who indicated professional sports as a career preference scored lower on the career maturity measure than those who indicated other career choices. It was noted that
freshmen athletes should not be spending a great deal of time on athletics, but instead on adapting to the academic environment.

Brown, Glastetter-Fender, and Shelton (2000) examined the relationship between career decision-making self-efficacy (CDMSE; confidence in the ability to plan for a future career), career locus of control, identity foreclosure, and athletic identity among student-athletes, and hypothesized that athletes who spend more time involved with sport and have a strong athletic orientation would have low career decision self-efficacy. Athletes who believe in personal responsibility for career planning had greater career decision self-efficacy. Findings suggested low self-efficacy among those that had already foreclosed on an athletic career, had low control over careers, or had larger-than-average hours put into sport. Athletes who demonstrated an internal locus of control for planning showed high career decision self-efficacy.

In an attempt to predict career maturity for junior college-athletes, Kornspan and Etzel (2001) found career locus of control and self-efficacy to have the most influence on an athlete’s career maturity, with gender and age the only demographic variables of significance. In this study, however, athletic identity did not factor into levels of career maturity. While the results were limited to junior-college athletes, the findings suggested that athletes with lower career maturity levels, low career self-efficacy, and external career locus of control may benefit more from educational and career planning.

**Self-Esteem**

Super's (1963) theory of vocational development also outlined that the selection of a vocation is a person's attempt to satisfy their own self-concept or reach a desired level of potential. As the individual works to decide upon a desired career, the person's sense of
self will also change to match their career needs. As more career options are analyzed, the person's self-image will also begin to take shape. Once a self-image has been fully formed, then an idea for a specific desired career may be realized. One major aspect of the self-concept is self-esteem, a judgment of self-worth based on personal competence or the possession of qualities that are universally associated with positive or negative values (Bandura, 1997). Super (1963) theorized that having higher self-esteem would assist in the development of more mature career attitudes, which should help high-esteem persons do better in school and at work than those with lower esteem levels.

Athletes tend to report higher value in self-esteem than do non-athletes (Taylor, 1995; Young & Bursik, 2000). Taylor examined whether participation in college athletics enhanced self-esteem. Results indicated that athletics alone were not responsible for self-esteem increases, but were one of a number of experiences that had an effect. For student-athletes, this had a positive impact on self-esteem, but was significant only for senior-year athletes. Using self-esteem as a measure of identity, Young and Bursik researched identity development and life plan maturity for female athletes and non-athletes. Female athletes reported higher self-esteem, replicating Taylor’s (1995) study, and revealed a more mature identity development. However, the groups did not differ regarding levels of identity achievement. De Man and Blais (1982) studied sport preference types in relation to the personality constructs of social alienation and self-esteem. High self-esteem was found in women who participated in team sports and men who participated in individual sports. It was estimated that since there probably is not a specific sport that both men and women play that affects their self-esteem in any direction, the athletes’ self-esteem might instead influence their selection of a sport.
Self-esteem was measured in physically active men and women in relation to the evaluation of a self-perception profile (Hayes, Crocker, & Kowalski, 1999). Within this study, self-esteem was expected to have a positive relation to physical self-worth, but no relation to physical activity. Results showed that men and women had no significant differences in levels of physical activity or self-esteem, and that no self-esteem and activity relationships were significant. However, two constructs of the profile, body attractiveness and physical conditioning, were significantly correlated with self-esteem.

In related research, Abood and Black (2000) examined how interventions concerning health education and prevention of eating disorders affected female college athletes. Since self-esteem was considered a factor in the onset of an eating disorder, measurements were utilized to study self-esteem before and following a disorder intervention program. Athletes demonstrated an average score for self-esteem during pre-intervention testing and experienced post-intervention esteem reductions, but additional analyses revealed that participation in the intervention might have prevented further loss of self-esteem.

Killeya (2001) predicted semester academic performance and college adjustment for African-American and Caucasian student-athletes based on the evaluation of student and athlete roles. A hierarchical classes model revealed a significant relationship between self-esteem and anxiety after role assessment in African-American student athletes only. Athletes who viewed themselves negatively as students demonstrated lower self-esteem and higher anxiety. Positive evaluation of the athlete roles showed higher self-esteem and less anxiety. Caucasian athletes demonstrated similar evaluation patterns but did not have significant results. Grade-point average was associated with self-esteem and anxiety for
African-American athletes also. Results for Caucasian athletes showed no significant relationships.

