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Self-Efficacy and Goal Orientation: a Comparison of Intramural and Varsity Athletes

Brooke Norwood

BARRY UNIVERSITY

SCHOOL OF HUMAN PERFORMANCE AND LEISURE SCIENCES

SELF-EFFICACY AND GOAL ORIENTATION; A COMPARISON OF
INTRAMURAL AND VARSITY ATHLETES

BY

BROOKE NORWOOD

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To the Dean of the School of Human Performance and Leisure Sciences:
I am submitting herewith a thesis written by Brooke Nichole Norwood entitled "Self-Efficacy and Goal Orientation; A Comparison of Intramural and Varsity 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 Sport Management.

_____
Dr. Annie Clement, Thesis Committee Chair

We, members of the thesis committee,
have examined this thesis
and recommend its acceptance:

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Accepted:

_____
Chair of Department of Sport and Exercise
Sciences

Accepted:

_____
Dean of School of Human Performance and
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Acknowledgements

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Abstract

Student athletes represent a special population and have demands on their time and energy that differ from the typical college student (Gatson, 2003). Perceived self-efficacy plays a pivotal role in the process of self-management. In sport, for example, the beliefs that athletes develop about their athletic capabilities (i.e., the belief an athlete may have concerning his or her own capability to run a mile in five minutes) help determine what they do with the knowledge and skills they have acquired (i.e., using his or her training and skills to successfully complete the mile in five minute). The basic concept behind this proposal was that self perceptions of capability can help determine what individuals do with the knowledge and skills they have.   This study aimed to define the goal profile (i.e., task orientation, ego orientation or a combination orientation) for both intramural and varsity athletes. A sample (n=56) of intramural and varsity athletes completed the Task and Ego in Sport Questionnaire (TEOSQ), Generalized Self-Efficacy Scale (GSES) and a Sport-Specific Self-Efficacy Scale (SSSES). Results showed a correlation between ego orientation and self-efficacy; and a correlation between task orientation and self-efficacy. No significant differences were present between intramural and varsity athletes or within the defined groups of intramural athletes.

Chapter 1

Introduction

On the college level, sports are not play. "They are being taken seriously as training for a game of life that has all the clarity of a board game" (Shulman & Bowen, 2001, p. xxi). Are student-athletes affected differently than others? Shulman and Bowen (2001) would argue that athletes are indeed a unique group, while Scott (2001) would say athletes are not unique. In their discussion of key empirical findings from *The Game of Life*, Shulman and Bowen (2001) say that athletes differ from their classmates in many ways (i.e., biased treatment in college admissions; monetary or material benefits for being an athlete; and so forth) and exist in their own *athlete culture.* An athletic culture is essentially a separation of students and athletes. If athletes are different, do they require special attention? And how do their needs differ from the norm? Perhaps it's the billions of dollars (Mandel & Lander, 1994) that sport generates every year in America, causing administrators, professors and the public to emphasize an invisible difference between student-athletes and students. This invisible difference effects the student population in various ways. The study examined the goal orientation of intramural and varsity athletes and whether there was a relationship between self-efficacy and goal orientation in these groups (intramural and varsity athletes). In addition, the study examined if this relationship differed between these two groups (intramural and varsity-athletes).

Statement of the Problem

Nicholls' (1989) work provides a detailed investigation into two perceptions, task and ego. A high task orientation has been passively associated with a high level of

enjoyment. In contrast, support for an ego orientation has been associated with negative

affect. However, despite the literature (Duda, Chi, Newton, Walling, & Catley, 1995;

Newton & Duda, 1993; Treasure, Duda, Hall, Roberts, Ames, & Maehr, 2001) displaying

the roles and definitions of achievement and goal setting and the positive or negative

affects brought on or influenced by society, individual athletes and their relationship

between self-efficacy and goal orientation have been documented.

Coakley (2004) has suggested that athletes have a tendency to be deviant

conformists. He provides two types of deviant conformity; overconformity and

underconformity. His definition of deviant overconformity is "behavior that involves an

uncritical acceptance of rules" (Coakley, 167, 2004). Deviant overconformity can

present problems in sport. For example, an athlete following a training schedule to the

extent that family and personal life are ignored can be defined as an overconformist.

Coaches, professors, and others who exercise control of sports often benefit when an

athlete over conforms. Coakley defines underconformity as "behavior that involves a

rejection or lack of awareness of norms" (Coakley, 167, 2004). An athlete who deviantly

under conforms often participates in behaviors which are contrary to the athletic culture

(e.g., illegal enhancement drugs, sexual harassment of other students or athletes, cheating

on academic tests). This negative behavior of underconformity with athletes is often

displayed in the media (news, movies, television, music, etc). However the media fails to

point out why athletes under conform or how to stop them from being deviant. Coakley

goes on to suggest that when the coaches, administration, parents, and others involved

look the other way, this deviant underconformity in athletes, from the athletes point of

view, is seen as being "normal" rather than deviant. Athletes who are surrounded by those who blindly accept deviant overconformity will continue to participate in behaviors. It is for this reason that administrators of sport need to focus on each athlete and consider his or her goal orientation. Those in sport management should set their goals on eliminating this stigma by assessing coaching styles, interventions and administrative rules at universities. By doing so, administrators of sport may find a greater response in athletes to these methods. They may also see fewer negative images of athletes and sport in the media.

Purpose of the Study

The purpose of the study was to examine self-efficacy and goal orientations of intramural and varsity athletes. Research by Duda and Nicholls (1992) showed that at the high school level, students incompetent in athletic skill were less likely to be on an athletic team. (If they were on a team they were more likely to be on the bench.) This suggests that, if a sport participant does not have fairly high self-efficacy, he or she will probably not experience or expect much satisfaction in sport. Therefore the purpose of this study is to identify the self-efficacy levels and goal orientations of collegiate intramural and varsity athletes. By doing so, administrators in sport can develop plans for these athletes that will serve them according to their self-efficacy and goal orientation. Furthermore, a powerful thread that binds these variables to coaches is the comprehension that their coaching style and behavior as well as parental behavior can have both positive and negative short- and long-term psychological impact on the athlete.

This knowledge will help athletes if researchers introduce coaches to the concept of the role they play within the motivational climate of the athlete. The principles and strategies associated with these variables should form an integral part of any sport program.

Variables

The independent variable was intramural and varsity athletes. The studies examined in this proposal's literature review utilized athletes (e.g., elite tennis players, swimmers, basketball players, etc) as subjects. However, there have been no significant findings regarding differences between varsity athletes and intramural athletes.

Goal orientation and self-efficacy are the dependent variables. Various studies (Weiner, 1974; Nicholls, 1984; Manning & Wright, 1983) have identified the relationship between self-efficacy and goal orientation. Based on this research, self-efficacy, or an individual's personal beliefs about his or her capability to succeed at a given task, influences his or her tendency to be task or ego oriented and his or her final outcome.

Research Questions

The following research questions were asked:

R_1: Which group of students (intramural or varsity athletes) were more likely to be task oriented?

R_2: Which group of students (intramural or varsity athletes) were more likely to be ego oriented?

R_3: In which goal-profile group were students (intramural or varsity athletes) more likely to fit?

These questions were asked to fill the gap that exists in the research literature. Harwood and Swain (1998) looked at the predictors of goal involvement toward one of the two orientations among junior athletes. Reinboth and Duda (2004) examined the motivational climate and perceived ability that athletes hold, but failed to establish a connection using goal orientation. Research has been prevalent in determining motivational factors that predict an individual's goal orientation, but there has been no work in assessing the differences between students who participate in collegiate athletics on two distinguished levels, intramural and varsity.   Administrators in sport will be able to understand the intramural and varsity athlete's perspective in relation to the athlete's self-efficacy and goal orientations. Knowing each group's self-efficacy and goal orientation can assist administrators in determining appropriate intervention techniques, goal orientation profiling, and the development of effective relationships between coaches, administration, peers and student-athletes.

Operational Definitions

Self-Efficacy

The beliefs one holds about his or her capability to perform a task (Parajes, 2000).

Social cognitive theory

Self-regulated behavior is initiated, monitored, and evaluated by the individual to accomplish his/her own goals (Bandura, 2001).

Task Orientation

Participating in an activity because one enjoys being the best and improving for his or her own benefit (Nicholls, 1984).

Ego Orientation

Participating in an activity because one "wants to be the best of all others" (Nicholls, 1984).

Intramural Athlete

Students who in the past year (April 2004 - April 2005) were not varsity athletes but participated in intramural athletics. For the purpose of this study, the

Intramural Athlete was defined by the following criteria:

1. Varsity Athlete in High School

2. Freshman (1-29 credits) /Sophomore (30-59 credits)

3. Junior (60-89 credits) /Senior (90 + credits)

Varsity Athlete

Varsity athletes participate in a university sponsored varsity athletic program and do not participate in intramural athletics.

Assumptions

The sample for this proposal was drawn from students who attended a university in South Florida during the time of the study. This study assumed that the instructions for each questionnaire were understood by the administrator of the questionnaire. It was also assumed that all subjects read and followed the instructions to the best of their ability.

Delimitations

This study was subject to the following delimitations:

The researcher was delimited to access and designed a study of convenience.

This study was delimited by the researcher's knowledge and experience in sport

psychology.

The sample consisted of university students and student athletes only.

Limitations

This study was subject to the following limitations:

The size of the sample was limited to the number of volunteers, which was

limited to the total number in the student body and the student-athlete population

at the university.

The questionnaires were subject to each participant's honesty.

Significance of the Study

Athletes in movies and on television are often portrayed in a negative manner The

stigma that exists with the athletic culture is often the only view shown in the media.

Koby Bryant's criminal behavior and Major League Baseball players' drug habits are

among most recent headlines. However, stories that highlight a collegiate athlete with a

4.0 GPA; a National Basketball Association team's philanthropic event; or healthy and

drug-free lifestyles of athletes are generally not portrayed in the media. The athletes

themselves take the majority of the blame for their negative behavior. However, it is not

solely the athletes' responsibility, but the administrators of sport (coaches, professors,

athletic directors, and so forth) who should take responsibility for the negative behavior

that does occur. The administrators influence the athletes. It is this relationship that

promotes the following research questions: Which group of students (intramural or

varsity athletes) were more likely to be task oriented? Which group of students

(intramural or varsity athletes) were more likely to be ego oriented? In which goal-profile group are students (intramural or varsity athletes) more likely to fit?   By identifying each athlete's self-efficacy and goal orientation, administrators in sport can better understand athletes' orientation, so as to design better coaching styles, interventions or advisement techniques that will have the potential to positively effect the athletes.

Chapter 2

Review of Literature

Preview

The following review of literature examines the social cognitive theory and the influence of Bandura's self-efficacy beliefs on social cognitive theory. Self-efficacy will be developed with a look at perceived self-efficacy and the affects of perceived self-efficacy. Measuring self-efficacy can be done with one of two approaches, context-specific scales or generalized scales. However, in review of goal orientation, Nicholls' states the importance of context-specific measures; for example, with his work in the Classroom and then in Sport. Despite the situation, both task and ego orientations are discussed further in this review. Goal orientation has been argued to be "states" of goal involvement or orthogonal in nature. Nicholls' orthogonal approach influences a practical examination of goal orientation through goal profiling. As with self-efficacy, goal orientation has also been studied in various domains, but specifically this review will look at those done in sport.

Social Cognitive Theory

A modern personality perspective, the social cognitive theory was proposed by Bandura (1986; 2001a; 2001b) and emphasized the interaction of individuals and situations. Social cognitive theorists believe that individuals learn many of their behaviors by observing others and modeling their behavior after others. This theory explains that human behavior is a triadic, continuous, and reciprocal interaction of personal (i.e., cognitive, affective, and biological), behavioral, and environmental

influences (Cullen & Agnew, 1999). However, the strength of each factor (triadic, continuous, and reciprocal) is dependent upon the individual, his or her behavior, and the context in which the behavior occurs. Moreover, the individual's personal characteristics such as age, gender, ethnicity, thoughts, emotions, goals, beliefs, expectations, self-evaluation, and sociocultural factors also influence his or her behavior. Thus individuals are seen as both products and producers of their environment (Bandura, 1986; 1997).

Self-Efficacy Beliefs in the Social Cognitive Theory

The beliefs that individuals use to control their environments include self-efficacy beliefs. Because self-efficacy beliefs are concerned with an individual's perceived capabilities to produce results and to attain designated types of performance, they differ from related conceptions of personal competence that form the core constructs of other theories.

Bandura (1978) first introduced the construct of self-efficacy by examining a unifying theory of behavioral change. Later, Bandura (1986) examined self-efficacy within the social cognitive theory. Bandura's research enhanced cognitive development by emphasizing a sociostructural network of influences. Bandura (1997) further examined self-efficacy within a theory of personal and collective agencies that regulate human well-being and attainment. He addressed the major facets of agency; the nature and structure of self-efficacy beliefs, their origins and effects, the processes through which such self beliefs operate, and the modes by which they can be created and

strengthened. In social cognitive theory, motivation and sociocognitive function is

governed by several self regulatory mechanisms operating together. One of the

mechanisms that occupy a central role in this self regulative process operates through

beliefs of self-efficacy.

Perceived Self-Efficacy

Perceived self-efficacy is concerned with people's beliefs in their capabilities to

mobilize the motivation, cognitive resources, and courses of action needed to exercise

control over environmental events (Bandura, 1986). Beliefs of self-efficacy have diverse

psychological effects that can facilitate or impair complex decision making that regulates

the level of motivation, both directly and indirectly, through mobilization and

maintenance of effort (Parajes, 1996). The stronger the perceived self-efficacy, the

higher the goals that people set for themselves, and the stronger their commitment to

achieving those goals (Cerwonka, Isbell & Hansen, 2000). Also this strong level of

commitment provides objective, nonsocial standards for gauging levels of ability. People

must therefore appraise their capabilities in relation to the performance attainments of

others (Faryna & Morales, 2000).

Perceived self-efficacy plays a pivotal role in self-management because it affects

actions not only directly but also through its impact on cognitive, motivational, and

decisional manners. Beliefs of self-efficacy influence what self regulative standards

people adopt; whether they think in an enabling or debilitating manner; how much effort

they invest in difficulties; how flexible they are to difficulties; how vulnerable they are to

stress and depression; and what types of choices they make at important decisional

points. Psychological research and theorizing has centered on how the mind works in

processing, representing, organizing, and retrieving information (Parajes, 1996).

Perceived Self-Efficacy Affects

Different conceptual models have been proposed concerning the underlying

structure of affective experiences (Bandura, 1982). Common among these models is one

which represents positive and negative affects. The regulation of affect has important

interpersonal, communicative, and behavioral functional value. For example, it is one

thing for an individual to possess self regulatory skills but another for him or her to be

able to adhere to those skills in complex situations. A flexible sense of efficacy is needed

to overrule emotional and psycho-social deviants of self regulative efforts. Bandura

(1997) sought to broaden and extend the analysis of perceived self-efficacy to the

regulation of one's affective life, and its impact on psycho-social function in an

individual.

In the interpersonal transactions of everyday life, societal rules specify the

conditions under which certain types of behavior are normal and others are deviant.

Expressions of positive and negative affects generally have different social effects.

Everyday life is stern with situational stressors that generate negative affect. Negative

affect is a natural part of life requiring effective self management through self regulatory

capabilities. Unrestrained venting of anger, belittling others, and voicing jealousy would

put an individual in social troubles. (For example, if fear automatically triggered

immobility behavior, personal development and accomplishment would be constrained

most significant pursuits involve some form of risks, and in evaluating those risks, an

individual would see the consequences as fear arousing and not proceed in those tasks.)

Unlike the often discordant effects of negative affect, positive affect promotes social

connectedness and bonding, as well as expression of affection and liking. By fostering

affirmative relationships, positive affect can enhance cognitive functions; help buffer the

perturbing effects of negative experience, and facilitate adaptive coping. Enabling

supportive relationships enhances a sense of self-efficacy that in turn influences the

quality of affective and behavioral function (Bandura, 1982).

The self-efficacy belief that one has the ability to perform a behavior is strongly

influenced by his or her continual success in specific behaviors (i.e.; the higher a person's

self-efficacy, the more likely he or she will repeat the behavior). Unlike other psycho-

social correlates such as self-esteem that are global in nature, self-efficacy is

conceptualized to be task and context-specific. For instance, an individual can have a

high level of self-efficacy in one context (i.e., physical activity) and yet a low level of

self-efficacy in another context (i.e. academic) (Bandura 1986; 1997).

Self-Efficacy Research

As Bandura (1978, 1986, & 1997) has been a major influence on social cognitive

theory, the tenets of self-efficacy, as it relates to social cognitive theory, have been

widely tested in varied disciplines. For example, self-efficacy beliefs have been found

related to depression (Davis & Yates, 1982), social skills (Moe & Zeiss, 1982),

assertiveness (Lee, 1983, 1984); pain control (Manning & Wright, 1983); and athletic

performance (Barling & Abel, 1983; Lee, 1982). Self-efficacy beliefs have also received

increasing attention in educational research, primarily in studies of academic motivation and of self regulation (Pintrich & Schunk, 1995).

Researchers have focused on three subcategories of self-efficacy. First, researchers have explored the link between self-efficacy beliefs and college major and career choices, particularly in science and mathematics (Lent & Hackett, 1987). Second, research suggests that the self-efficacy beliefs of teachers are related to their individual instructional practices and to various student outcomes. Finally, in the third area, researchers have reported that students' self-efficacy beliefs are correlated with other motivational constructs and with students' academic performances and overall achievement. Constructs in these studies have included goal setting, problem solving, test and domain specific anxiety, reward misfortunes, self regulation, social comparisons, strategy training, expectancies, and academic performances. Self-efficacy's broad application across various domains of behavior has accounted for its popularity in recent motivation research (Graham & Weiner, 1996; Weiner, 1974).