Gotwals, Dunn, and Wayment (2003) examined the relationship between perfectionism and self-esteem for college athletes. Results partially supported the hypothesis, in which athletes with unhealthy levels of perfectionist attitudes scored low for self-esteem levels. However, healthy perfectionists did not score high on self-esteem measures. Results indicated that the athletes' self-esteem might be affected only by internal or external influences on their perceptions of success or failure on a task, which can lead to an effect on personal standards.

One study by Loeb and Magee (1992) specifically addressed self-esteem in relation to underclass students. New, traditional-age (17-19 years) freshmen were surveyed over the course of their first semester of school and again during the second semester of their sophomore or second year of school. The survey included questions regarding social problems, personality traits, current and future quality of life, and ethnic or religious attitudes. Personality trait responses indicated a loss of self-esteem and confidence after the first year but a significant rebound during the later part of the second year. It was speculated that the loss came from possible times of academic difficulty early in the first year and a lack of accolades from peers or instructors that the participants were used to in high school.
Career Decision-Making and Self-Esteem

Bloor and Brook (1993) studied undergraduate students in regard to career decidedness and personal adjustment, which included life satisfaction and self-esteem. The relationship of career maturity and clarity of career direction was examined, and how that clarity relates to psychological well-being. Following Khan and Alvi’s (1983) findings, career maturity was related to career clarity, and that clarity is related to personal well-being. Students who already decided on a career goal reported greater life satisfaction and higher self-esteem than undecided or career-avoidant participants.

McCullough, Ashbridge, and Pegg (1994) examined effects of self-esteem, family structure, locus of control, and career goals on leadership behavior for adolescents, hypothesizing that those students with high leadership potential had high self-esteem, internal locus of control, strong family structure, and higher career goals than a comparison group. The hypothesis was found true in all aspects except self-esteem. The leadership group did not score higher in self-esteem. The leadership group derived their self-esteem from career goals. No speculation was made for where the comparison group gained self-esteem.
References


Appendix D

Instrumentation
The Rosenberg Self-Esteem Scale

Please read each item and then indicate using the following scale the feeling you experience when reading each item.

1 2 3 4
strongly agree agree disagree strongly disagree

1. ______ I feel that I am a person of worth, at least on an equal plane with others.

2. ______ I feel that I have a number of good qualities.

3. ______ All in all, I am inclined to feel that I am a failure.

4. ______ I am able to do things as well as most other people.

5. ______ I feel that I have much to be proud of.

6. ______ I take a positive attitude about myself.

7. ______ On the whole I am satisfied with myself.

8. ______ I wish I could have more respect for myself.

9. ______ I certainly feel useless at times.

10.______ At times, I think I am no good at all.
Career Decision Profile

Date _____________________  Code # _____________________

Directions: This measure will help you think about your career choice. There are no right or wrong answers. Just give the answer that best fits you. Do not spend too much time on any one statement.

Have you decided on an occupation? How certain are you? Think about it for a moment. . . . . Now circle the appropriate number (1-8) below to show how much you agree with the following statements. Please circle one number only:

Example: Incorrect DISAGREE 1 2 3 4 5 6 7 8 AGREE

Correct DISAGREE 1 2 3 4 6 7 8 AGREE

Decidedness
1. I have an occupational field in mind that I want to work in (e.g., medicine, agriculture, management, or the performing arts).

   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

2. I have decided on an occupation (e.g., electrical engineer, nurse, or cook).

   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

Now that you have indicated how decided you are, how do you feel about where you are in the process of making a choice?

Comfort
3. I feel at ease and comfortable with where I am in making a career decision.

   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

4. I’m not worried about my career choice.

   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE
Career Decision Needs
Now you will read statements people make when talking about making an occupational choice. Please read each statement and circle the number that shows the extent to which you agree or disagree that it describes you.