Effects of Self-Efficacy

According to Bandura's (1986) social cognitive theory, individuals possess a self system that enables them to exercise control over their thoughts, feelings, motivation, and actions. This self-management system provides reference mechanisms and a set of functions for perceiving, regulating, and evaluating behavior, which results from outside influences. As such, it serves as a self-regulatory function by providing individuals with the capability to influence their own cognitive processes and actions, and thus alter their environments or outcomes. How people interpret the results of their own performance

attainments influences their environments and their self beliefs which, in turn, influences

subsequent performances. This is the foundation of Bandura's (1986) reciprocal concept,

the view that (a) personal factors in the form of cognition, affect, and biological events,

(b) behavior, and (c) environmental influences create interactions in a triadic manner,

which reciprocates. Moreover, Bandura (1997) provided a view of human behavior in

which the beliefs that people have about themselves acts as key elements in the exercise

of control and self-management, in which individuals are viewed both as products and as

producers of their own environments and of their individual social systems.

According to this view, what people know, the skills they possess, or what they

have previously accomplished, are not always good predictors of future accomplishments

because the beliefs they hold about their capabilities powerfully influence the ways in

which they will behave (Bandura, 1997). Consequently, how people behave is both

directed by their beliefs about their capabilities and the results of their previous

performances (Bandura, 1997). This does not mean that people can accomplish tasks

beyond their capabilities simply by believing that they can, for competent functioning

requires a combination of both self beliefs and possessed skills and knowledge. Rather, it

means that self perceptions of capability help determine what individuals do with the

knowledge and skills they have. More important, self-efficacy beliefs are critical factors

of how well knowledge and skill are acquired in the first place.

The process of creating and using these self beliefs is an intuitive one: individuals

engage in a behavior, interpret the results of their actions, use these interpretations to

create and develop beliefs about their capability to engage in subsequent behaviors in

similar domains, and behave together with the beliefs created. In sport, for example, the

beliefs that athletes develop about their athletic capabilities help determine what they do

with the knowledge and skills they have acquired. Consequently, their athletic

performances are in part the result of what they come to believe they have accomplished

and can accomplish. This helps explain why athletes' athletic performances may be

noticeably different when they have similar abilities.

Bandura (1997) points out that self-efficacy beliefs influence motivational and

self regulatory processes in several ways. They influence the choices people make and

the courses of action they pursue. Most people engage in tasks in which they feel

competent and confident in, to avoid failure in those in which they are not competent, nor

confident in. The self beliefs that influence those choices are instrumental in defining an

individual's experience and providing an avenue through which an individual exercises

control over the events that do affect his or her life. Beliefs of personal competence also

help determine how much effort individuals will invest in an activity, how long they will

persevere when confronted with obstacles, and how flexible they will be in the face of

adverse situations.

Efficacy beliefs influence the amount of stress individuals experience as they

partake in a task and the level of accomplishment they perceive they can accomplish in

that task (Lee, C., 1984). Strong self-efficacy beliefs enhance human accomplishment

and personal well-being in many ways (Standage, Duda, & Ntoumanis, 2003). Athletes

with a strong sense of competence in sport approach difficult tasks (such as learning a

new skill) as challenges to be mastered, rather than dangers to be avoided and they have a greater interest in sport and learning new skills; setting more challenging tasks to be accomplished; and maintaining a strong commitment to achieving those tasks. Athletes with high self-efficacy also increase their efforts in the face of failure (i.e., if they lose a game, they practice harder for the next game); more easily recover their confidence after failures or setbacks (i.e., they do not allow the failure to hold them back in future tasks); and attribute failure to insufficient effort or a lack of knowledge, which they believe they are capable of acquiring in time. High self-efficacy helps create feelings of security in approaching difficult tasks and activities.

Conversely, athletes with low self-efficacy have the tendency to believe that things are tougher than they really are (i.e., the new skill is too difficult); a belief that fosters stress, depression, and a narrow vision of how best to accomplish a task. As a result of these influences, self-efficacy beliefs are strong variables and predictors of the level of accomplishment that individuals will finally attain. For these reasons, Bandura (1986, 1997) has made the strong claim that beliefs of personal efficacy constitute the key factor of self-management. By assessing one's ability to succeed or fail at a given task, an individual predicts his or her final outcome.

As key contributors to outcome expectations, there is a distinction between the roles of self-efficacy beliefs versus those of outcome expectations, in influencing motivation and predicting behavior. According to Bandura (1986), judgments of an individual's competence, to engage in a behavior differs from judgments of the consequence that the behavior will produce. Self-efficacy in part determines an athlete's

level of achievement. Athletes who expect success in their sport anticipate achievement.

For example, athletes confident in their athletic skills expect high win records during the

season, and that the quality of their work will reap benefits. The opposite is also true of

athletes who have low self-efficacy. They will doubt their athletic ability and envision a

loss, before they begin a game. Bandura (1986) argued that the outcomes people expect

are largely dependent on their judgments of what they can accomplish. This means

athletes place a large emphasis on past achievements in determining future achievements.

Measuring Self-Efficacy

Bandura (1997) has cautioned researchers attempting to predict academic

outcomes from students' self-efficacy beliefs, that to increase accuracy of prediction,

self-efficacy beliefs should be measured in terms of practical judgments of capability,

which varies across realms of activity; different levels of task demands within a given

activity context; and under different situational circumstances. Additionally, self-efficacy

beliefs should be assessed at the optimal level of specificity that corresponds to the task

being assessed and the context of functioning being analyzed. Often, no task is

identified, as researchers (Kazdin, A. E., 1978; Wigfield, A., & Karpathian, M., 1991)

aim to discover simply the nature of the relationship between motivational variables in

the absence of performance attainments. Still, in other studies (Wigfield, & Eccles, 1992;

Kazdin, 1978), judgments of self-efficacy are used instead of more appropriate measures.

The most general self-efficacy assessment consists of an all-inclusive instrument that

attempts to measure a general sense of efficacy or "confidence." Bandura (1997) argued

that such general measures create problems of predictive relevance and have an obscured

validity. General self-efficacy instruments provide global scores that decontextualize self-efficacy, and transform self-efficacy into a generalized personality trait rather than the context specific judgment. Bandura (1997) continues to suggest these instruments assess an individual's general confidence in which he or she can succeed at tasks and in situations without specifying what these tasks or situations are. Various researchers have assessed general academic self perceptions of competence (Multon, Brown, & Lent, 1991). The problem with such assessments is that students must make judgments about their academic capabilities without a clear activity or task in mind. Situation specific assessments, such as asking students to provide their level of confidence to learn mathematics or writing, are more explanatory and predictive than all-inclusive measures and are preferable to general academic judgments. They are, however; inferior to task specific judgments because the sub contexts can differ markedly in the skills required. Academic domain specific assessments of self-efficacy are especially common in educational research because the outcome tasks such as semester grades or achievement test results that are often used, do not lead to a true self-efficacy assessment.

The typical strategy of researchers in this regard is to use multiple items to restate different facets of the same academic subject. It is not unusual for a mathematics self-efficacy scale to be populated with items such as "I am confident about my ability to do the work in this class"; "I am certain I can understand the math presented in this class"; and "I am confident I can perform as well or better than others in this class." Although high internal consistency is ensured, such assessments primarily provide a redundant measure of the general domain (Wigfield, & Karpathian, 1991).

Bandura (1986) said that precise judgments of capability matched to a specific outcome allow for the greatest prediction and also offer the best explanations of behavioral outcomes, because these are the judgments that individuals use when confronted with these behavioral tasks. This is an especially critical issue in studies that attempt to establish causal relations between beliefs and outcomes.

Bandura (1986) observed that there are a number of conditions under which self-efficacy beliefs do not perform their influential, predictive, or directive role. In some cases students may possess the necessary skill and high self-efficacy required to reach achievement, but they may choose not to utilize their skills, because they lack the necessary incentives. Self-efficacy will also have no bearing on performance, if schools lack the effective teachers, necessary equipment, or resources required to aid students in an adequate nature. Bandura (1986) suggests that when social constraints and inadequate resources impede academic performances, self-efficacy may exceed actual performance because it is not so much a matter that students do not know what to do, but rather that they are unable to do what they know. There is need to explore the role that schools play as social systems for developing and cultivating self-efficacy beliefs as well as the roles that the various incentives and disincentives such systems create play in the development of students' self-efficacy (Bandura, 1997). Research is sparse in relating or comparing self-efficacy and its role in goal orientation. An individual's belief that he or she can accomplish a given task leads to his or her goal orientation. Once an individual knows he or she can do the task, he or she will tackle the task with one of two orientations: task orientation or ego orientation.

Nicholls' Goal Orientations in the Classroom

Nicholls (1984) suggests that individuals develop a tendency to become task and/or ego oriented in any particular achievement situation. In his classroom research, Nicholls (1984) investigated the motivation related correlates and characteristics of task and ego goal orientations. These included factors such as task choice, beliefs about the causes of success, attributions, and performance. In his studies (Nicholls, 1984; Nicholls, Cheung, Lauer, & Patashnick, 1989) Nicholls employed the motivational orientation scales, a classroom specific measure incorporating task and ego orientation factors. Items on the task scale centered mainly on learning, working hard, understanding, problem solving, and keeping busy; whereas the ego scale comprised statements centered on doing better than others, scoring higher than others, or being the only person who could answer questions. Nicholls (1984) had little opportunity to consolidate his research, particularly in the constructs of task and ego involvement. It follows that some of the conceptual and measurement concerns might have been forestalled had Nicholls been able to develop his research to a more mature stage. In sport psychology there appears to be a reasonable foundation of knowledge about the characteristics, determinants, and consequences of the task and ego goal orientations.

Goal Orientations in Sport

Duda (1987) provided a more detailed application of Nicholls approach to the domain of sport. While making some critical distinctions between cognitive tasks in the classroom and physical tasks in sport, Duda provided a strong and clear cause for applying the tenets of Nicholls theory to the sport achievement domain.

Task Orientation

A high task orientation has been passively associated with a high level of enjoyment. From this perceptive, hard work is seen as necessary for success and indicates potential for learning. Failure is understood as useful feedback about the effectiveness of one's learning strategy. In a sample of elite skiers White and Duda (1994) found task oriented skiers believed success resulted from ability and high effort. Another study (Duda & Nicholls, 1992) found that task oriented high school students believed that success required interest and effort. Even in a bowling class that emphasized learning, researchers (Duda, Chi, Newton, Walling, & Catley, 1995) found goal orientations predicted contentment and enjoyment. In this case, task orientation related to less worry, more enjoyment, and the belief that effort would contribute to performance.

Ego Orientation

In contrast, support for an ego orientation has been associated with negative links to factors in the aforementioned studies. Some studies (Newton & Duda, 1993; Treasure et al., 2001; Jagacinski & Duda, 2001) have demonstrated that goal orientations carry implications for individuals' theories of ability. Ego goals imply a theory of ability as fixed. From this view, effort is seen as indicative of a lack of natural ability and failure is interpreted as having a low level of ability. When examining the goal orientations of skiers, White and Duda (1994) found that ego oriented skiers believed success stems from superior ability, an illegal advantage and external factors (such as luck). Opposed

to those high in task orientation, participants in a beginning bowling class, who were high in ego orientation related to the belief that ability would contribute most to performance.

"States" of Goal Orientation versus Orthogonal Orientations

Goal orientations are considered to be states of goal involvement. This means that one cannot be task and ego involved at the same moment in time. Publications often quote the orthogonal nature of task and ego orientation and reinforce how Nicholls theory lies at odds with Dweck's (1986) bipolar continuum of achievement goals, which suggested that if individuals are high in learning orientation they must be low in performance orientation and vice versa. Nicholls (1984) however was never clear on whether states of goal involvement are orthogonal or not. Originally he stated, research with adults revealed that evaluative conditions and interpersonal competition increased an individual's level of ego involvement, tendency to evaluate, and ability relative to that of others. An individual's involvement in the task for its own sake and the tendency to feel competent simply when he or she gains insight or competence is thereby diminished.

Goal Profiling

The perceived independent nature of task and ego orientation constructs means that individuals could vary in levels of each orientation. For example, individuals could possess a high level of task orientation and a low level of ego orientation or perhaps any of the other three basic combinations (i.e., high in both orientations, low in both orientations, or high in one orientation and low in the other orientation).

Dispositional tendencies to be task and/or ego involved in sport achievement situations are perhaps best viewed as the orthogonal cognitive schemata that are socialized within the childhood years and may continue to be shaped into adulthood. The orthogonal nature of task and ego orientation means that individuals could vary in their levels of task and ego orientation. With this socialization process in mind, the term *goal orientation profile* reflects the intensity of each achievement goal that is socialized within the individual.

In sport psychology (Hodge & Pettichkoff, 2000) these dispositional combinations are more popularly termed goal profiles. For example, an athlete could be high in task (wanting to learn a new skill) and high in ego (wanting to perform this new skill better than others). The development of such dispositional task and ego goal orientations was thought to occur primarily as a function of socialization experiences. Despite levels of goal orientation, however, some research stresses that the activation of task and ego involvement depended greatly on situational properties, namely the task and/or ego involving structure of the achievement context.

Nevertheless investigations incorporating a goal profiling methodology have somewhat suppressed the negative spin that has characterized an ego orientation (Nicholls et al., 1989; Pintrich & De Groot, 1990). Specifically these studies have found that when a moderate to high ego orientation is combined with a corresponding level of task orientation, positive cognitive motivational outcomes may be evident. In short, goal orientations emphasize an individual's understanding of the nature and meaning of achievement situations.

Given that task and ego goal orientation have different cognitive and motivational implications; their combined impact might be different than the independent effect of being classified as either task or ego dominant. Therefore, a goal profile considers the two goal orientations, task and ego, in combination to generate groups of individuals with similar response ratings on each scale. Unfortunately achievement goal theorists have forwarded no predictions regarding the relationship between specific goal profiles and perceptions of physical ability. Hence, a major conceptual challenge has surfaced for researchers employing a social cognitive approach to achievement motivation to determine whether goal orientations should be examined independently as task or ego dominant or as a goal profile. Interest in both ego and task orientation has dominated research on motivation in educational and sport settings. Characteristic patterns of behavior have been associated with both task and ego orientations. These orientations emerged from dispositional preference for task or ego goals and situational influences (White & Duda, 1994).

Task Orientation and Ego Orientation in Various Studies

When an individual is ego involved, working hard to achieve success is not sufficient to show that he or she is able. Instead he or she must perform better than others by exerting the same level of effort or performing equally with less effort. Nicholls (1984) research has shown that individuals who are ego involved may become ineffective when they encounter performance difficulties in an achievement situation and express negative affect in the end, and blame their difficulties on a lack of ability.

Swain and Harwood (1996) assessed the interactive contribution of dispositional and situational factors on the precompetition goal involvement states of youth swimmers. Moderated hierarchal regression analyses showed how pre race levels of task and ego involvement were predicted not only by dispositional goal orientation, but also by individual perceptions of situational factors (i.e., influences from society, self, coaches, and peers). In Swain and Harwood's (1996) study they integrated both dispositional and situational criteria in order to examine the relative ability to predict "state" goals of task and ego involvement in a sample of age group swimmers (n = 214). The Task and Ego Orientation in Sport Questionnaire (TEOSQ) (Duda & Nicholls, 1992) and several single-item assessments of goal orientation represented the dispositional measures. The situational antecedents of task and ego involvement were assessed by an 11-item Race Context Questionnaire (RCQ) (Swain & Harwood, 1996), which was administered to the swimmers within 1 hour of their main event at their county championships. The RCQ also assessed the extent to which the swimmer had set task and ego goals for the upcoming race (i.e. "state" goals). Factor analysis of the RCQ revealed four factors which cumulatively accounted for 65.3% of the variance: social and personal perceptions of ability; perceived state goal preference of significant others; race outcome value; and perceived readiness. Specifically, social perceptions and race specific criteria were the two major predictors of ego involvement, whereas the level of task orientation combined with the above situational factors (social and personal perceptions of ability; perceived state goal preference of significant others; race outcome value; and perceived readiness)

seemed to exert greater influence in determining the intensity of task involvement in age group swimmers.

Harwood and Swain (1998) reinforced the salience of contextual influences on pre competition achievement goals within a study of elite junior tennis players. The aim of their 1998 study was to integrate both dispositional and situational factors to examine their interactive ability to predict pre competitive goal states of task and ego involvement in a sample of National junior tennis players. The TEOSQ and a set of single-item assessments of match goal orientation represented the dispositional measures in the study. The situational antecedents of pre match task and ego involvement were assessed by an 11-item Match Context Questionnaire (MCQ) (Harwood & Swain, 1998), which was administered to the players (n = 119) within 1 hour of their singles match start time at the National Junior Championships. The MCQ also measured the personal task and ego involved goal states of the player with respect to the upcoming singles match (i.e. "state" goals). Factor analysis of this questionnaire revealed three situational factors which cumulatively accounted for 64.7% of variance in the match context: social and personal perceptions of ability; perceived state goal preference of significant others; and match value. Specifically, perceptions of significant others, the achievement value of the match and perceptions of ability were the major predictors of task involvement. The pre match intensity of "state" ego involvement was predicted by ego orientation combined with perceptions of significant others and match value. Again, Harwood & Swain (2001) examined this concept by investigating three situational factors; match-specific perceptions of ability; the perceived importance and the value of the match; and the

players' perceptions of the achievement goal most preferred and recognized by parents, coaches and the national governing body. The 2001 study formed the first of two (Harwood & Swain 2001; 2002) investigations into the development and activation of achievement goals within athletes. The first study looked at identifying and understanding some of the underlying factors and processes responsible for the socialization of goal orientations and the activation of goal involvement states in a competition context. In-depth interviews were conducted with seventeen elite junior tennis players. Following a content analysis, four general dimensions emerged demonstrating how the development and activation of task and ego goals rested on a complex interaction of cognitive-developmental and social environmental factors. Specific general dimensions included cognitive developmental skills and experiences, the motivational climate conveyed by significant others, the structural and social nature of the game, and the match situation. The detail of these dimensions extends our knowledge of achievement goals. These influences emerged as more powerful predictors of pre match task and ego involvement than dispositional goal orientation.