Section A

5. I wish I knew which occupations best fit my personality.
   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

6. I need to have a clearer idea of what my interests are.
   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

7. I need to have a clearer idea of my abilities, my major strengths and weaknesses.
   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

Section B

8. I need information about educational programs I want to enter.
   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

9. I do not feel I know enough about the occupations I am considering.
   STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

10. I know what my interests and abilities are, but I am unsure how to find occupations that match them.
    STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

Section C

11. I feel relieved if someone else makes a decision for me.
    STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

12. I am an indecisive person; I delay deciding and have difficulty making up my mind.
    STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE

13. I frequently have difficulty making decisions.
    STRONGLY DISAGREE 1 2 3 4 5 6 7 8 STRONGLY AGREE
Section D

14. I don’t need to make a vocational choice at this time.
   STRONGLY DISAGREE  1  2  3  4  5  6  7  8  STRONGLY AGREE

15. My future work or career is not that important to me right now.
   STRONGLY DISAGREE  1  2  3  4  5  6  7  8  STRONGLY AGREE

16. I don’t have strong interests in any occupational field.
   STRONGLY DISAGREE  1  2  3  4  5  6  7  8  STRONGLY AGREE

Other Factors

Please write down any other factors that are important in understanding your situation:

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
Demographic Information

ID #: __________________________

Gender (circle one): Female Male

Race (circle one): African-American Asian Caucasian Hispanic Other

Age (circle one): 17 18 19 20 21 Other (please write): ______

Academic Year in School (circle one): Freshman Sophomore

Current sport participating in (only if you are participating in NCAA college athletics; circle one):

Baseball Basketball Cross-Country Football Golf Soccer Softball Swimming Tennis Track & Field Volleyball Other (please write)________________________
Appendix E

Informational Letters for Athletic Directors and Coaches
November 23, 2004

Dear Athletic Director,

I am a current graduate student in the Jiann-Ping Hsu School of Public Health at Georgia Southern University, completing requirements for a Master of Science Degree in Kinesiology with an emphasis in Sport Psychology. Part of my degree involves completion of a thesis project, entitled “Relationships of Career Decision-Making and Self-Esteem for College Students and Athletes.” I am writing to request your assistance in my data collection for this thesis.

Career decision-making is an area in athletics normally reserved for the end of an athlete’s playing career, where most literature can be found. Very little is known about how younger athletes respond to life choices beyond their playing careers. Self-esteem has long been a topic of study in the field of psychology and has been linked to various athletic endeavors, from enhanced mental health and body image to task execution in various specific sports. In linking these two aspects, I am attempting to gain knowledge of the thinking processes of younger athletes and perhaps enlighten them on the career and life possibilities they may also enjoy beyond a sport career. Since an overwhelming majority of athletes do not achieve the professional ranks of a given sport, any earlier understanding of how an athlete decides on a career may translate to a more positive and worthwhile undergraduate career.

My request is to receive permission to contact the coaches of your various intercollegiate teams. If approved, I will ask the coach for approximately 20 minutes of the team’s time before or after a practice or during a study hour to administer two questionnaires, and only to the freshman and sophomore athletes. The questionnaires present no risk to the players, and will only serve to enhance this area of research. No player will be individually identified. I will be contacting you to further discuss my research and answer any questions you may have. If you prefer, please contact my advisor, Dr. A. Barry Joyner, at (912) 681-0775 or me at (314) 882-1459. Thank you for your assistance.

Sincerely,

James B. Mize
November 24, 2004

Dear Coach,

I am a current graduate student in the Jiann-Ping Hsu School of Public Health at Georgia Southern University, completing requirements for a Master of Science Degree in Kinesiology with an emphasis in Sport Psychology. Part of my degree involves completion of a thesis project, entitled “Relationships of Career Decision-Making and Self-Esteem for College Student and Athletes.” I am writing to request your assistance in my data collection for this thesis.