Conclusion

Social cognitive theory plays a key role in Bandura's work with self-efficacy. As the literature has shown, self-efficacy is an individual's perceived ability. How people behave can often be better predicted by the beliefs they hold about their own capabilities, than by what they are actually capable of accomplishing. These self-efficacy perceptions help determine what individuals do with the knowledge and skills they possess. An individual's behavior can be associated with either task and/or ego orientation. When

individuals are task oriented, they have the tendency to base their competence on

improvement as well as effort. Also, the literature displayed the definitions and roles of

both task and ego orientation. Both examples from Nicholls were looked at, in the

classroom and in sport. The nature of goal orientation, to be "states" of goal involvement

or orthogonal was highlighted. The term goal profiling was discussed and described

individuals who have one of four combinations of goal orientation (i.e., high task/high

ego, high task/low ego, low task/high ego, and low task/low ego). The researcher seeks

to identify a relationship between the variables; self-efficacy and goal orientation for each

group of students (intramural and varsity athletes). In addition, the researcher aims to

identify any differences between the intramural and varsity athletes.

Chapter 3

Methodology

Introduction

In this chapter, the quantitative methods used to conduct this study are presented. The design, sampling techniques, instruments used to measure the major variables and their appropriateness to this study, ethical considerations, data gathering procedures, and that analysis techniques are described and justified.

Research Design

This is an exploratory study designed to investigate the goal orientation among intramural and varsity athletes. The literature review suggests that in order to effectively measure the relationship between the intramural and varsity athletes, a common domain must be identified. For this proposal, varsity athletes were distinguished from intramural athletes by means of the level of their sport participation. By assessing both varsity athletes and intramural athletes, the populations were defined, and the sport domain provided an effective common ground in which to measure goal orientation. The literature review emphasized the relationship between self-efficacy and goal orientation, thus this study considered self-efficacy as another variable. Despite the fact that both self-efficacy and goal orientation are context-specific variables researchers have proposed the General Self-Efficacy Scale to measure self-efficacy. Bandura's argued against general measures and for the effectiveness of context-specific measurements.

This study looked at both scales and assessed the differences between the generalized

self-efficacy scale and sport specific self-efficacy scale.

Subjects

The sample for this study consisted of undergraduate intramural and varsity

athletes at a single university in the Southeast United States (N= 485). Subjects (n=56)

who volunteered to participate were both intramural (n = 23) and varsity athletes (n = 33)

at a university in the Southeast United States. Through a sample of convenience all

students from the university were asked to participate. Subjects were asked to participate

with no regard to sport or position held on a team. Participation in the study was

voluntary. The subjects completed the General Self-Efficacy Scale, Sport-Specific Self-

Efficacy Scale, and Task and Ego Orientation in Sport Questionnaire.

Variables

The independent variables were intramural and varsity athletes. The dependent

variable was the scores on the General Self-Efficacy Scale, Sport-Specific Self-Efficacy

Scale and the Task and Ego Orientation in Sport Questionnaire.

Instruments

The Task and Ego Orientation in Sport Questionnaire (TEOSQ) (Duda &

Nicholls, 1989) is a 13 item questionnaire. The TEOSQ has two subscales, one measuring

task orientation and the other ego orientation. There are 7 task questions and 6 ego

questions. Before completing the questionnaire, the subjects were asked to think of a time

when they felt most successful in their sport and answer the questions based on this. The

answers were indicated on a 5 point Likert-type scale, where 1 = strongly agree and 5 =

strongly disagree (Chi & Duda, 1995; Zahariadis & Biddle, 2000). A mean score was

then calculated for each participant and by adding all the scores for all the task orientated

questions and dividing by 7 and doing the same for the ego orientated questions but

dividing by 6. This gave a mean score between 1 (low) and 5 (high) (Duda et al., 1995;

Newton & Duda, 1993).

Internal reliability was determined for the TEOSQ by Duda et al. (1995) with two

samples. In sample 1, they used 107 undergraduate students, and reached alphas of .72

for task orientation and .82 for ego orientation. In their second sample they provided

alphas of .83 for task and .78 for ego, with a sample of 121 undergraduate students. In

work by Zahariadis & Biddle (2000) they found alphas of .83 and .86 for task and ego

orientation. Finally, White & Duda (1994) also found alpha scores of .77 and .91 for task

and ego orientation. All these studies support the work of Duda et al. (1995) on

reliability, and the differences between the scores can be attributed to sample size and

demographic differences. Test-retest reliability was demonstrated by Duda and Nicholls

(1992) where they obtained a score of .68 for task orientation and .75 for ego orientation.

For the purpose of this study, no reliability tests were conducted.

Concurrent validity for the TEOSQ was shown by Duda & Nicholls (1992) where

2 studies were done. In the first study, the TEOSQ was administered to 205 high school

students. From the results it was found that high positive correlations emerged between

the sport task and ego orientation scale scores and their counterpart measures in the

classroom. This was confirmed by a second sample of undergraduate students. From this

it can be seen that the TEOSQ is valid in regard to sport. Validity was also shown by

Zahariadis & Biddle (2000). They found through a correlation analysis that skill development, competition, and team incentives were highly related to task orientation. The canonical correlation analysis by Zahariadis & Biddle (2001) showed skill development/competition and team atmosphere incentives to be highly related to task-orientation, supporting previous research (White & Duda, 1994). In addition, task orientation was negatively associated with the motive of status/recognition. Initially one might expect ego, not task, orientation to correlate with competition. However, the task oriented individuals can be "competitive" (Duda, 1993), but will be judging their competence in self-referenced terms and "doing their best" in the competitive context. Ego orientation was associated clearly with status/recognition incentives. This supports the view that externally-referenced (ego-oriented) individuals are motivated by more extrinsic factors (Nicholls, 1989; White & Duda, 1994). Results support the view that a task orientation is motivationally positive as it is associated with more intrinsic reasons for involvement.   For the purpose of this study, no validity tests were conducted.

The General Self-Efficacy Scale (GSES) was developed by Matthias Jerusalem and Ralf Schwarzer (1992). The scale contains ten items designed to assess the self-beliefs one has to cope with various demands in life. The scale was then validated by other researchers, Zhang (Zhang & Schwarzer, 1995) and Wang (1998). The scale has a Cronbach's alpha ranging form .76 to .90. The GSES is suitable for a broad range of contexts. The scale is usually self-administered, as part of a more comprehensive questionnaire. The 10 items are usually mixed at random into a larger pool of items that have the same response format. Responses are on a 4-point scale (1 = Not all true, 2 =

Hardly true, 3 = Moderately true, and 4 = Exactly true). For the purpose of this study no

reliability or validity tests were conducted on the GSES.

Due to a general self-efficacy instrument providing global scores and possibly

decontextualizing self-efficacy, a context-specific scale was be used as a comparative

instrument to the GSES. Based on Bandura's (2001) guide to constructing a spot specific

self-efficacy scale (SSSES), the scale contained 10 items with sport-specific words (i.e.,

basketball game, soccer game, and so forth) for each subject. The responses were on a 4-

point Likert Scale (1 = Not all true, 2 = Hardly true, 3 = Moderately true, and 4 = Exactly

true). For the purpose of this study no reliability or validity tests were done on the

SSSES.

Procedures

Permission to use all questionnaires in the Instrument section was based on

"educational purposes" disclaimer found on each author's website and in previous

articles. Permission from the University and Associate Athletic Director to distribute the

questionnaires described earlier to both varsity athlete and intramural athletes was

obtained through correspondence. The intramural director was also contacted with regard

to contacting intramural athletes to inform them of the study. Subjects from the varsity

athlete group were approached before and after practice with permission from their

respective coaches.   The intramural athletes were approached before, during, and after

the intramural basketball tournament. Both groups met in a classroom and received

instructions as stated on the questionnaires. They were then given approximately thirty

minutes to complete the questionnaire. Subjects wishing to participate in the study

received a consent form explaining the voluntary nature of the survey. The subjects were

informed that the purpose of the study was to better understand the self-efficacy and goal

orientation in intramural and varsity athletes; which wi=ould assist administrators in key

decision making strategies that couldl affect the intramural and varsity athlete's

interactions with the administrators. Those Subjects who chose to participate were asked

to complete the General Self-Efficacy, Sport-Specific Self-Efficacy Scale and the Task

and Ego Orientation in Sport Questionnaire. After these questionnaires were

administered, the answers were calculated and the results are discussed in chapters 4 and

5.

Analysis

Descriptive statistics were used to describe the mean, standard deviation, and

range for the particiapants.   The results were also analyzed by using the Pearson Product

Moment Correlation for self-efficacy, and goal orientation as they related to intramural

and varsity athletes. Correlations were used to determine the relationship between the

variables. The coefficient of correlation is a quantitative value of the relationship

between two or more variables. This coefficient can range from .00 to 1.00 in either a

positive or negative direction. The following tables and scatter plots illustrate the

relationships between the general self-efficacy scale, the sport specific self-efficacy scale,

task orientation, and ego orientation. Pearson correlation coefficient was run on the

dependent variables to determine if any relationship was present for the two groups,

intramural and varsity athletes. After identifying the correlations between the variables,

the independent *t* test was administered to ascertain whether the intramural and varsity

athletes means differed significantly from each other.

In order to classify the subjects into goal profile groups, a cluster analysis was

used. This technique has been used for exploratory studies and is designed to classify

data by sorting subjects into groups or clusters. This technique is used when the degree

of association is strong between the members of the same cluster and weak between

members of different clusters. Cluster analysis has been used to examine varying goal

profiles (Hodge & Petlichkoff, 2000). The cluster analysis procedure was designed to

generate subgroups from a sample of participants. Each subgroup is designed to

represent a homogeneous cluster. This procedure assumes data fall into a known number

of clusters (SPSS, 2005). For this study three clusters were assumed (Hodge &

Petlichkoff, 2000). Given this number, SPSS assigned participants to one of the three

clusters based on each participant's mean score for both ego and task orientation.

Chapter 4

Results

Descriptive Statistics

Table 1 represents the descriptive statistics for all participants combined for ego orientation, task orientation, the General Self-Efficacy Scale (GSES) and the Sport Specific Self-Efficacy Scale (SSSES). The Ego Mean for all participants was 2.18, with a range of 4 and standard deviation of .950. The Task Mean was 4.09, with a range of 3 and a standard deviation of .609. The General Self-Efficacy Scale held a 3.37 mean, with a range of 1, and a .323 standard deviation. Finally, the Sport Specific Self-Efficacy Scale had a mean of 3.48, a range of 1 and a standard deviation of .359. The table displays the mean, standard deviation and range for each dependent variable.

Table 1

Descriptive Statistics

	Range	Mean	Std. Deviation
Ego Orientation	4	2.18	.950
Task Orientation	3	4.09	.609
GSES	1	3.37	.323
SSSES	1	3.48	.359

Mean Scores

Table 2 represents the mean scores for ego orientation and task orientation. Intramural athletes had a mean ego orientation of 3.14; varsity athletes had a mean score of 1.56. The latter part of the table gives the mean score for task orientation, in which intramural athletes had a mean of 3.70, and varsity athletes had a mean of 4.35.

Table 2

Mean Scores

Goal Orientation	Range		Mean		Standard Deviation	
	Intramural	Varsity	Intramural	Varsity	Intramural	Varsity
Ego	3	1	3.14	1.56	.797	.290
Task	3	1	3.70	4.35	.703	.366

Correlations

Table 3 represents the correlation between the Ego Mean of both groups

and its relationship with both the General Self-Efficacy Scale and Sport Specific Self-

Efficacy Scale. The data shows that there is significant negative relationship (-.671)

between Ego and the Sport Specific Self-Efficacy Scale. Chart 1 also displays the

relationship. As the participant's ego orientation declines, their perceived self-efficacy

score increases. However there is no suggested relationship between the Ego Mean and

General Self-Efficacy Scale.

Table 3

Correlations

	Ego Mean	GSES Mean	SSSES Mean
Ego Mean	1	.082	-.671**
GSES Mean	.082	.1	.195
SSSES Mean	-.671**	.195	1

** Correlation is significant at the 0.01 level (2-tailed).

Chart 1

Correlation of Ego Orientation and Sport Specific Self-Efficacy Scale_____

Intramural or Varsity Athlete
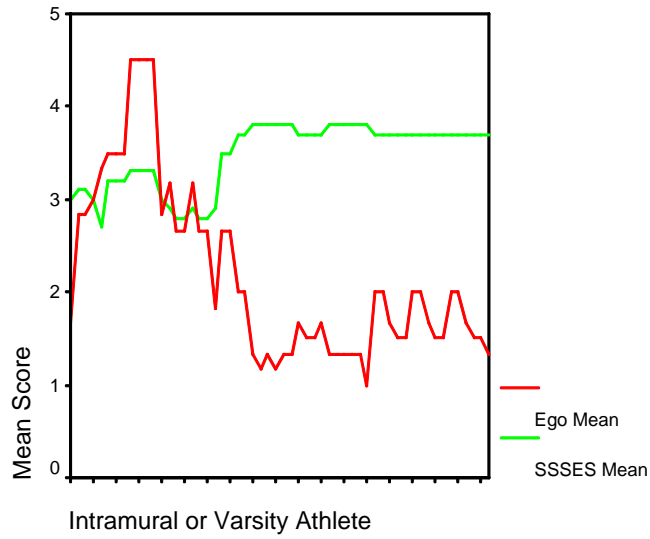
Table 4 below represents the relationship between the Task Mean and both General Self-Efficacy Scale and the Sport Specific Self-Efficacy Scale. The data shows that there is a positive relationship (.564) between the Task Mean and the Sport Specific Self-Efficacy Scale.

Table 4

Correlations

	GSES Mean	SSSES Mean	Task Mean
GSES Mean	1.	.195	.239
SSSES Mean	.195	1	.564**
Task Mean	.239.	.564**	1

** Correlation is significant at the 0.01 level (2-tailed).

Chart 2

Correlation of Task Orientation and Sport Specific Self-Efficacy Scale_____
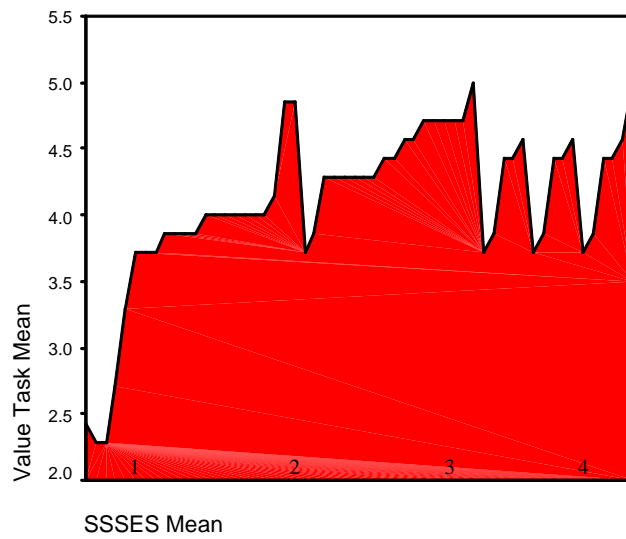
T-Tests

The Independent-Samples T-Test procedure compares means for two groups of cases. The following T-tests were run to determine any differences between the two groups (intramural and varsity athletes). First, a T-test was run on the independent variables and Task Orientation. Table 5 displays the number of cases, mean value, standard deviation, and standard error for the test variable(s) (Task and Ego, General Self-Efficacy Scale and Sport Specific Self-Efficacy Scale) within categories defined by the grouping variable (intramural or varsity athlete). Since the Independent Samples T Test procedure compares the two group means, it is useful to know what the mean values are.

Table 5

<u>Group Statistics</u>

	Athlete	N	Mean	Std. Deviation	Std. Error Mean
Task Mean	Intramural Athlete	22	3.70	.703	.150
	Varsity Athlete	34	4.35	.366	.063

Independent-Samples T-Test procedure compares means for two groups of cases. The

mean values for the two groups are displayed in the Group Statistics table. If the

significance value for the Levene test is high (typically greater that 0.05), then the results

that assume equal variances for both groups should be used to analyze the data. If the

significance value for the Levene test is low, then the results that do no assume equal

variances for both groups should be utilized for analyzing the data. A low significance

value for the T-test (typically less than 0.05) indicates that there is a significant difference

between the two group means. Table 6 represents the T-Test Procedure for Task

Orientation in both groups. The value for Levene's Test for Equality of Variances is

below .05, with a value of .028. For task, it is assumed that there are not equal variances

for the intramural and varsity athletes. For this T-Test procedure, there is no significant

relationship, t = - 3.987. On the T-test for Task Orientation, there is no significant

difference between the intramural and varsity athletes.

Table 6

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					90% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Task Mean	Equal variances assumed	5.083	.028	-4.523	54	.000	-.65	.143	-.887	-.408
	Equal variances not assumed			-3.987	28.458	.000	-.65	.162	-.924	-.371

The t-test procedure compares means for two groups. The following t-test represents the differences between both groups (intramural and varsity athletes) on Ego Orientation. The following table (see Table 7) displays the number of cases, mean value, standard deviation, and standard error for the test variable (s).

Table 7

Group Statistics

	Intramural or Varsity Athlete	N	Mean	Std. Deviation	Std. Error Mean
Ego Mean	Intramural Athlete	22	3.14	.797	.170
	Varsity Athlete	34	1.56	.290	.050

The Independent-Samples T-Test procedure compares means for two groups (intramural and varsity athletes). The mean values for the two groups are displayed in the Group Statistics table. The significance value for the Levene test is .000, and then the results that do not assume equal variances for both groups should be used to analyze the data. The value for the t-test is 8.950, which indicates that there is not a significant difference between the two group means. The table below (see Table 8) represents the T-Test Procedure for Ego Orientation in both groups. On the t-test for Ego Orientation, there is no significant difference between the intramural and varsity athletes.