Career decision-making is an area in athletics normally reserved for the end of an athlete’s playing career, where most literature can be found. Very little is known about how younger athletes respond to life choices beyond their playing careers. Self-esteem has long been a topic of study in the field of psychology and has been linked to various athletic endeavors, from enhanced mental health and body image to task execution in various specific sports. In linking these two aspects, I am attempting to gain knowledge of the thinking processes of younger athletes and perhaps enlighten them on the career and life possibilities they may also enjoy beyond a sport career. Since an overwhelming majority of athletes do not achieve the professional ranks of a given sport, any earlier understanding of how an athlete decides on a career may translate to a more positive and worthwhile undergraduate career.

My request is for approximately 20 minutes of your team’s time before or after a practice or during a study hour to administer two questionnaires, and only to your freshman and sophomore athletes. The questionnaires present no risk to the players, and will only serve to enhance this area of research. No player will be individually identified. I will be contacting you to further discuss my research and answer any questions you may have. If you prefer, please contact my advisor, Dr. A. Barry Joyner, at (912) 681-0775 or me at (314) 882-1459. Thank you for your assistance.

Sincerely,

James B. Mize
Appendix F

Institutional Review Board Forms
CONSENT TO PARTICIPATE IN A RESEARCH PROJECT

My name is James Mize, and I am a Graduate Student at Georgia Southern University. I am interested in examining aspects of personality and career thinking relationships for college students. Many young college students face difficulties in determining how they feel about their careers or futures beyond college. These obstacles can even affect the way they think about themselves. This research might help to find out some of the reasons for these problems.

This letter is to request your assistance in gathering information to analyze these problems. There is, of course, no penalty if you decide not to participate or to later withdraw from the study. If you agree to participate, please complete the attached questionnaires and place them in the envelope provided. The surveys will take about 15 minutes to finish. Completing and returning the surveys will indicate your permission to use the information you provide in this study. Please be assured that your responses will remain completely anonymous. Either I nor anyone else will be able to identify your responses from those of other participants. There is no risk to you if you agree to be involved. The study will be most useful if you respond to every item in the questionnaires; however, you may choose not to answer one or more of them without penalty. If you would like a copy of the study's results, you may indicate your intent below.

If you have any questions concerning this research project, you may contact me at (314) 882-1459. If you have any questions or concerns about your rights as a research participant in this study, you may contact Institutional Review Board Coordinator at the Office of Research Services and Sponsored Programs at (912) 486-7758.

I thank you in advance for your assistance in studying this issue. The results should help in making the decisions beyond college easier for many students.

Sincerely,

James B. Mize
Graduate Student
Georgia Southern University

Please tear off and place in the marked envelope ONLY if you would like a copy of the results

Name:_____________________________ Address:_____________________________________


Application for Approval to Utilize Human Subjects in Research

Instructions: Complete all sections of these forms (indicate any sections that do not apply with "N/A") and submit completed materials, including all data collection instruments, informed consent forms, and other relevant materials, to the address below.

Application Review: All applications are reviewed on a first come - first served basis, and as quickly as possible. Depending upon the type of review necessary, turn around time can range from less than a week (for certain types of exempt research protocols) to 6-8 weeks for full Committee review. Failure to follow instructions will delay the review process.

Submit Completed Application to:

<table>
<thead>
<tr>
<th>Research Oversight Coordinator</th>
<th>Institutional Review Board (IRB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of Research Services</td>
<td>P.O. Box 8005</td>
</tr>
<tr>
<td>Phone: 912-681-5465</td>
<td>Fax: 912-681-0719</td>
</tr>
<tr>
<td>E-Mail: <a href="http://www2.gasou.edu/research/Resources">http://www2.gasou.edu/research/Resources</a></td>
<td></td>
</tr>
</tbody>
</table>

Research Title: Relationships of Career Decision-Making and Self-Esteem for College Students and Athletes

Principal Investigator: James B. Mize  Title: Student Researcher

Department: Public Health

Mailing Address: 9950 Bonton Drive, St. Louis, MO 63123  Phone: (314) 882-1459

E-Mail: mizejb@hotmail.com

Approval Signatures:

Principal Investigator  Date:  Faculty Advisor (if student researcher)

Department Chair  Print Name of Faculty Advisor

Do Not Write Below This Line - For Internal IRB Use Only

DETERMINATION OF INSTITUTIONAL REVIEW BOARD (IRB)