Table 8

Group Statistics

	Intramural or Varsity Athlete	N	Mean	Std. Deviation	Std. Error Mean
GSES Mean	Intramural Athlete	22	3.39	.359	.077
	Varsity Athlete	34	3.35	.302	.052

	Intramural or Varsity Athlete	N	Mean	Std. Deviation	Std. Error Mean
SSES Mean	Intramural Athlete	22	3.07	.235	.050
	Varsity Athlete	34	3.74	.049	.008

Table 9 represents the t-test procedure which compares means for both intramural and varsity athletes. The following t-test represents the differences between both groups (intramural and varsity athletes) on both the General Self-Efficacy Scale and the Sport Specific Self-Efficacy Scale. The following table displays the number of cases, mean value, standard deviation, and standard error for the test variable(s).   The significance value for the Levene test on the General Self-Efficacy Scale is .298, and then the results that do not assume equal variances for both groups should be used to analyze the data. The value for the t-test for the GSES is .362, which indicates that there is not a significant difference between the two group means. The significance value for the Levene test on the SSSES is .000, showing that there is no equal variance for both groups. The t value for the SSSES is .000. Both of these values show a difference between intramural and varsity athletes and each group's mean score on the SSSES. Table 10 represents the T-Test Procedure for both the GSES and SSSES in both groups.

Table 9
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					90% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Ego Mean	Equal variances assumed	16.811	.000	10.603	54	.000	1.59	.150	1.335	1.835
	Equal variances not assumed			8.950	24.629	.000	1.59	.177	1.282	1.888

Table 10

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					90% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
GSES Mean	Equal variances assumed	1.105	.298	.376	54	.709	.03	.089	-.115	.182
	Equal variances not assumed			.362	39.358	.719	.03	.092	-.122	.189
SSES Mean	Equal variances assumed	59.164	.000	-15.972	54	.000	-.66	.041	-.732	-.593
	Equal variances not assumed			-13.024	22.159	.000	-.66	.051	-.750	-.575

Goal-Profile Groups

Goal-profile groups were generated via the cluster-analysis procedure. This procedure included task and ego orientation scores to classify participants into goal-profile groups. A similar method was used previously by Hodge and Petlichkoff (2000). A nonhierarchal clustering method was used with a squared Euclidean distance to classify participants based on their task and ego orientation subscale scores. The final clustering maximized the between group variance and minimized the within group variance.

SPSS (2005) gives the values for the initial cluster centers of ego orientation. The values are the means for ego orientation within each initial cluster. The mean value of cluster 1 (low ego) for the initial cluster is 1. The second initial cluster indicates a mean value of 3 (moderate ego), and the final initial cluster has a mean value of 5 (high ego). By default, SPSS chooses participants or cases, which is dissimilar and uses the values of these cases to define the initial clusters.

Each participant was classified into one of the three clusters. The distance from center value indicates how representative each case is of its cluster. Small values indicate cases that are typical of the cluster. Large values indicate cases that are not very representative of the cluster.

Table 12 shows the values for the final cluster centers. The values in the table are the means for each variable within each final cluster. The final clusters centers reflect the attributes of the prototypical case for each cluster.

Table 12

Final Cluster Centers (Ego Orientation)

Cluster	1	2	3
Ego Mean	2	3	5

Table 13 shows the Euclidean distances between the final cluster centers. Large values indicate clusters that are very different from each other. Small values indicate clusters that are not so different from each other.

Table 13

Distances between Final Cluster Centers (Ego Orientation)

Cluster	1	2	3
1		1.410	2.931
2	1.410		1.521
3	2.931	1.521	

Table 14 shows the values for the final cluster centers. The values in the table are the means for each variable within each final cluster. The final clusters centers reflect the attributes of the prototypical case for each cluster.

Table 14

Final Cluster Centers (Task Orientation)

Cluster	1	2	3
Task Mean	4	2	5

Table 15 shows the Euclidean distances between the final cluster centers. Large values indicate clusters that are very different from each other. Small values indicate clusters that are not so different from each other.

Table 15

Distances between Final Cluster Centers (Task Orientation)

Cluster	1	2	3
1		1.505	.684
2	1.505		2.188
3	.684	2.188	

Chapter 5

Discussion

The purpose of this study was to identify goal orientation in both intramural and varsity athletes. In so doing the following research question was asked: Which group of students (intramural or varsity athletes) were more likely to be task oriented? According to an analysis of the means for the task orientation subscale, varsity athletes were more likely to be task oriented (m = 4.35). In recent years, sport psychology researchers have consistently emphasized task orientation as a means to maximize positive achievement behaviors in sport (Duda, 1993, 1987). In 2000, Hodge and Petlichkoff found rugby players to be relatively high on the task subscale (4.14).

The second research question asked: Which group of students (intramural or varsity athletes) were more likely to be ego oriented? According to an analysis of the means for the ego orientation subscale of the TEOSQ, intramural athletes were more likely to be ego oriented (m = 3.14). However, the interpretation of the mean scores is only a reflection of this sample and merely shows the mean score of the both groups. In so doing, they have implied that high levels of ego orientation are negative. Yet research has also indicated that athletes generally consist of a balance between ego and task orientation. Moreover, some studies have suggested that a high level of ego orientation is not necessarily bad when it is paired with a high level of task orientation (Duda, 1987; Swain & Harwood, 1996). In 2000, Hodge and Petlichkoff found rugby players to be at a midpoint on the ego subscale, (2.84). They suggested that the issue is not of increasing

task orientation, but of achieving a complementary balance of moderate to high levels of both task and ego orientation.

In order to further examine goal orientation, research question three asked: Which goal-profile group are students (intramural or varsity athletes) more likely to fit in? The cluster analysis procedure provided goal-profile groups based only on ego and task orientation subscales' variation above or below the mean. This procedure magnified the between-group differences, displaying each participant in one of 7 goal-profile groups (Low Ego/Low Task; Moderate Ego/ Low Task; Low Ego/High Task; Moderate Ego/High Task; High Ego/Moderate Task; Low Ego/Moderate Task; and Moderate Ego/Moderate Task).   Intramural athletes were more likely to fit into the following goal profile groups: Low Ego/Low Task; Moderate Ego/ Low Task; Moderate Ego/High Task; Low Ego/Moderate Task; and Moderate Ego/Moderate Task. Varsity athletes were more likely to fit into the following goal profile groups: High Ego/Moderate Task and Low Ego/High Task.

Their cluster-analysis results supported Hodge and Petlickhoff's (2000) notion of a complementary model. They also suggested that a perceived ability or competence was associated with having a high ego/moderate task profile.   If the concept of complementary goal profiles were found to be of merit, it appears logical to also explore the degree to which the two goal orientations need to complement one another in order for adaptive motivational behaviors to emerge. The two goal orientations might not need to be perfect integrated matches, but to some degree a complementary pair (Duda, 1987; Hodge & Petlichkoff, 2000). Unfortunately, many previous goal orientation researchers

have only discussed these two orientations from either a task or ego dominant perspective and by default, have tended to portray them as bipolar rather than as the orthogonal constructs that the data clearly indicate them to be. Future research using cluster-analysis methods regarding goal -profile groups should be done. A series of investigations is needed to determine whether a similar goal orientation profile can be identified in other samples of sport participants.

The goal of this study was to identify any similarities or dissimilarities, as well as any relationship between goal orientations and the other independent variable, self-efficacy. The author approached the issue of self-efficacy by beginning with an inquiry into what actions could improve social perceptions of athlete's behaviors. One approach led to an investigation of the role of self-regulation in the realm of sport. From the results, it seems that cognitive regulation is a key to opening an athlete's eyes to their own capability to use fundamental skills to support their natural abilities. Duda and Nicholls (1992) predicted that task orientation in sport would be more likely among those with high self-efficacy. As the results with this sample show, athletes who scored high on task orientation also scored high on the self-efficacy measure. Moreover, the individual's personal characteristics such as age, gender, ethnicity, thoughts, emotions, goals, beliefs, expectations, self-evaluation, and sociocultural factors also influence his or her behavior. Unfortunately, this study did not examine any other factors. Class was looked at in regard to the intramural athletes. However, due to a small sample size, no significant findings were reported. The matching was successful in that the intramural and varsity athletes were similar in regard to age, class and high school experience. The

sample (n=56) consisted of 54 males and 2 females. Unfortunately this study was

conducted towards the end of the semester and athletes were difficult to attain for the

study, therefore causing a disproportionate ratio of males and females. However few

studies have shown significant differences between males and females in goal orientation

(Parajes, Britton, & Valiante, 2000; Everhart, 1998).

The stigma that exists with the athletic culture is often the only view shown in the

media. For example, despite the Detroit Piston's winning streak and return as the NBA's

National Champions, they still carry the name as the "Bad Boys of the NBA" for

previous occurrences of fighting during their games. Whether or not coaching strategies

or interventions based on measured goal orientations, applied to the Detroit Piston's,

would cause significant behavioral changes is not the goal behind this study. However,

the goal of this study was to provide assistance to sport administrators in understanding

the goal orientation of athletes, such as junior elite tennis players. In understanding goal

orientation, then tournament directors, tennis coaches, personal trainers, and significant

others (i.e., parents or peers) can apply coaching strategies, training schedules,

educational workshops, and other techniques that could be beneficial to the athletes, or

tennis players. These benefits can translate into behavioral or attitudinal changes in

performance, pre-competition routines, practices, and so forth. With future research

concentrating on a complementary outlooks of goal orientation, other variables such as

self-efficacy, and given little to no limitations on time; these benefits will be shaped into

positive, effective outcomes on and off the court.