<table>
<thead>
<tr>
<th>Human Subjects:</th>
<th>☐ At Risk  ☐ Not At Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action:</td>
<td>☐ Approved  ☐ Conditional †  ☐ Returned for Revisions/Not Approved  ☐ Extension of Approval Period</td>
</tr>
</tbody>
</table>

† Attach Conditions of Approval

Indicate Section of Federal Code that Applies

Signed: ___________________________ Date: ___________________________

Chair, Institutional Review Board
Research Protocol
For Research Utilizing Human Subjects

The purpose of this information is to provide the IRB with sufficient data to understand the use of and safeguard for human subjects in your research proposal. The IRB is not concerned with evaluating the quality or focus of your research, but only the use of human subjects. Do not leave any item blank, if an item does not apply to your research please indicate “N/A.” If completing this application kit by hand (i.e., you are not completing this form via a word processor but are typing or printing your responses) please do not attempt to fit your response onto this page -- attach additional pages as necessary.

1. Statement of the problem to be studied.
A lack of career decision-making research regarding effects of self-esteem on new or younger college student-athletes and non-athletes provides the impetus for this study. Most literature involves other factors influencing the way students decide on a career they would like to pursue. Little information is known regarding underclassmen's responses to career decision-making and how their self-esteem influences this process. Questions regarding men's and women's responses, athlete's and non-athlete's responses, freshman and sophomore responses, and associations between any categories may be answered through this study.

2. Describe your research design.
A pilot study using volunteer underclass collegiate martial artists from a Midwestern private university will be administered to assess the ease of use and comprehension for the two main surveys. Student-athletes' coaches will be contacted to request the athletes' participation in the study. All participants (at least 200 male and female underclass student-athletes, and at least 100 male and female underclass physical activity students) will complete an informed consent form and demographics sheet first. They will then complete two surveys: the Career Decision Profile and the Rosenberg Self-Esteem Scale. Participants will be briefed on the general nature of the questionnaires and may ask questions at any time. Participants will have no further obligation beyond the completion of the two surveys and two forms. Non-athletes recruited to participate received the instruments from their instructors in their classrooms before the start of a physical activity period. Athletes answered the surveys immediately after practices as given by the coaches or student trainers, or during study hours as given by their monitor(s). During data analysis, athletes will be identified by the type of sport participating in and the last four digits of their social security number, while non-athletes will be identified by their class standing and last four digits of their social security number.

3. Description of possible risks to human subjects.
No physical risk is involved with this study. Potential emotional risk may come in the form of embarrassment if a participant does not understand a question or takes longer than average to complete all forms and surveys.

4. Description of possible benefits to human subject and society in general.
Possible benefits begin with gaining an understanding of the thought processes of underclass athletes and students in relation to their career decision-making efforts. Results may assist in determining various programs which can be utilized by all students to make the transition to college from high school less psychologically stressful, and may also help school assistance departments (Counseling, Student Services, etc.) find more appropriate means to raise the collective self-esteem levels of those fearful about their careers upon the completion of school.

5. Identifying information on study participants.
Participants may only be identified by the type of sport participating in and last four digits of their social security number (if a student-athlete), or by their class standing (Freshman or Sophomore) and last four digits of their social security number.
6. List and attach a copy of all questionnaire instruments, informed consent documents, interview
protocols, or any other materials to be used during the research project (i.e., newspaper
advertisements, flyers, etc.).
Both questionnaires and both forms utilized are enclosed in this proposal. In order of receipt, they
are the Informed Consent Letter, demographics form, the Career Decision Profile, and the Rosenberg Self-
Esteem Scale.

7. Describe the procedure(s) that will be used to secure informed consent. If deception is necessary, attach
a copy of the debriefing plan.
Informed consent will be achieved after all participants have read the attached letter and signed
and dated it. Once completed, the letter will be separated from the remaining forms. After the forms are
completed, the letter will be placed face down behind the demographics form and returned accordingly for
analysis. No deception is necessary.

8. Will minors be included as part of the data set? (Indicated the appropriate response)  Yes ☐ No
If you indicated YES above, describe the procedure(s) to gain consent to utilize minors in the research.
All students are expected to be of college age (at least 18 years old); therefore, no minors will be
included.