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Appendices

Appendix A

Task and Ego Orientation in Sport Questionnaire

Directions: Please read each of the following statements listed below and indicate how much you personally agree with each statement by circling the appropriate response.

(Remember when you have felt most successful in a sport)

I feel most successful in sport when…

1.   I'm the only one who can do the play or skill
strongly disagree   disagree   neutral   agree   strongly agree

2.   I learn a new skill and it makes me want to practice more
strongly disagree   disagree   neutral   agree   strongly agree

3.   I can do better than my friends
strongly disagree   disagree   neutral   agree   strongly agree

4.   The others can't do as well as me
strongly disagree   disagree   neutral   agree   strongly agree

5.   I learn something that is fun to do
strongly disagree   disagree   neutral   agree   strongly agree

6.   Others mess up "and" I don't
strongly disagree   disagree   neutral   agree   strongly agree

7.   I learn a new skill by trying hard
strongly disagree   disagree   neutral   agree   strongly agree

8.   I work really hard
strongly disagree   disagree   neutral   agree   strongly agree

9.   I score the most points/goals/hits, etc.
strongly disagree   disagree   neutral   agree   strongly agree

10.   Something I learn makes me want to go practice more
strongly disagree   disagree   neutral   agree   strongly agree

11.   I'm the best
strongly disagree   disagree   neutral   agree   strongly agree

12.   A skill I learn really feels right
strongly disagree   disagree   neutral   agree   strongly agree

13.   I do my very best
strongly disagree   disagree   neutral   agree   strongly agree

Appendix A *(Continued)*

Task and Ego Orientation Questionnaire Scale

1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree

Mean scale score for Ego Orientation = (E1 + E2 + E3 + E4 + E5 + E6)/6

Mean scale score for Task Orientation = (T1 + T2 + T3 + T4 + T5 + T6 + T7)/7

I'm the only one who can do the play or skill **(E1)**

I learn a new skill and it makes me want to practice more **(T1)**

I can do better than my friends **(E2)**

The others can't do as well as me **(E3)**

I learn something that is fun to do **(T2)**

Others mess up "and" I don't **(E4)**

I learn a new skill by trying hard **(T3)**

I work really hard **(T4)**

I score the most points/goals/hits, etc. **(E5)**

Something I learn makes me want to go practice more **(T5)**

I'm the best **(E6)**

A skill I learn really feels right **(T6)**

I do my very best **(T7)**

Appendix B
General Self-Efficacy Scale

1.   I can always manage to solve difficult problems if I try hard enough.

Not all true   Hardly true   Moderately true   Exactly true

2.   If someone opposes me, I can find the means and ways to get what I want.

Not all true   Hardly true   Moderately true   Exactly true

3.   It is easy for me to stick to my aims and accomplish my goals.

Not all true   Hardly true   Moderately true   Exactly true

4.   I am confident that I could deal efficiently with unexpected events.

Not all true   Hardly true   Moderately true   Exactly true

5.   Thanks to my resourcefulness, I know how to handle unforeseen situations.

Not all true   Hardly true   Moderately true   Exactly true

6.   I can solve most problems if I invest the necessary effort.

Not all true   Hardly true   Moderately true   Exactly true

7.   I can remain calm when facing difficulties because I can rely on my coping abilities.

Not all true   Hardly true   Moderately true   Exactly true

8.   When I am confronted with a problem, I can usually find several solutions.

Not all true   Hardly true   Moderately true   Exactly true

9.   If I am in trouble, I can usually think of a solution.

Not all true   Hardly true   Moderately true   Exactly true

10.   I can usually handle whatever comes my way.

Not all true   Hardly true   Moderately true   Exactly true

Appendix B *(Continued)*
General Self-Efficacy Scale

1 = NOT ALL TRUE
2 = HARDLY TRUE
3 = MODERATELY TRUE
4 = EXACTLY TRUE

Appendix C

Sport Specific Self-Efficacy Scale*

1. I am not nervous when entering *basketball games* against known rivals

Not all true   Hardly true   Moderately true   Exactly true

2. I am eager to receive feedback from my coach/coaches.

Not all true   Hardly true   Moderately true   Exactly true

3. I am not hesitant when learning new skills/drills in *basketball*.

Not all true   Hardly true   Moderately true   Exactly true

4. I believe I will win when I enter a *basketball game*.

Not all true   Hardly true   Moderately true   Exactly true

5. I learn from losing a *basketball game*.

Not all true   Hardly true   Moderately true   Exactly true

6. I can persevere in challenging *basketball games*.

Not all true   Hardly true   Moderately true   Exactly true

7. I can utilize my skills in *basketball* to win.

Not all true   Hardly true   Moderately true   Exactly true

8. I know everything about *basketball*.

Not all true   Hardly true   Moderately true   Exactly true

9. I am capable of competing within my own *basketball team*.

Not all true   Hardly true   Moderately true   Exactly true

10. I know my skills & knowledge of *basketball* are used in practice and/or competition.

Not all true   Hardly true   Moderately true   Exactly true

* Words in italics will be changed (i.e., soccer, softball, and so forth) based on the sport the subject participates in.

Appendix C *(Continued)*
Sport Specific Self-Efficacy Scale

1 = NOT ALL TRUE
2 = HARDLY TRUE
3 = MODERATELY TRUE
4 = EXACTLY TRUE

Appendix D
Demographic Information

First, answer the following two questions:

Are you under the age of 18?   ☐ Yes ☐ No
Do you participate in both intramural and varsity athletics?   ☐ Yes ☐ No

If you answered "Yes" to any of the questions above, please **stop** and do not continue.
If you answered "No" to all of the questions above, please continue.

_____

Age:

Class Level
(check one):
☐ Freshman (1-29 credits) ☐ Sophomore (30-59 credits)
☐ Junior (60- 89 credits) ☐ Senior (90 + credits)

Sport(s) for which you participate in
with athletics:

Gender:
☐ Male ☐ Female

Please answer the following questions:

Did you participant in high school athletics?
☐ Yes ☐ No

(A) If yes, list sport(s) you participated in:

(B) If yes, did you play
☐ Junior Varsity ☐ Varsity ☐ Both

Do you currently play on a club team outside of the university?
☐ Yes ☐ No
If yes, list sport(s) you participate in:

Appendix E
Barry University
CONSENT FORM

The purpose of this research study is to analyze the self-efficacy and goal orientation in both intramural and varsity athletes. Brooke Norwood, a graduate student in Sport Management at Barry University, is conducting this study. You were selected for participation because you fit our desired criteria for either an intramural athlete or varsity athlete. We anticipate the number of participants to be 485.

This questionnaire is part of a study of athlete goal orientation relation to athlete self-efficacy (capability beliefs). We would like to ask for your participation in the study. As part of the study, you will be asked to fill out a questionnaire related to specific tasks that are common to athletes. There are no known risks but there may be some psychological discomfort resulting from questions on the instruments.

The questionnaire will be distributed more likely before or after your typical practice session. A research proctor will collect the questionnaire from you when you are finished. As a research participant, we will require approximately 30 minutes of your time to complete the questionnaire. You will complete the questionnaire on your own, preferably sitting separately from any one else.

You will also be asked to fill out a demographic sheet which is attached to the questionnaire.

There are no known benefits or risks to you for participating in this study. Future athletes and administrators of sport may benefit for the knowledge gained regarding the importance of self-efficacy and goal orientation, and designing appropriate instructional activities to support this trait in students like you.

YOUR PARTICIPATION IS VOLUNTARY AND NOT RELATED IN ANY WAY TO YOUR STATUS ON THE TEAM.

You may decide to participate now but you can withdraw from the study at any time with no penalty. All your responses are strictly confidential and only members of the research team will see your individual responses.

THERE ARE NO RIGHT OR WRONG ANSWERS TO THIS QUESTIONNAIRE. THIS IS NOT A TEST.

We want you to respond to the questionnaire as accurately as possible, reflecting your own real attitudes and behaviors. Participation in this research is voluntary. We ask that you *do not* write your name on the questionnaire. You have the right to refuse to participate and the right to withdraw later without any jeopardy to your status on the team or ability to participate in collegiate athletics. Your answers will not be seen by any one other than the researchers. Strict confidentiality will be maintained. No individual identifying information will be disclosed or collected.

All data collected in this research study will be stored in a locked file cabinet in the researcher's home office for one year, in which the data will be destroyed and access will only be given to personnel associated with the study. The signed consent forms will be contained in a separate locked file cabinet from the questionnaires. The signed consent forms will be kept for one year and then destroyed. Your answers to this questionnaire will be analyzed by computer, not by your coach.

If you have any questions regarding this research project, you may contact Brooke Norwood, P.O. Box 531498, Miami, FL 33153; (786) 274-7175 or my adviser, Dr. Annie Clement at (305) 899-3490. If you have questions regarding your rights as a participant in a research project, you may contact the Institutional Review Board point of contact, Ms. Avril Brenner, at (305) 899-3020.

All participants have a right to a copy of the informed consent.
Please sign below if you would like to be involved in this study. Thank you for your cooperation.

I have read, understood, and received a copy of the above consent, and desire of my own free will and volition, to participate in this study.

Your Name: _____   Date: _____

Intramural Athlete ☐ Varsity Athlete   ☐
Researcher: _____   Date: _____